

# **NS 3000/iX Error Messages Reference Manual**

**HP e3000 MPE/iX Computer Systems**

**Edition 10**



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## Preface

This manual contains most messages and errors generated by NS 3000/iX subsystems.

### What if the Error is Not in this Manual

If you have encountered an error that is not in this manual, here are some ideas on how you might find the errors:

- If it is an NMMGR error, or error from any of the Node Management Services Utilities, refer to Appendix A in the *Using the Node Management Services (NMS) Utilities* manual.
- If you have PCs using NS to connect to the MPE/iX system, consult the terminal emulator or networking manuals for your PC software for the error.
- If you cannot find the error at all, submit a CR and call your Hewlett-Packard Representative, see Appendix A , “Submitting a CR.”

### Special Note

MPE/iX, Multiprogramming Executive with Integrated POSIX, is the latest in a series of forward-compatible operating systems for the HP e3000 line of computers. In HP documentation and in talking with HP e3000 users, you will encounter references to MPE XL, the direct predecessor of MPE/iX. MPE/iX is a superset of MPE XL. All programs written for MPE XL will run without change under MPE/iX. You can continue to use MPE XL system documentation, although it may not refer to features added to the operating system to support POSIX.



# 1 CIERR Error Messages

CIERR errors are reported by the Command Interpreter when an error is detected in the `DSL`, `REMOTE`, or `NSCONTROL` commands. (`NETCONTROL` is not included here; `NETCONTROL` has its own set of errors.)

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## NOTE

A CI error is displayed on `$STDLIST` during the execution of the command. Some CI errors display a pointer (^) to the error in the command. For the Network Service commands, more than one CI error may be displayed (although only in a session; a job aborts when the first CI error is detected). These CI errors are held in `CATALOG.PUB.SYS`, message set 2 (CI errors). When a CI error is detected, the CIERR job control word is set to the error number.

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The CI errors fit into four categories:

- **Syntax errors or invalid options:** These errors result from user errors when issuing the command, and can be readily corrected.
- **Warnings:** Warnings are issued when a command is still executable, but the results may not be what you intended. These result from cases where conflicting options are specified. The warning informs you which option was actually used (or not used).
- **Resource errors:** These errors occur when a system resource needed for the execution of the command is not available. They should be rare. If they occur, you can wait and reissue the command later, when the resource may be available. If resource errors happen frequently, the configuration or resource allocation of the system may be inadequate. The system manager and SE should then look into the problem. Resource errors are also logged using Network Management logging, to log class 6, subclass 2.
- **Internal errors:** These errors indicate that the Network Service software is malfunctioning. If they ever occur, an HP representative should be notified. Internal errors are also logged using Network Management logging, to log class 6, subclass 3.

5000

**MESSAGE: INTERNAL DS ERROR — NO KEYWORD TABLE.**

**CAUSE:** The NS keyword Table was not allocated during system startup or prior to an NS command execution.

**ACTION:** See Appendix A , “Submitting a CR.”

5001

**MESSAGE: INTERNAL DS ERROR — NO ASGLOBAL DST.**

**CAUSE:** The NS global data segment was not allocated during system startup, or has been lost.

- ACTION: See Appendix A , “Submitting a CR.”
- 5002           **MESSAGE: INVALID ASCAT.NET.SYS MESSAGE CATALOG.**  
CAUSE: The ASCAT.NET.SYS message catalog exists, but is not in the proper format. It may have been overwritten by a file that is not a properly prepared message catalog.  
ACTION: Check that the message sets of the ASCAT.NET.SYS catalog are correct. Run the MAKECAT utility to prepare the message catalog properly.
- 5003           **MESSAGE: INTERNAL DS ERROR — COULD NOT ALLOCATE KEYWORD BUFFER.**  
CAUSE: The NS Keyword Table is not large enough to contain all the keywords from the ASCAT.NET.SYS catalog.  
ACTION: See Appendix A , “Submitting a CR.”
- 5004           **MESSAGE: ASCAT.NET.SYS MESSAGE CATALOG DOES NOT EXIST.**  
CAUSE: The ASCAT.NET.SYS catalog file is missing; the NS command keywords cannot be loaded.  
ACTION: Inform your system manager; install ASCAT.NET.SYS from the NS product tape.
- 5005           **MESSAGE: INTERNAL DS ERROR — COULD NOT CREATE KEYWORD TABLE.**  
CAUSE: The NS Keyword Table extra data segment could not be allocated, because of insufficient memory or free DSTs.  
ACTION: Inform your system manager; increase the number of configured DSTs or obtain more memory.
- 5006           **MESSAGE: NON-NUMERIC CHARACTER IN ENVIRONMENT NUMBER.**  
CAUSE: Syntax error in an environment number #Lxxx (in DSLINE) or xxx (in REMOTE), where one or more of the values for x is not numeric.  
ACTION: Correct the syntax error and reissue the command.
- 5007           **MESSAGE: NON-ALPHANUMERIC CHARACTER IN ENVIRONMENT ID OR NODE NAME.**  
CAUSE: Syntax error in an environment identifier in a DSLINE or REMOTE, where one or more characters are not alphanumeric.  
ACTION: Correct the syntax error and reissue the command.
- 5008           **MESSAGE: FILE NAME PART LONGER THAN 8 CHARACTERS.**  
CAUSE: The file, group, or account portion of a file name is longer than the allowed maximum length.  
ACTION: Correct the file name and reissue the command.

- 5009           **MESSAGE: NON-ALPHANUMERIC CHARACTER IN FILE NAME.**  
CAUSE: There is a character in a file name that is not an alphabetic or a numeric character (or special character . or /).  
ACTION: Correct the file name and reissue the command.
- 5010           **MESSAGE: EXPECTED , ; OR RETURN.**  
CAUSE: An invalid delimiter was found after a parameter for a command option.  
ACTION: Correct the syntax error and reissue the command.
- 5010           **MESSAGE: EXPECTED , ; OR RETURN.**  
CAUSE: An invalid delimiter was found after a parameter for a command option.  
ACTION: Correct the syntax error and reissue the command.
- 5012           **MESSAGE: EXPECTED TRACE SERVICE:ALL, VT, NFT, RFA.**  
CAUSE: In a DSLINE TRACE option, the second parameter was not the name of the service to be traced.  
ACTION: Correct the option parameter and reissue the command.
- 5013           **MESSAGE: EXPECTED MAXIMUM NUMBER OF TRACE RECORDS.**  
CAUSE: In a DSLINE TRACE option, the third parameter was not the number of trace records in the trace file, an integer between 0 and 32767.  
ACTION: Correct the option parameter and reissue the command.
- 5014           **MESSAGE: EXPECTED MAXIMUM LENGTH OF TRACE DATA.**  
CAUSE: In a DSLINE TRACE option, the fourth parameter was not the length of the trace record, an integer between 0 and 32767.  
ACTION: Correct the option parameter and reissue the command.
- 5015           **MESSAGE: EXPECTED TRANS OPTION.**  
CAUSE: In the DSLINE TRACE option, the fifth parameter was not TRANS, which selects transport tracing.  
ACTION: Correct the option parameter and reissue the command.
- 5016           **MESSAGE: EXPECTED =.**  
CAUSE: An equals sign (=) was not found between the option keyword and a list of positional parameters.  
ACTION: Correct the syntax and reissue the command.

- 5017           **MESSAGE: TOO MANY PARAMETERS IN TRACE OPTION.**  
CAUSE: More than the five defined parameters were specified in a  
DSL<sub>LINE</sub> TRACE option.  
ACTION: Correct the syntax and reissue the command.
- 5018           **MESSAGE: EXPECTED " OR '.**  
CAUSE: A string that begins with a quotation mark as a delimiter (") or  
(') does not end with a closing quotation mark (") or ('). You must use the  
same delimiter for starting and ending the string.  
ACTION: Correct the syntax and reissue the command.
- 5019           **MESSAGE: EXPECTED ; OR RETURN.**  
CAUSE: An unexpected character was found after a command option.  
ACTION: Correct the syntax and reissue the command.
- 5020           **MESSAGE: QUIET OVERRIDES PREVIOUS QUIET OPTION.**  
CAUSE: Two or more QUIET options were specified.  
ACTION: None.
- 5021           **MESSAGE: PROMPT OVERRIDES PREVIOUS PROMPT OPTION.**  
CAUSE: Two or more PROMPT options were specified. The prompt  
string from the last PROMPT is used.  
ACTION: None (unless you do not want the last prompt; then correct  
and reissue the command).
- 5022           **MESSAGE: LOGON OVERRIDES PREVIOUS LOGON OPTION.**  
CAUSE: Two or more LOGON options were specified. The logon from  
the last LOGON will be used.  
ACTION: None (unless you do not want the last logon; then correct and  
reissue the command).
- 5023           **MESSAGE: COMP OVERRIDES PREVIOUS COMP OR NOCOMP  
OPTION.**  
CAUSE: Two or more COMP and/or NOCOMP options were specified.  
The COMP option will take effect.  
ACTION: None (unless you do not want the COMP option; then correct  
and reissue the command).
- 5024           **MESSAGE: NOCOMP OVERRIDES PREVIOUS COMP OR NOCOMP  
OPTION.**  
CAUSE: Two or more COMP and/or NOCOMP options were specified.  
The NOCOMP option will take effect.  
ACTION: None (unless you do not want the NOCOMP option; then  
correct and reissue the command).



- 5025           **MESSAGE: TOO MANY TRACE OPTIONS (MAXIMUM OF 10).**  
CAUSE: There were more than 10 TRACE options specified in a DSLINE command.  
ACTION: Consolidate the TRACE options into less than 10, or break the DSLINE command into two or more DSLINE commands, each with less than 10 TRACE options.
- 5026           **MESSAGE: DS/3000 DSLINE OPTION IS IGNORED FOR NS NODE.**  
CAUSE: A DSLINE command for an NS node environment specified a DS/3000 option that is not supported for the NS node. The unsupported DS options are LOCID, REMID, PHNUM, LINEBUF, EXCLUSIVE, SELECT, FROMADR, FROMADDR, TOADR, TOADDR, QUEUE, and NOQUEUE.  
ACTION: None.
- 5027           **MESSAGE: INVALID DSLINE OPTION; EXPECTED QUIET, PROMPT, LOGON, COMP, NOCOMP, CLOSE, RESET, SHOW, OR TRACE.**  
CAUSE: An unknown option keyword was found in a DSLINE.  
ACTION: Correct or delete the option and reissue the command.
- 5028           **MESSAGE: INTERNAL DS ERROR — COULD NOT ADD VTREQ PORT.**  
CAUSE: The port used for communication between the CI and the Virtual Terminal server could not be added to the MPE port dictionary.  
ACTION: See Appendix A , “Submitting a CR.”
- 5029           **MESSAGE: INTERNAL DS ERROR — COULD NOT SEND CHANGE REQUEST.**  
CAUSE: The VT change request could not be sent to the DSDAD process port.  
ACTION: See Appendix A , “Submitting a CR.”
- 5030           **MESSAGE: INTERNAL DS ERROR — COULD NOT SEND START VT MSG.**  
CAUSE: The Start VT port message could not be sent to the Virtual Terminal server process.  
ACTION: See Appendix A , “Submitting a CR.”
- 5031           **MESSAGE: INTERNAL DS ERROR — COULD NOT CREATE VT REQ PORT.**  
CAUSE: A port to be used for communication between the CI and the Virtual Terminal server process could not be created.  
ACTION: See Appendix A , “Submitting a CR.”

- 5032           **MESSAGE: INTERNAL DS ERROR — COULD NOT GET PORT DST.**  
CAUSE: A port data segment entry could not be allocated for the port between the CI and the Virtual Terminal server.  
ACTION: See Appendix A , “Submitting a CR.”
- 5033           **MESSAGE: INTERNAL DS ERROR — COULD NOT START VT.**  
CAUSE: The Virtual Terminal service could not be initiated.  
ACTION: See Appendix A , “Submitting a CR.”
- 5034           **MESSAGE: INTERNAL DS ERROR — RECEIVED BAD PORT MESSAGE.**  
CAUSE: A port message with an unexpected function code was received from the Virtual Terminal server process.  
ACTION: See Appendix A , “Submitting a CR.”
- 5035           **MESSAGE: VT SERVER NOT AVAILABLE NOW.**  
CAUSE: The Virtual Terminal server process could not be created. There may be several reasons:  
  1. The `DSSERVER.NET.SYS` program is missing.
  2. The number of created `DSSERVER` processes is at the allowed maximum. The `NSCONTROL SHOW=SERVERS` command will tell you the current and maximum number of `DSSERVERS`.
  3. The `DSSERVER` process aborted during its initialization.ACTION: Depending on the cause:  
  1. Restore the `DSSERVER.NET.SYS` program from the NS/3000 product tape.
  2. Wait for the number of `DSSERVERS` to decrease, or increase the maximum number of `DSSERVERS` by `NSCONTROL SERVER=DSSERVER, ,new max>` (Only users with NM capability can use the `NSCONTROL` command.)
  3. See Appendix A , “Submitting a CR.”
- 5036           **MESSAGE: LOCAL VT SERVICE HAS NOT BEEN STARTED.**  
CAUSE: The local Virtual Terminal service (VTL) has not been started using the `NSCONTROL` command.  
ACTION: Issue either an `NSCONTROL START` or an `NSCONTROL START=VTL` command to start the local VT service, or wait until the service is started. (Only users with NM capability can use the `NSCONTROL` command.)
- 5037           **MESSAGE: LOCAL VT SERVICE HAS BEEN ABORTED.**  
CAUSE: An `NSCONTROL ABORT` has been issued. This immediately

terminates all network services, including the local Virtual Terminal service.

**ACTION:** Issue either an `NSCONTROL START` or an `NSCONTROL START=VTL` to start the local VT service, or wait until the service is started. (Only users with NM capability can use the `NSCONTROL` command.)

5038 **MESSAGE: VIRTUAL TERMINAL SERVICE DETECTED AN ERROR.**

**CAUSE:** An error was detected by the Virtual Terminal server process. The error message for the VT error will precede the CI error message.

**ACTION:** Some of the VT errors are normal responses (e.g., `REMOTE NOT ACCEPTING CHANGE REQUESTS`) and some are internal errors (e.g., `UNEXPECTED/BAD RESPONSE FROM VT`). Look up the VT error message for the appropriate action to take.

5039 **MESSAGE: INTERNAL DS ERROR — COULD NOT SEND REMOTE COMMAND.**

**CAUSE:** A port message with the remote command could not be sent from the CI to the Virtual Terminal server process.

**ACTION:** See “Submitting an CR” in Appendix A of this manual.

5040 **MESSAGE: INVALID TRACE INFORMATION.**

**CAUSE:** Information in a `DSLIN` `TRACE` option was incorrect. A DS error will also be displayed.

**ACTION:** Correct the `TRACE` option and reissue the command.

5041 **MESSAGE: COULD NOT USE ENVIRONMENT.**

**CAUSE:** This CI error is returned for a number of errors detected when the environment in a `DSLIN` or `REMOTE` command cannot be used. One or more DS errors will accompany this CI error to more fully describe the error or errors.

**ACTION:** Correct the command, based on the DS errors, and reissue.

5042 **MESSAGE: COULD NOT USE GENERIC ENVIRONMENT.**

**CAUSE:** This CI error is returned for a number of errors detected when a generic environment in a `DSLIN` command cannot be used. One or more DS errors will accompany this CI error to more fully describe the error or errors.

**ACTION:** Correct the command, based on the DS errors, and reissue.

5043 **MESSAGE: ALL DSLIN OPTIONS BUT CLOSE ARE IGNORED.**

**CAUSE:** Other options besides `CLOSE` were specified in a `DSLIN` command.

**ACTION:** None (the selected environment is closed).

- 5044           **MESSAGE: ALL DSLINE OPTIONS BUT RESET ARE IGNORED.**  
CAUSE: Other options besides RESET were specified in a DSLINE command.  
ACTION: None (the selected environment is closed).
- 5045           **MESSAGE: DSLINE OPTION OVERRIDES PREVIOUS DSLINE OPTION.**  
CAUSE: More than one DSLINE option was included in a REMOTE HELLO command. The last DSLINE option is used.  
ACTION: None (the REMOTE HELLO will be executed).
- 5046           **MESSAGE: DSLINE OPTION IGNORED.**  
CAUSE: Both the `envid` and `DSLINE=envid` options were specified in a REMOTE HELLO command. The `envid` is used to select the environment.  
ACTION: None (the REMOTE HELLO will be executed).
- 5047           **MESSAGE: GENERIC ENVIRONMENT ID NOT ALLOWED HERE.**  
CAUSE: A generic environment ID (with the wild card characters @, #, and/or ?) was used in the `envid` or `DSLINE=envid` option of a REMOTE command.  
ACTION: Correct the syntax and reissue the command. If you want to execute a REMOTE command for a set of environments, you must issue a separate REMOTE for each environment.
- 5048           **MESSAGE: NO DEFAULT ENVIRONMENT FROM PREVIOUS :DSLINE OR :REMOTE.**  
CAUSE: A REMOTE or DSLINE command was issued without an environment ID or environment number, and there is no default environment set by a previous command.  
ACTION: Insert an environment ID or number into the syntax and reissue the command.
- 5049           **MESSAGE: INVALID NSCONTROL OPTION: EXPECTED START, STOP, ABORT, SERVER, LOG, DEBUG, STATUS, AUTOLOGON, OR VERSION.**  
CAUSE: An unknown option keyword was found in an NSCONTROL command.  
ACTION: Correct or delete the keyword and reissue the command.
- 5050           **MESSAGE: TOO MANY NSCONTROL OPTIONS.**  
CAUSE: The information in the NSCONTROL command is too large to be sent to the DSDAD process for processing.  
ACTION: Consolidate options in the command, or break the command into two or more NSCONTROL commands.

- 5051           **MESSAGE: EXPECTED SERVER PROGRAM FILE NAME.**  
CAUSE: The first parameter of a SERVER option in an NSCONTROL command was not a program name.  
ACTION: Correct the SERVER option and reissue the command.
- 5052           **MESSAGE: EXPECTED MINIMUM NUMBER OF SERVERS (>=0 AND =32767).**  
CAUSE: The second parameter of a SERVER option in an NSCONTROL command was not the minimum number of servers, a positive integer.  
ACTION: Correct the SERVER option and reissue the command.
- 5053           **MESSAGE: EXPECTED DEBUG OPTION.**  
CAUSE: The fourth parameter of a SERVER option in an NSCONTROL command was not DEBUG or NODEBUG.  
ACTION: Correct the SERVER option and reissue the command.
- 5054           **MESSAGE: TOO MANY SERVER PARAMETERS; EXPECTED AT MOST FOUR.**  
CAUSE: There were more than four defined parameters for a SERVER option in an NSCONTROL command  
ACTION: Correct the SERVER option and reissue the command.
- 5055           **MESSAGE: TOO MANY SERVER PARAMETERS; EXPECTED AT MOST THREE.**  
CAUSE: There were more than three defined parameters for a LOG option in an NSCONTROL command.  
ACTION: Correct the LOG option and reissue the command.
- 5056           **MESSAGE: EXPECTED ON OR OFF.**  
CAUSE: The first parameter of a log option in an NSCONTROL command was not ON (enable logging) or OFF (disable logging).  
ACTION: Correct the LOG option and reissue the command.
- 5057           **MESSAGE: EXPECTED MODULE TO BE LOGGED; EXPECTED DSDAD, DSSERVER, ENV, OR VT.**  
CAUSE: The second parameter of a LOG option in an NSCONTROL command was not the name of a module to be logged.  
ACTION: Correct the LOG option and reissue the command.
- 5058           **MESSAGE: EXPECTED HIGH OR LOW.**  
CAUSE: The parameter of a log option in an NSCONTROL command was not HIGH (log all events) or LOW (log a subset of events).  
ACTION: Correct the LOG option and reissue the command.

- 5060           **MESSAGE: INTERNAL DS ERROR — COULD NOT SEND CONTROL MESSAGE.**  
CAUSE: The port message with the NSCONTROL information could not be sent from the CI to the DSDAD process.  
ACTION: See Appendix A , “Submitting a CR.”
- 5061           **MESSAGE: DSDAD.NET.SYS DOES NOT EXIST.**  
CAUSE: The DSDAD.NET.SYS program file is missing.  
ACTION: Restore the DSDAD.NET.SYS file from the NS product tape.
- 5062           **MESSAGE: INVALID CONTROL OPTION.**  
CAUSE: This CI error is returned for errors detected during the processing of an NSCONTROL command. One or more DS errors will accompany this CI error to more fully describe the error or errors.  
ACTION: Correct the error, based on the DS error(s), and reissue the command.
- 5063           **MESSAGE: INVALID SERVER PIN.**  
CAUSE: The server process ID number (PIN) in a DEBUG option in an NSCONTROL command is not numeric.  
ACTION: Correct the PIN and reissue the command.
- 5064           **MESSAGE: PROMPT MUST BE 8 CHARACTERS OR LESS.**  
CAUSE: The prompt string in a DSLINE PROMPT option is longer than the maximum of 8 characters.  
ACTION: Shorten the prompt string and reissue the command.
- 5065           **MESSAGE: LOGON MUST BE 54 CHARACTERS OR LESS.**  
CAUSE: The logon string in a DSLINE LOGON option is longer than the maximum of 54 characters.  
ACTION: Shorten the logon string and reissue the command.
- 5067           **MESSAGE: INTERNAL ERROR — DSLINE JCW NOT FOUND.**  
CAUSE: The DSLINE Job Control Word, set to the DSLINE number by the DS software, could not be found.  
ACTION: See Appendix A , “Submitting a CR.”
- 5072           **MESSAGE: ABORT DOES NOT ACCEPT ANY PARAMETERS.**  
CAUSE: Parameters were specified for an NSCONTROL ABORT option.  
ACTION: Delete the parameters and reissue the command.
- 5073           **MESSAGE: ABORT DOES NOT ACCEPT ANY PARAMETERS.**  
CAUSE: Parameters were specified for an :NSCONTROL ABORT option.

- ACTION: Delete the parameters and reissue the command.
- 5074      **MESSAGE: EXPECTED ONE OF USERS, SERVICES, SERVERS, OR ALL.**
- CAUSE: The parameter for a SHOW option in an NSCONTROL command was not one of the defined choices.
- ACTION: Correct the SHOW command and reissue the parameters.
- 5075      **MESSAGE: EXPECTED MAXIMUM NUMBER OF SERVERS (=> 0 and >32767).**
- CAUSE: The third parameter of a SERVER option in an NSCONTROL command was not a maximum number of servers, a positive integer.
- ACTION: Correct the SERVER option and reissue the command.
- 5076      **MESSAGE: WILD CARD CHARACTERS NOT ALLOWED IN NODE NAME.**
- CAUSE: A wild card character (@, #, or ?) was used in a node name. Node names cannot be generic.
- ACTION: Correct the node name and reissue the command.
- 5077      **MESSAGE: NETWORK SERVICE SOFTWARE VERSIONS DO NOT MATCH.**
- CAUSE: The version or update, or fix levels of the Network Service software modules are not compatible. NS cannot be initiated if its software is incompatible.
- ACTION: List the versions for the NS software modules, using NSCONTROL VERSION=MOD or RUN NMAINT.PUB.SYS. Identify the incompatible software modules, and replace with the assistance of your SE.
- 5078      **MESSAGE: PM CAPABILITY NEEDED TO USE DEBUG OPTION.**
- CAUSE: An NSCONTROL DEBUG or NSCONTROL SERVER=, , ,DEBUG command was executed, but the user does not have PRIVILEGED MODE (PM) capability. These commands cause a privileged breakpoint to be activated.
- ACTION: Execute the command from a user with PM capability.
- 5079      **MESSAGE: SYSTEM CONSOLE NEEDED TO USE DEBUG OPTION.**
- CAUSE: An NSCONTROL DEBUG or NSCONTROL SERVER=, , ,DEBUG command was executed from a terminal other than the system console. These commands cause a breakpoint to appear at the system console.
- ACTION: Execute the command from the system console.
- 5080      **MESSAGE: EXPECTED GENERIC ENVIRONMENT ID.**
- CAUSE: In a DSLINE RESET, the environment ID was not generic.

- ACTION:** Correct the syntax and reissue the command.
- 5081       **MESSAGE: INVALID VERSION OPTION: EXPECTED MOD.**
- CAUSE:** In a `NSCONTROL VERSION` command, an invalid option for `VERSION` was specified. `VERSION=MOD` is the only allowed option.
- ACTION:** Correct the syntax and reissue the command.
- 5082       **MESSAGE: REMOTE HELLO FAILED.**
- CAUSE:** In a `REMOTE HELLO` command, the Virtual Terminal service was set up, but the logon failed on the remote node. The Virtual Terminal service is then terminated.
- ACTION:** Check that the logon is valid, and check the jobfence and session limits on the remote node before reissuing the `REMOTE HELLO`.
- 5083       **MESSAGE: NS/3000 HAS NOT BEEN STARTED BY AN :NSCONTROL START.**
- CAUSE:** An `NSCONTROL STOP` or `ABORT` command was issued when the NS subsystem had not been started with `NSCONTROL START`.
- ACTION:** None.
- 5084       **MESSAGE: INVALID ENVIRONMENT NUMBER.**
- CAUSE:** Environment number specified in `DSL` command is greater than 32767 or the number was specified as #L.
- ACTION:** Specify environment number as a decimal integer between 1 and 32767, inclusive, using the syntax #Ln.
- 5085       **MESSAGE: LOGON STRING EXPECTED.**
- CAUSE:** The `DSL LOGON=option` was specified without a logon sequence following the equal sign (=).
- ACTION:** Reissue command with logon sequence included.
- 5086       **MESSAGE: EXPECTED SERVICE NAME: VT, VTR, VTL, VTRL, NFT, NFTL, RFA, RFAL, NSSTATL, NSSTAT, LOOPBACK.**
- CAUSE:** The `NSCONTROL START=` or `NSCONTROL STOP=` command was issued with no service names specified.
- ACTION:** Reissue command, specifying one or more services (as listed in the error message).
- 5087       **MESSAGE: EXPECTED ENVIRONMENT ID OR NODE NAME**
- CAUSE:** The command `REMOTE HELLO;DSL=` was issued without an `envid=nodename` or node name.
- ACTION:** Reissue the command, and include the `envid=nodename` or `nodename` following the equal sign (=).



- 5088           **MESSAGE: REMOTE SESSION CANNOT LOGOFF WHILE FRA/RDBA IS ACTIVE.**  
CAUSE: You cannot logoff until RFA/RDBA terminates.  
ACTION: Logoff when RFA/RDBA terminates.
- 5089           **MESSAGE: ANOTHER PROCESS IS EXECUTING A REMOTE COMMAND IN THIS ENVIRONMENT.**  
CAUSE: Your process is attempting to use an environment that is already in use. Only one process can access an environment at a time.  
ACTION: Try again later.
- 5095           **MESSAGE: NOT ENOUGH STACK SPACE TO EXECUTE NS COMMAND.**  
CAUSE: Internal resource error.  
ACTION: If this happens while running a program, prep or link the program with more stack space. If this happens after typing a command, see Appendix A , “Submitting a CR,” of this manual.
- 5100           **MESSAGE: UNABLE TO STORE NFT PORT ID IN PORT DICTIONARY.**  
CAUSE: Internal Resource Error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5101           **MESSAGE: ERROR OCCURRED WHEN SETTING UP NFT SERVER.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5102           **MESSAGE: NFT SERVER WAS ABORTED.**  
CAUSE: NFT server process terminated abnormally.  
ACTION: Examine the logging information returned at the system console. If you cannot correct the problem, see Appendix A , “Submitting a CR,” of this manual.
- 5103           **MESSAGE: CRITICAL INTERNAL NFT ERROR.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5104           **MESSAGE: ATTEMPT TO PLACE NFT SERVER INTO REQUESTORS ENVIRONMENT FAILED.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5105           **MESSAGE: UNABLE TO CONTRACT NFT SERVER.**  
CAUSE: Probable internal error.

- ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 5106       **MESSAGE: NO NFT SERVERS ARE CURRENTLY AVAILABLE.**
- CAUSE:** Maximum allowable limit of NFT Servers reached on system.
- ACTION:** Wait until fewer DSCOPY applications are running on the system, or ask the system manager to raise the maximum allowable limit of NFT Servers (via the NSCONTROL command). Try again.
- 5400       **MESSAGE: NSCONTROL COMMAND ERROR.**
- CAUSE:** NSCONTROL error found. A previously printed error message should be more specific.
- ACTION:** Refer to the ACTION for the previously displayed error message.
- 5401       **MESSAGE: DSLINE COMMAND ERROR.**
- CAUSE:** DSLINE error found. A previously printed error message should be more specific.
- ACTION:** Refer to the ACTION for the previously displayed error message.
- 5402       **MESSAGE: REMOTE COMMAND ERROR.**
- CAUSE:** REMOTE error found. A previously printed error message should be more specific.
- ACTION:** Refer to the ACTION for the previously displayed error message.
- 5501       **MESSAGE: RESOURCE ERROR — COULD NOT GET DST.**
- CAUSE:** Internal resource error.
- ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 5502       **MESSAGE: LIST IS INCOMPLETE — RESOURCE ERROR.**
- CAUSE:** Internal resource error.
- ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 5503       **MESSAGE: INTERNAL DS ERROR — SERVER TERMINATED.**
- CAUSE:** Internal resource error.
- ACTION:** Try the command again. If it fails again submit an CR See Appendix A , “Submitting a CR.”
- 5504       **MESSAGE: INTERNAL ERROR — COULD NOT STORE VTTM ID IN DSTABLE.**
- CAUSE:** Internal resource error.
- ACTION:** If this happens while running a program, prep or link the program with more stack space. If this happens after typing a

command, see Appendix A , “Submitting a CR,” of this manual.

5505 **MESSAGE: INTERNAL ERROR — COULD NOT STORE REQ. ID IN DSTABLE.**

CAUSE: Internal resource error.

ACTION: If this happens while running a program, prep or link the program with more stack space. If this happens after typing a command, see Appendix A , “Submitting a CR,” of this manual.

5506 **MESSAGE: NO \$BACK ENVIRONMENT IN THIS SESSION.**

CAUSE: The session executing the DSLINE command does not have \$BACK environment. This session was not created using the REMOTE command.

ACTION: None.

5507 **MESSAGE: ONLY TRACE OPTION IS ALLOWED FOR \$BACK ENVIRONMENT.**

CAUSE: \$BACK environment supports only TRACE option.

ACTION: Remove all the option except TRACE and reissue the command.

5508 **MESSAGE: NS TRANSPORT MISSING; MUST BE INSTALLED.**

CAUSE: NS Transport product not installed.

ACTION: Execute NETCONTROL VERSION=MOD. If an error is returned, install or reinstall NS Transport properly.

## Network Services Environment Error Messages

Environment error messages are produced when an error is detected in the definition of an environment by a `DSL` or a `REMOTE` command. They are displayed on `$STDLIST` during the execution of the command, usually preceding a CI error or `ENVIRONMENT` message. These error messages are found in `CATALOG.PUB.SYS`, message set 16 (DS errors). When an environment error is detected, the `DSERR` job control word is set to the error number. The environment error message is not displayed if the command is executed through the `COMMAND` intrinsic.

- 620       **MESSAGE: NO ENVIRONMENT FOR `envid`.**
- CAUSE:** A `DSL` `envid;RESET` was executed, and there is no generic environment for `envid`.
- ACTION:** Correct `envid` and reissue the command.
- 622       **MESSAGE: ENVIRONMENT TABLE IS FULL.**
- CAUSE:** The session environment table is full; there is no room for additional information on new environments or tracing.
- ACTION:** Delete any unused environments, turn off any unused service tracing, and reissue the command.
- 623       **MESSAGE: NO DEFAULT ENVIRONMENT SET BY A `:DSL` OR `:REMOTE`.**
- CAUSE:** A command using a default environment was executed, but no default environment was set by a previous `DSL` or `REMOTE` command.
- ACTION:** Insert an environment ID into the syntax and reissue the command.
- 624       **MESSAGE: NO ENVIRONMENT FOR # `envnum`.**
- CAUSE:** An environment number was used in a `DSL` or `REMOTE` and the `envnum` does not correspond to any existing environments.
- ACTION:** Correct the environment number and reissue the command. The `DSL @.@` command can be used to get a list of environments and their numbers.
- 625       **MESSAGE: ACTIVE SERVICES FOR `envid`; CLOSE IGNORED.**
- CAUSE:** A `DSL` `CLOSE` was executed for an environment, identified by `envid`, that has one or more active services (RFA, RDBA). The environment is not closed, and the services continue to be active.
- ACTION:** Terminate the service or services, and reissue the command. The `DSL` `SHOW` command will display which services are active for an environment.

- 627           **MESSAGE: CANNOT OPEN TRACE FILE filename.**  
CAUSE: A DSLINE TRACE=ON was issued, but the indicated trace file cannot be opened.  
ACTION: Check the parameters for the TRACE option, correct if in error, and reissue the command.
- 628           **MESSAGE: CANNOT CLOSE TRACE FILE filename.**  
CAUSE: A DSLINE TRACE=OFF was issued, but the indicated trace file cannot be closed.  
ACTION: Check the parameters for the TRACE option, correct if in error, and reissue the command.
- 629           **MESSAGE: CANNOT OBTAIN DATA SEGMENT FOR ENVIRONMENT TABLE.**  
CAUSE: An extra data segment was not available for the session environment table, because of a lack of memory or DST entries. No environments can be defined.  
ACTION: Wait and reissue the command later, when memory or DST entries may become available. If this error occurs frequently, there may be insufficient DST entries or memory. The system manager may have to increase the DSTs or memory.
- 630           **MESSAGE: CANNOT CHANGE NODE NAME FROM nodename WHILE ACTIVE SERVICES.**  
CAUSE: A DSLINE envid = nodename was executed for an environment for which one or more services have been established on a remote node other than nodename. The environment of this node cannot be changed until the services are finished.  
ACTION: Wait for the services to terminate, or terminate the services. The DSLINE SHOW command can be used to determine the active services for the environment.
- 631           **MESSAGE: INVALID ENVIRONMENT ID OR NODE NAME LENGTH.**  
CAUSE: A fully qualified environment or node name in a command was longer than the allowed maximum of 50 characters.  
ACTION: Shorten the name and reissue the command.
- 632           **MESSAGE: ID OR NODE IN name DOES NOT BEGIN WITH AN ALPHA.**  
CAUSE: The first part of a (fully qualified) environment ID or node name does not begin with an alphabetic character.  
ACTION: Correct the name and reissue the command.

- 633           **MESSAGE: ID OR NODE IN name IS GREATER THAN 16 CHARACTERS.**  
CAUSE: The first part of a (fully qualified) environment ID or node name is longer than the allowed 16 characters.  
ACTION: Shorten the name and reissue the command.
- 634           **MESSAGE: ID OR NODE IN name CONTAINS A NON-ALPHANUMERIC CHARACTER.**  
CAUSE: The first part of a (fully qualified) environment ID or node name contains a character that is not alphabetic or numeric special characters @ # - . \_ or ?.  
ACTION: Correct the name and reissue the command.
- 635           **MESSAGE: EXPECTED A DOMAIN AFTER THE NODE OR ID IN name.**  
CAUSE: Something other than a domain followed the node or ID part of name.  
ACTION: Correct the name and reissue the command.
- 636           **MESSAGE: DOMAIN IN name DOES NOT BEGIN WITH AN ALPHA.**  
CAUSE: The second (domain) part of a (fully qualified) environment ID or node name does not begin with an alphabetic character.  
ACTION: Correct the name and reissue the command.
- 637           **MESSAGE: DOMAIN IN name IS GREATER THAN 16 CHARACTERS.**  
CAUSE: The second (domain) part of a (fully qualified) environment ID or node name is longer than the allowed 16 characters.  
ACTION: Correct the name and reissue the command.
- 638           **MESSAGE: DOMAIN IN name CONTAINS A NON-ALPHANUMERIC CHARACTER**  
CAUSE: The second (domain) part of a (fully qualified) environment ID or node name contains a character that is not alphabetic or numeric.  
ACTION: Correct the name and reissue the command.
- 639           **MESSAGE: EXPECTED ORGANIZATION AFTER DOMAIN IN name.**  
CAUSE: Something other than an organization followed the domain part of a (fully qualified) environment ID or node name.  
ACTION: Correct the name and reissue the command.
- 640           **MESSAGE: ORGANIZATION IN name DOES NOT BEGIN WITH AN ALPHA.**  
CAUSE: The third (organization) part of a (fully qualified) environment ID or node name does not begin with an alphabetic character.  
ACTION: Correct the name and reissue the command.

- 641           **MESSAGE: ORGANIZATION IN name IS GREATER THAN 16 CHARACTERS.**  
CAUSE: The third (organization) part of a (fully qualified) environment ID or node name is longer than the allowed 16 characters.  
ACTION: Correct the name and reissue the command.
- 642           **MESSAGE: ORGANIZATION IN name CONTAINS A NON-ALPHANUMERIC CHARACTER.**  
CAUSE: The third (organization) part of a (fully qualified) environment ID or node name contains a character that is not alphabetic or numeric.  
ACTION: Correct the name and reissue the command.
- 643           **MESSAGE: TOO MANY HIERARCHY LEVELS IN name; EXPECTED NAME.DOMAIN.ORG.**  
CAUSE: The fully qualified environment ID or node name has more than three parts.  
ACTION: Correct the name and reissue the command.
- 644           **MESSAGE: TRANSPORT NOT INITIALIZED.**  
CAUSE: A DSLINE or REMOTE command has been issued and the Network Transport has not been started by a NETCONTROL command.  
ACTION: Wait until the transport is started, or issue a NETCONTROL to start the transport. (Only users with NM capability can use the NETCONTROL command.)
- 645           **MESSAGE: UNKNOWN NODE nodename.**  
CAUSE: A DSLINE or REMOTE command was issued for a non-existent node. Also, this error may be displayed when a valid NS node name is used, but the NS transport has not been started.  
ACTION: If the node name is invalid, correct the name and reissue the command. If the node name is valid, wait for the transport to be started or start the transport with the NETCONTROL command.
- 646           **MESSAGE: name IS NOT A NODE NAME OR DS LOGICAL DEVICE.**  
CAUSE: A DSLINE command was issued using a DS logical device instead of a node name.  
ACTION: Use a node name or environment name and issue the command again.
- 647           **MESSAGE: ALREADY LOGGED ON AS user.acct.**  
CAUSE: A DSLINE with a LOGON option has been issued for an environment that has its remote session logged on.  
ACTION: Wait for the remote session to be logged off, or log off the remote session (for example, by terminating any services using the

environment).

687           **MESSAGE: CANNOT CHANGE NS NODE NAME FROM nodename TO GIVEN DOMAIN NAME.**

CAUSE: The environment already exists with an NS node name.

ACTION: First delete the old environment and then create a new environment with the domain node name.

688           **MESSAGE: CANNOT CHANGE DOMAIN NODE NAME FROM nodename TO GIVEN NS NAME.**

CAUSE: The environment already exists with a DOMAIN node name.

ACTION: First delete the old environment and then create a new environment with the NS name.

689           **MESSAGE: ERROR NO ASGLOBAL TABLE.**

CAUSE: NS global table was not created or was corrupted.

ACTION: Internal error. See Appendix A , “Submitting a CR,” of this manual.

690           **MESSAGE: ERROR NO ROOM IN SID TABLE.**

CAUSE: NS services users has reached the maximum limit.

ACTION: Wait until some NS users log off then try again.

691           **MESSAGE: ERROR NO SESSION ID.**

CAUSE: NS session ID table was not created or was corrupted.

ACTION: Internal error. See Appendix A , “Submitting a CR,” of this manual.

692           **MESSAGE: ERROR DUPLICATE SESSION ID.**

CAUSE: Random number generator created a duplicate session ID for this session.

ACTION: Try the command again. If it fails again, then see Appendix A , “Submitting a CR,” of this manual.



## 2 DSERR Error Messages

Environment error messages are produced when an error is detected in the definition of an environment by a `DSL` or a `REMOTE` command. They are displayed on `$STDLIST` during the execution of the command, usually preceding a CI error or `ENVIRONMENT` message. These error messages are found in `CATALOG.PUB.SYS`, message set 16 (DS errors). When an environment error is detected, the DSERR job control word is set to the error number. The environment error message is not displayed if the command is executed through the `COMMAND` intrinsic.

620 **MESSAGE: NO ENVIRONMENT FOR `envid`.**

CAUSE: A `DSL` `envid;RESET` was executed, and there is no generic environment for `envid`.

ACTION: Correct `envid` and reissue the command.

622 **MESSAGE: ENVIRONMENT TABLE IS FULL.**

CAUSE: The session environment table is full; there is no room for additional information on new environments or tracing.

ACTION: Delete any unused environments, turn off any unused service tracing, and reissue the command.

623 **MESSAGE: NO DEFAULT ENVIRONMENT SET BY A `:DSL` OR `:REMOTE`.**

CAUSE: A command using a default environment was executed, but no default environment was set by a previous `DSL` or `REMOTE` command.

ACTION: Insert an environment ID into the syntax and reissue the command.

624 **MESSAGE: NO ENVIRONMENT FOR # `envnum`.**

CAUSE: An environment number was used in a `DSL` or `REMOTE` and the `envnum` does not correspond to any existing environments.

ACTION: Correct the environment number and reissue the command. The `DSL @. @. @` command can be used to get a list of environments and their numbers.

625 **MESSAGE: ACTIVE SERVICES FOR `envid`; CLOSE IGNORED.**

CAUSE: A `DSL` `CLOSE` was executed for an environment, identified by `envid`, that has one or more active services (RFA, RDBA). The environment is not closed, and the services continue to be active.

ACTION: Terminate the service or services, and reissue the command. The `DSL` `SHOW` command will display which services are active for an environment.

- 627           **MESSAGE: CANNOT OPEN TRACE FILE filename.**  
CAUSE: A `DSL` `TRACE=ON` was issued, but the indicated trace file cannot be opened.  
ACTION: Check the parameters for the `TRACE` option, correct if in error, and reissue the command.
- 628           **MESSAGE: CANNOT CLOSE TRACE FILE filename.**  
CAUSE: A `DSL` `TRACE=OFF` was issued, but the indicated trace file cannot be closed.  
ACTION: Check the parameters for the `TRACE` option, correct if in error, and reissue the command.
- 629           **MESSAGE: CANNOT OBTAIN DATA SEGMENT FOR ENVIRONMENT TABLE.**  
CAUSE: An extra data segment was not available for the session environment table, because of a lack of memory or DST entries. No environments can be defined.  
ACTION: Wait and reissue the command later, when memory or DST entries may become available. If this error occurs frequently, there may be insufficient DST entries or memory. The system manager may have to increase the DSTs or memory.
- 630           **MESSAGE: CANNOT CHANGE NODE NAME FROM nodename WHILE ACTIVE SERVICES.**  
CAUSE: A `DSL` `envid = nodename` was executed for an environment for which one or more services have been established on a remote node other than `nodename`. The environment of this node cannot be changed until the services are finished.  
ACTION: Wait for the services to terminate, or terminate the services. The `DSL` `SHOW` command can be used to determine the active services for the environment.
- 631           **MESSAGE: INVALID ENVIRONMENT ID OR NODE NAME LENGTH.**  
CAUSE: A fully qualified environment or node name in a command was longer than the allowed maximum of 50 characters.  
ACTION: Shorten the name and reissue the command.
- 632           **MESSAGE: ID OR NODE IN name DOES NOT BEGIN WITH AN ALPHA.**  
CAUSE: The first part of a (fully qualified) environment ID or node name does not begin with an alphabetic character.  
ACTION: Correct the name and reissue the command.
- 633           **MESSAGE: ID OR NODE IN name IS GREATER THAN 16 CHARACTERS.**  
CAUSE: The first part of a (fully qualified) environment ID or node name

is longer than the allowed 16 characters.

ACTION: Shorten the name and reissue the command.

634 **MESSAGE: ID OR NODE IN name CONTAINS A NON-ALPHANUMERIC CHARACTER.**

CAUSE: The first part of a (fully qualified) environment ID or node name contains a character that is not alphabetic or numeric special characters @ # - . \_ or ?.

ACTION: Correct the name and reissue the command.

635 **MESSAGE: EXPECTED A DOMAIN AFTER THE NODE OR ID IN name.**

CAUSE: Something other than a domain followed the node or ID part of name.

ACTION: Correct the name and reissue the command.

636 **MESSAGE: DOMAIN IN name DOES NOT BEGIN WITH AN ALPHA.**

CAUSE: The second (domain) part of a (fully qualified) environment ID or node name does not begin with an alphabetic character.

ACTION: Correct the name and reissue the command.

637 **MESSAGE: DOMAIN IN name IS GREATER THAN 16 CHARACTERS.**

CAUSE: The second (domain) part of a (fully qualified) environment ID or node name is longer than the allowed 16 characters.

ACTION: Correct the name and reissue the command.

638 **MESSAGE: DOMAIN IN name CONTAIN A NON-ALPHANUMERIC CHARACTER.**

CAUSE: The second (domain) part of a (fully qualified) environment ID or node name contains a character that is not alphabetic or numeric.

ACTION: Correct the name and reissue the command.

639 **MESSAGE: EXPECTED ORGANIZATION AFTER DOMAIN IN name.**

CAUSE: Something other than an organization followed the domain part of a (fully qualified) environment ID or node name.

ACTION: Correct the name and reissue the command.

640 **MESSAGE: ORGANIZATION IN name DOES NOT BEGIN WITH AN ALPHA.**

CAUSE: The third (organization) part of a (fully qualified) environment ID or node name does not begin with an alphabetic character.

ACTION: Correct the name and reissue the command.

641 **MESSAGE: ORGANIZATION IN name IS GREATER THAN 16 CHARACTERS.**

CAUSE: The third (organization) part of a (fully qualified) environment ID or node name is longer than the allowed 16 characters.

ACTION: Correct the name and reissue the command.

642

**MESSAGE: ORGANIZATION IN name CONTAINS A NON-ALPHANUMERIC CHARACTER.**

CAUSE: The third (organization) part of a (fully qualified) environment ID or node name contains a character that is not alphabetic or numeric

ACTION: Correct the name and reissue the command.

643

**MESSAGE: TOO MANY HIERARCHY LEVEL IN name; EXPECTED NAME.DOMAIN.ORG.**

CAUSE: The fully qualified environment ID or node name has more than three parts.

ACTION: Correct the name and reissue the command.

644

**MESSAGE: TRANSPORT NOT INITIALIZED.**

CAUSE: A DSLINE or REMOTE command has been issued and the Network Transport has not been started by a NETCONTROL command.

ACTION: Wait until the transport is started, or issue a NETCONTROL to start the transport. (Only users with NM capability can use the NETCONTROL command.)

645

**MESSAGE: UNKNOWN NODE nodename.**

CAUSE: A DSLINE or REMOTE command was issued for a non-existent node. Also, this error may be displayed when a valid NS node name is used, but the NS transport has not been started.

ACTION: If the node name is invalid, correct the name and reissue the command. If the node name is valid, wait for the transport to be started or start the transport with the NETCONTROL command.

646

**MESSAGE: name IS NOT A NODE NAME OR DS LOGICAL DEVICE.**

CAUSE: A DSLINE command was issued using a DS logical device instead of a node name.

ACTION: Use a node name or an environment name and issue the command again.

647

**MESSAGE: ALREADY LOGGED ON AS user.acct.**

CAUSE: A DSLINE with a LOGON option has been issued for an environment that has its remote session logged on

ACTION: Wait for the remote session to be logged off, or log off the remote session (for example, by terminating any services using the environment).

# 3 NS/NFTERR and NS/NFTWARN Messages

NFT messages may be distinguished from NFT/3000 messages in the following way: bit 2 of the DSCOPY result parameter or of the NFTERR JCW indicates the appropriate error set (on=NFT/3000; off=generic). The DSCOPYMSG intrinsic is able to determine the correct error set.

In the descriptions of the following error messages and warnings, many references are made to qualifying error-message strings. These strings are returned with the Network File Transfer (NFT) errors described below to further qualify errors that occur.

0 **MESSAGE: NO ERRORS WERE DETECTED.**

CAUSE: Transfer succeeded.

ACTION: None.

1 **MESSAGE: INTERNAL NFT ERROR.**

CAUSE: An internal NFT error has occurred.

ACTION: See Appendix A , "Submitting a CR," of this manual.

2 **MESSAGE: UNABLE TO LOGON TO SOURCE NODE.**

CAUSE: Error in logging on to the source computer, or no logon string supplied where required.

ACTION: Check the logon string or provide a logon string and try again.

3 **MESSAGE: UNABLE TO LOGON TO TARGET NODE.**

CAUSE: Error in logging on to the target computer, or no logon string where required.

ACTION: Check the logon string or provide a logon string and try again.

4 **MESSAGE: UNABLE TO ACCESS SOURCE FILE/DEVICE.**

CAUSE: An unexpected file system error occurred in opening or accessing the source file.

ACTION: Verify that the source file is accessible. Also, refer to the qualifying file system error string.

5 **MESSAGE: UNABLE TO CONNECT TO SOURCE NODE.**

CAUSE: A connection could not be established to the computer where the source file resides. Either the source-computer name is incorrect, the source computer is not connected to the network, or there are insufficient resources.

**ACTION:** Verify that the source-computer name is correct, that the source computer is connected to the network, and that there are sufficient resources to establish a connection. Also, refer to the qualifying error string. Check the log file for PM errors.

6

**MESSAGE: UNABLE TO CONNECT TO TARGET NODE.**

**CAUSE:** A connection could not be established to the computer where the target file resides. Either the target-computer name is incorrect, or the target computer is not connected to the network, or there are insufficient resources.

**ACTION:** Verify that the target-computer name is correct, that the target computer is connected to the network, and that there are sufficient resources to establish a connection. Also, refer to the qualifying error string. Check the log file for PM errors.

7

**MESSAGE: INSUFFICIENT RESOURCES ARE AVAILABLE ON SOURCE NODE.**

**CAUSE:** Insufficient resources at the source computer to carry out the file transfer.

**ACTION:** Verify that there are sufficient resources on the source computer and try again. Verify that DST tables are available. Check that the configured maximum number of DST table entries is large enough.

8

**MESSAGE: INSUFFICIENT RESOURCES ARE AVAILABLE ON TARGET NODE.**

**CAUSE:** Insufficient resources at the target computer to carry out the file transfer.

**ACTION:** Verify that there are sufficient resources on the target computer and try again. Verify that DST tables are available. Check that the configured maximum number of DST table entries is large enough.

9

**MESSAGE: SOURCE FILE WAS NOT FOUND.**

**CAUSE:** Source file specified does not exist.

**ACTION:** Verify that the source file name is correct.

10

**MESSAGE: TARGET FILE WAS NOT FOUND.**

**CAUSE:** The target file does not exist and APPend was specified.

**ACTION:** Verify that the target file name is correct.

11

**MESSAGE: TRANSFER STOPPED PER USER REQUEST.**

**CAUSE:** Acknowledges the user's Abort or Cancel request.

**ACTION:** None. This is an informational message only.

- 13           **MESSAGE: COUNTER OFFER.**  
CAUSE: An internal error has occurred during negotiations between the source and target computers.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14           **MESSAGE: REQUESTED DATA TYPE WAS REFUSED.**  
CAUSE: Consumer mainframe refused the data type offered by the producer mainframe.  
ACTION: Consult *Using NS 3000/iX Network Services* for the use of the ASC (ASCII) and BIN (binary) option.
- 15           **MESSAGE: REQUESTED RECORD WAS REFUSED.**  
CAUSE: Consumer mainframe refused the record type offered by the producer mainframe.  
ACTION: Consult *Using NS 3000/iX Network Services* for the use of the FIX (fixed) and VAR (variable) options.
- 16           **MESSAGE: REQUESTED FILE TYPE WAS REFUSED.**  
CAUSE: Consumer mainframe refused the file type offered by the producer mainframe.  
ACTION: Consult *Using NS 3000/iX Network Services* for the use of the DIR (direct) and SEQ (sequential) options.
- 17           **MESSAGE: REQUESTED RECORD SIZE WAS REFUSED.**  
CAUSE: Consumer mainframe refused the file size offered by the producer mainframe.  
ACTION: Consult *Using NS 3000/iX Network Services* for the RSIZE option.
- 18           **MESSAGE: REQUESTED FILE SIZE WAS REFUSED.**  
CAUSE: Consumer mainframe refused the file size offered by the producer mainframe.  
ACTION: Consult *Using NS 3000/iX Network Services* for the FSIZE option.
- 19           **MESSAGE: CONFLICTING ATTRIBUTES OR OPTIONS.**  
CAUSE: If an overwrite operation is attempted and the files involved do not have compatible attributes, this error will result. Also, if a file equation has been issued to change the characteristics of the target file to be incompatible with those of the source file, this error is returned.  
ACTION: Try the REP (replace) option or remove the offending file equation.

- 20           **MESSAGE: TARGET RECORD SIZE IS INVALID.**  
CAUSE: Requested `RSIZE` is too large.  
ACTION: Specify a smaller record size.
- 21           **MESSAGE: TARGET FILE SIZE IS INVALID.**  
CAUSE: Requested `Fsize` is too large.  
ACTION: Specify a smaller record size.
- 22           **MESSAGE: DUPLICATE TARGET FILE.**  
CAUSE: The target file exists and neither `REPLACE` nor `OVERWRITE` was specified.  
ACTION: Verify that the target file name is correct, and specify `REPLACE` or `OVERWRITE`.
- 23           **MESSAGE: NEED PASSWORD TO ACCESS SOURCE FILE.**  
CAUSE: Source file could not be accessed without proper password.  
ACTION: Specify the password and the source-file name and try again.
- 24           **MESSAGE: NEED PASSWORD TO ACCESS TARGET FILE.**  
CAUSE: Target file could not be accessed without proper password.  
ACTION: Specify the password and the target-file name and try again.
- 25           **MESSAGE: OUT OF DISK SPACE.**  
CAUSE: The target computer has run out of disk space. The target file will not fit.  
ACTION: Purge unused files on the target computer and try again.
- 26           **MESSAGE: CONNECTION TO SOURCE NODE HAS GONE DOWN.**  
CAUSE: An error was detected on the connection to the computer where the source files reside. If the file-producer program is still active on the source computer, it will attempt to carry out the remainder of the user-file `copy` command (perhaps causing several file transfers to occur if wildcards were given). If the file producer is no longer active, the remaining files were not transferred.  
ACTION: Determine which, if any, of the files were not transferred. Transfer these files by specifying the proper command and trying again.
- 27           **MESSAGE: CONNECTION TO TARGET NODE HAS GONE DOWN.**  
CAUSE: An error was detected on the connection to the computer where the target files are to be created. If this error occurs while the file producer is in the middle of copying several files, the current file may not have been copied successfully and an attempt will not be made to copy the remainder of the files.



- ACTION:** Specify a command to copy the remainder of the files, and try again.
- 28       **MESSAGE: UNABLE TO PURGE TARGET FILE.**
- CAUSE:** The existing target file could not be purged.
- ACTION:** Refer to the qualifying file system error string to determine what to do.
- 29       **MESSAGE: INVALID TARGET FILE.**
- CAUSE:** Check the target file name syntax and try again.
- ACTION:** Refer to the qualifying file system error string to determine what to do.
- 30       **MESSAGE: UNABLE TO PURGE SOURCE FILE.**
- CAUSE:** The source file could not be purged after successfully copying the file (the `MOVE` option was given).
- ACTION:** Refer to the qualifying file system error string to determine what to do.
- 31       **MESSAGE: READ FROM SOURCE FILE FAILED.**
- CAUSE:** An unexpected file system error occurred while reading from the source file.
- ACTION:** Refer to the qualifying file system error string to determine what to do.
- 32       **MESSAGE: WRITE TO TARGET FILE FAILED.**
- CAUSE:** An unexpected file system error occurred while writing data to the target file.
- ACTION:** Refer to the qualifying file system error string to determine what to do.
- 33       **MESSAGE: UNABLE TO CREATE OR OPEN TARGET FILE.**
- CAUSE:** An unexpected file system error occurred in creating or opening the target file.
- ACTION:** Refer to the qualifying file system error string to determine what to do.
- 34       **MESSAGE: INVALID OR UNSUPPORTED SOURCE DEVICE.**
- CAUSE:** A request was made to send a file to a non-disk device. Such transfers are not supported.
- ACTION:** Copy the non-disk device file to a disk file using a system utility program, and then use `DSCOPY` to copy that file to the target computer.

- 35           **MESSAGE: INVALID OR UNSUPPORTED TARGET DEVICE.**  
CAUSE: A request was made to send a file to a non-disk device. Such transfers are not supported.  
ACTION: Copy the file to disk on the target computer using DSCOPY and then to the non-disk device using a system utility program.
- 36           **MESSAGE: UNABLE TO CLOSE TARGET FILE.**  
CAUSE: An unexpected file system error occurred in closing the target file.  
ACTION: Refer to the qualifying file system error string to determine what to do
- 38           **MESSAGE: INCORRECT SOURCE FILE PASSWORD.**  
CAUSE: The given source file password was incorrect.  
ACTION: Specify the correct source file password and try again.
- 39           **MESSAGE: INCORRECT TARGET FILE PASSWORD.**  
CAUSE: The given target file password was incorrect.  
ACTION: Specify the correct target file password and try again.
- 41           **MESSAGE: INVALID CHARACTERS IN TARGET FILE WERE REMOVED.**  
CAUSE: Some non-MPE systems allow characters in file names that are not allowed on MPE systems. These characters are removed from a file name when that file is transferred to an MPE system.  
ACTION: None.
- 42           **MESSAGE: TARGET FILE NAME HAS BEEN TRUNCATED.**  
CAUSE: Some non-MPE systems allow file names to be longer than 8 characters. These names are truncated to 8 characters when transferred to an MPE system.  
ACTION: None.
- 43           **MESSAGE: SOURCE AND TARGET FILE ATTRIBUTES DIFFER.**  
CAUSE: If interchange mode is used, source file attributes may differ from target file attributes.  
ACTION: None.
- 44           **MESSAGE: RECORDS(S) WERE TRUNCATED TO FIT MAXIMUM TARGET FILE RECORD SIZE.**  
CAUSE: When the target file's record size is smaller than the source file's record size, the source file's records are truncated to fit the target file's record size.  
ACTION: None.

45           **MESSAGE: COMPRESSION WILL NOT BE DONE FOR THE CURRENT TRANSFER.**

CAUSE: The source and/or the target computer does not support data compression (the `COMPRESS` option); or the transfer is local. File transfer will continue without data compression.

ACTION: None.

46           **MESSAGE: UNABLE TO TURN ON TRACING.**

CAUSE: Indicates that an internal error has occurred. File transfer will continue without tracing.

ACTION: See Appendix A , “Submitting a CR,” of this manual.

47           **MESSAGE: INVALID USE OF STRIP OPTION.**

CAUSE: The `STRIP` option cannot be used with files that have variable-length records.

ACTION: Do not use the `STRIP` option with files having variable-length records.

48           **MESSAGE: UNABLE TO ACCESS TARGET FILE/DEVICE**

CAUSE: An unexpected file system error occurred in accessing the target file. This may mean that a file equation specified access options which conflict with those desired by NFT.

ACTION: Verify that the target file is accessible, reset previously given file equations, and specify attributes which do not conflict with those desired by NFT. Also, refer to the qualifying file system error string.

49           **MESSAGE: INVALID SOURCE FILE ID.**

CAUSE: The source file name is invalid on the source computer.

ACTION: Check the source file name syntax and try again.

51           **MESSAGE: APPEND NOT SUPPORTED.**

CAUSE: Target mainframe does not support the `APP` (append) option.

ACTION: None.

52           **MESSAGE: OVERWRITE NOT SUPPORTED.**

CAUSE: Target mainframe does not support the `OVER` (overwrite) option.

ACTION: None.

54           **MESSAGE: ERROR IN GENERATING LIST OF FILES MATCHING REQUEST.**

CAUSE: An error occurred while a generic source file specification was being processed.

ACTION: Verify that the generic source file specification does match up with existing files.

- 57           **MESSAGE: INCOMING CONNECTION HAS GONE DOWN.**  
CAUSE: An incoming connection to an NFT server program has gone down for an unknown reason.  
ACTION: This error will appear only in a log file. See Appendix A , “Submitting a CR.”
- 58           **MESSAGE: MOVE NOT SUPPORTED.**  
CAUSE: Source mainframe does not support the `MOVE` option. The transfer will take place, but the source file will not be purged.  
ACTION: None.
- 59           **MESSAGE: UNABLE TO OPEN CHECKPOINT/RESTART FILE.**  
CAUSE: NFT cannot open the file containing the information needed to restart a checkpointed transfer. This may be caused by the following factors:
- If `CHECKPT` is specified: 99 restart files already exist in the group and account of one of the roles (initiator, producer, or consumer).
  - If `RESTART` is specified: the file does not exist, or is being accessed exclusively, or the user is logged on to a different group or account to restart than when checkpointing.
- ACTION: Be sure there are fewer than 99 restart files in any of the necessary groups and accounts. Determine whether the file exists, and if so, make sure that the file is not being accessed. Also check to make sure that you are logged on as the same user, group, and account number as when checkpointing.
- 60           **MESSAGE: UNABLE TO RETRIEVE RESTART INFORMATION.**  
CAUSE: NFT fails to obtain valid information from the checkpointing/restart file and cannot restart the transfer. An `FREAD` error may have been received from the restart file, or the restart file may be in an inconsistent state and contains incomplete or invalid data.  
ACTION: None.
- 61           **MESSAGE: UNABLE TO STORE CHECKPOINT INFORMATION.**  
CAUSE: NFT failed to store valid information to the checkpoint/restart file. This error is returned only if the data transfer portion of the NFT transaction has begun and an `FWRITE` error to the checkpoint/restart file has occurred.  
ACTION: Attempt to restart the transfer. If this fails consistently, there may be a problem with the file system. See Appendix A , “Submitting a CR,” of this manual.

- 62           **MESSAGE: UNABLE TO RESTART TRANSFER.**
- CAUSE: NFT attempted to restart a generic transfer and was unable to open the generic `listf` file, i.e., the file which contains the list of files to be transferred. This would occur if the file is opened exclusively or has been purged.
- ACTION: Make sure that the generic `listf` file (`GENSETn`) exists in the producer's group and account and is not accessed exclusively.
- 63           **MESSAGE: SOURCE AND TARGET CHECKPOINTS DO NOT MATCH.**
- CAUSE: A restart has been attempted and the producer and consumer checkpoints do not match. The checkpoint restart file has been corrupted, or a serious internal NFT error has occurred.
- ACTION: Restart the transfer from scratch. If the problem persists, see Appendix A , "Submitting a CR," of this manual.
- 64           **MESSAGE: UNABLE TO INITIATE CHECKPOINTING.**
- CAUSE: This warning is issued for any one of the following reasons:
- A checkpoint/restart file cannot be opened or created.
  - The restart ID file cannot be opened or created.
  - The information cannot be written to the checkpoint/restart file, the generic `listf` file, or the restart ID file.
  - Checkpointing is being attempted on a circular file, a message file, or a variable length record file in interchange mode.
  - Checkpointing is being attempted to a node which does not support checkpointing.
- ACTION: After the warning is issued, the file transfer will continue with no checkpointing taking place. You may wish to abort the transfer.
- 65           **MESSAGE: CHECKPOINTING WILL NOT BE DONE FOR LOCAL TRANSFERS.**
- CAUSE: Checkpointing has been specified for a transfer for which the producer and consumer environments are equivalent, i.e., their group, account, and node name are the same.
- ACTION: Transfer will continue with no checkpointing. You may wish to abort the transfer.
- 66           **MESSAGE: FOUND END OF FILE MARK IN TARGET FILE, TRANSFER STOPPED.**
- CAUSE: Use of the `Fsize` option has resulted in a target file too small to hold the source file. After the target file is full, the transfer is stopped.
- ACTION: None.

67

**MESSAGE: TARGET FILE BLOCK SIZE BEING CHANGED DUE TO FILE SYSTEM DIFFERENCES.**

**CAUSE:** The block size for the Native Mode KSAM file has changed because of the file system differences.

**ACTION:** None.

## 4 NFT/3000 Error Messages

NFT/3000 messages may be distinguished from other NFT messages in the following way: bit 2 of the DSCOPY result parameter or of the NFTERR JCW indicates the appropriate error set (on=NFT/3000, off=NFT). The DSCOPYMSG intrinsic is able to determine the correct error set.

0

**MESSAGE: NO ERRORS WERE DETECTED.**

CAUSE: No errors occurred during the file transfer.

ACTION: None. This is an informative message.

1

**MESSAGE: UNABLE TO OPEN NFT MESSAGE CATALOG.**

CAUSE: If NFT is unable to open its message catalog it will print an error message to the system console, log the error to the NM logging facility and terminate. This error code will not actually be returned to the user.

ACTION: Make sure that NFTCAT2.NET.SYS is present and not being accessed exclusively by some other user. If so, then try running MAKECAT to ensure that the file is in message catalog format. If the console message says that the version number in the message catalog is not current then obtain the proper version. Examine the NM log file to see which file system error occurred when the FOPEN was attempted.

2

**MESSAGE: ATTEMPTED READ FROM INPUT FILE FAILED.**

CAUSE: Read from the command input file (formal designator DSCOPYI) failed.

ACTION: Look for a file equation for DSCOPYI. Make sure it is what was intended.

3

**MESSAGE: UNABLE TO OPEN SECONDARY OUTPUT FILE.**

CAUSE: FOPEN of the secondary output file (formal designator DSCOPYL) failed.

ACTION: Look for a file equation for DSCOPYL. Make sure it is correct. If primary output is not enabled, check the NM log file for the file system error which occurred.

4

**MESSAGE: UNABLE TO OPEN INPUT FILE.**

CAUSE: FOPEN of the command input file (formal designator DSCOPYI) failed.

ACTION: Look for a file equation for DSCOPYI. Ensure that it refers to a valid file (or \$STDIN).

- 5           **MESSAGE: COMMAND LINE IS TOO LONG.**  
CAUSE: Input command length exceeded the allowed maximum (200 bytes).  
ACTION: Ensure that the command input file is correct. If the command is truly too long, global specifications may be used to shorten it.
- 6           **MESSAGE: CALL TO GENMESSAGE FAILED.**  
CAUSE: DSCOPYMSG intrinsic could not retrieve the specified error string from the NFT message catalog.  
ACTION: Make sure that `NFTCAT2.NET.SYS` is present and not being accessed exclusively by some other user. If so, then try running `MAKECAT` to ensure that the file is in message catalog format. If the console message says that the version number in the message catalog is not current then obtain the proper version. Examine the NM log file to see which file system error occurred when the `FOPEN` was attempted.
- 8           **MESSAGE: KEYWORD DICTIONARY IS TOO LONG.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 9           **MESSAGE: COMMAND LINE CONTAINS TOO MANY PARAMETERS.**  
CAUSE: Too many delimiters were in the command line (each delimiter corresponds to one parameter).  
ACTION: If the command line was entered properly, try using global specifications to reduce the number of parameters.
- 10          **MESSAGE: NO SOURCE FILE WAS SPECIFIED.**  
CAUSE: Usually a typographical error.  
ACTION: Retype and reissue the command.
- 11          **MESSAGE: NO CLOSING QUOTE WAS SPECIFIED.**  
CAUSE: A matching apostrophe (') or set of quotation marks (" "), was not found.  
ACTION: The punctuation surrounding the parameter is not of the same type. They must both be either (') or (" ").
- 12          **MESSAGE: ! IS AN INVALID DELIMITER BETWEEN SOURCE AND TARGET.**  
CAUSE: Usually a typographical error.  
ACTION: Retype and reissue the command.
- 13          **MESSAGE: ! IS INVALID DELIMITER BETWEEN TARGET AND KEYWORDS.**  
CAUSE: Usually a typographical error.



- ACTION: Retype and reissue the command.
- 14       **MESSAGE: UNKNOWN KEYWORD: !**  
CAUSE: Usually a typographical error.  
ACTION: Retype and reissue the command.
- 15       **MESSAGE: REMOTE ENVIRONMENT SPECIFIED BY USER DOES NOT EXIST.**  
CAUSE: The session associated with the specified node or environment cannot be found. Either the session was aborted externally or an internal error occurred.  
ACTION: Ask your system manager if your session was aborted. If not, check the NM log file for additional error information.
- 16       **MESSAGE: RESTART ID FILE NAME IS TOO LONG.**  
CAUSE: Restart ID file name exceeds the length of a legal MPE file name.  
ACTION: Correct the file name and re-enter the command.
- 19       **MESSAGE: INVALID FILE SIZE.**  
CAUSE: FSIZE specified contains non-numeric characters or is too large.  
ACTION: Retype and reissue the command with the correct FSIZE.
- 20       **MESSAGE: INVALID CHECKPOINT INTERVAL.**  
CAUSE: Checkpoint interval specified contains non-numeric characters or is too large.  
ACTION: Retype and reissue the command with the correct checkpoint interval.
- 22       **MESSAGE: FILE IS TOO LONG.**  
CAUSE: Usually a typographical error.  
ACTION: Retype and reissue the command.
- 23       **MESSAGE: MISSING RIGHT BRACKET IN LOG-ON SPECIFICATION.**  
CAUSE: Typographical error.  
ACTION: Retype and reissue the command.
- 24       **MESSAGE: INVALID RECORD NUMBER FOR RESTART ID FILE.**  
CAUSE: Record number specified for restart ID file contains non-numeric characters or is too large.  
ACTION: Retype and reissue the command with the correct record number for the restart ID.

- 25           **MESSAGE: SCHAR AND ICHAR NOT ALLOWED AS GLOBAL SPECS.**  
CAUSE: SCHAR and ICHAR may not follow “+” on the command line.  
ACTION: Specify these options for every transfer.
- 26           **MESSAGE: INVALID RESTART SPEC.**  
CAUSE: RESTART option syntax is incorrect.  
ACTION: See *Using NS 3000/iX Network Services* for correct syntax.
- 27           **MESSAGE: FILE ID NOT ALLOWED AS GLOBAL SPECIFICATION.**  
CAUSE: File ID cannot follow “+” on command line. All other specifications may be made global.  
ACTION: Retype and reissue the command.
- 28           **MESSAGE: REP(LACE) OVERRIDES APP(END) AND OVER(WRITE).**  
CAUSE: Reminds user of the consequences of issuing REP option.  
ACTION: None.
- 29           **MESSAGE: APP(END) OVERRIDES REP(LACE) AND OVER(WRITE).**  
CAUSE: APP (append) was specified after REP (replace) or OVER (overwrite), therefore it takes effect during the transfer.  
ACTION: None.
- 31           **MESSAGE: OVER(WRITE) OVERRIDES APP(END) AND REP(LACE).**  
CAUSE: Reminds user of OVER option’s consequences.  
ACTION: None.
- 34           **MESSAGE: INVALID RSIZE.**  
CAUSE: RSIZE specified contains non-numeric characters or is too large.  
ACTION: Retype and reissue the command with the correct RSIZE.
- 35           **MESSAGE: EQUALS SIGN MUST FOLLOW !**  
CAUSE: Equals sign does not follow the SDEV, DEV, or CODE option.  
ACTION: Retype and reissue the command.
- 36           **MESSAGE: ! OVERRIDES PREVIOUS RECORD TYPE.**  
CAUSE: Either FIX or VAR was specified when the other was already specified in the command line or globally.  
ACTION: None.
- 37           **MESSAGE: ! OVERRIDES PREVIOUS FILE TYPE.**  
CAUSE: Either SEQ or DIR was specified when the other was already specified in the command line or globally.

- ACTION: None.
- 38       **MESSAGE: ! OVERRIDES PREVIOUS DATA TYPE.**  
CAUSE: Either BIN or ASC was specified when the other was already specified in the command line or globally.  
ACTION: None.
- 40       **MESSAGE: INVALID FILE ID: !**  
CAUSE: Usually caused by blank characters in the file ID, or by omitting a delimiter or parameter.  
ACTION: Retype and reissue the command.
- 41       **MESSAGE: INVALID NODE SPEC: !**  
CAUSE: Usually caused by blank characters in the node (or environment) specification.  
ACTION: Retype and reissue the command.
- 42       **MESSAGE: INVALID DEVICE SPEC: !**  
CAUSE: Usually caused by blank characters in the device specification.  
ACTION: Retype and reissue the command.
- 43       **MESSAGE: CREATION OF IPC SOCKET FAILED.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 44       **MESSAGE: NO LOGON FOR REMOTE ENVIRONMENT.**  
CAUSE: A node or environment was specified without a logon specification and without a pre-existing remote session.  
ACTION: Specify a logon string in the DSCOPY command line or perform a DSLINE/REMOTE HELLO before issuing the DSCOPY command.
- 45       **MESSAGE: ATTEMPT TO GET SOCKET ENDPOINT FAILED.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 46       **MESSAGE: VARIABLE LENGTH RECORDS CANNOT BE DIRECTLY ACCESSED.**  
CAUSE: The DIR option cannot be used on variable record files or with the VAR option.  
ACTION: Retry.
- 47       **MESSAGE: BUFFER MANAGER ERROR.**  
CAUSE: Probable internal error.

- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 48       **MESSAGE: ATTEMPT TO PLACE NFT SERVER BACK IN SYSTEM ENVIRONMENT FAILED.**
- CAUSE: Probable internal error.
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 49       **MESSAGE: BUFFER MANAGER ERROR.**
- CAUSE: When an NFT process is initiated it attempts to place itself into the appropriate user session (or job). The error results when this attempt fails.
- ACTION: Make sure that the sessions involving file transfer have not been aborted. If the sessions are present, see Appendix A , "Submitting a CR," of this manual.
- 50       **MESSAGE: INTERNAL ERROR — SEND QUEUE OVERFLOW.**
- CAUSE: Probable internal error.
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 51       **MESSAGE: SOURCE AND TARGET FILE ATTRIBUTES MUST MATCH.**
- CAUSE: For certain operations (such as overwrite) the attributes (data type, file type) of both files involved must match. When they do not this error results.
- ACTION: If overwrite was attempted but the source and target files aren't compatible, try using the replace option (REP); or use FCOPY to copy the files.
- 52       **MESSAGE: FSIZE SPEC IS IGNORED IF TARGET EXISTS.**
- CAUSE: The FSIZE option cannot be used with the OVER (overwrite) or APP (append) option.
- ACTION: None.
- 53       **MESSAGE: INTERNAL ERROR — COMPLETION QUEUE OVERFLOW.**
- CAUSE: Internal error.
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 54       **MESSAGE: UNABLE TO OBTAIN DATA SEGMENT FOR INTERNAL IPC.**
- CAUSE: Probable system resource problem.
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 55       **MESSAGE: UNABLE TO FIND AFT ENTRY FOR INTERNAL IPC.**
- CAUSE: Probable internal error.
- ACTION: See Appendix A , "Submitting a CR," of this manual.

- 56           **MESSAGE: CREATION OF INTERNAL IPC PORT FAILED.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 57           **MESSAGE: ATTEMPT TO RECEIVE NFT CHANGE REQUEST FAILED.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 58           **MESSAGE: UNKNOWN INTERNAL MESSAGE WAS RECEIVED.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 60           **MESSAGE: NFT SERVER WAS ABORTED.**  
CAUSE: An internal error or external request (ABORTJOB) may have aborted the NFT server.  
ACTION: Check NM log file. See Appendix A , “Submitting a CR,” of this manual.
- 61           **MESSAGE: INTERNAL ERROR — WARNING QUEUE OVERFLOW.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 62           **MESSAGE: NEW SIZE SPECIFICATION OVERRIDES PREVIOUS SETTING.**  
CAUSE: The size specified in the transfer overrides the global specification.  
ACTION: None.
- 63           **MESSAGE: UNSUPPORTED KEYWORD: !**  
CAUSE: Keyword specified is not currently supported by NFT/3000.  
ACTION: Retry.
- 64           **MESSAGE: NO FILES IN GENERIC REQUEST.**  
CAUSE: There are no files in the requested generic file set.  
ACTION: Check file names and try the transfer again.
- 65           **MESSAGE: UNABLE TO CREATE GENERIC TEMP FILE.**  
CAUSE: NFT needs a temporary file to hold file names in a generic set. This error results when NFT is unable to create this file. The cause may be a lack of disk space, duplicate file name.  
ACTION: Check file space available, increase it if necessary (and possible). Check for temporary files named GENSET@. Purge these and try the transfer again.

- 66           **MESSAGE: SOURCE DEVICE SPEC OVERRIDES GLOBAL SPEC.**  
CAUSE: An existing global specification conflicts with a specification in the current transfer. The specification in the current transfer will override the global specification for the current transfer only.  
ACTION: None.
- 67           **MESSAGE: TARGET NODE SPEC OVERRIDES GLOBAL SPEC.**  
CAUSE: An existing global specification conflicts with a specification in the current transfer. The specification in the current transfer will override the global specification for the current transfer only.  
ACTION: None.
- 68           **MESSAGE: SOURCE NODE SPEC OVERRIDES GLOBAL SPEC.**  
CAUSE: An existing global specification conflicts with a specification in the current transfer. The specification in the current transfer will override the global specification for the current transfer only.  
ACTION: None.
- 69           **MESSAGE: TARGET NODE SPEC OVERRIDES GLOBAL SPEC.**  
CAUSE: An existing global specification conflicts with a specification in the current transfer. The specification in the current transfer will override the global specification for the current transfer only.  
ACTION: None.
- 70           **MESSAGE: SOURCE LOGON SPEC OVERRIDES GLOBAL SPEC.**  
CAUSE: An existing global specification conflicts with a specification in the current transfer. The specification in the current transfer will override the global specification for the current transfer only.  
ACTION: None.
- 71           **MESSAGE: TARGET LOGON SPEC OVERRIDES GLOBAL SPEC.**  
CAUSE: An existing global specification conflicts with a specification in the current transfer. The specification in the current transfer will override the global specification for the current transfer only.  
ACTION: None.
- 72           **MESSAGE: UNABLE TO CONTACT NFT SERVER.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 73           **MESSAGE: UNABLE TO STORE NFT PORT ID IN PORT DICTIONARY.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 74           **MESSAGE: ERROR OCCURRED WHEN SETTING UP NFT SERVER.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 75           **MESSAGE: NO NFT SERVERS ARE CURRENTLY AVAILABLE.**  
CAUSE: The number of active NFT servers (set via NSCONTROL) has reached its limit.  
ACTION: Adjust the maximum number of NFT servers allowed via NSCONTROL. If this is not possible, try to invoke NFT again as a server may have terminated.
- 76           **MESSAGE: MESSAGE FILES MAY NOT BE TRANSFERRED IN INTERCHANGE MODE.**  
CAUSE: MPE message files cannot be transferred using any of the options which invoke interchange mode.  
ACTION: Try the transfer again without any options which invoke interchange mode.
- 77           **MESSAGE: UNABLE TO OBTAIN PSEUDO-TERMINAL FOR LOGON.**  
CAUSE: All available pseudo-terminals are in use.  
ACTION: If this happens often, ask the system manager to configure more pseudo-terminals.
- 78           **MESSAGE: NFT TERMINATION FAILED.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 79           **MESSAGE: LOGON ID IS TOO LONG.**  
CAUSE: Usually a typographical error.  
ACTION: Retype and reissue the command.
- 80           **MESSAGE: NODE NAME IS TOO LONG.**  
CAUSE: Usually a typographical error.  
ACTION: Retype and reissue the command.
- 81           **MESSAGE: FILE PASSWORD IS TOO LONG.**  
CAUSE: Usually a typographical error.  
ACTION: Retype and reissue the command.
- 82           **MESSAGE: DEVICE NAME IS TOO LONG.**  
CAUSE: Usually a typographical error.  
ACTION: Retype and reissue the command.

- 84           **MESSAGE: INSUFFICIENT BUFFER SPACE FOR USER REQUEST.**  
CAUSE: Probable system resource problem.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 85           **MESSAGE: PM CAPABILITY IS REQUIRED FOR DEBUG.**  
CAUSE: To enter debug in NFT, Privileged Mode (PM) capability is required.  
ACTION: Contact your system operator.
- 86           **MESSAGE: CI COMMAND EXECUTION FAILED.**  
CAUSE: Usually accompanied by an MPE error.  
ACTION: Fix the MPE error.
- 87           **MESSAGE: NEW SOURCE FILE CODE OVERRIDES PREVIOUS SETTING.**  
ACTION: None.  
CAUSE: Reminder to user.
- 88           **MESSAGE: INVALID FCODE.**  
CAUSE: File code contains non-numeric characters or is too large.  
ACTION: The file code must be specified as a number.
- 89           **MESSAGE: SM or PM CAPABILITY REQUIRED TO COPY PRIVILEGED FILES.**  
CAUSE: The user specified a negative file code but did not have system manager or privileged mode capability.  
ACTION: Make sure that the source file is accessed from a session (or job) whose user has system manager or privileged mode capability.
- 90           **MESSAGE: INVALID DATA MESSAGE WAS RECEIVED.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 91           **MESSAGE: UNABLE TO OBTAIN INFO ON NEWLY CREATED SESSION.**  
CAUSE: Probable internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 92           **MESSAGE: INVALID STRING FOLLOWING RIGHT BRACKET.**  
CAUSE: One or more invalid characters follow the right bracket in the logon part of the DSCOPY command.  
ACTION: Re-enter the command using the correct delimiters.



- 93           **MESSAGE: INVALID STRING FOLLOWING CLOSING QUOTE.**  
CAUSE: One or more invalid characters follow a closing quote. A file name, node name, or logon name enclosed in quotes must be followed by an appropriate delimiter.  
ACTION: Re-enter the DSCOPY command using correct delimiters.
- 94           **MESSAGE: BOUNDS VIOLATION.**  
CAUSE: Internal error parameter out of bounds.  
ACTION: Check parameters passed to DSCOPY or DSCOPY MSG.
- 95           **MESSAGE: SPLITSTACK MODE CALLS NOT ALLOWED.**  
CAUSE: DSCOPY will not run in splitstack mode.  
ACTION: Do not attempt to run DSCOPY in splitstack mode.
- 96           **MESSAGE: FIRST PARAMETER IS OUT OF RANGE (0:14).**  
CAUSE: OPT has value other than 0 opt 14.  
ACTION: Check content of OPT parameter.
- 100          **MESSAGE: ILLEGAL BASIC CALLING SEQUENCE.**  
CAUSE: There is in an error in the calling sequence of a BDSCOPY intrinsic call.  
ACTION: Refer to *Using NS 3000/iX Network Services* for the correct calling sequence.
- 103          **MESSAGE: AUTOLOGON DISABLED; USE :REMOTE HELLO FOR REMOTE SESSION.**  
CAUSE: Automatic logon facility has been turned off by the network manager.  
ACTION: Logon to the remote environment using the REMOTE HELLO command. Specify this remote environment in the DSCOPY command.
- 104          **MESSAGE: RESTART KEYWORD NOT ALLOWED IN DSCOPYI FILE.**  
CAUSE: User is attempting a restart from the DSCOPYI command file.  
ACTION: Only use the RESTART keyword when DSCOPYI has not been redirected to a file.
- 105          **MESSAGE: ERROR IN RETRIEVING RESTART ID NUMBER FROM RESTART ID FILE.**  
CAUSE: An error occurred while attempting to obtain the restart ID from the specified file.  
ACTION: Verify that the restart ID file name and record number are correct.

- 106           **MESSAGE: ! IS AN INVALID DELIMITER AS USED IN RESTART SPEC.**  
CAUSE: Typographical errors.  
ACTION: See *Using NS3000/iX Network Services* for the correct delimiters.
- 109           **MESSAGE: INVALID COMMAND INPUT FORMAL FILE DESIGNATOR.**  
CAUSE: Usually a typographical error. Either a right parenthesis is missing, or the formal file designator is too long.  
ACTION: Check the command syntax and try again.
- 110           **MESSAGE: FILE COMMAND WITH 'DEL' OPT. NOT ALLOWED.**  
CAUSE: File equation contains ';DEL' parameter.  
ACTION: Remove file parameter ';DEL' from file equation.
- 111           **MESSAGE: FILE CMD. WITH 'NEW', 'OLD', or 'OLDTEMP' OPT. NOT ALLOWED.**  
CAUSE: Domain parameter in file equation.  
ACTION: Remove file equation domain parameter.
- 112           **MESSAGE: BLOCK SIZE EXCEEDS MAXIMUM ALLOWABLE LIMIT.**  
CAUSE: Maximum block size is 65510 bytes.  
ACTION: Change the file block size to be less or equal to 65510 bytes.
- 113           **MESSAGE: SOURCE FILE CANNOT RESIDE IN A HIERARCHICAL DIRECTORY.**  
CAUSE: Source file resides in HFS (hierarchical file system) namespace.  
ACTION: NFT is POSIX aware, not POSIX compliant, and does not support HFS files.
- 114           **MESSAGE: TARGET FILE CANNOT RESIDE IN A HIERARCHICAL DIRECTORY.**  
CAUSE: Target file resides in HFS (hierarchical file system) namespace.  
ACTION: NFT is POSIX aware, not POSIX compliant, and does not support HFS files.
- 115           **MESSAGE: SOURCE FILE CANNOT BE BYTE STREAM RECORD TYPE.**  
CAUSE: Source file is a byte stream file.  
ACTION: NFT is POSIX aware, not POSIX compliant, and does not support byte stream files.

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**MESSAGE: TARGET FILE CANNOT BE BYTE STREAM RECORD TYPE.**

**CAUSE:** Target file is a byte stream file.

**ACTION:** NFT is POSIX aware, not POSIX compliant, and does not support byte stream files.



## 5 NetIPC (SOCKERRS) Error Messages

NetIPC are (32-bit) integers that are returned in the result parameter of NetIPC intrinsics when the intrinsic execution fails. (A result of 0 indicates that the intrinsic succeeded.) In addition, both NetIPC errors and Transport Protocol errors are returned in the IPCCHECK intrinsic: NetIPC errors in the `ipcerr` parameter and Transport Protocol errors in the `pmerr` parameter.

- 0 **MESSAGE: SUCCESSFUL COMPLETION.**  
 CAUSE: No error was detected.  
 ACTION: None.
- 1 **MESSAGE: INSUFFICIENT STACK SPACE.**  
 CAUSE: Area between S and Z registers is not sufficient for execution of the intrinsic.  
 ACTION: :PREP your program file with a greater MAXDATA value.
- 3 **MESSAGE: PARAMETER BOUNDS VIOLATION.**  
 CAUSE: A specified parameter is out of bounds.  
 ACTION: Check all parameters to make certain they are between the user's DL and S registers. If an array is specified, make certain all of it is within bounds.
- 4 **MESSAGE: TRANSPORT HAS NOT BEEN INITIALIZED.**  
 CAUSE: A :NETCONTROL was not issued to bring up the network transport.  
 ACTION: Notify your operator.
- 5 **MESSAGE: INVALID SOCKET TYPE.**  
 CAUSE: Specified socket type parameter is of an unknown value.  
 ACTION: Check and modify your socket type parameter.
- 6 **MESSAGE: INVALID PROTOCOL.**  
 CAUSE: Specified protocol parameter is of an unknown value.  
 ACTION: Check and modify protocol parameter.
- 7 **MESSAGE: ERROR DETECTED IN flags PARAMETER.**  
 CAUSE: An unsupported bit in the flags parameter was set, or a nonprivileged user set a privileged bit.

**ACTION:** Verify that the proper bits are specified in the flags parameter. Bit numbering is from left to right (0–31).

8           **MESSAGE: INVALID OPTION IN THE opt RECORD.**

**CAUSE:** An unsupported option was specified in the opt record, or a nonprivileged user attempted to specify a privileged option.

**ACTION:** Check the options added to the opt record and remove or modify the option. Verify that the opt record was initialized correctly using INITOPT.

9           **MESSAGE: PROTOCOL IS NOT ACTIVE.**

**CAUSE:** A NETCONTROL has not been issued to activate the requested protocol module.

**ACTION:** Notify your operator.

10          **MESSAGE: PROTOCOL DOES NOT SUPPORT THE SPECIFIED SOCKET TYPE.**

**CAUSE:** The type of socket you are trying to create is not supported by the protocol to be used.

**ACTION:** Use a different socket type or protocol.

12          **MESSAGE: ERROR DETECTED WITH MAXIMUM MESSAGES QUEUED OPTION.**

**CAUSE:** Invalid option length specified or value of option is not positive.

**ACTION:** Correct option specification.

13          **MESSAGE: UNABLE TO ALLOCATE AN ADDRESS.**

**CAUSE:** No addresses were available for dynamic allocation.

**ACTION:** If unsuccessful the second time, see Appendix A , “Submitting a CR,” of this manual.

14          **MESSAGE: ADDRESS OPTION ERROR.**

**CAUSE:** The address option in the opt record has an error in it (e.g., invalid length).

**ACTION:** Check the values being placed in the opt record.

15          **MESSAGE: ATTEMPT TO EXCEED LIMIT OF SOCKETS PER PROCESS.**

**CAUSE:** User has already reached the limit of 64 sockets per process.

**ACTION:** Shut down any sockets which are not being used or have been aborted.

16          **MESSAGE: OUT OF PATH DESCRIPTORS OR PATH DESCRIPTOR EXTENSIONS.**

**CAUSE:** Transport’s Path Cache or Path Descriptor table is full.

- ACTION: Contact your operator to see if the table can be expanded.
- 18       **MESSAGE: FORMAT OF THE opt RECORD IS INCORRECT.**  
CAUSE: NetIPC was unable to parse the specified opt record.  
ACTION: Check your INITOPT and ADDOPT calls.
- 19       **MESSAGE: ERROR DETECTED WITH MAXIMUM MESSAGE SIZE OPTION.**  
CAUSE: Maximum message size option in the opt record had an error associated with it (for example, too many bytes specified, invalid message size value).  
ACTION: Check the values being placed in the opt record.
- 20       **MESSAGE: ERROR WITH DATA OFFSET OPTION.**  
CAUSE: Data offset option in the opt record had an error associated with it (for example, too many bytes specified).  
ACTION: Check the values being placed in the opt record.
- 21       **MESSAGE: DUPLICATE opt RECORD OPTION SPECIFIED.**  
CAUSE: The same opt record option was specified twice.  
ACTION: Remove the redundant call.
- 24       **MESSAGE: ERROR DETECTED IN MAXIMUM CONNECTION REQUESTS QUEUED OPTION.**  
CAUSE: Maximum connection requests queued option in the opt record had an error associated with it (for example, too many bytes specified, bad value).  
ACTION: Check the values being placed in the opt record.
- 25       **MESSAGE: SOCKETS NOT INITIALIZED; NO GLOBAL DATA SEGMENT.**  
CAUSE: Error occurred attempting to initialize NetIPC, or Network Management is still initializing.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 26       **MESSAGE: UNABLE TO ALLOCATE A DATA SEGMENT.**  
CAUSE: The attempt to create a data segment failed because the DST table was full or there was not enough virtual memory.  
ACTION: Contact your operator to see if these tables can be expanded.
- 27       **MESSAGE: REQUIRED PARAMETER NOT SPECIFIED.**  
CAUSE: A required parameter was not supplied in an option variable intrinsic call.  
ACTION: Check your calling sequence.

- 28           **MESSAGE: INVALID NAME LENGTH.**  
CAUSE: Specified name length was too large or negative.  
ACTION: Check your name length parameter. Shorten the name if necessary.
- 29           **MESSAGE: INVALID DESCRIPTOR.**  
CAUSE: Specified descriptor is not a valid socket, connection, or destination descriptor.  
ACTION: Check the value being specified.
- 30           **MESSAGE: UNABLE TO NAME CONNECTION SOCKETS.**  
CAUSE: The socket descriptor given in the IPCNAME call was for a VC socket; VC sockets may not be named.  
ACTION: Check if the correct descriptor was specified.
- 31           **MESSAGE: DUPLICATE NAME.**  
CAUSE: Specified name was previously given.  
ACTION: Use a different name.
- 32           **MESSAGE: NOT CALLABLE INSPLIT STACK.**  
CAUSE: The particular NetIPC intrinsic cannot be called from split stack.  
ACTION: Recode to call the intrinsic from the stack. Vectored data may be required.
- 33           **MESSAGE: INVALID NAME.**  
CAUSE: Name is too long or has a negative length.  
ACTION: Check the name's length. Shorten the name if necessary.
- 34           **MESSAGE: CRITICAL ERROR PREVIOUSLY REPORTED; MUST SHUTDOWN SOCKET.**  
CAUSE: NetIPC previously detected and reported an irrecoverable error; most likely it was initiated by the protocol module.  
ACTION: The socket can no longer be used. Call IPCSHUTDOWN to clean up.
- 35           **MESSAGE: ATTEMPT TO EXCEED LIMIT OF NAMES PER SOCKET.**  
CAUSE: A socket can have only four names; the caller attempted to give it a fifth.  
ACTION: Use no more than four names.
- 36           **MESSAGE: TABLE OF NAMES IS FULL.**  
CAUSE: Socket registry or give table is full.



**ACTION:** Shut down unused sockets, call `IPCNAMERASE` on any sockets that no longer need to be looked up, or get given sockets. See Appendix A , “Submitting a CR,” of this manual.

37           **MESSAGE: NAME NOT FOUND.**

**CAUSE:** Name was not previously specified in an `IPCNAME` or `IPCGIVE` call; `IPCNAMERASE` or `IPCGET` was previously issued with the name; or socket no longer exists.

**ACTION:** Check names specified, make sure names were properly agreed on, determine if a timing problem exists.

38           **MESSAGE: USER DOES NOT OWN THE SOCKET.**

**CAUSE:** Attempted to erase a name of a socket you do not own.

**ACTION:** Have the owner of the socket call `IPCNAMERASE`.

39           **MESSAGE: INVALID NODE NAME SYNTAX.**

**CAUSE:** Syntax of the node name is invalid.

**ACTION:** Check the node name being supplied.

40           **MESSAGE: UNKNOWN NODE.**

**CAUSE:** Unable to resolve the specified node name as an NS node name.

**ACTION:** Check the node name to see if it is correct. The node name may be valid but the specified node’s transport may not be active.

41           **MESSAGE: ATTEMPT TO EXCEED PROCESS LIMIT OF DESTINATION DESCRIPTORS.**

**CAUSE:** User has already reached the limit of 261 destination descriptors per process.

**ACTION:** Call `IPCSHUTDOWN` on any unneeded destination descriptors.

43           **MESSAGE: UNABLE TO CONTACT THE REMOTE REGISTRY SERVER.**

**CAUSE:** Send to remote socket registry process failed. This is often caused by the fact that the PXP protocol module is not active on the local node.

**ACTION:** Contact your operator. If unable to resolve the problem, see Appendix A , “Submitting a CR,” of this manual.

44           **MESSAGE: NO RESPONSE FROM REMOTE REGISTRY SERVER.**

**CAUSE:** No reply was received from the remote registry process. This is often due to the remote node not having initialized its transport.

**ACTION:** Contact your operator. If unable to resolve the problem, see Appendix A , “Submitting a CR,” of this manual.

- 46           **MESSAGE: UNABLE TO INTERPRET RECEIVED PATH REPORT.**  
CAUSE: Unable to interpret the information returned by the remote socket registry process regarding the looked-up socket.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 47           **MESSAGE: INVALID MESSAGE RECEIVED FROM REMOTE SERVER.**  
CAUSE: The message received from the remote registry process does not appear to be a valid socket registry message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 50           **MESSAGE: INVALID DATA LENGTH.**  
CAUSE: Specified data length parameter is too long or negative.  
ACTION: Check and modify the value.
- 51           **MESSAGE: INVALID DESTINATION DESCRIPTOR.**  
CAUSE: Supplied destination descriptor value is not that of a valid destination descriptor.  
ACTION: Verify that you are passing an active destination descriptor.
- 52           **MESSAGE: SOURCE AND DESTINATION SOCKET PROTOCOL MISMATCH.**  
CAUSE: The source socket is not of the same protocol as the socket described by the destination descriptor.  
ACTION: Validate that you are using the correct destination descriptor. Make certain both processes have agreed on the same protocol. Determine the correct socket was looked up.
- 53           **MESSAGE: SOURCE AND DESTINATION SOCKET TYPE MISMATCH.**  
CAUSE: The source socket cannot be used for communication with the socket described by the destination descriptor.  
ACTION: Validate that you are using the correct destination descriptor. Make certain both processes have agreed on the same method of communication. Determine the correct socket was looked up.
- 54           **MESSAGE: INVALID CALL SOCKET DESCRIPTOR.**  
CAUSE: Specified descriptor is not for a call socket.  
ACTION: Validate the value being passed.
- 55           **MESSAGE: EXCEEDED PROTOCOL MODULE’S SOCKET LIMIT.**  
CAUSE: Protocol module being used cannot create any more sockets.  
ACTION: Contact your operator; the limit may be configurable.

- 56           **MESSAGE: CALL WOULD BLOCK WHILE USING SELECT ASYNCHRONOUS NODE.**  
CAUSE: The no wait call would block because the socket is not ready for desired operation.  
ACTION: Re-initiate the call or call the select to assure socket is ready for desired operation.
- 57           **MESSAGE: ATTEMPT TO EXCEED LIMIT OF NOWAIT SENDS OUTSTANDING.**  
CAUSE: User tried to send data too many times in nowait mode without calling `IOWAIT`.  
ACTION: Call `IOWAIT` to complete a send. The limit is 7.
- 58           **MESSAGE: ATTEMPT TO EXCEED LIMIT OF NOWAIT RECEIVES OUTSTANDING.**  
CAUSE: User tried to issue too many consecutive nowait receives without calling `IOWAIT`.  
ACTION: Call `IOWAIT` to complete a receive. The limit is 1.
- 59           **MESSAGE: SOCKET TIMEOUT.**  
CAUSE: The socket timer popped before data was received.  
ACTION: If this is not desired, call `IPCCONTROL` to increase or disable the timeout.
- 60           **MESSAGE: UNABLE TO ALLOCATE AN AFT.**  
CAUSE: User has no space for allocating an Active File Table entry.  
ACTION: Close unnecessary files or sockets.
- 62           **MESSAGE: CONNECTION REQUEST PENDING; CALL IPCRECV TO COMPLETE.**  
CAUSE: User called `IPCCONNECT` without a subsequent `IPCRECV` before issuing the current request.  
ACTION: Call `IPCRECV`.
- 63           **MESSAGE: WAITING CONFIRMATION; CALL IPCCONTROL TO ACCEPT/REJECT.**  
CAUSE: `IPCRECV` called with deferred connection option. `IPCCONTROL` has not been called to accept/reject.  
ACTION: Use the call `IPCCONTROL` with the accept/reject option.
- 64           **MESSAGE: REMOTE ABORTED THE CONNECTION.**  
CAUSE: Remote protocol module aborted the connection. This will occur when a peer has called `IPCSHUTDOWN` on the connection.  
ACTION: Call `IPCSHUTDOWN` to clean up your end of the connection.

- 65           **MESSAGE: CONNECTION ABORTED BY LOCAL PROTOCOL MODULE.**
- CAUSE: Local protocol module encountered some error which caused it to abort the connection.
- ACTION: Call IPCSHUTDOWN to clean up your end of the connection. See Appendix A , “Submitting a CR,” of this manual.
- 66           **MESSAGE: INVALID CONNECTION DESCRIPTOR.**
- CAUSE: Supplied value is not that of a valid VC socket (connection) descriptor.
- ACTION: Check the value being given.
- 67           **MESSAGE: CONNECTION FAILURE DETECTED.**
- CAUSE: An event occurred which caused the local protocol module to determine that the connection is no longer up (for example, retransmitted data was never acknowledged).
- ACTION: Call IPCSHUTDOWN to clean up your end of the connection.
- 68           **MESSAGE: RECEIVED A GRACEFUL RELEASE OF THE CONNECTION.**
- CAUSE: Informational message.
- ACTION: Do not attempt to receive any more data.
- 69           **MESSAGE: MUTUALLY EXCLUSIVE flags OPTIONS SPECIFIED.**
- CAUSE: Bits in the flags parameter were set which indicate requests for mutually exclusive options.
- ACTION: Check and clear the appropriate bits.
- 71           **MESSAGE: I/O OUTSTANDING.**
- CAUSE: Attempted an operation with nowait I/O outstanding.
- ACTION: Call IOWAIT to complete the I/O or IPCCONTROL to abort any receives.
- 74           **MESSAGE: INVALID ICCONTROL REQUEST CODE.**
- CAUSE: Request code is unknown or a nonprivileged user requested a privileged option.
- ACTION: Validate the value being passed.
- 75           **MESSAGE: UNABLE TO CREATE A PORT FOR LOW LEVEL I/O.**
- CAUSE: Unable to create an entity used for communication between NetIPC and the protocol module.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 76           **MESSAGE: INVALID TIMEOUT VALUE.**  
CAUSE: Value specified for the timeout is negative.  
ACTION: Modify the value.
- 77           **MESSAGE: INVALID WAIT/NOWAIT MODE.**  
CAUSE: Mode of socket cannot be used.  
ACTION: Use `IPCCONTROL` to specify correct mode.
- 78           **MESSAGE: TRACING NOT ENABLED.**  
CAUSE: Attempted to turn off trace when tracing was not on.  
ACTION: Remove the call.
- 79           **MESSAGE: INVALID TRACE FILE NAME.**  
CAUSE: Requested trace file name is not valid.  
ACTION: Validate and modify the trace file name.
- 80           **MESSAGE: ERROR IN TRACE DATA LENGTH OPTION.**  
CAUSE: An error was detected in the option specifying the maximum amount of data to be traced (for example, negative value, too large, too many bytes used to specify the value).  
ACTION: Modify the values being used.
- 81           **MESSAGE: ERROR IN NUMBER OF TRACE FILE RECORDS OPTION.**  
CAUSE: An error was detected in the option specifying the maximum amount of records to be in the trace file (for example, negative or too large a value, too many bytes used to specify the value).  
ACTION: Modify the values being used.
- 82           **MESSAGE: TRACING ALREADY ENABLED.**  
CAUSE: Attempted to turn on tracing when tracing already enabled.  
ACTION: Remove the call or turn off trace before the call.
- 83           **MESSAGE: ATTEMPT TO TURN ON TRACE FAILED.**  
CAUSE: The Node Management Subsystem (NMS) was unable to enable tracing.  
ACTION: Call `IPCCKECK`; the protocol module error returned will be the Node Management error number. Refer to the Node Management Errors (NMERR) to determine the appropriate action for the specified NMERR.
- 84           **MESSAGE: PROCESS HAS NO LOCAL SOCKET DATA STRUCTURES.**  
CAUSE: `IPCCKECK` was called, but the user had no sockets or destination descriptors, and therefore no data structure for retaining error codes.

- ACTION: None, but no NetIPC or protocol module errors are available.
- 85       **MESSAGE: INVALID SOCKET ERROR NUMBER.**  
CAUSE: IPCERRMSG was called with an invalid NetIPC error code.  
ACTION: Check the value being passed.
- 86       **MESSAGE: UNABLE TO OPEN ERROR CATALOG  
SOCKCAT.NET.SYS.**  
CAUSE: The error message catalog does not exist, it is opened  
exclusively, or the caller does not have access rights to the file.  
ACTION: Notify your operator.
- 87       **MESSAGE: GENMESSAGE FAILURE; NOT A MESSAGE CATALOG.**  
CAUSE: MAKECAT was not successfully run on the message catalog.  
ACTION: Notify your operator.
- 88       **MESSAGE: INVALID REQUEST SOCKET DESCRIPTOR.**  
CAUSE: Internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 89       **MESSAGE: INVALID REPLY SOCKET DESCRIPTOR.**  
CAUSE: Internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 91       **MESSAGE: WOULD EXCEED LIMIT OF REPLIES EXPECTED.**  
CAUSE: Internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 92       **MESSAGE: MUST REPLY TO BEFORE RECEIVING ANOTHER  
REQUEST.**  
CAUSE: Internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 93       **MESSAGE: INVALID SEQUENCE NUMBER.**  
CAUSE: Internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 94       **MESSAGE: NO OUTSTANDING REQUESTS.**  
CAUSE: Internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 95       **MESSAGE: RECEIVED AN UNSOLICITED REPLY.**  
CAUSE: Internal error.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 96       **MESSAGE: INTERNAL BUFFER MANAGER ERROR.**
- CAUSE: Attempted use of the buffer manager by NetIPC or the protocol module resulted in an error.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 98       **MESSAGE: INVALID DATA SEGMENT INDEX IN VECTORED DATA.**
- CAUSE: Data segment index value in the vectored data array is not valid.
- ACTION: Check the value being supplied.
- 99       **MESSAGE: INVALID BYTE COUNT IN VECTORED DATA.**
- CAUSE: The count of data in the vectored data array is invalid.
- ACTION: Check the values being given.
- 100      **MESSAGE: TOO MANY VECTORED DATA DESCRIPTORS.**
- CAUSE: More than two data locations were specified in the vectored data array.
- ACTION: Limit the number to two per operation. Use multiple sends or receives if necessary.
- 101      **MESSAGE: INVALID VECTORED DATA TYPE.**
- CAUSE: Type of vectored data is unknown (must be a 0, 1, 2, or 4) or the data type is for a data segment (1 or 2) and the user is not privileged.
- ACTION: Check the value being used.
- 102      **MESSAGE: UNABLE TO CRACEFULLY RELEASE THE CONNECTION.**
- CAUSE: Protocol module does not support graceful release, process tried to release connection that was not in the correct state, or output pending.
- ACTION: Check command sequence.
- 103      **MESSAGE: USER DATA NOT SUPPORTED DURING CONNECTION ESTABLISHMENT.**
- CAUSE: User data option is not supported for IPCRECV or IPCCONNECT.
- ACTION: Do not use user data option.
- 104      **MESSAGE: CAN'T NAME A REQUEST SOCKET.**
- CAUSE: Internal error.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 105      **MESSAGE: NO REPLY RECEIVED.**
- CAUSE: Internal error.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 106       **MESSAGE: ADDRESS CURRENTLY IN USE BY ANOTHER SOCKET.**  
CAUSE: Address being specified for use is already being used.  
ACTION: Stop application or choose a different socket address.
- 107       **MESSAGE: TRANSPORT IS GOING DOWN.**  
CAUSE: The transport is being shut down.  
ACTION: If you are a privileged user trying to specify a well known address, try again later. If you are nonprivileged, then see Appendix A , “Submitting a CR,” of this manual.
- 108       **MESSAGE: USER HAS RELEASED CONNECTION; UNABLE TO SEND DATA.**  
CAUSE: Process tried to send after initiating graceful release.  
ACTION: Check command sequence.
- 109       **MESSAGE: PEER HAD RELEASED THE CONNECTION; UNABLE TO RECEIVE DATA.**  
CAUSE: Process tried to receive after remote initiated graceful release.  
ACTION: Check command sequence.
- 110       **MESSAGE: UNANTICIPATED ERROR.**  
CAUSE: NetIPC received a protocol module error which it was unable to map.  
ACTION: Call IPCCHECK to get the protocol module error. Call IPCSHUTDOWN to clean up. See Appendix A , “Submitting a CR,” of this manual.
- 111       **MESSAGE: INTERNAL SOFTWARE ERROR DETECTED.**  
CAUSE: An internal error was detected.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 112       **MESSAGE: NOT PERMITTED WITH SOFTWARE INTERRUPTS ENABLED.**  
CAUSE: A request was made which cannot be performed with software interrupts enabled.  
ACTION: Disable software interrupts or remove the request
- 113       **MESSAGE: INVALID SOFTWARE INTERRUPT PROCEDURE LABEL.**  
CAUSE: Procedure label passed when enabling software interrupts is invalid.  
ACTION: Check the PLABEL you are passing.



- 114           **MESSAGE: CREATION OF SOCKET REGISTRY PROCESS FAILED.**  
CAUSE: Socket registry program missing.  
ACTION: Contact your Hewlett-Packard representative for assistance.
- 116           **MESSAGE: DESTINATION UNREACHABLE.**  
CAUSE: The transport was unable to route the packet to the destination.  
ACTION: Notify your operator.
- 117           **MESSAGE: ATTEMPT TO ESTABLISH CONNECITON FAILED.**  
CAUSE: Protocol module was unable to set up the requested connection.  
This may be caused by the remote protocol module not being active.  
ACTION: Notify your operator.
- 118           **MESSAGE: INCOMPATIBLE VERSION.**  
CAUSE: NetIPC software was incompatible with the software being  
executed by the remote registry process.  
ACTION: Notify your operator.
- 119           **MESSAGE: INCOMPATIBLE VERSION.**  
CAUSE: An unsupported option was specified in the opt record, or a  
nonprivileged user attempted to specify a privileged option.  
ACTION: Check your opt record and remove or modify the option.
- 120           **MESSAGE: ERROR IN WINDOW UPDATE THRESHOLD OPTION.**  
CAUSE: An unsupported option was specified in the opt record, or a  
nonprivileged user attempted to specify a privileged option.  
ACTION: Check your opt record and remove or modify the option.
- 124           **MESSAGE: ERROR IN WINDOW UPDATE THRESHOLD OPTION.**  
CAUSE: User error. Entry number of option is either negative or higher  
than specified in INITOPT value.  
ACTION: Correct and reissue command.
- 125           **MESSAGE: INVALID OPTION DATA LENGTH.**  
CAUSE: User error. Data length for option is either negative or higher  
than specified in INITOPT value.  
ACTION: Correct and reissue command.
- 126           **MESSAGE: INVALID NUMBER OF EVENTUAL OPT RECORD  
ENTRIES.**  
CAUSE: Number of option entries is either too high or negative. Either  
an internal restriction or a user mistake.  
ACTION: Remove the cause by making the number positive or smaller

in value.

127

**MESSAGE: UNABLE TO READ ENTRY FROM OPT RECORD.**

CAUSE: The option record indicates that the entry is not valid or the buffer supplied by the user was too small to hold all of the data.

ACTION: Check entry number, make sure the option record has not been written over and check output buffer length.

131

**MESSAGE: PROTOCOL MODULE DOES NOT HAVE SUFFICIENT RESOURCES.**

CAUSE: Protocol module is temporarily out of buffers or internal data descriptors.

ACTION: Retry later when the system load is lighter.

141

**MESSAGE: X.25 NETWORK NAME INCORRECTLY SPECIFIED.**

CAUSE: Invalid X.25 network name specified or not configured.

ACTION: Correct the network name or notify the operator.

142

**MESSAGE: INVALID CALL USER DATA OPT RECORD ENTRY.**

CAUSE: The length of the call user data is invalid for the transport protocol type.

ACTION: Check the length of the call user data option in the opt array. The call user data opt record must be greater than 1 for IPCCONNECT and 4 for IPCRECVCN. The maximum length is protocol specific.

143

**MESSAGE: INVALID FACILITIES SET OPT RECORD ENTRY.**

CAUSE: The facility set passed as a parameter has not been found in the internal facility set table.

ACTION: Use one of the facility sets defined in the configuration or add a new one.

144

**MESSAGE: INVALID CALLING NODE OPT ENTRY.**

CAUSE: The user may request the address of the calling node. Address of 8 bytes will be returned.

ACTION: The length of the option entry must be exactly 8 bytes.

145

**MESSAGE: INVALID READSON CODE ENTRY.**

CAUSE: The reason code of the option in IPCSHUTDOWN has an invalid length.

ACTION: Check the values being placed in the opt record.

146

**MESSAGE: RESET EVENT OCCURRED ON X.25 CONNECTION.**

CAUSE: An unsolicited reset packet was received.

ACTION: Use IPCCONTROL (request 12) to examine the cause/diagnostic

- field. The connection is still up and operational but some data may have been lost.
- 151       **MESSAGE: COULD NOT OBTAIN A SEMAPHORE.**  
CAUSE: The attempt to obtain a semaphore before sending a message to the protocol module failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 153       **MESSAGE: SOCKET IS ALREADY IN USE.**  
CAUSE: A single socket per network interface can be created with the catch-all capability.  
ACTION: Wait for catch-all socket to be released.
- 155       **MESSAGE: INVALID X.25 FLAGS OPT RECORD ENTRY.**  
CAUSE: Invalid flag bits set in protocol specific flags option, or invalid length specified for option, or user did not have NA capability.  
ACTION: Check bits set and length specified. Bit numbering is from left to right (0–31).
- 156       **MESSAGE: INTERRUPT EVENT OCCURRED ON X.25 CONNECTION.**  
CAUSE: An unsolicited interrupt packet was received.  
ACTION: Use IPCCONTROL (request 12) to get interrupt data. The connection is still up and operational.
- 157       **MESSAGE: NO VIRTUAL CIRCUIT CONFIGURED.**  
CAUSE: No VC configured in the configuration file.  
ACTION: Check the configuration file for X.25.
- 158       **MESSAGE: CONNECTION REQUEST REJECTED BY REMOTE.**  
CAUSE: The remote node received the connection request and rejected it.  
ACTION: The call may be retried later. Otherwise, the reason for the reject must be known.
- 159       **MESSAGE: INVALID X.25 D BIT SETTING.**  
CAUSE: The D bit setting is not consistent in configuration file of local and destination node.  
ACTION: Check the configuration file for X.25.
- 160       **MESSAGE: INCOMPATIBLE WITH PROTOCOL STATE.**  
CAUSE: The user requested an operation which is not supported by the protocol module.  
ACTION: Verify the sequence of intrinsic calls.

- 162           **MESSAGE: X.25 PERMANENT VIRTUAL CIRCUIT DOES NOT EXIST.**  
CAUSE: No PVC configured.  
ACTION: Check the configuration file for X.25.
- 163           **MESSAGE: PERMANENT VIRTUAL CIRCUIT ALREADY ESTABLISHED.**  
CAUSE: A connection request was issued on a PVC which is in use by another process.  
ACTION: Select a different PVC or retry later.
- 164           **MESSAGE: ADDRESS VALUE IS OUT OF RANGE.**  
CAUSE: Address specified in opt parameter is out of range.  
ACTION: Specify an address in the range 30767 to 32767.
- 165           **MESSAGE: INVALID ADDRESS LENGTH.**  
CAUSE: An invalid address length was specified in the opt parameter.  
ACTION: The address length is 2 bytes (for non-privileged users).
- 166           **MESSAGE: CONNECTION NOT IN VIRTUAL CIRCUIT WAIT CONFIRM STATE.**  
CAUSE: Attempt was made to accept or reject a connection that is open or in the process of closing.  
ACTION: Use flags parameter in IPCRECVCN to defer acceptance or rejection of the connection request.
- 168           **MESSAGE: RESTART EVENT OCCURRED ON X.25 CONNECTION.**  
CAUSE: X.25 connection was reset.  
ACTION: Call IPCSHUTDOWN to clean up the connection.
- 169           **MESSAGE: NODENAME AND INTERNET ADDRESS CANNOT BOTH BE SPECIFIED.**  
CAUSE: A nodename and an IP address have both been specified in a call to IPCDEST.  
ACTION: Specify either the nodename or the IP address but not both.
- 170           **MESSAGE: ERROR WITH THE USE OF THE FAST SELECT FACILITY.**  
CAUSE: Invalid use of the fast select.  
ACTION: Validate the calling sequence.
- 171           **MESSAGE: INVALID FACILITY FIELD.**  
CAUSE: For IPCCONNECT, IPCRECVCN, or IPCRECV, the opt parameter facility field length is wrong.  
ACTION: Check the facility field length. The length must be 1 to 109 bytes inclusive.

172

**MESSAGE: CONNECTION MUST BE REJECTED.**

CAUSE: An IPCCONTROL request 9, accept the connection, cannot be performed.

ACTION: Use IPCCONTROL request 15 to reject the connection.

173

**MESSAGE: MORE DATA IS AVAILABLE.**

CAUSE: Warning message. READOPT request was for less data than available.

ACTION: Specify a greater length in READOPT.



## 6 Virtual Terminal (VT ERROR) Error Messages

### 1 **MESSAGE: RESOURCE NOT RELEASED ON TERMINATION.**

**CAUSE:** During the termination process a resource was not released with a good disposition.

**ACTION:** None; this is not a severe problem since MPE forces cleanup upon process termination.

### 2 **MESSAGE: INVALID STATUS FOUND.**

**CAUSE:** Conflicting states existed in the VT status mask. The transition to a new state could not be made.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

### 3 **MESSAGE: ILLEGAL STATUS STATE.**

**CAUSE:** A VT routine requested an illegal option for altering the current state.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

### 4 **MESSAGE: VTS MESSAGE DOES NOT INCLUDE PARAMETERS.**

**CAUSE:** The VTS protocol message has no request parameters. This may be an error in the data transmission or a mismatch in versions of the VT software.

**ACTION:** Verify the VT versions on the different nodes, retry the VT session, and/or see Appendix A , “Submitting a CR,” of this manual.

### 5 **MESSAGE: VTS MESSAGE CONTAINS AN INVALID PARAMETER.**

**CAUSE:** The VTS protocol message contains an invalid request. This may be a transmission error or a result of incompatible versions of VT.

**ACTION:** Check the VT version numbers using NMMAINT, retry the VT session. If the problem recurs, see Appendix A , “Submitting a CR,” of this manual.

### 6 **MESSAGE: VTS MESSAGE HAS INVALID FORMAT.**

**CAUSE:** The VTS protocol message could not be decoded; the format was not recognized. This results from incompatible versions of the software or an uncorrected transmission error.

**ACTION:** Verify the VT software version numbers, retry the VT session. If the problem recurs, see Appendix A , “Submitting a CR,” of this manual.

7

**MESSAGE: UNEXPECTED/BAD RESPONSE FROM VT.**

**CAUSE:** The VT “partner” on the remote machine could not handle a request and has generated an unexpected protocol error. This is the result of Virtual Terminal error 4, 5 or 6 above.

**ACTION:** One of your commands was probably not executed correctly. Terminate the session and re-issue the commands. If the problem persists, verify VT versions and/or submit CR.

8

**MESSAGE: VT SERVER NOT ADOPTED.**

**CAUSE:** The VT process could not initialize the environment properly, probably because of poor timing or a resource shortage.

**ACTION:** Terminate the session and log on again.

9

**MESSAGE: SAVED READ DATA NOT VALID.**

**CAUSE:** Sequencing problem: VT did not have a read request from the remote system to satisfy your `REMOTE` command.

**ACTION:** Reissue your command.

11

**MESSAGE: VT TRACE STATE NOT ALTERED.**

**CAUSE:** The trace facility could not be enabled or disabled. When you are starting the trace, this indicates that the trace file could not be opened. For trace termination, the file did not close successfully. In either case there may not be sufficient storage for the file, or the user’s limit may have been exceeded.

**ACTION:** Readjust the disk space parameters, and reissue the command.

12

**MESSAGE: VT DATA AREA NOT UPDATED.**

**CAUSE:** Information could not be added to a VT environment-related table, usually because timing was off or there was a resource shortage.

**ACTION:** The VT can continue to function; however, it would be best to terminate the remote session and begin again.

13

**MESSAGE: RETRIEVE OF DSLINE DATA FAILED.**

**CAUSE:** The `DSL` table was not accessible to the VT service probably because of a timing problem in the subsystems. The table entry was not released.

**ACTION:** Terminate the remote session.

14

**MESSAGE: BUFFER/STORAGE NOT RELEASED.**

**CAUSE:** An internal buffer could not be returned to the buffer pool.

**ACTION:** If the problem reoccurs, dump the system and see Appendix A, “Submitting a CR,” of this manual.



- 16           **MESSAGE: CR/LF SWITCH FAILED.**  
CAUSE: The File System did not honor the request to alter the issuing of Line Feed on receipt of a Carriage Return.  
ACTION: This may affect the actions of the remote application program: if problems occur, reestablish the remote session.
- 17           **MESSAGE: SET READ TIMEOUT FAILED.**  
CAUSE: Setting of a timed read failed.  
ACTION: This may affect the actions of the remote application program: if problems occur, reestablish the remote session.
- 18           **MESSAGE: SET ECHO FAILED.**  
CAUSE: The echo setting was not altered as requested by the application program.  
ACTION: This will affect the remote program: terminate and rerun the program.
- 19           **MESSAGE: SET PRE/POST SPACE FAILED.**  
CAUSE: Space control was not altered.  
ACTION: Line feeds will not be issued as requested: rerun the remote program.
- 20           **MESSAGE: PREEMPTIVE WRITE.**  
CAUSE: A preemptive write could not be issued.  
ACTION: None.
- 21           **MESSAGE: FWRITE TO TERMINAL FAILED.**  
CAUSE: Data could not be written to the terminal.  
ACTION: Reconfigure the terminal to respond to the attached CPU.
- 22           **MESSAGE: GET TERM-TYPE FAILED.**  
CAUSE: Terminal type could not be retrieved from the file system.  
ACTION: Reattempt to establish the remote session. If it fails again, make sure that the terminal is properly configured for MPE.
- 23           **MESSAGE: SET EOR FAILED.**  
CAUSE: End-of-Record setting failed.  
ACTION: Terminate the remote program, reset the terminal, and run the program again.
- 24           **MESSAGE: SET EDIT MODE FAILED.**  
CAUSE: The mode required by the remote program was not set by MPE.  
ACTION: Terminate the remote program and attempt to rerun it.

- 25           **MESSAGE: SET DRIVER MODE FAILED.**  
CAUSE: The File System did not alter the setting of the driver/terminal handshake mode.  
ACTION: Terminate the remote program.
- 26           **MESSAGE: TERMINAL NOT ALLOCATED.**  
CAUSE: The terminal could not be allocated for access.  
ACTION: Check the MPE configuration and retry the remote session.
- 27           **MESSAGE: SET TERMINAL TYPE FAILED.**  
CAUSE: The terminal type was not reset as requested.  
ACTION: Terminate the remote program and rerun it.
- 28           **MESSAGE: TERMINAL PARITY NOT ALTERED.**  
CAUSE: The parity setting for reads/writes to the terminal was not altered.  
ACTION: Terminate the remote program, check the terminal's configuration, and rerun the program.
- 29           **MESSAGE: TERMINAL OPEN FAILED.**  
CAUSE: The terminal could not be opened for VT access.  
ACTION: Use `SYSDUMP` to verify that your terminal is correctly configured as a valid MPE terminal.
- 30           **MESSAGE: END OF FILE ENCOUNTERED.**  
CAUSE: A hardware EOF was set on the terminal.  
ACTION: Reestablish your local session.
- 31           **MESSAGE: FATAL INTERNAL ERROR OCCURRED.**  
CAUSE: The VT could not continue because of a VTS protocol error or a corrupt data structure.  
ACTION: Verify the NS version numbers, and if they are compatible, see Appendix A , "Submitting a CR," of this manual.
- 32           **MESSAGE: REMOTE SESSION LOGON FAILED.**  
CAUSE: The remote logon was started; however, it did not succeed because the logon timed out, a break was issued during logon, the remote CI aborted, or communication to the remote system was lost.  
ACTION: Reattempt the remote logon.
- 33           **MESSAGE: REMOTE SESSION ABORTED.**  
CAUSE: Some action on the remote system, probably an operator command, forced the session to be aborted.

- ACTION: Reestablish remote session.
- 34       **MESSAGE: CANNOT ACCESS SESSION DEVICE.**
- CAUSE: The session device is either incorrectly configured, is not a terminal, or is not accessible through the file system.
- ACTION: Check the above and reattempt logon.
- 35       **MESSAGE: VT INITIALIZATION FAILED.**
- CAUSE: VT could not initialize itself because of an internal error or a resource shortage.
- ACTION: Reattempt the logon; if it fails, see Appendix A , “Submitting a CR,” of this manual.
- 36       **MESSAGE: VT NEGOTIATIONS FAILED.**
- CAUSE: The remote system could not support a VT option or the two systems have incompatible software versions.
- ACTION: Verify the VT version numbers and submit an CR.
- 37       **MESSAGE: VTS MESSAGE PROTOCOL ERROR.**
- CAUSE: The local and remote VT code are different versions, or a data transmission error occurred.
- ACTION: Reattempt session establishment. If the error reoccurs, verify the version numbers using NMMAINT and see Appendix A , “Submitting a CR,” of this manual.
- 38       **MESSAGE: INVALID REMOTE NODE REQUESTED.**
- CAUSE: The node name specified is not valid.
- ACTION: Check the validity of the node name and make sure that it is installed in the Node Management Tables. If valid and installed, see Appendix A , “Submitting a CR,” of this manual.
- 39       **MESSAGE: REMOTE NOT ACCEPTING CHANGE REQUESTS.**
- CAUSE: The remote machine has no VT servers available.
- ACTION: Enable/increase the number of VT servers on the remote machine.
- 40       **MESSAGE: REMOTE NOT RESPONDING, DATA SEND FAILED.**
- CAUSE: The connection to the remote machine has failed. The session is terminated.
- ACTION: Attempt to re-logon to the remote machine.
- 41       **MESSAGE: REMOTE NOT RESPONDING, RECEIVED FAILED.**
- CAUSE: The connection to the remote machine has failed. The session is terminated.

- ACTION: Attempt to re-logon to the remote machine.
- 42       **MESSAGE: REMOTE NOT RESPONDING, CONNECTION CLOSED.**  
CAUSE: The remote VT closed the connection. The session has been terminated.  
ACTION: Attempt to re-logon to the remote machine.
- 43       **MESSAGE: VT COULD NOT SECURE BUFFER SPACE.**  
CAUSE: There is insufficient buffer space because of a shortage of table space or system tables. The VT could not be started.  
ACTION: Reattempt the command. If problem persists, see Appendix A , “Submitting a CR,” of this manual
- 44       **MESSAGE: VT-CI ERROR, MISSING DATA STRUCTURE.**  
CAUSE: There is an error in the interaction between the CI and VT.  
ACTION: Verify the version numbers of the NS subsystem for the CI and VT. See Appendix A , “Submitting a CR,” of this manual.
- 45       **MESSAGE: DUPLICATE VT DATA STRUCTURE.**  
CAUSE: Internal data structure allocation error.  
ACTION: When possible, dump the system and forward it to your SE.
- 46       **MESSAGE: REMOTE VT REQUESTED STOP.**  
CAUSE: A condition on the remote system forced the VT to terminate.  
ACTION: None; this is a valid action.
- 47       **MESSAGE: VT RESTART ATTEMPT FAILED.**  
CAUSE: An error occurred while trying to restart the VT because of old data or a non-responding remote node.  
ACTION: Close the DSLINE, reopen it, and initiate a new remote session.
- 48       **MESSAGE: VT TERMINATED NORMALLY (VT INFORMATIONAL MESSAGE 48).**  
CAUSE: No error.  
ACTION: This is an informative message.
- 49       **MESSAGE: CANNOT ACCESS TERMINAL FOR REVERSE-VT.**  
CAUSE: The device specified for access is not available.  
ACTION: Verify that the node name and device are valid.
- 50       **MESSAGE: VT TERMINATED, PSEUDO TERMINAL UNABAILABLE.**  
CAUSE: All available pseudo terminals are currently active.  
ACTION: Try the remote request later.

- 51           **MESSAGE: VT TERMINATED, COULD NOT FOPEN TERMINAL.**  
CAUSE: A File System error has occurred; the terminal was not accessible by the VT program.  
ACTION: Save the Node Management logfile, and if the problem recurs, see Appendix A , “Submitting a CR,” of this manual.
- 52           **MESSAGE: VT TERMINATED, INVALID DEVICE FOR SESSION.**  
CAUSE: Your session device is not an acceptable MPE session device.  
ACTION: Verify the configuration in SYSGEN.
- 53           **MESSAGE: NO DEVICE STRING SPECIFIED FOR REVERSE-VT.**  
CAUSE: The device string was omitted in the FOPEN or file equation.  
ACTION: Insert a device string.
- 54           **MESSAGE: INVALID TERMINALL SPEED FOR REVERSE-VT.**  
CAUSE: The terminal did not respond since the speed in the configuration file and the hardware-configured speed do not match.  
ACTION: Set the hardware to the speed in the configuration file.
- 55           **MESSAGE: LOCAL NS GOING DOWN, CONNECTION FAILED.**  
CAUSE: The connection to the remote machine failed because the local network services are going down.  
ACTION: See Appendix A , “Submitting a CR,” to this manual.
- 57           **MESSAGE: ATTEMPT TO SET OR STEAL BREAK FAILED.**  
CAUSE: An error occurred while VT trying to set or steal break for the remote session.  
ACTION: Bring up the network services on the local node, and re-establish the connection.
- 58           **MESSAGE: SET QUIESE IOQ FAILED.**  
CAUSE: The ATTACHIO failed with an abnormal completion code.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 59           **MESSAGE: SET \$BACK ENVIRONMENT INFO FAILED.**  
CAUSE: Could not set the \$BACK information to environment table.  
ACTION: Close the DSLINE, re-open the line, and then initiate a new remote session.



# 7 Network Services Information Messages

These messages, displayed on `$STDLIST` during the execution of a command, give the user information about the environment(s) affected by the command. They are held in `CATALOG.PUB.SYS`, message set 16 (DS set). No action is required for these messages.

500 **MESSAGE: ENVIRONMENT envum: envid.**

**CAUSE:** The defined or affected environment has been assigned an environment number `envum` and environment ID `envid`. `Envid` will be fully qualified with domain and organization names. The node name for the environment is the same as the environment ID. If the `DSL` specified a generic environment ID, there will be one `ENVIRONMENT` message displayed for each affected environment.

**ACTION:** This is an informative message.

501 **MESSAGE: ENVIRONMENT envum: envid=nodename.**

**CAUSE:** The defined or affected environment has been assigned an environment number `envum` and environment ID `envid`. `Envid` will be fully qualified with domain and organization names. The environment is on `nodename`, which is different from `envid`. If the node is an NS node, `nodename` is fully qualified.

**ACTION:** This is an informative message.

502 **MESSAGE: NO ENVIRONMENTS.**

**CAUSE:** A `DSL` with a generic environment ID was executed, and there were no environments with an ID that matched the generic ID. The `DSL` then has no effect.

**ACTION:** Reissue the command with a correct environment ID.

503 **MESSAGE: ABORT REMOTE SESSION ON envid?**

**CAUSE:** A `DSL` `CLOSE` was issued for an environment that has a Virtual Terminal remote session. `Envid` is the environment ID for the environment. This message expects a YES (or Y), or NO (or N) response from the user.

**ACTION:** Enter YES to abort the remote session and close the environment. Enter NO, to retain the remote session and keep the environment open. If a `DSL` `CLOSE` with a generic environment is executed, an `ABORT REMOTE SESSION` message is displayed for each matching environment with a remote session.

504           **MESSAGE: PLEASE ANSWER YES OR NO.**

CAUSE: A question (such as `ABORT REMOTE SESSION`) has been asked, and the user entered a response other than YES or NO. This prompt is displayed until the user replies YES, Y, No, or N.

ACTION: Enter either YES or NO in response to this message.

505           **MESSAGE: KILL RPM PROCESS ON envid?**

CAUSE: A `DSLIN` `CLOSE` has been issued for an environment that includes an RPM-created process. `Envid` is the environment ID for the environment.

ACTION: Enter YES (or Y) to issue an `RPMKILL` for the process, and to close the environment. Enter NO to retain the RPM process and to keep the environment open. If `DSLIN` `CLOSE` is issued with a generic environment, a `KILL RPM PROCESS` message is displayed for each matching environment with an RPM process.

506           **MESSAGE: GENERIC ENVIRONMENT envid.**

CAUSE: A generic environment has been established by a `DSLIN` for the specified `envid` pattern, which includes wild card characters @, #, and/or ?. All existing environments with an ID that matches the generic `envid` acquire the characteristics specified in the `DSLIN` command. (The affected environments will be listed.) In addition, all future environments with an ID that matches the generic pattern will assume the `DSLIN` options as defaults. (These default options can be explicitly overridden, though). The generic environment remains in effect until it is reset by a `DSLIN` `RESET` command.

ACTION: This is an informative message.

507           **MESSAGE: NO GENERIC ENVIRONMENTS.**

CAUSE: For a `DSLIN` or `DSLIN` `SHOW`, there are no currently defined generic environments with an ID that matches the specified pattern.

ACTION: Specify an environment with a valid ID.

508           **MESSAGE: REMOTE SESSION ABORTED.**

CAUSE: During a `DSLIN` `CLOSE`, the user specified YES to the `ABORT REMOTE SESSION ON envid?` message. The remote session on the specified environment was aborted.

ACTION: This is an informative message.

509           **MESSAGE: REMOTE SESSION ABORTED.**

CAUSE: During a `DSLIN` `CLOSE`, the user specified YES to the `ABORT REMOTE SESSION ON envid?` message. The remote session on the specified environment was aborted.

ACTION: This is an informative message.



- 510           **MESSAGE: TRACE FILE FOR ALL SERVICES TO envid IS filename.**
- CAUSE: A DSLINE with a TRACE=ON or TRACE=OFF option was executed. These messages indicate which service to what environment is being (or has been) traced, and the fully qualified name of the trace file. One TRACE message is displayed for each TRACE option in the command. If a DSLINE with a generic environment ID turns tracing on or off for a set of environments, the TRACE FILE FOR ALL SERVICES TO envid IS filename message is displayed for each environment.
- ACTION: This is an informative message.
- 511           **MESSAGE: TRACE FILE FOR VT TO envid IS filename.**
- CAUSE: A DSLINE with a TRACE=ON or TRACE=OFF option was executed. These messages indicate which service to what environment is being (or has been) traced, and the fully qualified name of the trace file. One TRACE message is displayed for each TRACE option in the command. If a DSLINE with a generic environment ID turns tracing on or off for a set of environments, the TRACE FILE FOR ALL SERVICES TO envid IS filename message is displayed for each environment.
- ACTION: This is an informative message.
- 512           **MESSAGE: TRACE FILE FOR NFT TO envid IS filename.**
- CAUSE: DSLINE with a TRACE=ON or TRACE=OFF option was executed. These messages indicate which service to what environment is being (or has been) traced, and the fully qualified name of the trace file. One TRACE message is displayed for each TRACE option in the command. If a DSLINE with a generic environment ID turns tracing on or off for a set of environments, the TRACE FILE FOR ALL SERVICES TO envid IS filename message is displayed for each environment.
- ACTION: This is an informative message.
- 513           **MESSAGE: TRACE FILE FOR RFA TO envid IS filename.**
- CAUSE: A DSLINE with a TRACE=ON or TRACE=OFF option was executed. These messages indicate which service to what environment is being (or has been) traced, and the fully qualified name of the trace file. One TRACE message is displayed for each TRACE option in the command. If a DSLINE with a generic environment ID turns tracing on or off for a set of environments, the TRACE FILE FOR ALL SERVICES TO envid IS filename message is displayed for each environment.
- ACTION: This is an informative message.
- 514           **MESSAGE: TRACE FILE FOR RFA TO envid IS filename.**
- CAUSE: A DSLINE with a TRACE=ON or TRACE=OFF option was executed. These messages indicate which service to what environment is being (or has been) traced, and the fully qualified name of the trace file. One TRACE message is displayed for each TRACE option in the command. If a DSLINE with a generic environment ID turns tracing on or off for a set

of environments, the TRACE FILE FOR ALL SERVICES TO envuid IS filename message is displayed for each environment.

ACTION: This is an informative message.

515

**MESSAGE: TRACE FILE FOR RPM TO envuid IS filename.**

CAUSE: A DSLINE with a TRACE=ON or TRACE=OFF option has been executed. These messages indicate which service to what environment is being (or has been) traced, and the fully qualified name of the trace file. There will be one TRACE message for each TRACE option in the command. If a DSLINE with a generic environment ID turns tracing on or off for a set of environments, there will be one TRACE message for each environment.

ACTION: This is an informative message.

516

**MESSAGE: TRACE FILE FOR PTOP TO envuid IS filename.**

CAUSE: A DSLINE with a TRACE=ON or TRACE=OFF option was executed. These messages indicate which service to what environment is being (or has been) traced, and the fully qualified name of the trace file. One TRACE message is displayed for each TRACE option in the command. If a DSLINE with a generic environment ID turns tracing on or off for a set of environments, the TRACE FILE FOR ALL SERVICES TO envuid IS filename message is displayed for each environment.

ACTION: This is an informative message.

## 8 Remote File Access Error Messages

Remote File Access errors are returned only through the `FCHECK` intrinsic. The `FCHECK` intrinsic is called when:

- A file system intrinsic (such as `FOPEN`) encounters an error.
- During remote file access.

The following error codes refer to Network Service Remote File Access over Local Area Network (NS-Compatible) links.

49 **MESSAGE: HIERARCHICAL OR BYTE STREAM FILES NOT ALLOWED THROUGH RFA. UNIMPLEMENTED FUNCTION. (Actual Message Displayed)**

CAUSE: RFA was requested to `FOPEN` a byte stream or hierarchical file.

ACTION: Redirect the `FOPEN` to a non byte stream or hierarchical file.

201 **MESSAGE: ERROR IN ACCESSING DELINE/ENVIRONMENT TABLE. REMOTE DID NOT RESPOND WITH THE CORRECT REMOTE ID. (Actual Message Displayed)**

CAUSE: Internal inconsistency in table or in RFA services data structures.

ACTION: Release the environment and set it up again.

204 **MESSAGE: UNABLE TO CREATE/EXPAND EXTRA DATA SEGMENT BUFFERS FOR RFA. UNABLE TO ALLOCATE AN EXTRA DATA SEGMENT FOR DS/3000. (Actual Message Displayed)**

CAUSE: System does not have enough virtual memory or maximum data segment table size is too small for this RFA application.

ACTION: See your system manager.

205 **MESSAGE: UNABLE TO ALLOCATE/MANAGE BUFFERS FOR RFA. UNABLE TO EXPAND THE DS/3000 EXTRA DATA SEGMENT. (Actual Message Displayed)**

CAUSE: RFA has run out of memory space to hold the user's `FREAD` or `FWRITE` request.

ACTION: The maximum data allowed per `FREAD` or `FWRITE` with RFA is 29980 bytes per request. If data compression is enabled, this limit is 29000 bytes. If reducing the size of the request does not help, then see Appendix A , "Submitting a CR," of this manual.

- 214           **MESSAGE: ILLEGAL USE OF NODE NAME. DS LINE WAS NOT OPENED WITH A USER :DSLIN COMMAND. (Actual Message Displayed)**
- CAUSE: The node does not exist or the specified node name is invalid.
- ACTION: Correct the node name.
- 217           **MESSAGE: NOT ENOUGH STACK SPACE FOR RFA. INSUFFICIENT AMOUNT OF USER STACK AVAILABLE. (Actual Message Displayed)**
- CAUSE: The MPE PREP command allocated the default ;MAXDATA or STACK values to the program, which are too small.
- ACTION: Run the program again with 2000 additional words allocated in the ;STACK=stacksize parameter of PREP.
- 224           **MESSAGE: FILE EQUATIONS FOR REMOTE FILE CONSTITUTE AN INFINITE LOOP. FILE EQUATIONS FOR A REMOTE FILE CONSTITUTE A LOOP. (Actual Message Displayed)**
- CAUSE: File equations on the remote machine loop back to the local side causing reverse RFA.
- ACTION: Correct the file equations.
- 227           **MESSAGE: RFA/RDBA COULD NOT FIND OR CREATE A REMOTE SESSION. RFA/RDBA COULD NOT FIND OR CREATE A REMOTE SESSION. (Actual Message Displayed)**
- CAUSE: This error could occur for one of the following reasons:
1. Autologon is not enabled.
  2. Autologon is enabled and the logon string specified in the DSLIN command is incorrect. Remember that if a remote session is already established, logon strings are ignored.
- ACTION: Depending on the cause:
1. Enable autologon (refer to *Using NS 3000/iX Network Services*), or establish a VT session using the REMOTE command.
  2. Establish a remote session and try again, or use a correct logon string and try again.
- 239           **MESSAGE: Network Service TRACING MALFUNCTION. COMMUNICATIONS INTERFACE ERROR. TRACE MALFUNCTION. (Actual Message Displayed)**
- CAUSE: Tracing malfunction.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 240           **MESSAGE: LOCAL COMMUNICATION LINE NOT OPENED BY OPERATOR. LOCAL COMMUNICATION LINE WAS NOT OPENED BY OPERATOR. (Actual Message Displayed)**
- CAUSE: The RFA/RDBA service has not been started.
- ACTION: Use the `NETCONTROL START` command to open the line.
- 242           **MESSAGE: INTERNAL ERROR. INTERNAL DS SOFTWARE ERROR ENCOUNTERED. (Actual Message Displayed)**
- CAUSE: This is an internal error.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 246           **MESSAGE: REMOTE NODE DISCONNECTED CONNECTION. COMMUNICATIONS INTERFACE ERROR. REMOTE DISCONNECTED. (Actual Message Displayed)**
- CAUSE: Remote node is no longer running on the network.
- ACTION: Contact the system operator of the remote node.
- 249           **MESSAGE: REMOTE SESSION ENVIRONMENT COULD NOT ADOPT RFA SERVER. COMMUNICATIONS INTERFACE ERROR. REMOTE DISCONNECTED. (Actual Message Displayed)**
- CAUSE: RFA was unable to initiate the RFA server in the remote session.
- ACTION: If the remote session was not aborted by the system operator, then see Appendix A , “Submitting a CR,” of this manual.
- 255           **MESSAGE: TRANSPORT ERROR ON CONNECTION. COMMUNICATIONS INTERFACE ERROR. UNANTICIPATED CONDITION. (Actual Message Displayed)**
- CAUSE: RFA lost connection with the RFA server on the remote system.
- ACTION: If you attempted to use a newly supported RFA intrinsic, and the version of RFA on the remote system is older than the version on this system, then the remote system must be updated with compatible versions of the Network Services. Otherwise, see Appendix A , “Submitting a CR,” of this manual.



# 9 Remote Process Management Error Messages

RPM errors are (32-bit) integers that are returned in the result parameter of the intrinsics `RPMCREATE`, `RPMKILL`, `RPMCONTROL`, and `RPMGETSTRING` when the intrinsic execution fails. (A result of 0 indicates that the intrinsic succeeded.) There are two ranges of RPM errors returned by the HP e3000 implementation of RPM. The first range (0–99) includes generic RPM errors. The second range (100–199) includes errors specific to the HP e3000 implementation.

0

**MESSAGE: NO ERROR.**

CAUSE: Successful execution.

ACTION: None.

1

**MESSAGE: NETWORK DOWN.**

CAUSE: The transport is not available for use by RPM.

ACTION: Wait until the transport is available.

2

**MESSAGE: ILLEGAL PROGRAM NAME LENGTH.**

CAUSE: The program `namelen` parameter in an `RPMCREATE` call is greater than the allowed maximum of 256 (characters).

ACTION: Shorten the program name.

3

**MESSAGE: ILLEGAL FLAG.**

CAUSE: An `RPMCREATE` call includes a `flags` parameter with one or more undefined flag bits set.

ACTION: Correct the `flags` parameter. The defined flags are:

bit 0            No `dsline` (3000-specific)

bit 1            Wait until son dies (3000-specific)

bit 31          Dependent

4

**MESSAGE: ILLEGAL OPTION.**

CAUSE: An `RPMCREATE` call includes an `opt` parameter with one or more invalid options.

ACTION: Correct the `opt` parameter. The valid options are:

20000                            RPM string

22001–22012, 22100            MPE options

5           **MESSAGE: ILLEGAL OPTION FORMAT.**

CAUSE: The `opt` parameter in an `RPMCREATE` call is not formatted correctly.

ACTION: Correct the `opt` format; use the `INITOPT` and `ADDOPT` intrinsics to format the `opt` array.

6           **MESSAGE: INVALID LOGIN.**

CAUSE: This may be caused by several conditions relating to the login (`Env`) and password parameters of `RPMCREATE`:

- The `login` parameter is syntactically incorrect for the remote machine. For the HP e3000, the logon syntax is:  

```
user[/userpass].acct[/acctpass],group[grouppass]
```
- The password parameter is syntactically incorrect for the remote machine. For the HP e3000, the password syntax is:  

```
[userpass][acctpass][,grouppass]
```
- The login and password are syntactically correct, but the login (on the HP e3000, `user`, `group`, or `account`) is not defined on the remote machine.
- The login and password parameters do not supply required passwords for the login.
- The login and password parameters were correct, but the logon failed for some reason (on the HP e3000: `jobfence` too high, session limit exceeded).

ACTION: Correct the login and password parameters, if necessary. If login and password are correct, determine the reason for the remote logon failure: possibly wait until the remote logon resources are available.

7           **MESSAGE: ILLEGAL PROGRAM NAME.**

CAUSE: The program indicated by the `progrname` (and `namelen`) parameters of an `RPMCREATE` was not found on the remote computer.

ACTION: Correct the `progrname` (and `namelen`) parameters, if necessary. Make sure the program file exists on the remote node. Note that, if the program name is not fully qualified, the logon group and account (determined by login) will be used.

8           **MESSAGE: INVALID PROGRAM DESCRIPTOR.**

CAUSE: The program descriptor (`pd`) parameter of an `RPMKILL` contained a program descriptor that was not defined on the remote node. There are two cases in which this can happen:

1. The (`pd`) value was not generated by PRM on the remote node. This would happen if the program descriptor were incorrect or corrupted,



or if the `RPMCREATE` that was supposed to return the descriptor failed.

2. The `(pd)` value was generated for a program on the remote node, but the program terminated itself, or was terminated by an abort or an `RPMKILL`. In this case the program's descriptor is deleted when the program terminates, and a later `RPMKILL` receives the Invalid Program Descriptor error.

**ACTION:** Depending on the cause:

1. Correct the program descriptor. Do not issue an `RPMKILL` when the `RPMCREATE` failed.
2. Do not issue an `RPMKILL` if the created process is supposed to terminate itself. Do not issue more than one `RPMKILL` for the same process.

9

### **MESSAGE: REMOTE PROCESS LIMIT.**

**CAUSE:** A resource needed to create the process is not available. On a remote HP e3000 (or the local HP e3000 if the created process is local), this can include:

- Process Control Block entry for created process.
- Stack space for created process.
- RPM Table entry for created process.
- Pseudo terminal for created session.

On the local HP e3000, some resources needed for a process creating a dependent process may not be available:

- RPM Table entry for creator process.
- AFT entry in creator process' stack.

**ACTION:** Wait for the resource(s) to become available. If the Remote Process Limit error occurs often, resources like the number of PCB and DST entries or number of configured pseudo terminals may have to be increased.

10

### **MESSAGE: REMOTE MEMEORY LIMIT.**

**CAUSE:** Memory was not available for storage of data. The possible reasons for this include:

- RPM String could not be stored.
- Buffers in the RPM server could not be allocated.

**ACTION:** Wait until the resource(s) become available.

11

**MESSAGE: PROGRAM ACCESS ERROR.**

CAUSE: The program to be created by an RPMCREATE could not be accessed. This may be due to one of the following reasons:

1. The program file is secured against access from the login user and account.
2. The program file has a lockword that was not specified in progame.
3. The program name in progame is not syntactically correct.

ACTION: Depending on the cause:

1. Change the program file's security or the login user and account to allow Execute access to the program.
2. Insert the program file's lockword into the progame parameter. The syntax is:

```
progame/lockword[.acct][,group]
```

3. Correct the syntax of the progame.

12

**MESSAGE: UNKNOWN ERROR.**

CAUSE: Internal software error. For example, the RPM Table (which is always supposed to be there) was not found.

ACTION: See Appendix A , "Submitting a CR," of this manual.

13

**MESSAGE: PROTOCOL ERROR.**

CAUSE: An RPM message is incorrect or has been corrupted.

ACTION: Turn on tracing for RPM and see Appendix A , "Submitting a CR," of this manual.

14

**MESSAGE: NETWORK ERROR.**

CAUSE: An error occurred in using a transport connection to send or receive an RPM message. The transport error will be logged by Network Management logging, log class 6, subclass 5.

ACTION: Examine the log file and see Appendix A , "Submitting a CR," of this manual.

15

**MESSAGE: INCOMPATIBLE VERSIONS.**

CAUSE: The versions of the RPM software on the local and remote computers are incompatible.

ACTION: Check the versions of the RPM software on the local and remote computers. On an HP e3000, the RPM version can be obtained by running NMMMAINT.PUB.SYS, or by NSCONTROL VERSION=MOD. The RPM version is listed as ASRPMVERS. Update the software on the local or remote nodes to compatible versions.

- 16           **MESSAGE: UNSUPPORTED OPTION.**
- CAUSE: A legal option specified in the `opt` parameter of the `RPMCREATE` is not supported by the remote RPM software.
- ACTION: Modify the option, or update the remote RPM software to a version that supports the option.
- 17           **MESSAGE: RPMCREATE LENGTH ERROR.**
- CAUSE: An `RPMCREATE` resulted in a message that could not be handled by the remote node RPM software.
- ACTION: Decrease the size of the `RPMCREATE` message by shortening the program name or the lengths of options.
- 18           **MESSAGE: ILLEGAL OPTION ERROR.**
- CAUSE: The value of an option in the `opt` parameter of an `RPMCREATE` was invalid.
- ACTION: Check the options for validity. In some cases (like the Initial Stack Size option), the option value might exceed maximum configured limits for the remote system.
- 19           **MESSAGE: INVALID NODE NAME.**
- CAUSE: The node name specified by the location and `loclen` parameters of an `RPMCREATE` call is not a valid node. It may be syntactically incorrect, or it may not be defined in the network.
- ACTION: Correct the location and `loclen` parameters.
- 20           **MESSAGE: NO RPM STRING.**
- CAUSE: A program called the `RPMGETSTRING` intrinsic, but there was no RPM string to be passed to the program. This could be caused by one of the following:
1. The program was not created by an `RPMCREATE` (but by a `RUN`, `CREATE`, or `CREATEPROCESS`).
  2. The creating process did not pass an RPM string in the `opt` parameter in its `RPMCREATE` call.
  3. The created process has called `RPMGETSTRING` more times than the number of RPM strings passed by the creating process.
- ACTION: Either add the RPM string to the creating process's `RPMCREATE` call, or remove the `RPMGETSTRING` from the created program.
- 21           **MESSAGE: RPM STRING LENGTH.**
- CAUSE: In a call to `RPMGETSTRING`, the parameter specifying the maximum string length was less than zero.
- ACTION: Check that the parameter specifying string length is set to a positive integer in the `RPMGETSTRING` intrinsic. If the string length is

positive, and you are getting the error anyway, submit an CR. See Appendix A , “Submitting a CR.”

22

**MESSAGE: REMOTE SON ABORTED.**

CAUSE: The remote process aborted abnormally.

ACTION: Check the remote program to ascertain what caused the premature termination.

100

**MESSAGE: INSUFFICIENT STACK SPACE.**

CAUSE: The program calling RPMCREATED, RPMKILL, RPMCONTROL, or RPMGETSTRING could not expand its stack to accommodate the requirements of the RPM software.

ACTION: Increase the stack size and/or maxdata of the program and rerun.

101

**MESSAGE: NOT AT THE STACK.**

CAUSE: RPMCREATE, RPMKILL, or RPMGETSTRING was called when the DB register was not at the process' stack “split-stack mode”.

ACTION: Switch the DB register to the process stack before calling any RPM intrinsic.

102

**MESSAGE: PARAMETER OUT OF BOUNDS.**

CAUSE: A parameter for an RPMCREATE, RPMKILL, RPMCONTROL, or RPMGETSTRING call was not fully within the stack of the calling process.

ACTION: Check each parameter of the call to make sure it is between the DL and S registers. For arrays, also check that the end of the array (beginning + length) is also between DS and S.

103

**MESSAGE: PROGRAM DOES NOT HAVE PH CAPABILITY.**

CAUSE: A program without PH (Process Handling) capability called RPMCREATE or RPMKILL.

ACTION: PREP the program with CAP=PH... and rerun. (Only users with PH capability can PREP a program with CAP=PH.)

104

**MESSAGE: REQUIRED PARAMETER OMITTED.**

CAUSE: A required parameter for RPMCREATE or RPMKILL has been omitted. The required parameters are:

RPMCREATE     *progrname, namelen*

RPMKILL       *pd*

ACTION: Add the required parameter to the call.

106

**MESSAGE: RPM OR PTOPTOP PROCESS AT LOCATION.**

CAUSE: An RPM or PTOPTOP created process already exists in the remote session specified by the location parameter. Because of the design of the

RPM and PTO services, only one RPM or PTO process can exist in a remote session.

**ACTION:** Terminate the first RPM or PTO process, or change the location to a different remote session. By means of the environment facility of Network Services, it is possible to have more than one remote session on the same remote node. Use DSLINE commands to set up the environments; for example:

```
DSLINE S1=NODE
```

```
DSLINE S2=NODE
```

Then use the different environment IDs (S1 and S2) in the location parameter of the RPMCREATES and of a POPEN.

107 **MESSAGE: LOGON TIME OUT.**

**CAUSE:** The logon of the remote session for an RPMCREATE did not complete in a set amount of time. This time can be set by the Logon TimeOut option in an RPMCREATE; if the logon TimeOut is not set, a default of 1 hours (3600.0 seconds) is used.

**ACTION:** Increase the timeout with the Logon TimeOut option; the timeout depends on factors like the load on the remote system and set-up and execution time of UDCs for the remote session. It is possible to have a logon UDC that never completes (for example, one that runs a program that does not terminate), so in this case no logon timeout is sufficient.

108 **MESSAGE: LOCAL RPM SERVICE NOT STARTED.**

**CAUSE:** The local RPM service (RPML) has not been started, or has been stopped and aborted.

**ACTION:** Start the RPM service with NSCONTROL START=RPML or NSCONTROL START. (Only users with NM capability can use the NSCONTROL command.)

111 **MESSAGE: RPMDAD CREATE ERROR.**

**CAUSE:** The remote node was unable to create the RPMDAD process.

**ACTION:** Check to verify that RPMDAT.PUB.SYS exists on the remote node. Also check that the process limit has not been exceeded on the remote node. The log file (NMLGxxxx.PUB.SYS) may contain additional information.

112 **MESSAGE: RPMDAD DEAD ERROR.**

**CAUSE:** RPMDAD is terminating and exiting the session because the session has been aborted or because all sons created by RPM have terminated.

**ACTION:** Try again. A new RPMDAD and a new session are created at the next RPMCREATE request.

- 113           **MESSAGE: BAD RPMCONTROL STATE.**
- CAUSE: RPMCONTROL was unable to suspend the remote process. A system process may have impeded the remote process, or the remote process may be waiting for a system resource.
- ACTION: Call RPMCONTROL again with the suspend option, or attempt to use another method of synchronization such as NetIPC.
- 114           **MESSAGE: SWITCH FAILURE.**
- CAUSE: RPM was unable to call a native mode procedure.
- ACTION: See Appendix A , “Submitting a CR,” in this manual. The log file (NMLGxxxx.PUB.SYS) may contain additional information.
- 114           **MESSAGE: ADOPT FAILURE.**
- CAUSE: RPMDAD was unable to enter the remote session because the remote session was being aborted.
- ACTION: Try again. Make sure the session is not aborted before the RPM son is created. The log file (NMLGxxxx.PUB.SYS) may contain additional information.

# 10 Network Transport Protocol (PMERR) Error Messages

The following errors are returned by Transmission Control Protocol (TCP) as the 32-bit integer "PMERR" parameter in calls to `IPCCHECK`. They are also found in the "PARM" field of the TCP Statistics, PM Deactivated and PM Deactivated with Error logging entries.

---

**NOTE** The Network Transport is technically not part of network services; it is a subsystem of the NS links. However it is included here because it is available to the user.

---

**0 MESSAGE: NO ERROR**

**CAUSE:** `IPCCHECK` has been called when no `PMERR` has occurred. This message is also returned when a connection or socket is closed at the local user's request.

**ACTION:** None.

**1 MESSAGE: WAIT FOR REPLY**

**CAUSE:** The operation is pending. A reply message will be received when the operation has been completed.

**ACTION:** None.

**2 MESSAGE: NO DATA SENT**

**CAUSE:** TCP was unable to send any of the requested data on a partial send request.

**ACTION:** Either wait for the connection to become writable and then retry the send, or do a waited send.

**10 MESSAGE: END OF URGENT DATA**

**CAUSE:** The data received ends at the urgent data boundary.

**ACTION:** None. For notification purposes only.

**11 MESSAGE: MORE URGENT DATA**

**CAUSE:** The most recent urgent data boundary has not yet been reached.

**ACTION:** None. For notification purposes only.

**20 MESSAGE: GRACEFUL RELEASE**

**CAUSE:** The connection has entered either simplex-in or simplex-out mode.

- ACTION: None. For notification purposes only.
- 21           **MESSAGE: SHUTDOWN COMPLETE**
- CAUSE: The graceful release shutdown for the connection has been completed. The connection has been released.
- ACTION: None. For notification purposes only.
- 22           **MESSAGE: IPC SHUTDOWN COMPLETE**
- CAUSE: The connection has been terminated by IPC.
- ACTION: None. For notification purposes only.
- 10          **MESSAGE: FIN BEFORE OPEN**
- CAUSE: TCP has had an internal error which has caused it to process an inbound FIN packet before the open handshake with IPC was complete.
- ACTION: This is an internal error. See Appendix A , “Submitting a CR,” of this manual. A protocol level trace of TCP header information will enhance resolution of this defect.
- 11          **MESSAGE: LOOPBACK FRAGMENTATION**
- CAUSE: A message for a loopback connection in message mode was fragmented.
- ACTION: This is an internal error. See Appendix A , “Submitting a CR,” of this manual. A protocol level trace including buffer and message level tracing will enhance resolution of this defect.
- 12          **MESSAGE: Network Type Manager (NWTM) Error**
- CAUSE: A call to a Network Type Manager procedure returned an error status.
- ACTION: Enable class 2 logging for NS Transport if not previously enabled. Locate matching log instance for Network Type Manager Error. Error message will indicate class 2, subsystem 3, entity TCP, location 100xx. Parameter is NWTM error returned. (Sign bit set indicates error, not set indicates warning.) Consult NWTM error documentation if available, submit an CR with this information if necessary.
- 13          **MESSAGE: SEND MESSAGE (Ports) ERROR**
- CAUSE: A call to a port send message procedure returned an error status.
- ACTION: Enable class 2 logging for NS Transport if not previously enabled. Locate matching log instance for send message error. Error message will indicate class 2, subsystem 3, entity TCP, location 101xx. Parameter is ports error returned. (Sign bit set indicates error, not set indicates warning.) Consult MPE/iX operating system error documentation if available, submit an CR with this information if necessary.



- 20           **MESSAGE: CONNECTION ENTRY ALLOCATION FAILED**
- CAUSE: TCP was unable to allocate a connection entry. Potential reasons include running out of memory space for resident data structures, table management failure, or TCP internal error.
- ACTION: Enable class 2 logging for NS Transport if not previously enabled. Locate matching log instance for resource error if possible. Error message will indicate class 2, subsystem 3, entity TCP, location 102xx. Parameter is table management error returned. (Sign bit set indicates error, not set indicates warning.) Consult MPE/iX operating system error documentation if available, submit an CR with this information if necessary.
- 21           **MESSAGE: CONNECTION ALREADY EXISTS**
- CAUSE: An attempt was made to open a connection which already exists.
- ACTION: The connection attempt used a set of local and remote socket numbers (sap) and local and remote IP addresses which were identical to the set in use by a currently functioning connection. If you are connecting from a user socket, open a new local socket or allow transport to choose a random sap in the connect call. If you are connecting using transport chosen random saps, the original connector must have marked the local socket for immediate reuse. In this case, retrying the connect should succeed.
- 30           **MESSAGE: SOCKET ALLOCATION FAILED**
- CAUSE: TCP was unable to allocate a socket entry. Potential reasons include running out of memory space for resident data structures, table management failure, or TCP internal error.
- ACTION: Enable class 2 logging for NS Transport if not previously enabled. Locate matching log instance for resource error if possible. Error message will indicate class 2, subsystem 3, entity TCP, location 102xx. Parameter is table management error returned. (Sign bit set indicates error, not set indicates warning.) Consult MPE/iX operating system error documentation if available, submit an CR with this information if necessary.
- 31           **MESSAGE: SOCKET ALREADY EXISTS**
- CAUSE: An attempt was made to open a socket with a TCP sap number which is already in use by a currently open socket.
- ACTION: Close the original socket.
- 40           **MESSAGE: INCONSISTENT IPC STATE**
- CAUSE: A TCP operation was attempted which conflicts with expected (IPC/BSD sockets) operation in this state.

**ACTION:** This is an internal error between TCP and the upper layer protocol (IPC or BSD Sockets). You should submit an CR on this defect. Please include the nature of the call being made, and some indication of the current connection state. If possible please include a copy of the program and the input which caused the error to aid resolution of the problem.

-41

**MESSAGE: IPC PROTOCOL VIOLATION**

**CAUSE:** A TCP operation was attempted which is in direct violation of (IPC/BSD sockets) /TCP interface rules.

**ACTION:** This is an internal error between TCP and the upper layer protocol (IPC or BSD Sockets). You should submit an CR on this defect. Please include the nature of the call being made, and some indication of the current connection state. If possible please include a copy of the program and the input which caused the error to aid resolution of the problem.

-42

**MESSAGE: RECEIVE REPLY WITHOUT DATA**

**CAUSE:** A receive reply call was made on a TCP connection; however, there was no data pending at the time.

**ACTION:** This is an internal error between TCP and the upper layer protocol (IPC or BSD Sockets). You may wish to submit an CR for this defect. Please include the nature of the call being made, and some indication of the current connection state. If possible please include a copy of the program and the input which caused the error to aid resolution of the problem.

-43

**MESSAGE: RECEIVE REPLY WITHOUT MESSAGE**

**CAUSE:** A receive reply call was made on a TCP connection in message mode; however, there were no messages pending at the time.

**ACTION:** This is an internal error between TCP and the upper layer protocol (IPC or BSD Sockets). You may wish to submit an CR for this defect. Please include the nature of the call being made, and some indication of the current connection state. If possible please include a copy of the program and the input which caused the error to aid resolution of the problem.

-44

**MESSAGE: MESSAGE QUEUE FULL**

**CAUSE:** TCP was unable to process a send because it has run out of message queue elements.

**ACTION:** This is an internal error between TCP and the upper layer protocol (IPC or BSD Sockets). You may wish to submit an CR for this defect. Please include the nature of the call being made, and some indication of the current connection state. If possible please include a copy of the program and the input which caused the error to aid resolution of the problem.

- 45           **MESSAGE: DATA SENT AFTER SHUTDOWN**
- CAUSE: An attempt was made to send data after a simplex-in or graceful release lingering shutdown call had been executed.
- ACTION: This is an internal error between TCP and the upper layer protocol (IPC or BSD Sockets). The upper layer protocol should circumvent any further sends before they reach TCP. You may wish to submit an CR for this defect. Please include the nature of the call being made, and some indication of the current connection state. If possible please include a copy of the program and the input which caused the error to aid resolution of the problem.
- 50           **MESSAGE: DATA SENT AFTER SHUTDOWN**
- CAUSE: Data was received on a connection after a shutdown call with how = "graceful release now" (available only in BSD sockets) had been executed.
- ACTION: The remote connection half should not be sending data after the local side has issued a "graceful release now shutdown." This is an application timing issue. The application needs to coordinate the connection shutdown or the local side should do a "simple-in shutdown" and continue to receive until the remote graceful release notification is received.
- 60           **MESSAGE: NETWORK SHUTDOWN**
- CAUSE: A Netcontrol shutdown was issued. A connection or sockets may have been shutdown due to the network shutdown; or an operation may have been denied because a network shutdown is in progress.
- ACTION: Restart the network to be able to establish new sockets and/or connections.
- 61           **MESSAGE: NETWORK NOT STARTED**
- CAUSE: An operation was denied because a NETCONTROL START has not been issued yet (i.e., the transport has not been started.)
- ACTION: Issue a NETCONTROL START and retry the operation.
- 70           **MESSAGE: CONNECTION ABORTED**
- CAUSE: A TCP Connection was aborted either due to a local error or due to a remote connection abortion (i.e., a reset packet was received).
- ACTION: Use IPC or BSD error code to discover source of connection abortion.
- 80           **MESSAGE: RETRANSMISSION RETRIES EXCEEDED**
- CAUSE: A TCP connection did not receive any acknowledgment from the remote connection half for a data packet within the configured number of retransmissions.

**ACTION:** There are many possible reasons for a retransmission time out to occur. Potential problems include severe network bottlenecks, remote system CPU starvation, incorrect or improperly tuned configuration, remote node failure, gateway or network failure, and servers which are not processing new connection requests (or which are becoming backlogged). Check for remote system and network failure first. If there is no problem reaching the remote system, then the problem is most likely a system or network load problem. Check CPU usage on remote system and/or network traffic capacity especially at gateways or over slow (non-LAN) links. Also, if the problem is at connect time, check that the remote server is processing connection requests in a timely manner. Also see the *NS 3000/iX NMMGR Screens Reference Manual* for a discussion on tuning TCP retransmission parameters.

-81

**MESSAGE: RETRANSMISSION TIMEOUT EXCEEDED**

**CAUSE:** A TCP connection did not receive any acknowledgment from the remote connection half for a data packet within the configured `MAXIMUM TIME TO WAIT FOR REMOTE RESPONSE`.

**ACTION:** There are many possible reasons for a retransmission time out to occur. Potential problems include severe network bottlenecks, remote system CPU starvation, incorrect or improperly tuned configuration, remote node failure, gateway or network failure, and servers which are not processing new connection requests (or which are becoming backlogged). Check for remote system and network failure first. If there is no problem reaching the remote system, then the problem is most likely a system or network load problem. Check CPU usage on remote system and/or network traffic capacity especially at gateways or over slow (non-LAN) links. Also, if the problem is at connect time, check that the remote server is processing connection requests in a timely manner. Also see the *NS 3000/iX NMMGR Screens Reference Manual* for a discussion on tuning TCP retransmission parameters.

-82

**MESSAGE: CONNECTION ASSURANCE TIMEOUT**

**CAUSE:** A TCP connection has not received any acknowledgment from the remote connection half within the configured number of connection assurance retries; therefore we assume that the remote system half has experienced an abrupt termination.

**ACTION:** Check for remote system failure or network failure. If both the network and the remote system are intact, you may wish to readjust the time out parameters, or disable the connection assurance function by configuring a maximum of zero retries.

-90

**MESSAGE: PATH FAILURE**

**CAUSE:** The operation failed because TCP was unable to resolve a path to the remote system.

**ACTION:** Check for proper network configuration. If the configuration appears correct, enable Class 5 logging for NS Transport if not already

enabled and locate matching logging entry. Logging event will indicate Class 5, Subsystem 3, Entity TCP, Location 104xx, path failure error. Parameter is path resolution error returned. Consult path resolution error listings to diagnose problem.

-91

**MESSAGE: PATH FAILURE**

**CAUSE:** Excessive retransmissions prompted TCP to test the path to the remote node (an algorithm called active rerouting or negative advice) and path was reported as lost.

**ACTION:** Suspect gateway or network failure. If necessary, enable Class 5 logging for NS Transport if not already enabled and locate matching logging entry. Logging event will indicate Class 5, Subsystem 3, Entity TCP, Location 104xx, path failure error. Parameter is path resolution error returned. Consult path resolution error listings to diagnose problem.

-92

**MESSAGE: RESEGMENTATION FAILURE**

**CAUSE:** In an attempt to adjust to a new path, TCP was unable to resegment the currently outstanding outbound data to the new segment size. Most likely this was due to a lack of available buffers in the outbound pool associated with the new link.

**ACTION:** To prevent future occurrences, increase the buffer pool size of the link which TCP failed over to, or diagnose and prevent the original link failure which caused the fail over.

-100

**MESSAGE: DATA AFTER FIN**

**CAUSE:** The remote connection half continued to send data beyond the advertised final (FIN) sequence number.

**ACTION:** This is a remote protocol violation. Fix or remove the offending remote implementation.

-101

**MESSAGE: PRECEDENCE FAULT**

**CAUSE:** The remote connection half violated IP precedence conventions and sent a packet with an incorrect precedence.

**ACTION:** This is a remote protocol violation. Fix or remove the offending remote implementation.

-102

**MESSAGE: SYN IN WINDOW**

**CAUSE:** A valid SYN packet was discovered within the window of an already established connection.

**ACTION:** This is a remote protocol violation. Fix or remove the offending remote implementation.

- 103           **MESSAGE: DATA BEFORE CONNECT**  
CAUSE: The remote connection half has begun to send data before the connection startup handshake has been completed (i.e., before the SYN/ACK was sent).  
ACTION: This is a remote protocol violation. Fix or remove the offending remote implementation.
- 110           **MESSAGE: SEND ATTEMPT BEFORE NETWORK START**  
CAUSE: An attempt was made to send data before the network was started.  
ACTION: This is an IPC or BSD sockets internal error. Please submit an CR.
- 120           **MESSAGE: EMPTY RETRANSMISSION QUEUE**  
CAUSE: A TCP connection attempted to remove packets from its retransmission queue, but no packets were found.  
ACTION: This is an internal error in TCP. Please submit an CR. A protocol or link level trace including TCP header information will facilitate resolution of this problem.
- 121           **MESSAGE: UNEXPECTED EXCAPE**  
CAUSE: An unexpected escape or trap condition was detected by TCP.  
ACTION: This is a software error. Please submit an CR. A detailed description of the network and system state along with a copy of the program and input which uncovered the error may enhance timely resolution of this problem.
- 121           **MESSAGE: UNKNOWN CONTROL OPTION**  
CAUSE: An unknown control option was passed to TCP from a call to IPCCONTROL.  
ACTION: Identify and remove offending control option.

# 11 FPARSE Error Messages

An FPARSE error code is a 32-bit negative integer returned in the result parameter of the FPARSE intrinsic. The FPARSE intrinsic parses a file designator to determine if it is syntactically correct. If so, then the result parameter returns a positive value. For more FPARSE information, see the “Remote File Access” section of *Using NS 3000/iX Network Services*.

- 1      **MESSAGE: -1**  
CAUSE: Bad item values.  
ACTION: Provide a valid item (0–5).
- 2      **MESSAGE: -2**  
CAUSE: Parameter bounds violation.  
ACTION: Provide a proper parameter within bounds.
- 3      **MESSAGE: -3**  
CAUSE: Illegal delimiter — misuse of “.”, “/”, or “:”  
ACTION: Fix with an appropriate delimiter.
- 4      **MESSAGE: -4**  
CAUSE: User specified only one of items array or vector array.  
ACTION: Specify both items and corresponding vector array.
- 5      **MESSAGE: -5**  
CAUSE: Illegal item value in items array.  
ACTION: Correct value in the items array.
- 6      **MESSAGE: -6**  
CAUSE: Item list not terminated by the 0 terminator.  
ACTION: Terminate list by the 0 terminator.
- 7      **MESSAGE: -7**  
CAUSE: Undefined system file.  
ACTION: Correct with a valid system file name.
- 8      **MESSAGE: -8**  
CAUSE: “\*FDesig” has lockword specified.  
ACTION: Remove lockword specified.

- 9           **MESSAGE: -9**  
CAUSE: NS not present, but user specified envuid.  
ACTION: Install NS or do not specify envuid.
- 101         **MESSAGE: -101**  
CAUSE: First character of filename not alphabetic.  
ACTION: Provide a valid MPE file starting character.
- 102         **MESSAGE: -102**  
CAUSE: Filename expected in the string.  
ACTION: Provide a filename in the string.
- 103         **MESSAGE: -103**  
CAUSE: Filename identifier too long.  
ACTION: Provide a filename 8 characters or less.
- 104         **MESSAGE: -104**  
CAUSE: First character of lockword not alphabetic.  
ACTION: Provide a valid alphabetic first character.
- 105         **MESSAGE: -105**  
CAUSE: Lockword expected in the string.  
ACTION: Provide a lockword in the string.
- 106         **MESSAGE: -106**  
CAUSE: Lockword identifier too long.  
ACTION: Provide a lockword 8 characters or less.
- 107         **MESSAGE: -107**  
CAUSE: First character of groupname not alphabetic.  
ACTION: Provide a valid MPE syntax starting character.
- 108         **MESSAGE: -108**  
CAUSE: Groupname expected in the string.  
ACTION: Provide a valid group.
- 109         **MESSAGE: -109**  
CAUSE: Groupname identifier too long.  
ACTION: Supply group 8 characters or less.



- 110           **MESSAGE: -110**  
CAUSE: First character of accountname not alphabetic.  
ACTION: Provide a valid alphabetic starting character for the account.
- 111           **MESSAGE: -111**  
CAUSE: Accountname expected in the string.  
ACTION: Provide an account name in the string.
- 112           **MESSAGE: -112**  
CAUSE: Accountname identifier too long.  
ACTION: Provide an accountname of 8 characters or less.
- 113           **MESSAGE: -113**  
CAUSE: First character of envidname not alphabetic.  
ACTION: Provide an alphabetic first character for the envidname.
- 114           **MESSAGE: -114**  
CAUSE: Envidname expected in the string.  
ACTION: Provide and envidname in the string.
- 115           **MESSAGE: -115**  
CAUSE: Envidname identifier too long.  
ACTION: Provide an envidname of 8 characters or less.



# 12 NETXPORTERR Error Messages

NETXPORTERR messages are returned to `$STDLIST` when executing the `NETCONTROL` command. The `NETCONTROL` command initiates, terminates, and controls the operation of the Network Transport subsystem of the links.

- 0001      **MESSAGE: TRANSPORT NOT ACTIVE.**
- CAUSE: Issued `NETCONTROL STATUS` command on inactive transport.
- ACTION: Issue `NETCONTROL START`.
- 0011      **MESSAGE: DIAG COMMAND NOT SUPPORTED. NETXPORT RUNNING IN UNSUPPORTED MODE. RESTART NETXPORT TO CLEAR CONDITION.**
- CAUSE: The use of the `NETCONTROL DIAG` command invalidates Hewlett-Packard support of Network Transport.
- ACTION: Do not use the `NETCONTROL DIAG` command. This command is reserved for Hewlett-Packard support personnel. Network Transport must be shut down and restarted to clear the effects of this command.
- 0020      **MESSAGE: TRANSPORT STATISTICS UNAVAILABLE.**
- CAUSE: A call to cache information used by the diagnostic tool has failed, although the `NETCONTROL START` command has completed successfully.
- ACTION: Bring down the transport and retry the command. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 0021      **MESSAGE: CONF= OPTION NOT SUPPORTED. NETXPORT RUNNING IN UNSUPPORTED MODE. RESTART NETXPORT TO CLEAR CONDITION.**
- CAUSE: The use of the `CONF=` option in a `NETCONTROL` command invalidates Hewlett-Packard support of the Network Transport.
- ACTION: Shutdown the Network Transport and restart it without using the `CONF` option.
- 25        **MESSAGE: X.25 LEVEL 3 DOWN ON DTC FOR DEVICE linkname.**
- CAUSE: The DTC has lost or was unable to start level 2 and/or level 3 for the X.25 card specified in the `NMCONFIG` path `LINK.linkname`.
- ACTION: No action required. When level 3 is established, the host will be informed.

- 2000           **MESSAGE: TRACE FILE IS !.**  
CAUSE: Informative message.  
ACTION: None.
- 4000           **MESSAGE: TOO MANY PARMS IN COMMAND LINE.**  
CAUSE: Certain NETCONTROL functions and entities are mutually exclusive and cannot be combined on the same command line. Multiples of the same function are not allowed.  
ACTION: Check the *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4002           **MESSAGE: EXPECTED STATUS KEYWORD ALL.**  
CAUSE: Typographical error.  
ACTION: Type the word ALL after STATUS =. Correct and retry.
- 4003           **MESSAGE: EXPECTED SEMICOLON.**  
CAUSE: Typographical error. There must be a blank between NETCONTROL and the first entity or function on the command line. All following entities or functions must be separated by semicolons.  
ACTION: Check the *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4004           **MESSAGE: INVALID NETCONTROL KEYWORD: EXPECTED START STOP, TRACEON, TRACEOFF, MONON, MONOFF, STATUS, VERSION, NET, GATE, OR NI.**  
CAUSE: Only the keywords listed are allowed.  
ACTION: Check the *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4006           **MESSAGE: EXPECTED EQUAL.**  
CAUSE: For TRACEON=Type, the type is a required parameter, one of H,D,M,B,N,S.  
ACTION: Check the *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4007           **MESSAGE: EXPECTED LINK NAME.**  
CAUSE: No link name follows the ADDLINK= or DELLINK= keyword.  
ACTION: Reissue the NETCONTROL ADDLINK or DELLINK command with the appropriate link name.
- 4008           **MESSAGE: KEYWORD SPECIFIED REDUNDANTLY.**  
CAUSE: Certain NETCONTROL functions and entities are mutually exclusive and cannot be combined on the same command line. Multiples of the same function are not allowed.

- ACTION: Check the *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4009      **MESSAGE: BOTH START AND STOP ISSUED.**
- CAUSE: Both parameters not allowed in a single NETCONTROL command.
- ACTION: Pick appropriate command. Correct and retry.
- 4011      **MESSAGE: INVALID TRACE TYPE. EXPECTED COMBINATION OF D,H,M,B,N,S.**
- CAUSE: Usually a typographical error. Recommended combination for trace type is HMD.
- ACTION: Check the *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4012      **MESSAGE: INVALID TRACE DESTINATION. EXPECTED DISC.**
- CAUSE: Usually a typographical error. DEFAULT: Disk.
- ACTION: Check the *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4013      **MESSAGE: INVALID FILE NAME.**
- CAUSE: An invalid file name has been supplied with the NETCONTROL TRACEON option. Usually a typographical error.
- ACTION: Check the *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4014      **MESSAGE: INVALID RECORD SIZE, MUST BE >5 AND 1024.**
- CAUSE: Trace file record size specified in command line parameter is too large or too small.
- ACTION: Correct with valid value; retry.
- 4015      **MESSAGE: INVALID FILE SIZE, MUST BE > THAN 32 AND 32000.**
- CAUSE: Trace file size specified in command line parameter is too large or too small.
- ACTION: Correct with valid value; retry.
- 4016      **MESSAGE: CONTROL PROCESS NOT STARTED (NMERR= ! ).**
- CAUSE: NMMON was unable to launch the Control Process, or user issued a command when the transport was not active.
- ACTION: Issue NETCONTROL START. Then retry command. If problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 4017      **MESSAGE: DATA DICTIONARY FULL, TRY AGAIN.**
- CAUSE: Data dictionary full.

**ACTION:** Reissue the command after waiting a few minutes. If the problem persists, then see Appendix A , “Submitting a CR,” of this manual.

4021           **MESSAGE: TRACE OPEN ERROR.**

**CAUSE:** Usually, you are trying to open a trace on an already opened trace file.

**ACTION:** Ensure that the trace file exists and is open. If it exists and is not open, then see Appendix A , “Submitting a CR,” of this manual.

4023           **MESSAGE: BAD DIAG VALUE, EXPECTED SET(0–31) OR RST(0–31).**

**CAUSE:** Invalid DIAG value.

**ACTION:** The DIAG keyword command is not for customer use. Contact your Hewlett-Packard representative.

4025           **MESSAGE: NET NOT ALLOWED WITH PROT.**

**CAUSE:** The two entities (NET and PROT) cannot be used together.

**ACTION:** Pick appropriate entity and reissue command.

4026           **MESSAGE: EXPECTED VERSION KEYWORD MOD.**

**CAUSE:** User typed an illegal command.

**ACTION:** Type word MOD after VERSION=.

4028           **MESSAGE: FOPEN FAILED ON NETMSG.NET.SYS.**

**CAUSE:** Usually appears with an MPE XL command.

**ACTION:** Fix the MPE XL error. Ensure that the NETMSG file exists; if it does, then see Appendix A , “Submitting a CR,” of this manual.

4029           **MESSAGE: MESSAGE CATALOG ERROR ON NETMSG.NET.SYS.**

**CAUSE:** Usually appears with an MPE XL command.

**ACTION:** Fix the MPE XL error. Ensure that the NETMSG file exists; if it does, then see Appendix A , “Submitting a CR,” of this manual.

4030           **MESSAGE: GATE &NET FUNCTIONS ENTERED, ONLY ONE ALLOWED.**

**CAUSE:** The GATE and NET keywords have been specified on the same NETCONTROL command line.

**ACTION:** Reissue the NETCONTROL command using only one of the keywords.

4031           **MESSAGE: TRACEON AND TRACEOFF NOT ALLOWED ON SAME LINE.**

**CAUSE:** The TRACEON and TRACEOFF keywords have been specified on the same NETCONTROL command line.

- ACTION: Reissue the NETCONTROL command using only one of the keywords.
- 4033       **MESSAGE: NO FUNCTION KEYWORDS ENTERED.**
- CAUSE: User typed an illegal command. Specifying an entity requires a function to act on it.
- ACTION: Check *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4034       **MESSAGE: TRACE PREVIOUSLY ENABLED.**
- CAUSE: Informative message.
- ACTION: None.
- 4035       **MESSAGE: ENTITY WAS NOT TRACING.**
- CAUSE: Informative message.
- ACTION: None.
- 4040       **MESSAGE: VERSION ERROR: FIX NUMBERS DIFFER.**
- CAUSE: Network Transport software module version numbers do not match.
- ACTION: Issue the NETCONTROL VERSION=MOD command to see which numbers do not match, then see Appendix A , “Submitting a CR,” of this manual.
- 4041       **MESSAGE: VERSION ERROR: UPDATE NUMBERS DIFFER.**
- CAUSE: Network Transport software module version numbers do not match.
- ACTION: Issue the NETCONTROL VERSION=MOD command to see which numbers do not match, then see Appendix A , “Submitting a CR,” of this manual.
- 4042       **MESSAGE: VERSION ERROR: VERSION NUMBERS DIFFER.**
- CAUSE: Network Transport software module version numbers do not match.
- ACTION: Issue the NETCONTROL VERSION=MOD command to see which numbers do not match, then see Appendix A , “Submitting a CR,” of this manual.
- 4043       **MESSAGE: VERSION ERROR: MISSING REQUIRED MODULE (S).**
- CAUSE: Either missing software module or possible internal error.
- ACTION: Issue the NETCONTROL VERSION=MOD command to find out which module is missing.

- 4044           **MESSAGE: VERSION ERROR: BAD MODULE (S).**  
CAUSE: There may be no version stamp; file label may be overwritten, or possible bad software installation.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4045           **MESSAGE: ALREADY STARTED.**  
CAUSE: NETCONTROL START command issued for an already active entity.  
ACTION: None.
- 4046           **MESSAGE: NOT STARTED.**  
CAUSE: The NETCONTROL STOP command was issued when the network transport was never running.  
ACTION: Check the command for correctness. If it is correct, no further action is required.
- 4047           **MESSAGE: TOO MANY MESSAGES TO BE DISPLAYED.**  
CAUSE: The NETCONTROL error reporting mechanism has encountered more than 6 errors.  
ACTION: Fix the errors displayed and try the command again. If this error persists, submit and CR. See Appendix A , “Submitting a CR.”
- 4048           **MESSAGE: ! PROTOCOL IS NOT ACTIVE.**  
CAUSE: Trace issued on an inactive protocol.  
ACTION: Check configuration file. All protocols must be configured.
- 4049           **MESSAGE: THIS COMBINATION OF FUNCTIONS AND OBJECTS NOT ALLOWED.**  
CAUSE: Certain NETCONTROL functions and entities are mutually exclusive and cannot be combined on the same command line. Multiples of the same function are not allowed.  
ACTION: Check *NS 3000/iX Operations and Maintenance Reference Manual* for proper syntax. Correct and retry.
- 4050           **MESSAGE: niName NOT CONFIGURED.**  
CAUSE: The NI named is not configured.  
ACTION: Alter the configuration file appropriately, shut down the transport, and reconfigure.
- 4051           **MESSAGE: NAME LONGER THAN 8 CHARACTERS.**  
CAUSE: Usually a command line syntax error.  
ACTION: Rename if necessary; retype and retry.



- 4052           **MESSAGE: COMMAND NOT EXECUTED DUE TO VERSION MISMATCH.**  
CAUSE: Missing software modules or module version number mismatch.  
ACTION: Issue the `NETCONTROL VERSION=MOD` command for more information. See Appendix A , “Submitting a CR,” of this manual.
- 4053           **MESSAGE: ! DEVICE NOT CONFIGURED.**  
CAUSE: The link name specified with the `ADDLINK` or `DELLINK` keyword in the `NETCONTROL` command line is not configured.  
ACTION: Check the command for correctness. If it appears correct and the link is configured correctly, see Appendix A , “Submitting a CR,” of this manual.
- 4054           **MESSAGE: THE ENTITY IS NOT ACTIVE.**  
CAUSE: Issued a `NETCONTROL STATUS` command on an inactive entity.  
ACTION: None.
- 4055           **MESSAGE: INTERNAL ERROR ON STATUS, TRY AGAIN.**  
CAUSE: `NETCONTROL STATUS` error.  
ACTION: Wait and try again; if problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 4056           **MESSAGE: ! DEVICE ALREADY STARTED.**  
CAUSE: The link name specified by the `NETCONTROL ADDLINK` command has already been started.  
ACTION: Check the command for correctness. If it appears correct, no further action is required.
- 4057           **MESSAGE: ! DEVICE NOT STARTED.**  
CAUSE: The link name specified by the `NETCONTROL DELLINK` command is already shut down.  
ACTION: Check the command for correctness. If it appears correct, no further action is necessary.
- 4058           **MESSAGE: X25 NOT INSTALLED.**  
CAUSE: An attempt was made to start an X25 network when X25 is not installed on the system.  
ACTION: Install X25. If X25 is properly installed then see “Appendix A , “Submitting a CR,” of this manual.
- 4059           **MESSAGE: BAD UPDATE VALUE, EXPECTED INTERNET OR MAPPING.**  
CAUSE: Something other than the supported `INTERNET` or `MAPPING` option follows the `UPDATE=` option in the `NETCONTROL` command line.

**ACTION:** Consult the *NS 3000/iX Operations and Maintenance Reference Manual* for the correct syntax for the NETCONTROL command. Once the syntax has been corrected, retry the command.

4060

**MESSAGE: THIS UPDATE IS NOT ALLOWABLE FOR THIS ENTITY.**

**CAUSE:** The entity associated with the NETCONTROL UPDATE command may not be updated.

**ACTION:** Consult the *NS 3000/iX Operations and Maintenance Reference Manual* for the correct syntax for the NETCONTROL command. Once the syntax has been corrected, retry the command.

4061

**MESSAGE: CONFIGURATION FILE NOT VALID.**

**CAUSE:** Validation errors occurred on a NETCONTROL START or UPDATE commands.

**ACTION:** Correct the invalid parameters in your configuration file and try again.

4062

**MESSAGE: UNABLE TO LOCK CONFIGURATION FILE. (NMERR= error number).**

**CAUSE:** Unable to lock the configuration file for execution of a NETCONTROL START or UPDATE.

**ACTION:** Wait and try again; if problem persists, see Appendix A , “Submitting a CR,” of this manual.

4063

**MESSAGE: PROTOCOL START FAILED.**

**CAUSE:** During a NETCONTROL START one or more of the NI specific protocols failed to start.

**ACTION:** Stop the network. Check the configuration of the effected protocols to be sure that they are correct. Then restart the network. If the error persists, then see Appendix A , “Submitting a CR,” of this manual.

4064

**MESSAGE: GENERAL PROTOCOL STARTUP FAILED.**

**CAUSE:** During a NETCONTROL START one or more of the general protocols or common modules failed to start. This prevented startup of any NI-specific protocols. Any further attempts to start networks will also fail, unless networking is first stopped.

**ACTION:** Do a netcontrol stop. Check the configuration of the TCP and IP modules to be sure that they are correct. Then try restarting the network. If the error persists, see Appendix A , “Submitting a CR,” of this manual.

4100

**MESSAGE: VERSION ERROR: INTERNAL ERROR (NMERR= error number).**

**CAUSE:** An internal error occurred while the network transport was checking its module versions.

**ACTION:** Review the referenced NMERR elsewhere in this manual. Confirm that there have been no validation errors with this configuration file. If the error still occurs, see Appendix A , “Submitting a CR,” of this manual.

4101

**MESSAGE: TRANSPORT NOT YET DOWN.**

**CAUSE:** Detected upon issuing a `NETCONTROL START` command. The prior `NETCONTROL STOP` command failed to completely terminate the Network Transport.

**ACTION:** Perform the following steps:

1. Wait a few minutes, then retry the `NETCONTROL START` command. If the problem persists, abort any remaining network users.
2. Submit an CR any time this problem occurs. See Appendix A , “Submitting a CR.”

4200

**MESSAGE: CONFIGURATION FILE NOT OPENED.**

**CAUSE:** Opening the configuration file failed.

**ACTION:** Confirm that the configuration file `NMCONFIG.PUB.SYS` exists and is valid. Retry the `NETCONTROL` command.

4201

**MESSAGE: INTERNAL BUFFER ERROR.**

**CAUSE:** Creating a network transport buffer area failed.

**ACTION:** See Appendix A , “Submitting a CR.”

4202

**MESSAGE: INTERNAL CONFIGURATION FILE ERROR (NMERR= error number).**

**CAUSE:** Accessing the configuration file returned the specified error.

**ACTION:** Review the description of the NMERR referenced elsewhere in this manual. Confirm that there are no validation errors with the configuration file. If the error still occurs, restore a backup copy of the configuration file `NMCONFIG.PUB.SYS`.

4203

**MESSAGE: INTERNAL ERROR ON START.**

**CAUSE:** A serious internal error has been detected during the execution of the `NETCONTROL START` command.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

4204

**MESSAGE: linkname DEVICE STARTUP FAILED.**

**CAUSE:**

1. The configured device does not exist on the system.
2. The link connection is bad due to faulty hardware.
3. An internal error has occurred during device startup.

ACTION:

1. Consult the SHERLOCK diagnostics to determine the cause of the link error. If no link error is indicated, see Appendix A , “Submitting a CR,” of this manual.
2. Consult the SHERLOCK diagnostics to determine the cause of the link error. If no link error is indicated, see Appendix A , “Submitting a CR,” of this manual.
3. Consult the SHERLOCK diagnostics to determine the cause of the link error. If no link error is indicated, see Appendix A , “Submitting a CR,” of this manual.

4205 **MESSAGE: linkName DEVICE IN BOTH ADDLINK AND DELLINK FUNCTIONS.**

CAUSE: The same linkname is the object of both the ADDLINK and DELLINK option in the NETCONTROL command above. This is not permitted.

ACTION: Do the ADDLINK and DELLINK on separate NETCONTROL command lines when the same linkname is used for both functions.

4206 **MESSAGE: HOST — DTC CONFIGURATION MISMATCH FOR DEVICE linkname. ENSURE HOST NAME IS CONFIGURED ON DTC.**

CAUSE: The host name and/or host link name is not configured for the DTC name and card number specified with this device.

ACTION: Ensure that the DTC name and card number configured for this device are correct. Then use the DTC Manager to add the host name and host link name to the configuration for the appropriate DTC and card number. Restart the DTC card.

4207 **MESSAGE: HOST — DTC VERSION MISMATCH FOR DEVICE linkname.**

CAUSE: The version number of the Remote Link Manager (RLM) on the host and the version number of MARS on the DTC are incompatible.

ACTION: Ensure that the DTC name configured for this device is correct. Contact your Hewlett-Packard support engineer to correct the problem.

4208 **MESSAGE: X.25 CARD DOWN ON DTC FOR DEVICE linkname.**

CAUSE: The X.25 code must be downloaded on an X.25 card on the DTC before the Network Transport attempts to open the link.

ACTION: Ensure that the DTC name and card number configured for this device are correct. Using the Openview DTC Manager, download X.25 for the appropriate DTC and card.

- 4209           **MESSAGE: X.25 NOT STARTED ON DTC FOR DEVICE linkname.**  
CAUSE: The X.25 card on the DTC was reset, but X.25 was not restarted.  
ACTION: Ensure that the DTC name and card number configured for this device are correct. Using the Openview DTC Manager, start X.25 for the appropriate DTC and card.
- 4210           **MESSAGE: HOST LOST CONTACT WITH DTC FOR DEVICE linkname.**  
CAUSE: The control connection between the host and the DTC was lost.  
ACTION: Verify that the DTC configured for this device is still functioning.
- 4211           **MESSAGE: INVALID CARD NUMBER FOR DTC FOR DEVICE linkname.**  
CAUSE: This error could occur for one of the following reasons:
- The card number specified does not exist on the DTC.
  - The card number specified is not an X.25 card.
  - The card number specified has not been configured using the Openview DTC Manager.
- ACTION: Ensure that the DTC name and card number configured for this device are correct. Using the Openview DTC Manager, configure and start X.25 for the appropriate DTC and card.
- 4212           **MESSAGE: COULD NOT GET DATA FROM NMCONFIG PATH "DTS.DTCPC".**  
CAUSE: The path DTS.DTC was created, but no data was added.  
ACTION: Using NMMGR, update the path and validate the DTS subsystem.
- 4213           **MESSAGE: LAN LINK NAME NOT CONFIGURED IN NMCONFIG PATH "DTS.DTCPC".**  
CAUSE: The path DTS.DTC was created in NMCONFIG.PUB.SYS, but the IEEE 802.3 link name was not added.  
ACTION: Using NMMGR, update the path and validate the DTS subsystem.
- 4214           **MESSAGE: COULD NOT GET DATA FROM NMCONFIG PATH "LINK.linkname".**  
CAUSE: The path LINK.linkname was created in NMCONFIG.PUB.SYS, but no data was added.  
ACTION: Using NMMGR, update the path and validate the DTS subsystem.

- 4215           **MESSAGE: DTC NAME NOT CONFIGURED IN NMCONFIG PATH “LINK.linkname”.**  
CAUSE: The path LINK.linkname was created in NMCONFIG.PUB.SYS, but the DTC name was not added.  
ACTION: Using NMMGR, update the path and validate the DTS subsystem.
- 4216           **MESSAGE: CANNOT FIND DTC CONFIGURED FOR DEVICE linkname.**  
CAUSE: This error may be caused by one of the following reasons:
- The host has a non-existent DTC configured in the NMCONFIG.PUB.SYS path LINK.linkname.
  - The DTC configured in the NMCONFIG.PUB.SYS path LINK.linkname is down or flooded.
- ACTION: Check the configuration data and verify that it is correct. Restart the DTC if necessary.
- 4217           **MESSAGE: MAXIMUM X.25 LINKS ALREADY STARTED, CANNOT START DEVICE linkname.**  
CAUSE: Too many X.25 links have been started on the host.  
ACTION: Stop unused X.25 links or Network Interfaces.
- 4218           **MESSAGE: CANNOT OPEN NETWORK DIRECTORY FILE.**  
CAUSE: NETCP was unable to open the file NSDIR.NET.SYS.  
ACTION: Check to be sure that the files NSDIR.NET.SYS and NSDIRK.NET.SYS exist. If they exist and they are not being accessed by another process, then try recreating the files. Otherwise, see Appendix A , “Submitting a CR,” of this manual.

# 13 NSCONTROL Error Messages

NSCONTROL messages are DSERR messages returned to \$STDLIST by the :NSCONTROL command. (:NSCONTROL initiates, terminates, and controls the operation of the Network Services subsystem of NS 3000/iX.) These errors are reported during the execution of an NSCONTROL command. There may be several errors reported for one NSCONTROL. NSCONTROL error messages are held in CATALOG.PUB.SYS, message set 16 (DS errors). When an NSCONTROL error is detected, the DSERR job control word is set to the error number.

- 651 **MESSAGE: SERVICE servicename NOT STARTED.**
- CAUSE: An NSCONTROL command with a START option was issued, but the indicated service was not started.
- ACTION: Check that the transport has been started. If the transport is started, then this may be a resource or internal error. Check the Node Management log file for the internal errors associated with this problem. See Appendix A, "Submitting a CR," of this manual.
- 652 **MESSAGE: SERVICE servicename ALREADY STARTED.**
- CAUSE: An NSCONTROL command with a START option was issued; the indicated service, however, was already active.
- ACTION: None. The other specified services have been started.
- 653 **MESSAGE: SERVICE servicename NOT STOPPED.**
- CAUSE: An NSCONTROL command with a STOP option was issued, but the indicated service was not stopped.
- ACTION: This may be an internal error. Check the Network Management log file for the internal errors associated with this problem. See Appendix A, "Submitting a CR," of this manual.
- 654 **MESSAGE: SERVICE servicename ALREADY STOPPED.**
- CAUSE: An NSCONTROL command with a STOP option was issued; the indicated service, however, was not active.
- ACTION: None. The other specified services have been stopped.
- 655 **MESSAGE: UNKNOWN SERVICE servicename.**
- CAUSE: An NSCONTROL command with a START or STOP option was issued; the indicated service name is not a defined service.
- ACTION: Delete or correct the name and reissue the command. The NSCONTROL STATUS=SERVICES command will display the valid service names.

- 656           **MESSAGE: UNKNOWN SERVER servername.**  
CAUSE: An NSCONTROL command with a SERVER option was issued; the indicated server name is not a defined service.  
ACTION: Delete or correct the name and reissue the command. The NSCONTROL STATUS=SERVERS command will display the valid server names.
- 657           **MESSAGE: SERVER pin DOES NOT SUPPORT DEBUG.**  
CAUSE: An NSCONTROL command with a DEBUG=pinin option was issued, but the server selected by pin does not support the DEBUG option.  
ACTION: Correct the pin and reissue the command, or ignore.
- 658           **MESSAGE: PROCESS pin NOT A SERVER.**  
CAUSE: An :NSCONTROL command with a DEBUG=pin option was issued, but the pin is not a server process.  
ACTION: Correct the pin and reissue the command, or ignore.
- 659           **MESSAGE: MINIMUM SERVER NUMBER MAXIMUM SERVER NUMBER FOR servername.**  
CAUSE: An NSCONTROL command was issued with a SERVER option that changes the minimum and/or maximum number of servers, so that the minimum number of servers is greater than the maximum.  
ACTION: Correct the SERVER option and reissue the command. The NSCONTROL STATUS=SERVERS command will show the current minimum and maximum server limits for the server type.
- 660           **MESSAGE: TOTAL MINIMUM SERVER NUMBERS MINIMUM PROCESS LIMIT.**  
CAUSE: An :NSCONTROL command was issued with a SERVER option that changes the minimum number of servers for one or more server types, so that the total number of previously created servers exceeds the minimum process limit. The minimum process limit prevents previously created servers from taking up too many processes and hindering other applications on the system.  
ACTION: Adjust the minimum number of servers to fit within the minimum process limit.
- 661           **MESSAGE: MISSING DADCONF.NET.SYS CONFIGURATION FILE.**  
CAUSE: To be determined.  
ACTION: Check that the JCONFJOB job has been streamed. If not, issue the command STREAM JCONFJOB.



- 662           **MESSAGE: INVALID DADCONF.NET.SYS CONFIGURATION FILE.**  
CAUSE: To be determined.  
ACTION: Check that the JCONFJOB job has been streamed. If not, issue the command `STREAM JCONFJOB`.
- 663           **MESSAGE: SERVICE NSservice DOES NOT SUPPORT AUTOLOGON.**  
CAUSE: You cannot automatically log on with the Network Service you are using.  
ACTION: Do not use the AUTOLOGON function with this service.
- 698           **MESSAGE: INSUFFICIENT STACK SPACE.**  
CAUSE: To be determined.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 699           **MESSAGE: INSUFFICIENT SYSTEM RESOURCES.**  
CAUSE: To be determined.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.



# 14 VALERR and VALWARN Messages

VALERR messages are returned to \$STDLIST as a result of using the configuration validation screen of NMMGR, or following the NETCONTROL START and UPDATE commands. See *Using the Node Management Services (NMS) Utilities* manual for information on using this screen.

- 1           **MESSAGE: NO DATA FOUND IN PATH RECORD.**  
 CAUSE: No data has been entered for the specified path.  
 ACTION: Check for correct spelling of configuration path; enter data for the path, if necessary.
- 2           **MESSAGE: INCORRECT DATA LENGTH, LENGTH = n, EXPECTED = m**  
 CAUSE: Name entered in configuration screen is too long.  
 ACTION: Rename, using no more than the expected number of characters.
- 3           **MESSAGE: NO CORRESPONDING LINK CONFIGURED.**  
 CAUSE: Link name specified in link configuration screen (LINK.linkname) differs from name in NETXPORT configuration screen.  
 ACTION: Make sure that link name specified in link configuration screen (LINK.linkname) is the same as that specified in NETXPORT screen.
- 4           **MESSAGE: EXPECTED NO DATA IN RECORD, FOUND n BYTES.**  
 CAUSE: Displayed path should contain no data.  
 ACTION: Contact your Hewlett-Packard representative for assistance.
- 5           **MESSAGE: HOME NETWORK SPECIFIED NOT CONFIGURED.**  
 CAUSE: Home network specified in the Global Transport Configuration screen (path NETXPORT.GLOBAL) is not configured.  
 ACTION: Check name of IEEE 802.3 network interface as configured in the Network Interface Configuration screen (path NETXPORT.NI). Enter this name as Home Network Name in Global Transport Configuration screen.
- 6           **MESSAGE: CONFIGURATION PATH EXPECTED, NOT FOUND.**  
 CAUSE: Displayed configuration path not found in configuration file.  
 ACTION: Contact your Hewlett-Packard representative for assistance.

- 7           **MESSAGE: NO NETWORKS (NETWORK INTERFACES) CONFIGURED.**  
CAUSE: No network interfaces have been configured.  
ACTION: Configure the network interface, using the Network Interface Configuration screen (path `NETXPORT.NI`).
- 8           **MESSAGE: RETRANSMIT LOWER (n) BOUND MUST BE = UPPER BOUND (m).**  
CAUSE: Retransmission interval lower bound is set higher than upper bound in Transmission Control Protocol screen (path `NETXPORT.GPROT.TCP`).  
ACTION: Reconfigure transmission interval bounds so that the lower bound is less than or equal to the upper bound in `NETXPORT.GPROT.TCP`.
- 9           **MESSAGE: RETRANSMIT INITIAL (n) OUT OF RANGE.**  
CAUSE: Initial retransmission interval is not in range between lower and upper retransmission interval bounds.  
ACTION: Reconfigure initial retransmission interval or interval bounds so that initial interval falls in range, using the Transport Control Protocol (TCP) Configuration screen (path `NETXPORT.GPROT.TCP`).
- 14          **MESSAGE: UNKNOWN PATH IN CONFIGURATION FILE.**  
CAUSE: Unknown path found in configuration file.  
ACTION: Contact your Hewlett-Packard representative.
- 17          **MESSAGE: MUST CONFIGURE PHONE NUMBER FOR DIAL LINK.**  
CAUSE: In the Router Mapping Screen the specified link is a dial type link and local is specified, but a phone number is not configured.  
ACTION: Configure the appropriate phone number for the dial link in the Router Mapping Screen (path `NETXPORT.NI.NIname.MAPPING.mapentry`.)
- 18          **MESSAGE: MUST CONFIGURE SECURITY STRING — SECURITY ENABLED.**  
CAUSE: On the Router Mapping Screen local is specified, dial is enabled for the specified link, and security is set ON in the Dial Protocol Screen, but there is no security string configured for the mapping entry.  
ACTION: Either configure the appropriate security string in the Router Mapping Screen or disable security in the Dial Protocol Screen.
- 19          **MESSAGE: GATEWAY IP NETWORK NUMBER DOESN'T MATCH NI IP NETWORK NUMBER.**  
CAUSE: The network portion of the gateway IP internet address specified in the Neighbor Gateway screen differs from the network portion of the IP internet address configured in the IP Protocol Screen.

**ACTION:** Correct one of the two addresses such that their network portions match.

20 **MESSAGE: THIS LINK IS NOT ALLOWED FOR THIS NI TYPE.**

**CAUSE:** You are configuring a LAP-B network interface link, but the link name specified corresponds to a non-LAP-B link.

**ACTION:** Reconfigure the link in the Link Selection screen (LINK) as a LAP-B link type.

25 **MESSAGE: SECURITY ENABLED BUT NO SECURITY STRING CONFIGURED.**

**CAUSE:** The Dial Protocol screen is configured with Security On = Y but there are no security strings configured.

**ACTION:** Either disable security in the Dial Protocol Screen, or configure at least one security string.

26 **MESSAGE: HOME NETWORK NAME MUST NOT BE GATEWAY HALF.**

**CAUSE:** The specified home network name in the Global Transport configuration screen corresponds to a configured gatehalf type network interface.

**ACTION:** Check the names of the network interfaces configured in NETXPORT.NI. Except for loop and gatehalf types, enter one of the configured network interfaces as the home network name on the Global Transport Configuration Screen (NETXPORT.GLOBAL).

27 **MESSAGE: HOME NETWORK NAME MUST NOT BE LOOPBACK.**

**CAUSE:** The specified home network name in the Global Transport configuration screen corresponds to configured loopback type network interface.

**ACTION:** Check the NI names configured in NETXPORT.NI. Choose one of the names that does not correspond to a LOOPBACK type.

28 **MESSAGE: NO MAPPING ENTRIES CONFIGURED FOR ROUTER NI.**

**CAUSE:** There are no entries configured on the Router Mapping Screen.

**ACTION:** Configure mapping entries for the Router NI (NETXPORT.NI.NIname.MAPPING).

30 **MESSAGE: MUST CONFIGURE A HOME NETWORK — GATEHALF NI IS CONFIGURED.**

**CAUSE:** A home network is not configured on the Global Transport Screen, but a gatehalf network interface is configured.

**ACTION:** Check the names of the NI configured. Choose one of the names that does not correspond to a gatehalf type.

- 31           **MESSAGE: CONFIGURED REACHABLE NETS (n) MUST BE = IPU  
MAX NETS (m).**
- CAUSE: The maximum number of internet reachable networks configured for the specified network interface exceeds the maximum number of networks.
- ACTION: Use the NMMGR utility to reduce the number of reachable networks in `NETXPORT.NI.NIname.INTERNET.gatename` to be equal to or less than the maximum value. Validate the configuration again.
- 32           **MESSAGE: CONFIGURED GATEWAYS (n) MUST BE = IPU MAX  
GATES (m).**
- CAUSE: The number of gateways configured for the specified `NETXPORT.NI.NIname.INTERNET` screen is greater than the maximum value permitted.
- ACTION: Use the NMMGR utility to reduce the number of gateways in `NETXPORT.NI.NIname.INTERNET` to be equal to or less than the maximum value. Validate the configuration again.
- 33           **MESSAGE: CONFIGURED MAPPINGS (n) MUST BE = NUMBER OF  
ROUTER TABLE ENTRIES (m).**
- CAUSE: The number of configured entries on the Router Mapping screen exceeds the maximum number of router table entries.
- ACTION: Use the NMMGR utility to reduce the number of mappings in `NETXPORT.NI.NIname.MAPPING` to be equal to or less than the maximum value. Validate the configuration again.
- 34           **MESSAGE: NO CORRESPONDING NI LINK CONFIGURED.**
- CAUSE: The link name entered in the Router Mapping Screen differs from any configured in the NI Link Screen.
- ACTION: Make sure that the link name specified in the Router Mapping Screen is the same as one of the links configured in the NI Screen (`NETXPORT.NI.NIname.LINK`).
- 35           **MESSAGE: IP NETWORK NUMBER IN RECORD DOESN'T MATCH NI  
IP NETWORK NUMBER.**
- CAUSE: The network portion of the IP internet address specified in the network interface mapping screen differs from the network portion of the IP internet address configured in the IP Protocol Screen.
- ACTION: Make sure that the IP network number in the Mapping Screen (`NETXPORT.NI.NIname.MAPPING`) is the same as the IP number specified in the IP Protocol Screen (`NETXPORT.NI.NIname.PROTOCOL.IP`).
- 37           **MESSAGE: LINKTYPE MUST BE LAN802.3 IN LINK.**
- CAUSE: The NI type is LAN802.3, but the link configured corresponds

to a non-LAN link in Link Configuration.

ACTION: Configure a LAN802.3 type link on the NI Link Screen (NETXPORT.NI.NIname.LINK).

39 **MESSAGE: ONLY 1 WILD CARD ADDRESS MAPPING ALLOWED FOR EACH ROUTER NI.**

CAUSE: There are two or more Router Mapping Screens with the wild card IP address "@" configured for the same router NI.

ACTION: Consult the discussion on the use of the wild card address on the Router Mapping Screen in the *NS 3000/iX NMMGR Screens Reference Manual*.

40 **MESSAGE: WILD CARD ADDRESS REQUIRES THAT EXACTLY 2 ROUTER MAPPINGS BE CONFIGURED.**

CAUSE: The wild card IP address was used in the specified Router Mapping Screen and a total of 2 router mapping entries are not configured for this router NI.

ACTION: Consult the discussion on the use of the wild card address on the Router Mapping Screen in the *NS 3000/iX NMMGR Screens Reference Manual*.

41 **MESSAGE: WILD CARD ADDRESS ALLOWED ONLY WHEN SINGLE NI LINK CONFIGURED.**

CAUSE: A wild card IP address mapping is configured for this router network, but more than one link is configured for this network under the NETXPORT.NI.NIname.LINK screen.

ACTION: Use the NMMGR utility to change the configuration file so that only one link is configured for this screen; or, do not use the wild card for the IP address mapping. Validate the configuration file again.

42 **MESSAGE: SUBSYSTEM 3 LOGGING NOT CONFIGURED.**

CAUSE: The LOGGING.SUB0003 record does not exist in the configuration file.

ACTION: Use the NMMGR utility to add the LOGGING.SUB0003 record to the configuration file so that logging for Network Transport will be configured. Be sure to add logging classes 1 through 6 to the LOGGING.SUB0003 level. Validate the Network Transport again.

43 **MESSAGE: NO LOGGING CLASSES CONFIGURED FOR SUBSYSTEM 3.**

CAUSE: There are no configuration file records beneath the LOGGING.SUB0003 path in the configuration file.

ACTION: Use the NMMGR utility to add in configuration records CLAS0001 through CLAS0006. Validate the Network Transport again.

- 46           **MESSAGE: NOT A VALID LOGGING CLASS FOR SUBSYSTEM 3.**  
CAUSE: Some other configuration record besides CLAS0001 through CLAS0006 exists beneath the LOGGING.SUB0003 record of the configuration file.  
ACTION: Use the NMMGR utility to change the configuration file so that the only records beneath the LOGGING.SUB0003 path are CLAS0001 through CLAS0006. Validate the Network Transport again.
- 49           **MESSAGE: IP NODE ADDRESS CANNOT EQUAL ZERO.**  
CAUSE: The node number portion of an IP internet address in the specified configuration file record is equal to zero.  
ACTION: Use the NMMGR utility to change the node number portion of the offending IP internet address to be a non-zero value. Validate the Network Transport again.
- 50           **MESSAGE: INTERNET IP ADDRESS CANNOT EQUAL NI IP ADDRESS.**  
CAUSE: The node number portion of the gateway IP internet address in the specified configuration file record is the same as the network's local IP internet address node number.  
ACTION: Use the NMMGR utility to change the local node number or gateway number so that they are no longer equal. Validate the Network Transport again.
- 100          **MESSAGE: SUBSYSTEM 4 LOGGING NOT CONFIGURED.**  
CAUSE: The LOGGING.SUB0004 record does not exist in the configuration file.  
ACTION: Use the NMMGR utility to add the LOGGING.SUB0004 record to the configuration file so that logging for the DC/LDM will be configured. At this time logging class 0 should also be added to the LOGGING.SUB0004 screen. Validate the Network Transport again.
- 101          **MESSAGE: LOGGING CLASS ZERO NOT CONFIGURED FOR SUBSYSTEM 4.**  
CAUSE: There is no class zero logging configured for the DC/LDM beneath the LOGGING.SUB0004 path in the configuration file.  
ACTION: Use the NMMGR utility to add in configuration record CLAS0000 so that all logging is configured for the DC/LDM. Validate the Network Transport again.
- 102          **MESSAGE: SUBSYSTEM 5 LOGGING NOT CONFIGURED.**  
CAUSE: The LOGGING.SUB0005 record does not exist in the configuration file.  
ACTION: Use the NMMGR utility to add the LOGGING.SUB0005 record to the configuration file so that logging for NetIPC will be configured. At this time logging classes 0 through 2 should also be added to the



- LOGGING.SUB0005 screen. Validate the Network Transport again.
- 103      **MESSAGE: THREE LOGGING CLASSES REQUIRED FOR SUBSYSTEM 5.**
- CAUSE: There are not three logging classes configured beneath the LOGGING.SUB0005 path in the configuration file.
- ACTION: Use the NMMGR utility to add in configuration records CLAS0000 through CLAS0002 so that all three logging classes are configured for NetIPC. Validate the Network Transport again.
- 104      **MESSAGE: NOT A VALID LOGGING CLASS FOR SUBSYSTEM 5.**
- CAUSE: Some other configuration record besides CLAS0000 through CLAS0002 exists beneath the LOGGING.SUB0005 path in the configuration file.
- ACTION: Use the NMMGR utility to change the configuration file so that the only records beneath the LOGGING.SUB0005 path in the configuration file are CLAS0000 through CLAS0002. Validate the Network Transport again.
- 105      **MESSAGE: NEXT HOP IP NETWORK NUMBER DOES NOT MATCH NI IP NETWORK NUMBER.**
- CAUSE: The network number portion of the next hop IP internet address on the specified NETXPORT.NI.NIname.MAPPING screen is not the same as the network's local IP internet address number.
- ACTION: Use NMMGR to change the network number of either the next hop IP internet address or the local IP internet address so that they are the same. Validate the Network Transport again.
- 106      **MESSAGE: NEXT HOP IP ADDRESS AND/OR LINK NAME DO NOT MATCH CONFIGURED ADJACENT DESTINATION.**
- CAUSE: There is no NETXPORT.NI.NIname.MAPPING record for the specified network which has the same destination IP internet address and linkname as those on the specified non-adjacent mapping screen.
- ACTION: Use NMMGR to change the configuration file so that the next hop IP internet address and the linkname on the specified mapping screen match those of an adjacent mapping screen for the same network. Validate the Network Transport again.
- 107      **MESSAGE: NO NI LINK CONFIGURED FOR THIS NETWORK.**
- CAUSE: There are no NETXPORT.NI.NIname.LINK.linkname records in the configuration file for this non-software loopback network.
- ACTION: Use NMMGR to change the configuration file so that at least one NETXPORT.NI.NIname.LINK.linkname record exists for this network. Validate the Network Transport again.

- 108           **MESSAGE: NO PHONE NUMBER REQUIRED FOR DC LINK.**  
CAUSE: Phone data has been erroneously configured for a direct connect link.  
ACTION: Delete the phone data, or correct the link type.
- 109           **MESSAGE: LOOPBACK ONLY CONFIGURATION NOT ALLOWED.**  
CAUSE: Loopback is the only NI configured.  
ACTION: Use NMMGR to add NIs for LAN or router networks and validate the Network Transport again.
- 110           **MESSAGE: LINK TYPE MUST BE X.25 IN LINK CONFIGURATION.**  
CAUSE: The link specified in the `NETXPORT.NI.NIname.LINK.linkname` is not configured as an X.25 link.  
ACTION: Use NMMGR to change the link type in `LINK.linkname` to an X.25, or create a new link of type X.25 and associate it with this NIname. Validate the network transport configuration again.
- 111           **MESSAGE: MUST CONFIGURE A NODE NAME.**  
CAUSE: There is no node name configured under the `NODENAME` path.  
ACTION: Use NMMGR to configure a local node name under the `NODENAME` path.
- 112           **MESSAGE: NOT A VALID LOGGING CLASS FOR SUBSYSTEM 40.**  
CAUSE: A class other than `CLAS0000`, `CLAS0001`, `CLAS0002`, `CLAS0003`, `CLAS0004`, or `CLAS0005` has been configured as a logging class for subsystem 40 (remote link manager).  
ACTION: Use NMMGR to change the configuration file so that only valid classes are configured. Validate the network transport configuration again.
- 113           **MESSAGE: SUBSYSTEM 40 LOGGING NOT CONFIGURED.**  
CAUSE: The `LOGGING.SUB0040` record does not exist in the configuration file.  
ACTION: Use NMMGR and go to the `LOGGING` screens to add the `LOGGING.SUB0040` record to the configuration. Logging classes 0000 through 0005 should also be added to the configuration so that logging is completely configured for Remote Link Management.
- 114           **MESSAGE: FIVE LOGGING CLASSES REQUIRED FOR SUBSYSTEM 40.**  
CAUSE: All required logging classes are not configured for subsystem 40. Six logging classes configured: `CLAS0000`, `CLAS0001`, `CLAS0002`, `CLAS0003`, `CLAS0004`, `CLAS0005`.

- ACTION: Use NMMGR to configure all classes under the path LOGGING.SUB0040. Validate the network transport configuration again.
- 115       **MESSAGE: LINK TYPE FOR SNA NI MUST BE SNA.**
- CAUSE: A link of type SNA must be used when configuring an NI for NS over SNA.
- ACTION: Use NMMGR to configure a link of type SNA. Validate Transport again.
- 300       **MESSAGE: FACILITY SET setname DOES NOT EXIST.**
- CAUSE: In the SVCSPATH configuration an X.25 address key is mapped to an undefined facility set.
- ACTION: Modify the X.25 address key so that it is mapped to an existing facility set. Or, create a new facility set with the name to which the X.25 address key is mapped.
- 313       **MESSAGE: MUST DEFINE AT LEAST ONE X.25 ADDRESS KEY IN SVCSPATH OR PVCSPATH.**
- CAUSE: At least one X.25 address key must be configured under either the NETXPORT.NI.NIname.PROTOCOL.X25.SVCSPATH or the NETXPORT.NI.NIname.PROTOCOL.X25.PVCSPATH path.
- ACTION: Use NMMGR to configure an address key under either the NETXPORT.NI.NIname.PROTOCOL.X25.SVCSPATH or the NETXPORT.NI.NIname.PROTOCOL.X25.PVCSPATH path.
- 322       **MESSAGE: MORE THAN 1024 X.25 ADDRESS KEYS CONFIGURED (SVC + PVC).**
- CAUSE: More than the allowed number of address keys were defined. The maximum number of combined SVC and PVC address keys allowed is 1024.
- ACTION: Use NMMGR to delete excess address key paths.
- 323       **MESSAGE: X.25 ADDRESS KEY key IS DEFINED MORE THAN ONCE.**
- CAUSE: An X.25 address key was defined more than once under either the NETXPORT.NI.NIname.PROTOCOL.X25.SVCSPATH or the NETXPORT.NI.NIname.PROTOCOL.X25.PVCSPATH path.
- ACTION: Make sure an X.25 address key is configured only once. Delete all but one of any given X.25 address key.
- 324       **MESSAGE: PVC NUMBER pvc IS DEFINED MORE THAN ONCE.**
- CAUSE: A PVC number is defined more than once under the NETXPORT.NI.NIname.PROTOCOL.X25.PVCSPATH path.
- ACTION: Make sure all PVC numbers are unique in a given PVC configuration path.

- 325           **MESSAGE: X.25 ADDRESS address is defined more than once.**  
CAUSE: An X.25 address is defined more than once under the  
NETXPORT.NI.NIname.PROTOCOL.X25.SVCPATH path.  
ACTION: Make sure all X.25 addresses are unique in a given SVC  
configuration path.
- 350           **MESSAGE: MORE THAN 1024 SVCPATHS CONFIGURED.**  
CAUSE: The number of SVC entries under the  
NETXPORT.NI.NIname.PROTOCOL.X25.SVCPATH path exceeds the  
maximum of 1024 allowed.  
ACTION: Delete the excess SVC entries.
- 351           **MESSAGE: MORE THAN 128 PVCPATHS CONFIGURED.**  
CAUSE: The number of PVC entries under the  
NETXPORT.NI.NIname.PROTOCOL.X25.PVCPATH path exceeds the  
maximum of 128 allowed.  
ACTION: Delete the excess PVC entries.
- 900           **MESSAGE: COULD NOT BUILD PATH REPORT FOR CONFIGURATION  
FILE.**  
CAUSE: An internal error occurred while building the local node's path  
report to place in the configuration file.  
ACTION: RESTORE a backup copy of NMCONFIG.PUB.SYS from tape and  
try to validate the Network Transport again. If this fails, the  
configuration file is corrupt. See Appendix A , "Submitting a CR," of this  
manual.
- 901           **MESSAGE: COULD NOT ADD PATH REPORT TO CONFIGURATION  
FILE.**  
CAUSE: An internal error occurred while adding the local node's path  
report to the configuration file.  
ACTION: RESTORE a backup copy of NMCONFIG.PUB.SYS from tape and  
try to validate the Network Transport again. If this fails, the  
configuration file is corrupt. See Appendix A , "Submitting a CR," of this  
manual.
- 1004          **MESSAGE: NO STORE AND FORWARD BUFFERS CONFIGURED.**  
CAUSE:  
1. The specified router network has more than one link configured, but  
no store and forward buffers have been configured in the  
NETXPORT.NI.NIname.PROTOCOL.IP screen. It will not be possible to  
send inbound packets from one link out to another link without any  
store and forward buffers.

2. If this condition is not desired, use the NMMGR utility to configure store and forward buffers in the `NETXPORT.NI.NIname.PROTOCOL.IP` screen, and validate the Network Transport again.

ACTION:

1. More than one non-loopback network is configured, but no store and forward buffers have been configured in the `NETXPORT.NI.NIname.PROTOCOL.IP` screen. It will not be possible to send inbound packets from another network out on a link on this network without any store and forward buffers.
2. If this condition is not desired, use the NMMGR utility to configure store and forward buffers in the `NETXPORT.NI.NIname.PROTOCOL.IP` screen, and validate the Network Transport again.

1007 **MESSAGE: CONFIGURED T1 PARAMETER (!) IS THE RECOMMENDED FORMULA VALUE (!).**

CAUSE: The T1 timer parameter configured is less than the value recommended in the LAP-B specification for the type of point to point link configured in `LINK.linkname`.

ACTION: Confirm that the configuration in this `LINK.linkname` is correct. If any changes are made, validate the Network Transport again.

1100 **MESSAGE: NETWORK DIRECTORY CONFIGURED BUT NOT FOUND.**

CAUSE: The network directory is configured as part of the search path in the `NETXPORT.GLOBAL` screen, but no `NSDIR.NET.SYS` file exists.

ACTION: Prior to completing the current configuration activity, the network directory `NSDIR.NET.SYS` should be created, or the search path in the `NETXPORT.GLOBAL` screen should be modified to not include the network directory.

1101 **MESSAGE: ANOTHER LAP-B LINK HAS THIS SAME PHYSICAL PATH.**

CAUSE: Another LAP-B link in the configuration file is configured for the same physical path as the specified LAP-B link.

ACTION: This is not a problem if one of the LAP-B links configured for this path is not activated. However, if a LAP-B link is brought up while another such link is active at that physical path, an error will result during link startup.

1102 **MESSAGE: X.25 INACTIVITY TIMER IS LESS THAN OR EQUAL TO TCP CONNECTION ASSURANCE TIMER.**

CAUSE: The X.25 timer is set too low.

ACTION: Hewlett-Packard recommends that the X.25 Inactivity timer be configured with a value greater than that of the TCP Connection Assurance timer to avoid unnecessary closing and opening of the X.25 virtual circuit. For optimum performance, configure the X.25 Inactivity

timer (or the TCP Connection Assurance timer) so that the X.25 timer has a greater value than the TCP timer.

1103

**MESSAGE: SVCSPATH HAS NO X.25 ADDRESS—THIS IS VALID ONLY FOR DDN.**

**CAUSE:** At least one SVCSPATH entry does not have an X.25 address key configured. This configuration will work only if the link is connected to a DDN.

**ACTION:** If the link is not connected to a DDN, make sure all SVCSPATH entries have an address key configured under the path  
NETXPORT.NI.NIname.PROTOCOL.X25.SVCSPATH.

# 15 LAN, LAN/Console, Token Ring LAN Error Messages

Messages generated by the LAN, LAN/console, Token Ring LAN are the following type:

Internal driver error in SYSLINK (LANWARN ###) or (LANERR ###) where ### is an error number.

## 2 MESSAGE: Bad LINK ID.

CAUSE: An invalid LINK ID was passed to the link driver's write initiator.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

CAUSE: An invalid LINK ID was specified in the rendezvous request message.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

## 3 MESSAGE: Bad OPEN ID.

CAUSE: An invalid OPEN ID was specified in the rendezvous request message.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

## 5 MESSAGE: Unable to obtain a buffer manager buffer.

CAUSE: The buffers are not freed.

ACTION: Warmstart the system and correct the user programs.

CAUSE: Some other process has obtained buffers reserved for the driver.

ACTION: Write down the error information displayed on the console, take a system dump, submit an CR, and call your Hewlett-Packard representative.

## 6 MESSAGE: Unable to obtain an I/O Services message frame.

CAUSE: The driver could not obtain a message frame from a user port for newly arrived LAN packet (or from CAM's port, in the case of a CIO card) for a new DMA request to the card.

ACTION: Write down the error information displayed on the console, take a system dump, submit an CR, and call your Hewlett-Packard representative.

7           **MESSAGE: A call to IO\_CONFIG\_INT failed during driver initialization.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

8           **MESSAGE: A call to IO\_DECONFIG\_INT failed during driver shutdown.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

9           **MESSAGE: A call to IO\_FLUSH\_INT failed during power fail recovery.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

10          **MESSAGE: Unable to obtain an I/O Services timer.**

CAUSE: A call to obtain a timer resource returned an error. Too many timers may be in use.

ACTION: If you suspect your system might be low on timer resources because of heavy loading, try restarting the link later. If repeated attempts fail, try warmstarting your system. If the problem persists, a system dump will be required. Call your Hewlett-Packard representative.

11          **MESSAGE: Unable to release an I/O Services timer.**

CAUSE: The driver tried to free a timer that was not recognized by the system as valid. Memory data corruption may have occurred.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

12          **MESSAGE: Unable to release an I/O Services message frame.**

CAUSE: A call to the system message freeing routine returned an error. The port may belong to a process that no longer exists or is not operating with the required capabilities. Also, the message frame may not have been recognized by the system as a valid message frame.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

13          **MESSAGE: Unable to retrieve an I/O Services message frame.**

CAUSE: A call to the system message retrieve routine returned an error.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.



- 14           **MESSAGE: Unable to send I/O Services message frame to another process.**
- CAUSE: A call to a system message SEND routine returned an error. The destination port may belong to a process that no longer exists or is not operating with required capabilities.
- ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 16           **MESSAGE: LAN console is not supported.**
- CAUSE: The console DM tries to bind with a driver as a LAN Console DM.
- ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 17           **MESSAGE: Unable to obtain a step data structure from driver internal resources.**
- CAUSE: All steps are in use and wait for DMA completion. The driver may be low on steps because of heavy LAN traffic.
- ACTION: Ignore this problem unless other problems are occurring. If you are experiencing other problems, write down the error information displayed on the console and call your Hewlett-Packard representative.
- 18           **MESSAGE: Unable to send I/O Services message frame to another process.**
- CAUSE: A call to a system message send routine returned in error. The destination port may belong to a process that no longer exists or is not operating with required capabilities.
- ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 19           **MESSAGE: NIO LAN/Console card reports internal fatal hardware error.**
- CAUSE: Indicates a problem caused by bad hardware.
- ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.
- 20           **MESSAGE: Unable to release buffer manager buffer.**
- CAUSE: The driver tried to free memory that the buffer manager did not recognize as a valid buffer because of a driver problem or memory data corruption. Also, the driver may have tried to free a buffer that is already freed.
- ACTION: System dump required. Call your Hewlett-Packard representative.

- 32           **MESSAGE: Attempt to rendezvous with a link driver with SAP or SAP+XSAP or Ethernet Type already being used.**
- CAUSE: The user is trying to rendezvous twice with a link driver or two different users are using the same SAP, SAP+XSAP or Ethernet Type.
- ACTION: Write down the error information displayed on the console submit an CR and call your Hewlett-Packard representative.
- 33           **MESSAGE: Attempt to separate from the driver failed.**
- CAUSE: An attempt was made to separate from the driver using console Link ID.
- ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 34           **MESSAGE: Attempt to rendezvous with the driver or separate from the driver when the Middle Plane is in CLOSED state.**
- CAUSE: The driver shuts itself down because of a fatal hardware error or driver internal error and the user tries to rendezvous with the driver or separate from it.
- ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 36           **MESSAGE: Bad Rendezvous ID.**
- CAUSE: An attempt was made to use a bad rendezvous ID in a process of separating from the driver or changing its inbound buffer pool. This may be caused by data corruption.
- ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 37           **MESSAGE: Unable to rendezvous with the driver; the rendezvous table is full.**
- CAUSE: An attempt to rendezvous with the driver failed due to running out of free entries in the rendezvous table.
- ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 38           **MESSAGE: Attempt to separate from the driver while not having previously rendezvoused with it.**
- CAUSE: An attempt is made to separate twice from the link driver.
- ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 39           **MESSAGE: Bad rendezvous info length.**
- CAUSE: Write down the error information displayed on the console submit an CR and call your Hewlett-Packard representative.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

40 **MESSAGE: The Middle Plane is in wrong state.**

**CAUSE:** The Middle Plane state machine table is corrupted.

**ACTION:** Write down the error information displayed on the console submit an CR, take a dump and call your Hewlett-Packard representative.

41 **MESSAGE: Missing inbound pool in the rendezvous request message.**

**CAUSE:** The rendezvous request message does not specify inbound buffer pool.

**ACTION:** Write down the error information displayed on the console submit an CR, and call your Hewlett-Packard representative.

42 **MESSAGE: Missing rendezvous info in the rendezvous request message.**

**CAUSE:** The rendezvous request message does not have a pointer to the rendezvous information buffer.

**ACTION:** Write down the error information displayed on the console submit an CR and call your Hewlett-Packard representative.

48 **MESSAGE: Unsupported module type in IODC.**

**CAUSE:** The problem is caused by bad NIO LAN hardware, the wrong path number, or the wrong type of card.

**ACTION:** Try these actions in this order:

1. Verify that the configured physical path is correct by using NMMGR.
2. Verify that the card is a NIO LAN/console card.
3. If you have tried both of the actions above and are still experiencing difficulties, your Hewlett-Packard representative must run diagnostics on the LAN/console card.

49 **MESSAGE: Unsupported software model in IODC.**

**CAUSE:** The problem is caused by bad NIO LAN hardware, the wrong path number, or the wrong type of card.

**ACTION:** Try these actions in this order:

1. Verify that the configured physical path is correct by using NMMGR.
2. Verify that the card is a NIO LAN/console card.
3. If you have tried both of the actions above and are still experiencing difficulties, your Hewlett-Packard representative must run diagnostics on the LAN/console card.

50           **MESSAGE: The NIO LAN/console card did not return to a ready state after a reset was issued.**

CAUSE: The problem is caused by bad NIO LAN/console hardware.

ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

52           **MESSAGE: The NIO LAN/console card register test failed during LAN/console card initialization.**

CAUSE: The problem is caused by bad NIO LAN/console hardware.

ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

53           **MESSAGE: Unable to obtain IODC information from IO\_GET\_MODULE\_REC during initialization.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

55           **MESSAGE: An unknown interrupt type was received from IO\_Services.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

57           **MESSAGE: The NIO LAN/console card detects that bind request for a given 802.2 SAP or 802.2 SAP + XSAP or ETHERNET Type is already bound.**

CAUSE: The problem is caused by a link driver internal problem.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

CAUSE: The problem is caused by a bad NIO LAN/console backplane.

ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

58           **MESSAGE: The NIO LAN/console card detects illegal bind request.**

CAUSE: The problem is caused by a link driver internal problem.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

CAUSE: The problem is caused by a bad NIO LAN/console backplane.

ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

- 58           **MESSAGE: The NIO LAN/console card detects illegal bind request.**  
CAUSE: The problem is caused by a link driver internal problem.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.  
CAUSE: The problem is caused by a bad NIO LAN/console backplane.  
ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.
- 59           **MESSAGE: The NIO LAN/console card detects a bad length of the configuration data buffer.**  
CAUSE: The problem is caused by data corruption in the configuration quad.  
ACTION: Write down the error information displayed on the console, submit an CR, take a dump and call your Hewlett-Packard representative.  
CAUSE: The problem is caused by a bad NIO LAN/console backplane.  
ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.
- 60           **MESSAGE: The NIO LAN/console card detects bad multicast address in the configuration data.**  
CAUSE: A bad multicast address was entered into the Multicast Address Table.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.  
CAUSE: The problem is caused by a bad NIO LAN/console backplane.  
ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.
- 61           **MESSAGE: The NIO LAN/console card detects a bind request to illegal register.**  
CAUSE: The problem is caused by a link driver internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.  
CAUSE: The problem is caused by a bad NIO LAN/console backplane.  
ACTION: Your Hewlett-Packard representative must run diagnostics on the LAN/console card.
- 62           **MESSAGE: The NIO LAN/console card detects a bad Station Address in CONFIG\_SA.**  
CAUSE: The problem is caused by configuring the wrong Station Address in NMMGR.

**ACTION:** Use NMMGR to verify that the configured Station Address is correct.

**CAUSE:** The problem is caused by a bad NIO LAN/console backplane.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

63 **MESSAGE: The NIO LAN/console card detects a bind request to already bound register.**

**CAUSE:** The problem is caused by a link driver internal error.

**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

**CAUSE:** The problem is caused by a bad NIO LAN/console backplane.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

64 **MESSAGE: The NIO LAN/console card detects an unbind request to an unbound register.**

**CAUSE:** The problem is caused by a link driver internal error.

**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

**CAUSE:** The problem is caused by a bad NIO LAN/console backplane.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

65 **MESSAGE: The NIO LAN/console card detects too many multicast addresses in the configuration buffer.**

**CAUSE:** The problem is caused by a link driver internal error.

**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

**CAUSE:** The problem is caused by a bad NIO LAN/console backplane.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

66 **MESSAGE: The NIO LAN/console card reports that expected CCMD\_IN or CCMD\_OUT was not found.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

67 **MESSAGE: The NIO LAN/console card reports that CCMD\_OUT was sent to an inbound only register set.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

68       **MESSAGE: The NIO LAN/console card reports that expected CCMD\_LINK was not found.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

69       **MESSAGE: The NIO LAN/console card reports that CCMD\_IN was sent to an outbound only register set.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

70       **MESSAGE: The NIO LAN/console card detects unknown CCMD.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

71       **MESSAGE: The NIO LAN/console card detects fatal backplane error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

72       **MESSAGE: The NIO LAN/console card detects fatal bus error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

73       **MESSAGE: The NIO LAN/console card detects fatal error, dinmode.**

**CAUSE:** The problem is caused by bad NIO LAN/console hardware.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

74       **MESSAGE: The NIO LAN/console card detects parity error.**

**CAUSE:** The problem is caused by bad NIO LAN/console hardware.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

75       **MESSAGE: The NIO LAN/console card detects assertion of the BUS\_ERROR signal.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

76 **MESSAGE: The NIO LAN/console card detects a severe hardware error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

77 **MESSAGE: The NIO LAN/console card detects a severe internal error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

78 **MESSAGE: The NIO LAN/console card detects a fatal error in the bus protocol.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

79 **MESSAGE: The NIO LAN/console card reports that the selftest failed.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Your Hewlett-Packard representative must run diagnostics on the LAN/console card.

80 **MESSAGE: The NIO/LAN console card detected an internal error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

81 **MESSAGE: The NIO/LAN console card detected an internal error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

82 **MESSAGE: The NIO/LAN console card detected an internal error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

83 **MESSAGE: The BDMARS transferred less DMA data than the host CCMD\_IN or CCMD\_OUT count requested.**

**CAUSE:** The NIO LAN/console card did not have enough data bytes to completely fill the inbound buffer. Or the NIO/LAN console card did not accept all the data that the host tried to send; for example, the number



of bytes were bigger than maximum LAN packet size.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

84 **MESSAGE: The BDMARS expected more DMA data to be transferred than the host CCMD\_IN or CCMD\_OUT count requested.**

**CAUSE:** The NIO LAN/console card was prepared to send more data bytes to the host, but the host did not provide enough buffers. Or the LAN/console card expected more data than the host provided.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

85 **MESSAGE: The NIO LAN/console card reported unknown advisory error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

86 **MESSAGE: The NIO LAN/console card reported unknown apstat error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

87 **MESSAGE: The NIO LAN/console card reported unknown fatal error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

88 **MESSAGE: The NIO LAN/console card detects unknown CCMD.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

89 **MESSAGE: The NIO LAN/console card reports unknown hard error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

90 **MESSAGE: The NIO LAN/console card reports unknown soft error.**

**CAUSE:** Unknown. Need more information.

**ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

- 91           **MESSAGE: The NIO LAN/console card detects unknown I/O command.**
- CAUSE: Unknown. Need more information.
- ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 112           **MESSAGE: The CIO bottom plane is unable to obtain buffer manager buffer.**
- CAUSE: Buffers have not been freed or some other process has obtained buffers reserved for the driver.
- ACTION: Warmstart the system and correct the user programs. If you are still experiencing problems, write down the error information displayed on the console, take a system dump, submit an CR, and call your Hewlett-Packard representative.
- 114           **MESSAGE: The CIO bottom plane detects unknown reply message from buffer manager.**
- CAUSE: Unknown. Need more information.
- ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 115           **MESSAGE: The bind request to CAM failed.**
- CAUSE: The driver is already bound to CAM.
- ACTION: Write down the error information displayed on the console, take a system dump, submit an CR, and call your Hewlett-Packard representative.
- CAUSE: The value of CIO\_META\_TAG was not specified in the bind request message.
- ACTION: Write down the error information displayed on the console, take a system dump, submit an CR, and call your Hewlett-Packard representative.
- CAUSE: The hardware address in the bind request was invalid.
- ACTION: Write down the error information displayed on the console, take a system dump, submit an CR, and call your Hewlett-Packard representative.
- 116           **MESSAGE: The CIO LAN card selftest failed.**
- CAUSE: The problem is caused by bad CIO LAN hardware.
- ACTION: Your Hewlett-Packard representative must run diagnostics on the CIO LAN card.

- 117           **MESSAGE: The CIO LAN card detects a fatal backplane error.**  
CAUSE: Unknown. Need more information.  
ACTION: Your Hewlett-Packard representative must run diagnostics on the CIO LAN card.
- 118           **MESSAGE: The Identity Request to the CIO LAN card failed.**  
CAUSE: Unknown. Need more information.  
ACTION: Your Hewlett-Packard representative must run diagnostics on the CIO LAN card.
- 119           **MESSAGE: The CIO LAN card reports an invalid hardware ID.**  
CAUSE: The problem is caused by bad CIO LAN hardware, the wrong path number, or the wrong type of card.  
ACTION: Try these actions in this order:  
  1. Verify that the configured physical path is correct by using NMMGR.
  2. Verify that the card is a NIO/LAN console card.
  3. If you have verified that the physical path and card type are correct and are still experiencing problems, your Hewlett-Packard representative must run diagnostics on the LAN/console card.
- 120           **MESSAGE: The Status Request to the CIO LAN card failed.**  
CAUSE: Unknown. Need more information.  
ACTION: Your Hewlett-Packard representative must run diagnostics on the CIO LAN card.
- 122           **MESSAGE: The CIO LAN card can not sense MAU heartbeat.**  
CAUSE: The MAU is disconnected or bad.  
ACTION: Check your cables and if this error still appears, your Hewlett-Packard representative must run diagnostics on the CIO LAN card.
- 123           **MESSAGE: The unbind request to the CAM failed.**  
CAUSE: The driver is not bound to the CAM.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.  
CAUSE: The driver still has outstanding requests to the CAM.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

125           **MESSAGE: The driver detects unknown option in the 802.2 control field of a test or xid packet.**

CAUSE: The problem is caused by a bad packet.

ACTION: If this error appears repeatedly, write down the error information displayed on the console and call your Hewlett-Packard representative.

128           **MESSAGE: The CIO LAN configuration request failed.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

129           **MESSAGE: The CIO LAN statistics request failed.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR and call your Hewlett-Packard representative.

130           **MESSAGE: The CIO LAN reset statistics request failed.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR and call your Hewlett-Packard representative.

131           **MESSAGE: The CIO LAN card reports Dead-or-Dying ARQ status.**

CAUSE: The problem is caused by bad CIO LAN card hardware.

ACTION: Your Hewlett-Packard representative must run diagnostics on the CIO LAN card.

132           **MESSAGE: The CIO LAN card reports Protocol Error ARQ.**

CAUSE: Violation of the CIO LAN card backplane protocol.

ACTION: Your Hewlett-Packard representative must run diagnostics on the CIO LAN card.

133           **MESSAGE: The CIO bottom plane received invalid request at a given state.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

135           **MESSAGE: The CIO LAN card hard reset request failed.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

- 144           **MESSAGE: Dump request received when driver is dumping.**  
CAUSE: Unknown. Need more information.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 145           **MESSAGE: Message received in invalid state.**  
CAUSE: The link driver received an unexpected message.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 146           **MESSAGE: Driver detected unsupported command in received SDI or WAN control message.**  
CAUSE: Unknown. Need more information.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 147           **MESSAGE: Unknown driver problem.**  
CAUSE: The driver detected an error, but did not say what type of error was found.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 148           **MESSAGE: Unknown dump manager port number.**  
CAUSE: The driver detects unrecoverable error and tries to dump its PDA and the NIO LAN/console card but the dump module is missing.  
ACTION: Run NMMAINT to verify that the dump module is present.
- 149           **MESSAGE: Unable to obtain an I/O Services timer for a dump process.**  
CAUSE: A call to obtain a timer resource returned an error. Too many timers may be in use.  
ACTION: If you suspect your system might be low on timer resources be cause of heavy loading, try restarting the link later. If repeated attempts fail, try warmstarting your system. If the problem persists, a system dump will be required. Call your Hewlett-Packard representative.
- 150           **MESSAGE: Unable to send dump request message to dump manager.**  
CAUSE: A call to a system message SEND routine returned in error. The dump manager port is not operating with required capabilities.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

- 151           **MESSAGE: Unexpected timer event message.**  
CAUSE: Unknown. Need more information.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 152           **MESSAGE: Unimplemented message received.**  
CAUSE: The message descriptor is not known to the driver.  
ACTION: Call your Hewlett-Packard representative and explain what you are trying to do.
- 160           **MESSAGE: Nil configuration pointer.**  
CAUSE: A user passed a nil configuration pointer to the driver.  
ACTION: Call your Hewlett-Packard representative and explain what you are trying to do.
- 161           **MESSAGE: Trace manager overrun.**  
CAUSE: The driver is generating trace entries faster than the trace manager can process them. This causes some trace entries to be lost.  
ACTION: This is only a warning and is indicative of a very busy system. If not debugging a problem, then tracing should be turned off. This will improve system performance in general. If a problem is being looked at, use partial tracing whenever possible (when full data frames are not needed) to ensure that no trace data is lost.
- 224           **MESSAGE: Could not read the link name from the LSS link table.**  
CAUSE: The link table does not exist.  
ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 225           **MESSAGE: Could not add the link name to the LSS link table.**  
CAUSE: The link table does not exist.  
ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 226           **MESSAGE: Could not delete the link name from the LSS link table.**  
CAUSE: The link name specified the LAN\_KILL\_MODULE call is not in the LSS link table.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 227           **MESSAGE: Could not read multicast addresses table.**  
CAUSE: The multicast addresses table does not exist.  
ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.

228

**MESSAGE: Could not open NMCONFIG.PUB.SYS file.**

CAUSE: The configuration file NMCONFIG.PUB.SYS was purged or renamed or the NMCONFIG.PUB.SYS configuration file may be opened with exclusive access.

ACTION: Type a LISTF NMCONFIG.PUB.SYS to determine if the file has been opened with exclusive access. If it has, wait for the program or process that has this file opened exclusively to close it. If the configuration file is missing, restore the file from a backup tape and restart the link again.

CAUSE: The configuration file NMCONFIG.PUB.SYS may be opened with exclusive access.

ACTION: Wait for the program or process that has this file opened exclusively to close it.

229

**MESSAGE: Link data not found in NMCONFIG.PUB.SYS.**

CAUSE: The link data is not found in the configuration file NMCONFIG.PUB.SYS.

ACTION: Use NMMGR to create the link data for the link you are trying to start. Try to start the link again.

230

**MESSAGE: The link data record is incorrect for this driver.**

CAUSE: The link data record is corrupted in the configuration file NMCONFIG.PUB.SYS.

ACTION: Restore the file from a backup tape and restart the link again.

CAUSE: The configuration file NMCONFIG.PUB.SYS was not converted to a version supported by the driver.

ACTION: Run NMMGRVER on the configuration file NMCONFIG.PUB.SYS.

233

**MESSAGE: A call to IO\_GET\_MGR\_ENTRY failed during driver configuration.**

CAUSE: Unknown. Need more information.

ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.

234

**MESSAGE: A call to IO\_CONFIG failed during driver configuration.**

CAUSE: Wrong physical path is configured for the installed LAN card.

ACTION: Use NMMGR to correct the Physical Path for the link.

CAUSE: The card for the configured path is bad.

ACTION: To determine whether the LAN card is good your Hewlett-Packard representative must run diagnostics on the LAN card.

- 235           **MESSAGE: A call to IO\_UNCONFIG failed during driver deconfiguration.**
- CAUSE: Wrong physical path was specified in IO\_UNCONFIG call due to configuration data corruption in the driver PDA.
- ACTION: Write down the error information displayed on the console, submit an CR, take a system dump, and call your Hewlett-Packard representative.
- 236           **MESSAGE: The LAN card is used by another link.**
- CAUSE: The card was configured by another link.
- ACTION: Use NMMGR to correct the Physical Path for this link or change the link name to point to a different LAN card.
- 237           **MESSAGE: Could not create inbound buffer pool for the CIO LAN card.**
- CAUSE: The buffer manager cannot allocate a new logical buffer pool entry or cannot allocate virtual memory for the buffers.
- ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 238           **MESSAGE: Could not delete the CIO LAN card inbound buffer pool.**
- CAUSE: Wrong pool ID was specified in the call to delete inbound buffer pool due to configuration data corruption in the driver's PDA.
- ACTION: Write down the error information displayed on the console submit an CR, take a system dump, and call your Hewlett-Packard representative.
- 239           **MESSAGE: Could not open trace file.**
- CAUSE: The indicated trace file might be opened with exclusive access.
- ACTION: Wait for the program or process that has the trace file opened exclusively to close it.
- 240           **MESSAGE: Could not stop trace.**
- CAUSE: Tracing might have been turned off with LINKCONTROL TRACEOFF command, but the link software information indicates that it was on.
- ACTION: Ignore this problem unless you are experiencing other problems. If you are experiencing other problems, write down the error information displayed on the console and call your Hewlett-Packard representative.
- 241           **MESSAGE: Could not start trace.**
- CAUSE: Unknown. Need more information.



- ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 242      **MESSAGE: Could not get Write Initiator label.**
- CAUSE:** Unknown. Need more information.
- ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 243      **MESSAGE: Could not release Write Initiator label.**
- CAUSE:** Unknown. Need more information.
- ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 244      **MESSAGE: Could not open NML Gxxxx.PUB.SYS file.**
- CAUSE:** The indicated log file may be opened with exclusive access.
- ACTION:** Wait for the program or process that has the log file opened exclusively to close it.
- CAUSE:** The driver subsystem is not configured in logging configuration.
- ACTION:** Use NMMGR to check logging configuration for subsystem 25 or write down the error information displayed on the console and call your Hewlett-Packard representative.
- 245      **MESSAGE: Could not close the NMLGxxxx.PUB.SYS file.**
- CAUSE:** Invalid LOG ID due to configuration data corruption in the driver's PDA.
- ACTION:** Write down the error information displayed on the console, submit an CR, take a system dump and call your Hewlett-Packard representative.
- 246      **MESSAGE: Could not freeze the configuration record in memory.**
- CAUSE:** Memory shortage problems are occurring.
- ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 247      **MESSAGE: Could not unfreeze the configuration record in memory.**
- CAUSE:** Memory problems are occurring.
- ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 248      **MESSAGE: Could not send config request message.**
- CAUSE:** An internal system ports problem has occurred.
- ACTION:** Write down the error information displayed on the console and call your Hewlett-Packard representative.

- 249           **MESSAGE: Could not receive config reply message.**  
CAUSE: An internal system ports problem has occurred.  
ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 250           **MESSAGE: Timeout waiting for the config reply message.**  
CAUSE: The link software or the card could not be configured.  
ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 251           **MESSAGE: Driver's PDA is corrupted.**  
CAUSE: Unknown. Need more information.  
ACTION: Write down the error information displayed on the console, submit an CR, take a dump and call your Hewlett-Packard representative.
- 252           **MESSAGE: Configuration of the dump manager failed.**  
CAUSE: Unknown. Need more information.  
ACTION: Write down the error information displayed on the console and call your Hewlett-Packard representative.
- 253           **MESSAGE: The link type is not LAN.**  
CAUSE: The link name type in NMCONFIG.PUB.SYS is not set to LAN.  
ACTION: Use NMMGR to correct the link name type.
- 253           **MESSAGE: The link driver failed to start.**  
CAUSE: Incorrect physical path was specified in the NMCONFIG file.  
ACTION: Correct the physical path in the NMCONFIG file using NMMGR.

# 16

## **100VG-AnyLAN and HP-PB 100Base-T Error Messages**

The following error messages gives the meaning of the first 8 bits of 32-bit status values produced by the 100VG-AnyLAN or HP-PB 100Base-T link driver and its supporting modules. This is the so-called “SDI status” portion. All values are architected, and are intended to provide a generic indication of what the rest of the status means, in a module-independent way.

For more information about the specific status, you must look at the second 8 bits, described in SDI Driver Specific Status Values.

The final (rightmost) 16 bits gives the subsystem number of the module generating the status, or 0 if there was no error or warning.

For the meaning of sublocation codes logged to logfiles of the system console, refer to the section on sublocation codes.

## SDI Generic Status Values

- 0 (\$00)      **MESSAGE: No error, info only.**  
CAUSE: None  
ACTION: None
- 1 (\$01)      **MESSAGE: The driver detected an exception in hardware operation.**  
CAUSE: The driver detects an exception in hardware operation. At this state, the only type of requests that would be processed are the diagnostic requests or Module Deconfigurator Call.  
ACTION: Stop the normal operation and execute the diagnostic software.
- 2 (\$02)      **MESSAGE: Adapter card firmware reported an error.**  
CAUSE: The firmware reports an error, at this state, the driver would stop the normal operation and process diagnostic requests or Module Deconfigurator Call.  
ACTION: Stop the normal operation and execute error recovery software.
- 3 (\$03)      **MESSAGE: A power failure occurred.**  
CAUSE: A power failure occurred. The driver failed to process the powerfail recovery.  
ACTION: According to the subsystem.
- 4 (\$04)      **MESSAGE: Error in interface with Operating System.**  
CAUSE: Errors in interfacing with the operating system (example, ports, memory, procedures, I/O services etc.).  
ACTION: According to the situation.
- 5 (\$04)      **MESSAGE: Error in interface with Buffer Manager.**  
CAUSE: An error was detected in interfacing with Buffer Manager (example, Nil buffer pointer in read/write, nil buffer pool ID, etc.).  
ACTION: According to the situation.
- 6 (\$06)      **MESSAGE: General error in operation of link driver software.**  
CAUSE: This is a “catch all” error for the ultimate non-specific driver error.  
ACTION: According to the implementation.

- 7 (\$07)           **MESSAGE: Inadequate resources available to satisfy a request.**  
  
CAUSE: There are inadequate SAP control block, buffers, or link stations available to satisfy the request.  
  
ACTION: According to the situation, close some SAPs/stations or wait.
- 8 (\$08)           **MESSAGE: An adapter card is not responding.**  
  
CAUSE: The driver detects an exception in hardware operation. At this state, the only type of requests that would be processed are the diagnostic requests or Module Deconfigurator Call.  
  
ACTION: Stop the normal operation and execute the diagnostic software.
- 29 (\$41)          **MESSAGE: Could not establish requested connection, but can retry.**  
  
CAUSE: The Connect Request could not establish a requested connection, however, it is a recoverable situation.  
  
ACTION: Start a timer and try again when timer popped.
- 42 (\$2A)          **MESSAGE: Could not establish requested connection, cannot retry.**  
  
CAUSE: The Connect Request could not establish a requested connection and it is not a recoverable situation.  
  
ACTION: Determine the cause for the failure and try again when resolved.
- 43 (\$2B)          **MESSAGE: Could not establish requested connection, no remote response.**  
  
CAUSE: The Connect Request could not establish a requested connection.  
  
ACTION: Check the configuration and make sure the remote system is up and running.
- 44 (\$2C)          **MESSAGE: Remote connections are still active.**  
  
CAUSE: For the Separate Request, there are connections still active on the LSAP, the driver did not close the LSAP or disconnect the associated connections.  
  
ACTION: Disconnect all the associated connections and try again.
- 45 (\$2D)          **MESSAGE: Link has lost its connection to the remote link.**  
  
CAUSE: After the link has been established and both link stations are in open state, a link station detected an inoperative condition in either the remote link station or in the transmission medium (the recovery attempt has failed). The driver informs the user that link is inoperative, also, no link station resource has been deallocated.  
  
ACTION: Send a Disconnect Request to the Driver and log the error.

- 46 (\$2E)      **MESSAGE: Remote link has disconnected.**  
CAUSE: For the Disconnect Event, the remote link station issued a Disconnect command to the link station, and the link station has replied that disconnect command and notified the subsystem.  
ACTION: According to the subsystem.
- 47 (\$2F)      **MESSAGE: Link disconnected, although remote has not acknowledged.**  
CAUSE: The driver issued a disconnect command to the remote link station as a result of receiving a Disconnect Request. No acknowledgment has been received from the remote link station and the in station has been closed.  
ACTION: According to the subsystem.
- 48 (\$30)      **MESSAGE: An active connection with the remote link already exists.**  
CAUSE: The Driver is already configured.  
ACTION: According to the subsystem.
- 81 (\$51)      **MESSAGE: Link sharing conflicts with current usage.**  
CAUSE:  
  - A driver is being exclusively accessed by a subsystem already, no resources have been allocated for the second subsystem.
  - A subsystem wants to have exclusive access to a “shared” driver which is currently in use, no resources have been allocated.
  - Driver does not support link sharing.
  - Configurable parameters conflict.ACTION: According to the subsystem.
- 82 (\$52)      **MESSAGE: Configuration file access error.**  
CAUSE: A module Configurator/Deconfigurator detected an error in the configuration file on accessing the configuration file.  
ACTION: According to the subsystem.
- 83 (\$53)      **MESSAGE: Error in interface with Link Support Services.**  
CAUSE: A module Configurator/Deconfigurator failed in calling Link Support Services (LSS) procedures.  
ACTION: According to the subsystem.
- 84 (\$54)      **MESSAGE: Error in interface with Trace Services.**  
CAUSE: A module Configurator/Deconfigurator failed to start/stop the TRACE MANAGER, however, the configuration/deconfiguration operation has the completed (example, The Driver has deallocated the

- Driver's resources).
- ACTION: According to the subsystem.
- 85 (\$55) **MESSAGE: Resource deallocation error.**
- CAUSE: For the error shutdown handling, all SAPs and all associated link stations are deallocated, and the driver is deconfigured.
- ACTION: None
- 86 (\$56) **MESSAGE: One or more still active resources were deallocated.**
- CAUSE: For the error shutdown handling, all SAPs and all associated link stations are deallocated, and the driver is deconfigured.
- ACTION: None
- 87 (\$57) **MESSAGE: Link is already active.**
- CAUSE: The Driver is already configured.
- ACTION: According to the subsystem.
- 121 (\$79) **MESSAGE: A requested feature is not supported by this link.**
- CAUSE: Feature is not supported/implemented. This might be the result of subsystem "probing" the capability of the driver (example, Connection oriented subsystem over a datagram service).
- ACTION: None
- 122 (\$7A) **MESSAGE: A requested option is not supported by this link.**
- CAUSE: The Driver understands the option that user requested, however, it does not support the option.
- ACTION: Check Driver ES and make sure you talk to the right Driver.
- 123 (\$7B) **MESSAGE: Link was expecting optional parameters but they were missing.**
- CAUSE: The Driver was expecting some driver specific information, the driver may or may not be configured (for some drivers, this information may be considered critical; and for some other drivers, this information may be considered optional).
- ACTION: According to the subsystem.
- 124 (\$7C) **MESSAGE: Link did not understand the optional parameters supplied.**
- CAUSE: The Driver did not understand the optional parameter in the request message.
- ACTION: Check Driver ES and make sure you talk to the right Driver.
- 125 (\$7D) **MESSAGE: Link type of the named link is not supported.**
- CAUSE: The Linkname passed by the Module Configuration Call or Deconfigurator Call is invalid. The particular driver is not configured.

- ACTION: Fix the configuration file and try again.
- 126 (\$7E) **MESSAGE: Link type of the named link is not supported.**  
CAUSE: The linktype that stored in the NMCONFIG file which associated with the Linkname in a Module Configurator call is unsupported. The particular driver is not configured.  
ACTION: Fix the Configuration file and try again.
- 127 (\$7F) **MESSAGE: An invalid subsystem open ID was specified.**  
CAUSE: The Open ID in the Rendezvous Request or Module Deconfigurator call is invalid. The LSAP is not opened or closed.  
ACTION: Use a Valid open ID.
- 128 (\$80) **MESSAGE: An invalid protocol bind ID was specified.**  
CAUSE: The requested Protocol Bind ID does not exist.  
ACTION: Make the appropriate changes and reissue the request.
- 129 (\$81) **MESSAGE: An invalid connection ID was specified.**  
CAUSE: The requested Connection ID does not exist.  
ACTION: Make the appropriate changes and reissue the request.
- 130 (\$82) **MESSAGE: Link did not understand the specified address family.**  
CAUSE: The Driver detected an error in the address family in the request message.  
ACTION: Fix the configuration file and then try again.
- 131 (\$83) **MESSAGE: Link found an error within the specified address family.**  
CAUSE: The Driver detected an error in the address family in the request message.  
ACTION: Fix the configuration file and they try again.
- 132 (\$84) **MESSAGE: An invalid or redundant protocol SAP address was specified.**  
CAUSE: For the Rendezvous Request, the LSAP value is the NULL or Global SAP. For the connect request, this error indicates that this SAP already has a link to the specified RSAP and destination address combination, or the remote SAP specified was the null SAP, global SAP, or a group SAP.  
ACTION: Use an acceptable SAP and Destination Address.
- 133 (\$85) **MESSAGE: The specified local Protocol SAP was already opened.**  
CAUSE: For the Rendezvous Request, this error indicates that the LSAP has already opened.  
ACTION: Use an acceptable SAP value.



- 161 (\$A1)      **MESSAGE: A request was not accepted due to current state of the link.**
- CAUSE: The requested message cannot be accepted because of the existing state of the link station. (example, A write event message will not be accepted if the link is in the disconnected, opening or closed state).
- ACTION: According to the subsystem.
- 201 (\$C9)      **MESSAGE: A formatter error was detected.**
- CAUSE: A Module Configurator/Deconfigurator failed to start/stop the TRACE MANAGER, however, the configuration/deconfiguration operation has completed (example, The Driver has deallocated the Driver's resources).
- ACTION: According to the subsystem.

## SDI Driver Specific Status Values

The following error messages gives the meaning of the second 8 bits of 32-bit status values produced by the 100VG-AnyLAN or HP-PB 100Base-T link driver and its supporting modules. This is the so-called “driver status” portion. All values are driver-specific, and are intended to provide additional detail beyond the generic indication provided by the first 8 bits of status.

For information about the generic portion of the status, you must look at the first 8 bits, described in the previous section.

The final (rightmost) 16 bits gives the subsystem number of the module generating the status, or 0 if there was no error or warning.

- 0 (\$00)      **MESSAGE: No error.**
- CAUSE: The operation was successful. No error occurred.
- ACTION: None
- 1 (\$01)      **MESSAGE: Subsystem is opening link.**
- CAUSE: An upper level subsystem has called the link module configurator, which has successfully located configuration for the link, and will now proceed to start it up.
- ACTION: This event is informational. No action is required.
- 2 (\$02)      **MESSAGE: Driver is starting up.**
- CAUSE: The driver has just completed initial configuration and is now starting up.
- ACTION: This event is informational. No action is required.
- 3 (\$03)      **MESSAGE: Driver is starting adapter card.**
- CAUSE: The driver has completed initial startup of the adapter card, or a restart following a reset, powerfail, dump, or other recoverable condition.
- ACTION: This event is informational. No action is required.
- 4 (\$04)      **MESSAGE: Driver is re-starting adapter card.**
- CAUSE: The driver has completed a restart of the adapter card, following a reset, powerfail, dump, or other recoverable condition.
- ACTION: This event is informational. No action is required.
- 5 (\$04)      **MESSAGE: Link connected.**
- CAUSE: The first upper layer subsystem to bind to the driver triggered a link connect, which was successful. This event is also logged after the link or cable has been successfully reconnected after being

disconnected, or on a link reconnect following a hub retrain, severe line hit, power failure, or other recoverable error.

**ACTION:** This event is informational. No action is needed unless the message appears frequently while the link is up, indicating possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference, and is of the proper UTP category or grade for the type of link (CAT-5 for HP-PB 100Base-T, CAT-3 or -5 for 100VG-AnyLAN).

7 (\$07)

**MESSAGE: Link disconnected.**

**CAUSE:** The last upper layer subsystem has unbound itself from the driver, triggering a link disconnect. This event is also logged if the link unexpectedly drops due to a cable disconnect, hub retrain request, powerfail, severe line hit, or other recoverable error.

**ACTION:** This event is informational. No action is required if the network is being shut down. However, if the link was supposed to be up or the message appears frequently while the link is up, this indicates possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference, and is of the proper UTP category or grade for the type of link (CAT-5 for HP-PB 100Base-T, CAT-3 or -5 for 100VG-AnyLAN).

8 (\$08)

**MESSAGE: Driver is shutting down.**

**CAUSE:** The driver is being shut down. The last subsystem that was using the driver is now closing it.

**ACTION:** This event is informational. No action is required.

9 (\$09)

**MESSAGE: Subsystem is binding to link driver.**

**CAUSE:** An upper-layer protocol has successfully bound (rendezvoused) to the link driver. Being bound means the driver can now route incoming data frames to this protocol.

**ACTION:** This event is informational. No action is required. If this is the first bind, the link driver will now attempt to reconnect the link.

10 (\$0A)

**MESSAGE: Subsystem is unbinding from link driver.**

**CAUSE:** An upper-layer protocol has begun to unbind (separate) from the link driver. Once unbound, the driver can no longer route incoming data frames to this protocol.

**ACTION:** This event is informational. No action is required. If this is the last bind, the link driver will now attempt to disconnect the link.

11 (\$0B)

**MESSAGE: Subsystem is closing link.**

**CAUSE:** An upper level subsystem has called the link module deconfigurator, which has successfully located the link, and will now proceed to close it.

- ACTION:** This event is informational. No action is required.
- 13 (\$0D) **MESSAGE: Powerfail detected.**
- CAUSE:** The driver was notified of a power failure by the I/O system, or detected all 1's on a hardware register read, and, upon checking further, saw that its hardware I/O address space was disabled, indicating a powerfail had already occurred.
- ACTION:** This event is informational. No action is required. Power failures can occur at any moment. If the driver was executing at the moment power failed, power then returned, and the driver ran to completion, noticing this error along the way. Upon exit, the driver was then officially notified of a powerfail by MPE. The driver then attempted powerfail recovery, and should now be operating the same as before.
- 14 (\$0E) **MESSAGE: Cannot release ADA memory object.**
- CAUSE:** During shutdown, the driver requested the I/O system to release a memory object, but received an error reply in response.
- ACTION:** This error should not occur. The driver may be confused, or there is a system problem. However, the driver will ignore the error and attempt to continue with the shutdown. If this happens frequently, see Appendix A , "Submitting a CR,"
- 15 (\$0F) **MESSAGE: Driver timed out waiting for ISR to shut down.**
- CAUSE:** During link shutdown, the driver signaled the ISR to shut down, then invoked the ISR. The driver then waited repeatedly for the signal to clear, but it did not.
- ACTION:** This is an informational warning. The driver gave up waiting, and continued with the rest of shutdown. If this happens frequently, see Appendix A , "Submitting a CR."
- 16 (\$10) **MESSAGE: Retrying an operation.**
- CAUSE:** During 100VG-AnyLAN link training, the driver found the ISR was running, and is waiting again for it to stop running.
- ACTION:** This is an informational warning. If it occurs repeatedly, the ISR, or the processor running it, may be stuck; the driver will give up and will not be able to connect the link. If this happens frequently, see Appendix A , "Submitting a CR."
- 17 (\$11) **MESSAGE: Cannot release a system plabel.**
- CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to release the link's write initiator procedure.
- ACTION:** This is an informational warning that some system memory resources may have been lost. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every

- time, see Appendix A , “Submitting a CR.”
- 18 (\$12)      **MESSAGE: Cannot close NM logging.**
- CAUSE: The link module configurator or deconfigurator attempted to close access to the NM logging facility, but encountered an error.
- ACTION: This is an informational warning that the logfile may still be open. Use of the :SWITCHNMLOG command should not be affected, however there may be a delay at system shutdown time. If this happens every time, see Appendix A , “Submitting a CR.”
- 19 (\$13)      **MESSAGE: Cannot unfreeze a memory area.**
- CAUSE: After previously freezing a data structure into system memory, software encountered an error trying to unfreeze the same memory.
- ACTION: This is an informational warning that some system memory resources may have been lost. Software probably continued, ignoring the error. Software may be confused, or the pointer to the memory area may have been changed. If this happens every time, see Appendix A , “Submitting a CR.”
- 22 (\$16)      **MESSAGE: No DMA buffer was available for a received frame.**
- CAUSE: On receipt of an inbound data frame, the driver attempted to dequeue a buffer from the inbound buffer cache for one of the bound protocols, but the cache was empty.
- ACTION: This is an internal warning. The driver may use it to detect the need to request more buffers. Typically the inbound frame is discarded in this case for flow control reasons, instead of being queued.
- 25 (\$19)      **MESSAGE: Cannot initiate a dump. Already dumping.**
- CAUSE: A user attempted to force a driver dump while a previous driver dump was still occurring.
- ACTION: A dump of your problem is already being produced. Wait a minute or two for the dump to finish. Forward the resulting NETDMP##.PUB.SYS to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”
- 26 (\$1A)      **MESSAGE: Internal error while initiating a dump. Dump failed.**
- CAUSE: During processing of some other fatal driver error, the driver attempted a driver dump, but encountered an error.
- ACTION: This error is mainly informational, since the driver did not dump, but may be indicative of other, possibly-related problems. The driver will still attempt to auto-reset itself, up to a total of 12 times or more.
- 27 (\$1B)      **MESSAGE: Late dump-done message received. Dump took too long.**
- CAUSE: The driver received a driver-dump completion message when it was not working on a dump.

**ACTION:** This error is informational only. Probably the Network Dump Process was delayed by other system processing, such that it exceeded the time limit set by the driver. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, after which the driver will now attempt to auto-reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disk activity load before the next attempt. If load is not the problem, see Appendix A , “Submitting a CR.”

28 (\$1C)

**MESSAGE: A driver dump is starting.**

**CAUSE:** A user is forcing a driver dump to occur, typically via the VGPBA diagnostic tool program.

**ACTION:** This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”

31 (\$1F)

**MESSAGE: A driver dump was suppressed. Too many dumps already.**

**CAUSE:** During processing of a fatal driver error, the driver attempted a driver dump, but determined it had already dumped too many times since it was initially started.

**ACTION:** By design, the driver attempts to auto-reset itself after any driver dump. But after 3 dumps, to avoid uncontrollably filling disk space with driver dumps, additional dumps are automatically suppressed. No attempt is made to determine whether the dumps are duplicates of the same problem. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. There is apparently something wrong, since many driver dumps are occurring. Collect binary copies of all dump files (NETDMP##.PUB.SYS) on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”

33 (\$21)

**MESSAGE: Driver is out of DMA resources.**

**CAUSE:** When processing a received data frame, the driver successfully obtained a new buffer, then was unable to obtain a DMA step to transfer the frame into that buffer.

**ACTION:** This error indicates a bug in the link driver. The driver is designed to avoid this situation through use of various queues and checks. If the problem happens often, see Appendix A , “Submitting a CR.”

34 (\$22)

**MESSAGE: Driver is out of extra DMA quad resources.**

**CAUSE:** When processing an outbound data buffer, the driver found the data residing on more pages than a standard DMA step can support, but when it attempted to get an extra quad, none were available.

**ACTION:** None. This is an internal error used to detect the out of extra quads condition. The driver automatically requeued the buffer for later

transmission, on the assumption some extra quads will free up.

35 (\$23)

**MESSAGE: Driver is out of card memory resources.**

**CAUSE:** The driver attempted to dequeue a card memory buffer entry from a specific queue, but the queue was empty.

**ACTION:** None. This is an internal error used to detect the empty queue condition. In most cases, the driver already knows the queue is not empty, and does not check for this error. If this error occurs as part of some other problem, see Appendix A , “Submitting a CR.”

39 (\$27)

**MESSAGE: The link is already started.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created.

**ACTION:** This event is informational. No action is required. The module configurator will ignore this warning and continue to bring the link driver up, so that the number of users may be checked.

39 (\$27)

**MESSAGE: The link is already started.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created.

**ACTION:** This event is informational. No action is required. The module configurator will ignore this warning and continue to bring the link driver up, so that the number of users may be checked.

41 (\$29)

**MESSAGE: Driver received an unknown port message.**

**CAUSE:** The driver received a port message which it does not implement, or containing a function code which it does not implement.

**ACTION:** This is an informational error only. If this error occurred as part of a driver reset operation, it may be ignored. The driver did not attempt to return an error reply to the message sender. That sender may now be hung, awaiting a reply. Attempt to determine what action caused the error. Activate link tracing, reproduce the problem, then stop link tracing and save the resulting NMTcnnnn . PUB . SYS trace data file. See Appendix A , “Submitting a CR.”

43 (\$2B)

**MESSAGE: A received frame could not be delivered.**

**CAUSE:** Just before delivering a received data frame to an upper layer protocol, the driver found that the rendezvous table entry specified in the buffer was not in the proper state.

**ACTION:** This is an internal error which detects a normal race condition. Probably the protocol separated from the driver while a frame destined for it was in motion. The frame was not delivered, and the buffer was silently released. No action is required.

- 46 (\$2E)      **MESSAGE: Link tracing is already enabled.**
- CAUSE: The driver received a request to turn link tracing on when it was already on.
- ACTION: This event is informational. No action is required. An error reply was sent in response to the request. Trace was not started by this request this time, but it remains on.
- 47 (\$2F)      **MESSAGE: Link tracing is already disabled.**
- CAUSE: The driver received a request to turn link tracing off when it was already off.
- ACTION: This event is informational. No action is required. An error reply was sent in response to the request. Trace was not stopped by this request this time, but it remains off.
- 50 (\$32)      **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: This is a generic hardware error, reported when any of the driver's hardware access routines reports an error. By itself it is not descriptive of the problem. This error is often seen as a result of previous power failures, MII or EEPROM read/write errors, or other low-level hardware problems.
- ACTION: When this error occurs as a result of previous errors, it mainly serves as a way to track the sequence of the failure back to what was happening at the time. Check for those errors and look them up for an additional explanation of the problem.
- 51 (\$33)      **MESSAGE: Bad hardware ID or path.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator did not find a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card at the hardware path specified in NMCONFIG.
- ACTION: Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card is installed in the computer backplane. Verify the Power LED is lit on that adapter. If necessary, reseal the board or contact your Hewlett-Packard Representative for hardware assistance.
- 52 (\$34)      **MESSAGE: Adapter card reported an HP-PB fatal error.**
- CAUSE: The driver's ISR module awoke to process a DVR request or an interrupt, but after reading status from the HP-PB interface chip on the adapter card, the driver discovered a fatal error bit had been set.
- ACTION: The driver already verified the bit was not set because of a power failure. The HP-PB chip has signaled a fatal error. There may be a hardware problem with the adapter card or the HP-PB bus. Replace the adapter card. If the same problem still occurs, there could be excessive activity on the HP-PB bus the card is attached to. Under



heavy DMA load, the HP-PB chip might encounter a timeout while trying to complete an HP-PB slave transaction, and post a fatal error. Try to reduce other bus activity by pausing applications. If the system has multiple HP-PB busses, move the card to a less active bus. If the problem persists, there may be a hardware problem with the HP-PB bus itself. Contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems. If the problem still cannot be traced to bus hardware, see Appendix A , “Submitting a CR.”

53 (\$35)

**MESSAGE: Driver could not identify PCI controller on card.**

**CAUSE:** After trying repeatedly, the ID the driver is still receiving the wrong ID from the PCI controller chip on the adapter card.

**ACTION:** Replace the adapter card. If the same problem persists even after replacement with a known good card, contact Hewlett-Packard: your software could be out of date, but a patch may be available. It is unlikely this would be a system HP-PB bus hardware problem.

54 (\$36)

**MESSAGE: Driver could not identify LAN controller on card.**

**CAUSE:** After initializing the PCI bus on the adapter card, the driver checked the ID of the LAN controller chip, but found it did not match any of the known ID's expected.

**ACTION:** Replace the adapter card. If the same problem persists even after replacement with a known good card, contact Hewlett-Packard; your software could be out of date, but a patch may be available. Or, depending on the exact cause, a knowledgeable Hewlett-Packard Support Representative may be able to use VGPBA diagnostics to modify your adapter card's EEPROM to work temporarily with your older software.

55 (\$37)

**MESSAGE: Driver could not identify the expected PHY on card.**

**CAUSE:** After verifying the PHY chip on the adapter card had been successfully reset, the driver checked the ID of the PHY, but found it did not match any ID expected for this kind of adapter card.

**ACTION:** Replace the adapter card. The motherboard and PMC board may be mismatched, the PHY chip may have gone bad, or your software may be out of date. Only the upper 12 bits of the ID need to match the expected value, which varies depending on adapter card type.

56 (\$38)

**MESSAGE: Adapter card LAN controller reported a fatal error.**

**CAUSE:** The link driver received an adapter check interrupt from the LAN controller chip on the adapter card, indicating a fatal error has been detected.

**ACTION:** This error typically indicates a driver bug has resulted in incorrect use of the LAN controller chip, however it could also indicate an adapter card hardware problem. The driver will now attempt to

perform a dump of all host context data structures and adapter card memory, then reset itself and continue. This error is not meaningful without the accompanying “Cause” status. Locate and decode that “Cause” to determine the next action to take (see sublocation 9470 discussion for more information).

57 (\$39)

**MESSAGE: MII read error on adapter card.**

**CAUSE:** During a link connect, disconnect, or management operation, the driver attempted to read from an MII hardware register in a PHY chip on the adapter card, but the read failed to return the proper acknowledgment bit. This indicates good data was not returned.

**ACTION:** MII reads can be sensitive to software timing. If you have GLANCE or a similar tool, run it and check the CPU load on the system. If the load is high, try reducing the CPU load, then retry the operation. If the problem persists, the adapter card has probably failed; replace the adapter card.

58 (\$3A)

**MESSAGE: EEPROM read error on adapter card.**

**CAUSE:** During link startup or a diagnostic operation, the driver attempted to read from an EEPROM chip on the adapter card, but the read failed to return one of the necessary acknowledgment bits. This indicates good data was not returned.

**ACTION:** EEPROM reads can be sensitive to software timing. If you have GLANCE or a similar tool, run it and check the CPU load on the system. If the load is high, try reducing the CPU load, then retry the operation. If the problem persists, the adapter card has probably failed; replace the adapter card.

59 (\$3B)

**MESSAGE: EEPROM write error on adapter card.**

**CAUSE:** During a diagnostic operation, the driver attempted to write to an EEPROM chip on the adapter card, but the write failed to return one of the necessary acknowledgment bits. This indicates the data was not written properly.

**ACTION:** EEPROM writes can be sensitive to software timing. If you have GLANCE or a similar tool, run it and check the CPU load on the system. If the load is high, try reducing the CPU load, then retry the operation. If the problem persists, the adapter card has probably failed; replace the adapter card.

60 (\$3C)

**MESSAGE: Adapter card PHY did not finish reset in the time allowed.**

**CAUSE:** During a link connect sequence, the driver tried 3 times to reset the PHY chip, but it still did not go “ready” after the reset.

**ACTION:** This is a fatal hardware error. Replace the adapter card. The driver cannot connect the link if the PHY will not reset. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

- 61 (\$3D)      **MESSAGE: Adapter card produced an illegal interrupt.**
- CAUSE: The link driver has received an interrupt from the card during normal operation, but the driver should have specifically disabled that interrupt at startup.
- ACTION: The driver will attempt to perform a dump of all host context data structures and adapter card memory, then reset itself and continue. Save the resulting NETDMP###PUB.SYS file for possible analysis by Hewlett-Packard. But first, replace the adapter card and see if this corrects the problem. If not, see Appendix A , “Submitting a CR.”
- 62 (\$3E)      **MESSAGE: No adapter card found on specified HP-PB bus.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator did not find an HP-PB bus at the hardware path specified in NMCONFIG.
- ACTION: Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card is installed in your computer backplane. If the path passes through bus converters, verify the SYSGEN configuration has entries for the higher-level bus converters leading to that path. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.
- 63 (\$3F)      **MESSAGE: Adapter card found does not match software configuration.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator found a supported adapter card at the path specified in NMCONFIG, but it was not the right type of card for the link being started.
- ACTION: Correct the network configuration or plug in the correct type of adapter card, and retry the operation.
- 64 (\$40)      **MESSAGE: Memory test failed: memory data miscompare.**
- CAUSE: Upon reaching the end of a diagnostic test of adapter card memory or LAN controller chip memory, the driver had accumulated at least one data pattern mismatch.
- ACTION: One or more data patterns written by the driver did not match the data read back from those same memory locations. Depending on which test was being performed, either the adapter card or LAN controller chip is faulty. Replace the adapter card.
- 75 (\$4B)      **MESSAGE: Cannot install interrupt handler.**
- CAUSE: During initial driver startup, the driver was unable to add its ISR into the MPE I/O system, as an interrupt handler routine for any adapter card interrupts on that EIR bit.

**ACTION:** The driver did not start up. There is probably an MPE software installation problem, with incomplete or incompatible O/S software. Verify the system is running an MPE release which supports 100-Mbit link drivers. The only other cause is a software bug; see Appendix A , “Submitting a CR.”

76 (\$4C)

**MESSAGE: Cannot get ADA memory object.**

**CAUSE:** During initial startup, the driver attempted to obtain a memory object via the I/O system, but received a bad status in the reply for that request.

**ACTION:** Probably the amount of frozen memory on the system is very high; if you have the GLANCE tool you can try to check memory usage. Try retrying the operation again later, or first terminate some applications and then retry.

77 (\$4D)

**MESSAGE: Cannot get a system timer.**

**CAUSE:** The driver attempted to get a system timer from I/O Services but encountered an error. This is either caused by exhausting all timers due to heavy system load, or by system software either failing to release timers, or having some other bug.

**ACTION:** This is a fatal software error. The number of available timers is not configurable, and the driver cannot operate without the necessary timers. Typically followed by another error giving more information about what kind of timer the driver needed; check log data for that error and look it up also. If you suspect a heavy load, you can try shutting some processes down, then restart the driver. Otherwise halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

78 (\$4E)

**MESSAGE: Cannot reset a system timer.**

**CAUSE:** The driver attempted to reset a system timer previously obtained from I/O Services but encountered an error. This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a fatal software error. The driver cannot operate without all necessary timers. If the problem persists, halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

79 (\$4F)

**MESSAGE: Cannot free a system timer.**

**CAUSE:** The driver attempted to release a system timer previously obtained from I/O Services but encountered an error. This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a warning that some timer resources may have been lost. Possibly followed by another error giving more information about what kind of timer the driver was releasing; check log data for that

error and look it up also. If the problem happens every time, see Appendix A , “Submitting a CR.”

80 (\$50)

**MESSAGE: Cannot send a port message.**

**CAUSE:** This is a generic error saying that the link driver, module configurator or deconfigurator, or other module of the link subsystem encountered an error when trying to send a port message. This error could be caused by the target module having been already shut down. It could also be an indication of a more serious system software problem, and may be followed by a system abort; probably all message frames have been exhausted by some module running on the system.

**ACTION:** Severity and side effects of this error are dependent upon the purpose of the message that was not sent. Attempt to determine the conditions that led to the error. If it occurred during a shutdown, possibly this error can be ignored. Otherwise, if the same problem happens repeatedly, or if a system abort occurs, take a memory dump and see Appendix A , “Submitting a CR.”

81 (\$51)

**MESSAGE: Error from upper layer protocol read completor.**

**CAUSE:** The driver finished transferring a data frame and passed it to an upper layer protocol, but the protocol’s read completor returned an error which was not one of the expected, legal errors the driver was able to handle.

**ACTION:** This is an informational error only. The driver incremented a statistic then attempted to continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung. There may be a problem in the upper layer protocol. If the problem occurs frequently, take a link trace showing the problem, then see Appendix A , “Submitting a CR.”

84 (\$54)

**MESSAGE: Cannot load driver plabel.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load the code for the driver.

**ACTION:** Probably not all software required to operate this type of link is installed. The software was incorrectly installed, or you may need to purchase additional link or MPE software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

85 (\$55)

**MESSAGE: Cannot add driver to I/O system.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but encountered an error which was not one of the legal errors the configurator was able to handle.

**ACTION:** Verify the path in NMCONFIG is correct and complete, and

matches the path where a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card is installed in your computer backplane. If the path passes through bus converters, verify the SYSGEN configuration has entries for the higher-level bus converters leading to that path. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

86 (\$56)

**MESSAGE: Cannot remove driver from I/O system.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete an instance of the link driver, but encountered an I/O system error.

**ACTION:** Not all resources were released. The driver may already have been shut down by some other means, or the system I/O configuration may have been altered. If this happens frequently, see Appendix A , “Submitting a CR.”

87 (\$57)

**MESSAGE: Cannot load a system routine.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load code for the write initiator procedure needed for the link type configured in NMCONFIG.

**ACTION:** Probably not all software required to operate this type of link is installed. Software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

88 (\$58)

**MESSAGE: Cannot open NM logging.**

**CAUSE:** During a link open attempt by an upper-level subsystem, the link module configurator encountered a positive (error) status when trying to open NM logging against the link’s subsystem ID.

**ACTION:** This event is informational. No action is required. The module configurator cleared the error and will attempt to continue. However, NM logging may not be available to the link. You may need to install new NM logging patches. If the problem occurs every time, see Appendix A , “Submitting a CR.”

89 (\$59)

**MESSAGE: Cannot freeze a memory area.**

**CAUSE:** This is a generic error that during a link-open or some other operation by an upper level subsystem, link software encountered an error while trying to freeze some data into memory before passing the driver a pointer to that data.

**ACTION:** The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation.

- 90 (\$5A)      **MESSAGE: Did not receive an expected port message.**
- CAUSE: This is a generic error that during a link-open or some other operation by an upper level subsystem, link software sent a port message to the driver, then encountered an error while awaiting the correct reply message.
- ACTION: Severity and side effects of this error are dependent upon the purpose of the message that was not received. There may be a system problem with message ports, or the link driver may have sent the wrong reply message. If this happens every time, see Appendix A , “Submitting a CR.”
- 106 (\$6A)      **MESSAGE: General error trying to get a buffer.**
- CAUSE: When attempting to directly obtain a new buffer manager buffer from a read pool, to replenish the inbound buffer cache for one of its bound protocols, the driver’s ISR encountered an error that was not one of the few legal errors it expected, or was able to handle.
- ACTION: The problem could indicate some serious internal problems within the buffer manager or its data structures, or with the way the system is configured. Note all log messages, especially the “Cause” status for this error, and see Appendix A , “Submitting a CR.” If the problem persists, take a system memory dump immediately after the problem has occurred.
- 107 (\$6B)      **MESSAGE: Cannot create a buffer pool.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to create an outbound buffer pool or control buffer pool.
- ACTION: The system may be low on available memory. Try stopping some applications or sessions and retry the operation. If the problem persists, stop all networking and restart it, or restart the system. The buffer size and pool size are not configurable. If the problem still occurs, there could be a problem with the buffer manager. See Appendix A , “Submitting a CR.”
- 108 (\$6C)      **MESSAGE: Cannot delete a buffer pool.**
- CAUSE: During a link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to delete an outbound buffer pool or control buffer pool.
- ACTION: This is an informational warning that some system memory resources may have been lost. Probably not all buffers were freed before the pool was deleted. If this happens every time, see Appendix A , “Submitting a CR.”
- 115 (\$73)      **MESSAGE: Driver encountered a software problem.**
- CAUSE: This is a generic software error, reported when any of the driver’s non-hardware routines reports an error. By itself it is not

descriptive of the problem. This error is often seen as a result of previous errors from intrinsics, reply messages, or validity checks.

**ACTION:** When this error occurs as a result of previous errors, it mainly serves as a way to track the sequence of the failure back to what was happening at the time. Check for those errors and look them up for an additional explanation of the problem.

116 (\$74)

**MESSAGE: Internal driver error.**

**CAUSE:** While processing a request, the link driver encountered a problem indicating there is something internally wrong with some other module of system software. Specific instances include: range or bounds violation errors while storing or clearing a statistics buffer.

**ACTION:** This is an indication of a bug in the link software. If possible, note exactly what actions caused the error to occur, then see Appendix A , "Submitting a CR."

117 (\$75)

**MESSAGE: A driver request failed.**

**CAUSE:** This is a generic software error, used when the driver receives a new request but cannot process it because of an earlier failure. It is used in the reply to the outside module which requested the operation, to indicate it could not be processed.

**ACTION:** If this status is reported, it is because of some earlier failure. Check log files and locate any previous errors for this link, to try to find the reason this error is now occurring. By running the VGPBA diagnostic and trying the Reset function, you may be able to clear the error.

119 (\$77)

**MESSAGE: Driver dump was forced.**

**CAUSE:** A user is forcing a driver dump to occur, typically via the VGPBA diagnostic tool program.

**ACTION:** This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , "Submitting a CR."

121 (\$79)

**MESSAGE: Driver is going down.**

**CAUSE:** A request to the driver failed because the driver is in the process of shutting down, or because it has encountered a fatal software error and has not yet been shut down.

**ACTION:** If this status is reported during a shutdown operation, it may be ignored. Otherwise this should be a signal to the operator that the link driver has a problem and needs to be shut down, or dumped and/or reset.



125 (\$7D)

**MESSAGE: Driver has detected data corruption.**

**CAUSE:** A driver receive-frame DMA operation completed, but in doing a quick check of the DMA'ed data, the driver found all ones in the first 4 words, indicating some kind of driver/ adapter card bug has occurred. Probably the driver attempted to perform a DMA transfer which was not a 4-byte multiple in length.

**ACTION:** This is a fatal error. The driver has halted all operations to prevent mishandling any user data, and did not forward the received frame to upper layer protocols. The driver will now attempt to perform a dump of all host context data structures and adapter card memory, then reset itself and continue. Save the resulting `NETDMP##.PUB.SYS` dump data file for analysis by Hewlett-Packard. See Appendix A , "Submitting a CR."

126 (\$7E)

**MESSAGE: An unexpected transmit condition was encountered.**

**CAUSE:** While attempting to initiate DMA to send some transmit data to the adapter card, driver software found its data structures to be in an unexpected state. The state of all transmit queues was not one of the legal states predicted at design time.

**ACTION:** This is a fatal software error. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, take a link trace of the problem, then see Appendix A , "Submitting a CR."

128 (\$80)

**MESSAGE: Illegal access to saved port message area.**

**CAUSE:** While completing an old blocking request (requiring a driver exit and later reply), the driver found that the entry in the pending message save area, where the request was supposedly saved, was no longer in use, or was not within the range of legal table indexes.

**ACTION:** This fatal software error is only caused by a bug or memory corruption, because the driver should never be trying to complete the same message twice, or passing an illegal index. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, take a link trace of the problem, then see Appendix A , "Submitting a CR."

129 (\$81)

**MESSAGE: Frame received when no queue entry was available.**

**CAUSE:** When processing an interrupt for a received data frame, the driver was not able to locate the adapter card data memory frame containing the data. The driver thinks there are no more adapter card memory frames in which to receive incoming frames, yet the card has reported another frame anyway. The driver is designed to maintain synchronization with the card, therefore it appears that either an out-of-sync condition exists, or the card has a problem.

**ACTION:** The driver acknowledged and dropped the interrupt and the received packet. Many upper layer protocols typically retransmit lost

packets, so operation of the system and applications may continue with only minimal degradation. Exhausting all receive resources would be a highly unusual condition. If all receive resources have really been exhausted, network load may be extremely high, and/or the HP-PB bus may be preventing frames from being returned to the card in a timely manner; incoming frames are probably now being dropped. Otherwise there may be a bug in the link driver. If the problem happens often, see Appendix A , “Submitting a CR.”

130 (\$82)

**MESSAGE: Cannot read current multicast list.**

**CAUSE:** During a link-open or close operation by an upper level subsystem, the link module configurator tried to read the current list of multicast addresses produced by the subsystem, but encountered an error on the read.

**ACTION:** Run `NMMAINT.PUB.SYS;PARM=74` or `;PARM=77`, for 100VG-AnyLAN or HP-PB 100Base-T respectively, and check that the multicast services are present. If present, try starting a ThinLAN link, to see if the same errors occur; or try restarting the system, then retry the operation. If not present, you may need to reinstall ThinLAN software (which contains the multicast for 100VG-AnyLAN and HP-PB 100Base-T) or obtain newer patches; contact your Hewlett-Packard Representative for assistance. If reinstalling software does not solve the problem, see Appendix A , “Submitting a CR.”

131 (\$83)

**MESSAGE: An unexpected timeout occurred.**

**CAUSE:** This is a generic error reporting that a timeout occurred during a link driver operation, such as a diagnostic loopback test or a dump operation, or while awaiting a reply message from the driver for an operation initiated by the link module configurator or deconfigurator.

**ACTION:** A required message or interrupt has not arrived in time. Reset the link driver using VGPBA diagnostics, or shut it down and restart. Retry the operation. If the same problem occurs, replace the adapter card if this is a loopback test, otherwise check system load or see Appendix A , “Submitting a CR.”

132 (\$84)

**MESSAGE: Module Configurator cannot access its context area.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator checked its context memory area for validity, but did not find the expected data.

**ACTION:** The module deconfigurator’s context memory area is being overwritten, or is not working properly. The deconfigurator did not perform the close. If this happens every time, wait until the next time the link is to be closed; instead of closing the link, halt the system and take a memory dump, and see Appendix A , “Submitting a CR.”

- 147 (\$93)      **MESSAGE: Open table full. Too many driver users.**
- CAUSE: Too many subsystems are attempting to open the driver at the same time, or subsystems are shutting down without closing the driver.
- ACTION: Shut down any networking subsystems that are not currently needed and try again. A side-effect of this error may be that the driver becomes unusable; if so, run VGPBA and execute the Reset function to see if that restores normal operation.
- 148 (\$94)      **MESSAGE: Bind table full. Too many upper level protocols.**
- CAUSE: When a new upper-layer protocol attempted to bind (rendezvous) to the link driver, the driver determined all available rendezvous table entries were already in use. Too many different protocols are trying to use the driver.
- ACTION: Shut down any networking subsystems that are not currently needed and try again.
- 149 (\$95)      **MESSAGE: Buffer pool table full. Too many unique pools.**
- CAUSE: When a new upper-layer protocol attempted to bind (rendezvous) to the link driver, the driver determined all available buffer pool table entries were already in use. Too many different pool ID's are being specified by the protocols. The driver assumes a few pools will be shared by many protocols.
- ACTION: Shut down any networking subsystems that are not currently needed and try again.
- 150 (\$96)      **MESSAGE: Pending message table full. Driver not finishing fast enough.**
- CAUSE: While processing a new blocking request (requiring a driver exit and later reply) and scanning a table in which to save the request, the driver found an unused entry, but an entry counter indicated the table was full.
- ACTION: This fatal software error is only caused by a bug, because the in use flags and counters should match. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, take a memory dump and reboot. See Appendix A , "Submitting a CR."
- 151 (\$97)      **MESSAGE: Out of internal comm frame resources.**
- CAUSE: While attempting to request action from its ISR module, the driver found that no available communication frames were available on the referenced queue. The number of available comm frames is not configurable, and the driver cannot operate if frames run out.
- ACTION: This is a fatal software error. After reporting this error, the driver will attempt a driver dump, then will auto-reset and attempt to continue. Typically followed by another error giving more information

about what kind of comm the driver was trying to send; check log data for that error and look it up also. Collect binary copies of all NETDMP##.PUB.SYS dump files on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”

152 (\$98)

**MESSAGE: Driver initialization failed.**

**CAUSE:** While processing its very first startup message, the driver encountered a problem. Probably the configured hardware is not present, is not the correct kind of adapter card, or there was a problem configuring the ISR into the I/O system.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data for that error and look it up also, for more actions to take. The driver will attempt to send an error reply for the startup request. It then enters a “broken” state and awaits a shutdown, which the module configurator should attempt automatically.

154 (\$9A)

**MESSAGE: Configuration failed.**

**CAUSE:** This is a generic error, reported after successful or unsuccessful completion of initial hardware startup, if the driver encountered an error bringing up the adapter card, or when opening the link, or while attempting to send the reply to a pending configuration request from its module configurator.

**ACTION:** This is a fatal software error. It might be caused by a bad adapter card, by having too many driver users, by a heavy CPU load, or by attempting to operate the network subsystem or tool which started the link at too low of a CPU process priority, causing a timeout. Any condition, such as a timeout or abort, which causes the driver’s module configurator to cease awaiting the reply and dispose of its reply port, might also cause this error. The driver now “dies” and awaits a shutdown, which the module configurator should attempt automatically.

160 (\$A0)

**MESSAGE: Heartbeat timeout. Adapter card appears to be hung.**

**CAUSE:** The LAN controller chip on the adapter card has failed to produce any interrupt from normal activity for over 5 seconds. It has also failed, for an additional 5 seconds, to respond to the driver’s inquiry by producing a test interrupt. The driver has decided the card is dead or hung.

**ACTION:** This is a fatal hardware error. Replace the adapter card. The driver will enter a “broken” state and await a manual shutdown by the operator. If you wish you may try running the VGPBA diagnostic and attempt a reset. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

- 161 (\$A1)      **MESSAGE: Card did not go ready after hard reset.**
- CAUSE: After performing a hard reset of the adapter card during startup, the HP-PB interface chip did not report “ready” status, or reported an error.
- ACTION: Replace the adapter card. If the same problem persists even after replacement with a known good card, contact Hewlett-Packard: your software could be out of date, but a patch may be available. It is unlikely this would be caused by a system HP-PB bus hardware problem.
- 162 (\$A2)      **MESSAGE: An expected PHY interrupt did not arrive.**
- CAUSE: During a link connect sequence, the driver requested a test interrupt from the PHY chip on the adapter card, but received a timeout. The driver cannot connect the link if PHY interrupts do not work.
- ACTION: Replace the adapter card. The link did not connect. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”
- 163 (\$A3)      **MESSAGE: Timeout while awaiting a link training transmit interrupt.**
- CAUSE: During a 100VG-AnyLAN link connect attempt, the driver received a training frame from the 100VG-AnyLAN hub in response to a previous send, but no interrupt arrived for the last frame it sent within the 2 ms time allowed.
- ACTION: This error is informational only. The driver will retry the connect. If the problem happens every time, try replacing the cable and/or adapter card.
- 164 (\$A4)      **MESSAGE: Timeout while awaiting a link training receive.**
- CAUSE: After successfully sending a training frame to the 100VG-AnyLAN hub, no frames were received back from the hub within the 50 ms time allowed. The hub should return one frame for every frame sent.
- ACTION: This error is informational only. The driver will retry the connect. If the problem persists, try reducing the CPU load. The hub sent a training idle signal, but it is not responding to frames sent to it by the link driver. Make sure the link’s NMCONFIG configuration is not forcing use of a MAC address already in use by some other link; in this case the hub may not respond. Try replacing the cable and/or adapter card. Check the hub port configuration.
- 165 (\$A5)      **MESSAGE: Timeout while awaiting any link training interrupt.**
- CAUSE: During a 100VG-AnyLAN link connect attempt, the driver sent a training frame to the 100VG-AnyLAN hub, but no interrupt arrived within the 50 ms time allowed, for either the frame which was sent, or a receive from the hub in response to it.

**ACTION:** This error is informational only. The driver will retry the connect. If the problem happens every time, try replacing the cable and/or adapter card.

170 (\$AA)

**MESSAGE: Hub did not report link up within time allowed.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver exchanged 24 training frames with the hub, but afterward the LINK signal still did not appear within the 4 ms time allowed. The hub may not have liked some or all of the frames, although it responded anyway. If this error is logged, it is because the link did not connect within 25 to 30 seconds after it was instructed to do so.

**ACTION:** This error is informational only. The driver will retry the connect. If the problem happens every time, try checking the hub port configuration, or replacing the cable and/or adapter card.

171 (\$AB)

**MESSAGE: Hub did not send link training idles within time allowed.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver requested a training idle signal from the 100VG-AnyLAN hub, but no idles arrived within the 400 ms time allowed.

**ACTION:** This error is informational only. The driver will retry the connect. If the problem happens every time, first check that the cable is good, is connected, and the hub is powered on. Try checking the hub port configuration, or replacing the cable and/or adapter card.

172 (\$AC)

**MESSAGE: Link training failed.**

**CAUSE:** This is a generic error., reported if 100VG-AnyLAN link training failed due to an unusual condition not covered by expected error conditions. This might include LAN controller chip adapter checks, timeouts, hardware failures, or power failures.

**ACTION:** This error is informational only. The driver will retry the connect. If the problem happens every time, take a link trace while the problem is occurring, then see Appendix A , “Submitting a CR.”

175 (\$AF)

**MESSAGE: Timeout while awaiting link autonegotiation completion.**

**CAUSE:** The link appears to be connected, but the driver thinks it is still waiting for it to connect.

**ACTION:** This error should not occur. If it happens frequently, see Appendix A , “Submitting a CR.”

183 (\$B7)

**MESSAGE: Driver bug prevents link training. File CR.**

**CAUSE:** During an attempt to establish the proper stack context within which to begin 100VG-AnyLAN link training, the driver tried repeatedly to run without the ISR underneath it, but failed to even after 4 retries.

**ACTION:** Shut down the link and restart it. If the same problem still occurs, see Appendix A , “Submitting a CR.”

- 184 (\$B8)      **MESSAGE: Hub reports access is disallowed for this link.**
- CAUSE: The driver received a training frame from the hub with the “no access” bit set in the frame. The hub is disallowing access to this link.
- ACTION: The driver discarded this frame and sent another. However, it is likely the hub will report this in every frame. If this error is seen, check the hub port configuration to make sure it is enabled and is not set to an incompatible mode and/or frame format.
- 185 (\$B9)      **MESSAGE: Hub returned wrong station address in training frame.**
- CAUSE: The link driver received a training frame from the 100VG-AnyLAN hub having nonzero data in the destination address field. This hub is not compatible with your link driver.
- ACTION: The driver discarded this frame and sent another. However, it is likely the hub will report this in every frame. Check if the hub has configuration settings or switches. Some hubs have a feature which switches the hub to a mode where this problem does not occur. Otherwise, contact your Hewlett-Packard Representative to see if software patches are available to correct this problem.
- 186 (\$BA)      **MESSAGE: Hub reports link station address is already in use.**
- CAUSE: The driver received a training frame from the hub with the “duplicate address” bit set in the frame. The hub is reporting that another adapter is already using the same MAC address as the link now trying to connect. Every card on a LAN network must have a unique MAC address.
- ACTION: The driver discarded this frame and sent another. However, it is likely the hub will report this in every frame. Using NMMGR, check the link configuration in NMCONFIG to see if a specific MAC address is being forced. If not, run VGPBA diagnostics to determine the MAC address assigned to this adapter card, then try to locate the other card on the network using that same address. Change the configuration of one of the cards, or use a different adapter card at one end.
- 187 (\$BB)      **MESSAGE: Hub reports your link configuration is incompatible or not allowed.**
- CAUSE: The driver received a training frame from the hub with the “configuration incompatible” bit set in the frame. The hub port is not configured in a way compatible with this link. For instance, the port may be set to allow only 802.5 framing.
- ACTION: The driver discarded this frame and sent another. However, it is likely the hub will report this in every frame. If this error is seen, check the hub port configuration to make sure it is enabled and is not set to an incompatible mode and/or frame format.

- 188 (\$BC) **MESSAGE: Autonegotiation reports link settings are incompatible with hub.**
- CAUSE:** If this error occurs, it is probably because the link has reported a remote fault. Usually this means the adapter card and the hub or switch to which it is connected, have failed to agree on a link speed and duplex setting acceptable to both.
- ACTION:** Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other. Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable. If a crossover cable is being used, make sure it is correctly wired, and that you have software version A00550B0 or later. Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.
- 194 (\$C2) **MESSAGE: Unexpected loss of link signal from hub.**
- CAUSE:** While the link was supposedly connected, an event occurred causing the link driver to check if the link was connected, and when the PHY chip on the adapter card was checked, it was found that the link was not connected. Probably the cable was disconnected from the hub or card.
- ACTION:** This event is informational. No action is required. The driver will attempt to reconnect the link automatically.
- 195 (\$C3) **MESSAGE: Hub has requested that the link be retrained.**
- CAUSE:** While a 100VG-AnyLAN link was supposedly connected, an interrupt occurred, and when the PHY chip on the adapter card was checked, it was found that the hub was requesting that the link be re-trained. Probably the hub has detected an excessive error rate on that hub port.
- ACTION:** This event is informational. No action is required. The driver will attempt to re-train the link automatically.
- 198 (\$C6) **MESSAGE: Cannot open configuration file.**
- CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to open the configuration file.
- ACTION:** Verify an NMCONFIG.PUB.SYS file exists. If so, try to verify its format matches rest of the operating system. If the system was updated, you may need to run NMMGRVER.PUB.SYS to convert the file to a newer format. If the system was backdated, you may need to restore an older copy of NMCONFIG from a backup tape. Perform a :LISTF,3 command and make sure the file is not protected by a lockword, and that the user starting the link has the necessary access rights to open



the file. Perform a `:DSTAT ALL` command and make sure the disk drive the file resides on is present and mounted. Make sure the file resides on Ldev 1. If not, use Fcopy and a file equation with a `“;DEV=1”` option to force a copy of the file onto Ldev 1. Perform a `:SHOWPROC 1;TREE;SYSTEM` command and verify an NMFILE process exists. If not, shut down and restart the system, and retry the operation. If the problem persists, contact your Hewlett-Packard Representative for assistance with NMCONFIG file open problems.

199 (\$C7)

**MESSAGE: Cannot read from configuration file.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was able to open the configuration file, but encountered an error while trying to data for the link being started.

**ACTION:** Using NMMGR, verify the path `LINK.linkname` exists in the NMCONFIG file and is the exact same linkname which is now being started. Verify the `“Data=Y”` flag is set at the top of that LINK screen (meaning that ENTER has been pressed to save the configuration data there). If the link is being used with NS or DTS, use the VALIDATE function to validate the network configuration. Correct any configuration errors and retry the operation.

200 (\$C8)

**MESSAGE: Cannot validate configuration file.**

**CAUSE:** After successfully reading configuration data for a link being started, the link module configurator checked the data and found it was not valid. For NS/3000, probably the link type and NI type do not match.

**ACTION:** Using NMMGR, verify the path `LINK.linkname` exists in the NMCONFIG file and is either a 100VG-AnyLAN or HP-PB 100Base-T link type. If the subsystem being started is NS, verify the link type matches the NI type for the network being started. If these are not the problem, an incorrect version of NMMGR may have been used to create the NMCONFIG file on your system. Run `NMMAINT.PUB.SYS;PARM=24` to check versions of NMMGR components. The format of your NMCONFIG file may be incompatible with the link driver version installed on your system. Run `NMMGRVER.PUB.SYS` to update your NMCONFIG file to a newer version, or restore an older version from a backup tape, whichever is appropriate. If the problem still occurs, contact your Hewlett-Packard Representative for assistance in using NMMGR to configure 100VG-AnyLAN or HP-PB 100Base-T links.

203 (\$CB)

**MESSAGE: Cannot determine link type.**

**CAUSE:** Early in a link open operation by an upper level subsystem, the link module configurator encountered an error while attempting to use Link Support Services to determine the type of link being started. Probably the link is not completely configured.

**ACTION:** If the link is already started, LSS tries to read the link type from its own link table. Otherwise, it tries to read it from the

NMCONFIG file. Using NMMGR, verify the path `LINK.linkname` exists in the NMCONFIG file and is the exact same linkname which is now being started. Verify the "Data=Y" flag is set at the top of that LINK screen (meaning that ENTER has been pressed to save the configuration data there). If the link is being used with NS or DTS, use the VALIDATE function to validate the network configuration. Correct any configuration errors and retry the operation.

204 (\$CC)

**MESSAGE: Cannot read from link table.**

**CAUSE:** Early in a link open operation by an upper level subsystem, the link module configurator attempted to determine if the link was already running, by trying to read from the link table, but an error occurred which was not one of the expected, legal errors the configurator was designed to handle.

**ACTION:** If the linkname being started is a valid linkname, then there may be a problem with Link Support Services. Halt the system, take a system memory dump, then restart the system. If the problem still occurs, see Appendix A , "Submitting a CR."

205 (\$CD)

**MESSAGE: Cannot add to link table.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator successfully started the driver, but encountered an error trying to add the link to the link table.

**ACTION:** Possibly too many links are started. If not, try starting a different link, to see if that works. If not, first try doing a `:LINKCONTROL @` command to see if any LSS errors occur. If they do, you may need to reinstall MPE software; contact your Hewlett-Packard Representative for assistance. Otherwise try restarting the system to see if it corrects the problem or LINKCONTROL errors. If none of these suggestions helps, see Appendix A , "Submitting a CR."

206 (\$CE)

**MESSAGE: Cannot delete from link table.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete the link from the link table, but encountered an error.

**ACTION:** The module deconfigurator reported an error, but attempted to continue with the close. Network management services may have been shut down. Otherwise, if this happens every time, see Appendix A , "Submitting a CR."

208 (\$D0)

**MESSAGE: Cannot open tracing.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup, but encountered an error trying to open the trace file.

**ACTION:** Using NMMGR, check if a filename was configured. If so,

verify it is a legal MPE filename. A group and account may need to be specified. Make sure the user starting the link has the necessary capabilities to create that file in the group and account specified. Check whether the system is low on disk space. Check whether too many `NMTCnnnn.PUB.SYS` trace data files already exist. Purge files as necessary to free up disk space, or add more disks. Make sure the version of the `NMCONFIG` file matches the rest of the system software, by running `NMMGRVER.PUB.SYS`. If none of these suggestions solves the problem, contact your Hewlett-Packard Representative for assistance with configuring a 100VG-AnyLAN or HP-PB 100Base-T link to enable tracing at startup.

209 (\$D1)

**MESSAGE: Cannot stop tracing.**

**CAUSE:** After a link-open operation by an upper level subsystem failed, the link module configurator tried to clean up, but encountered an error trying to disable driver tracing.

**ACTION:** Probably the link driver returned an error reply when asked to disable tracing. The driver may have a problem, or may already have shut down. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , “Submitting a CR.”

210 (\$D2)

**MESSAGE: Cannot send a trace request.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup. After successfully opened a trace file, the configurator encountered an error trying to enable driver tracing.

**ACTION:** Probably the link driver returned an error reply when asked to enable tracing. The driver may have a problem. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , “Submitting a CR.”

218 (\$DA)

**MESSAGE: Unimplemented operation attempted.**

**CAUSE:** The driver was asked to, or attempted to perform an operation which it is not currently designed to handle.

**ACTION:** If possible, the driver will attempt to send an error reply in response to the request. However, depending on the operation, the driver may not know how to do this, and will not attempt it. Determine what you were trying to do, then contact your Hewlett-Packard Representative for assistance.

220 (\$DC)

**MESSAGE: Buffer chaining is not supported.**

**CAUSE:** An upper layer protocol attempted to send data to the driver using a buffer containing chained data. No link subsystems support this data format.

**ACTION:** There is a problem in the upper-layer protocol. Attempt to determine which application produced the error, then see Appendix A , “Submitting a CR.”

223 (\$DF) **MESSAGE: One or more bad bind parms passed by upper level protocol.**

**CAUSE:** This is a generic error, reported when the driver received a bind (rendezvous) from an upper layer protocol, but the parameters in the request were not satisfactory to the driver. There are a number of separate causes; look up the specific sublocation code that was logged, for more information.

**ACTION:** All such errors are caused by bugs in the upper layer protocol. Attempt to determine what protocol was trying to bind, then see Appendix A , “Submitting a CR.”

224 (\$E0) **MESSAGE: A data buffer is too long.**

**CAUSE:** During diagnostic loopback testing, the driver was asked to prepare a data block for transmission, but the block length or memory allocation was beyond the driver’s DMA capabilities.

**ACTION:** This problem should only be seen in diagnostics, however it should not be occurring at all. Specify a shorter loopback length, and see Appendix A , “Submitting a CR.”

225 (\$E1) **MESSAGE: One or more bad utility parms passed to driver.**

**CAUSE:** The driver received a utility register access request from an upper level tool program such as PVGUTIL, but the register number specified was out of the range of legal register values for the selected register set.

**ACTION:** This is an informational error only. This problem most likely occurred while diagnosing some previous problem. Retry the operation using a legal register number for the register set you have selected.

226 (\$E2) **MESSAGE: A data buffer is too short.**

**CAUSE:** A diagnostic status, loopback, or statistics operation did not provide a buffer large enough for the link driver to return all the driver information being requested.

**ACTION:** All such errors are caused by version mismatches between the link driver and the modules requesting the data, or bugs in the modules requesting the data. Contact your Hewlett-Packard Representative to determine if additional software patches are already available to correct this problem.

228 (\$E4) **MESSAGE: One or more bad unbind parms passed by upper level protocol.**

**CAUSE:** The driver received an unbind (separate) from an upper layer protocol module, but the specified rendezvous ID was out of range of

legal rendezvous ID values for this driver, or the corresponding rendezvous table entry state indicated no bind had occurred or an unbind had already occurred. The protocol was supposed to pass a rendezvous ID value previously returned to it by the driver, when that protocol did a bind. The protocol may be trying to unbind twice, or unbind from the wrong link.

**ACTION:** This problem most likely occurred while stopping a running network subsystem. Attempt to determine which subsystem was being stopped when the error occurred and, if possible, which upper layer protocol was unbinding. Future attempts to start that same protocol will probably fail until the entire network is stopped or the system is rebooted. Either there is a bug in the driver or upper layer protocol software, memory data corruption has occurred, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

229 (\$E5)

**MESSAGE: An illegal bind ID was encountered.**

**CAUSE:** The driver finished transferring a data frame and was preparing to pass it to an upper layer protocol, when it discovered the rendezvous ID associated with the frame was out of range of legal ID values for this driver. The driver avoided a SysAbort by making this check.

**ACTION:** This is a fatal error. The driver will attempt to perform a dump of all host context memory data structures, then reset itself and continue. Save the resulting `Netdmp###.pub.sys` dump data file for analysis by Hewlett-Packard. If the problem occurs frequently, wait for the problem to occur, then quickly take a system memory dump. See Appendix A , “Submitting a CR.”

233 (\$E9)

**MESSAGE: Unsupported packet format.**

**CAUSE:** After transferring a received data frame from the adapter card to host memory, the link driver found that the frame was not deliverable because it utilizes frame features not supported by this driver.

**ACTION:** This event is informational. No action is required. The driver dropped the frame and incremented a statistic. However, if the application sending these frames is a required part of your environment, you may need to contact your Hewlett-Packard Representative for assistance.

235 (\$EB)

**MESSAGE: The same upper level protocol attempted to bind twice.**

**CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module, but when it attempted to save information about that protocol’s address (SAP), a lower-level routine reported an error because the address is already in the driver’s rendezvous table.

**ACTION:** Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was

binding. If a duplicate address is in the table already, either an attempt has been made to start the same subsystem twice, or a previous instance of that subsystem did not properly shut down; a system reboot may be required to shut it. Otherwise there could be a driver bug, if two protocols are truly different but the driver thinks they are the same. Shut down the network and restart it. If the problem happens every time, see Appendix A , “Submitting a CR.”

239 (\$EE)

**MESSAGE: Bad message for current state.**

**CAUSE:** This is a generic error, reported when the driver received a request from outside when the driver was not in a state where it could process that type of request, or the when driver has already processed a message of this type and was not expecting another. The driver may have encountered a previous fatal error, may be in the middle of startup, shutdown, or a recovery or dump operation, a message may have arrived too late, or the sender may be confused.

**ACTION:** If the message has replies, the driver will attempt to send an error reply back to the sender. If another error has already occurred, this event may be ignored. Otherwise, if the problem happens frequently, or if external subsystems are noticeably impacted after the error, see Appendix A , “Submitting a CR.”

240 (\$F0)

**MESSAGE: Unknown file record format.**

**CAUSE:** The trace or log formatter attempted to decode a record header to obtain basic information such as length and version, but on inspection found that the record does not appear to be a 100VG-AnyLAN or HP-PB 100Base-T record supported by this formatter.

**ACTION:** The formatter will attempt to print this record in raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if VG FOS patches are already available to update the software on your current system.

243 (\$F3)

**MESSAGE: Unknown data version.**

**CAUSE:** The trace or log formatter attempted to decode a record header to obtain general information such as link type and link name, but on inspection found that the version of that data was not supported by this formatter, thus no other fields could be decoded.

**ACTION:** The formatter will attempt to print this record in raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if VG FOS patches are already available to update the software on your current system.

244 (\$F4)      **MESSAGE: Error encountered while decoding an entry.**

**CAUSE:** The trace or log formatter encountered an entry having an unrecognized entry tag value. The formatter cannot decode entries of this type.

**ACTION:** The formatter will attempt to print this entry in raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if VGFOS patches are already available to correct this problem.

245 (\$F5)      **MESSAGE: Incomplete data was encountered.**

**CAUSE:** The trace or log formatter attempted to decode an entry, but on inspection found that the entry did not contain at least the minimum length of data required for this version of the data.

**ACTION:** The trace or log file may be corrupted, or you may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. The formatter will attempt to print this entry in raw form. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if VGFOS patches are already available to correct this problem.

## Logging Sublocation Codes

The following are the logging sublocation codes reported by the 100VG-AnyLAN and HP-PB 100Base-T link drivers, including sublocation code, log class, log message, and the appropriate cause of and action to take for each.

For meanings of 32-bit status values generated by the driver, refer to the sections on status values.

1020 CLAS0001      **MESSAGE: Cannot freeze a memory area.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was preparing to send configuration data to the driver, but encountered an error while trying to freeze that data into memory (“Cause” = 32-bit status from the call to freeze).

**ACTION:** The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

1040 CLAS0001      **MESSAGE: Cannot send a port message.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was preparing to send configuration data to the driver, but encountered an error while trying to send the port

message (“Cause” = 32-bit status from the call to `send_msg`).

**ACTION:** There may be a system problem, or another subsystem has already shut the driver down while this one was trying to start it. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Retry the operation. If this does not help, try stopping all networks using the link, then retry. If the problem still persists, halt the system and take a memory dump, then see Appendix A , “Submitting a CR.”

1060 CLAS0001 **MESSAGE: An unexpected timeout occurred.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, then encountered a timeout while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`, saying there was a timeout).

**ACTION:** The link driver is probably hung because of a problem in the driver, or the driver may have sent the wrong message back. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Perform a `:LINKCONTROL @` command to see if an entry exists for the linkname being started. If so, then run the VBPBA diagnostic tool and attempt to force a driver dump. If that works, save the resulting `NETDMP##.PUB.SYS` file for analysis by Hewlett-Packard. Otherwise, halt the system and take a memory dump. The dump should tell Hewlett-Packard what actions the driver took. See Appendix A , “Submitting a CR.”

1080 CLAS0001 **MESSAGE: Did not receive an expected port message.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, then encountered an error while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`).

**ACTION:** There may be a system problem with message ports, or the link driver may have sent the wrong reply message. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Perform a `:LINKCONTROL @` command to see if an entry exists for the linkname being started. If so, then run the VBPBA diagnostic tool and attempt to force a driver dump. If that works, save the resulting `NETDMP##.PUB.SYS` file for analysis by Hewlett-Packard. Otherwise, halt the system and take a memory dump. The dump should tell Hewlett-Packard what actions the driver took. See Appendix A , “Submitting a CR.”



1100 CLAS0001 **MESSAGE:** (*varies*)

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, but the driver returned an error in the reply message (“Cause” is not used here).

**ACTION:** If this error occurs, there may be additional driver-specific errors logged, giving more information about the problem. Attempt to locate those errors and look them up also. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

1110 CLAS0001 **MESSAGE:** No adapter card found on specified HP-PB bus.

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find an HP-PB bus at the hardware path specified in NMCONFIG (“Cause” is not used here).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card is installed in your computer backplane. If the path passes through bus converters, verify the SYSGEN configuration has entries for the higher-level bus converters leading to that path. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as MAPPER, or an online utility such as SYSMAP, to precisely determine your hardware configuration. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1120 CLAS0001 **MESSAGE:** Bad hardware ID or path.

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card at the hardware path specified in NMCONFIG (“Cause” = 32-bit hex value from a system table which holds the first 4 bytes of IODC information from the adapter card).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card is installed in the computer backplane. Verify the Power LED is lit on that adapter. If necessary, reseal the board or contact your Hewlett-Packard Representative for hardware assistance.

- 1130 CLAS0001 **MESSAGE: Adapter card found does not match software configuration.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator found a supported adapter card at the path specified in NMCONFIG, but it was not the right type of card for the link being started.
- ACTION: Correct the network configuration or plug in the correct type of adapter card, and retry the operation. The module configurator cleaned up and returned an error to the subsystem.
- 1140 CLAS0001 **MESSAGE: Cannot create a buffer pool.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to create an outbound buffer pool ("Cause" = 32-bit status from the call to `bmgr_create_pool`).
- ACTION: The system may be low on available memory. The module configurator cleaned up and returned an error to the subsystem.
- Try stopping some applications or sessions and retry the operation. If the problem persists, stop all networking and restart it, or restart the system.
- The buffer size and pool size are not configurable. If the problem still occurs, there could be a problem with the buffer manager. See Appendix A , "Submitting a CR."
- 1150 CLAS0001 **MESSAGE: Cannot create a buffer pool.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to create a control buffer pool ("Cause" = 32-bit status from the call to `bmgr_create_pool`).
- ACTION: The system may be low on available memory. The module configurator cleaned up and returned an error to the subsystem.
- Try stopping some applications or sessions and retry the operation. If the problem persists, stop all networking and restart it.
- The buffer size and pool size are not configurable. If the problem still occurs, there could be a problem with the buffer manager. See Appendix A , "Submitting a CR."
- 1160 CLAS0001 **MESSAGE: Cannot load driver plabel.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load the code for the driver ("Cause" = 32-bit status from the call to `io_get_mgr_entry`).
- ACTION: Probably not all software required to operate this type of link is installed. The software was incorrectly installed, or you may need to

purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

1170 CLAS0001 **MESSAGE: Cannot load a system routine.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load code for the write initiator procedure needed for the link type configured in NMCONFIG ("Cause" = 32-bit status from the call to `hpgetsysplabel`).

**ACTION:** Probably not all software required to operate this type of link is installed. Software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

1200 CLAS0001 **MESSAGE: The link is already started.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created ("Cause" = 32-bit status from the call to `io_configure`).

**ACTION:** This event is informational. No action is required. It probably would not appear as a log event. The module configurator will ignore this warning and continue to bring the link driver up, so that the number of users may be checked. May be followed by another error.

1240 CLAS0001 **MESSAGE: Cannot add driver to I/O system.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but encountered an error which was not one of the legal errors the configurator was able to handle ("Cause" = 32-bit status from the call to `io_configure`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card is installed in your computer backplane. If the path passes through bus converters, verify the SYSGEN configuration has entries for the higher-level bus converters leading to that path. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as MAPPER, or an online utility such as SYSMAP, to precisely determine your hardware configuration. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1400 CLAS0001 **MESSAGE: Cannot open configuration file.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to open the configuration file ("Cause" = 32-bit status from the call to nmconfopen).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify an NMCONFIG.PUB.SYS file exists. If so, try to verify its format matches rest of the operating system. If the system was updated, you may need to run NMMGRVER.PUB.SYS to convert the file to a newer format. If the system was backdated, you may need to restore an older copy of NMCONFIG from a backup tape.

Perform a :LISTF,3 command and make sure the file is not protected by a lockword, and that the user starting the link has the necessary access rights to open the file.

Perform a :DSTAT ALL command and make sure the disk drive the file resides on is present and mounted. Make sure the file resides on Ldev 1. If not, use Fcopy and a file equation with a ";DEV=1" option to force a copy of the file onto Ldev 1.

Perform a :SHOWPROC 1;TREE;SYSTEM command and verify an NMFILE process exists. If not, shut down and restart the system, and retry the operation. If the problem persists, contact your Hewlett-Packard Representative for assistance with NMCONFIG file open problems.

1420 CLAS0001 **MESSAGE: Cannot read from configuration file.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was able to open the configuration file, but encountered an error while trying to data for the link being started ("Cause" = 32-bit status from the call to nmconfopen).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Using NMMGR, verify the path LINK.linkname exists in the NMCONFIG file and is the exact same linkname which is now being started. Verify the "Data=Y" flag is set at the top of that LINK screen (meaning that ENTER has been pressed to save the configuration data there). If the link is being used with NS or DTS, use the VALIDATE function to validate the network configuration. Correct any configuration errors and retry the operation.

1440 CLAS0001 **MESSAGE: Cannot validate configuration file.**

**CAUSE:** After successfully reading configuration data for a link being started, the link module configurator checked the data and found it was not valid ("Cause" is not used here). For NS/3000, probably the link type and NI type do not match.

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Using NMMGR, verify the path `LINK.linkname` exists in the NMCONFIG file and is either a 100VG-AnyLAN or HP-PB 100Base-T link type. If the subsystem being started is NS, verify the link type matches the NI type for the network being started.

If these are not the problem, an incorrect version of NMMGR may have been used to create the NMCONFIG file on your system. Run `NMMAINT.PUB.SYS;PARM=24` to check versions of NMMGR components.

The format of your NMCONFIG file may be incompatible with the link driver version installed on your system. Run `NMMGRVER.PUB.SYS` to update your NMCONFIG file to a newer version, or restore an older version from a backup tape, whichever is appropriate.

If the problem still occurs, contact your Hewlett-Packard Representative for assistance in using NMMGR to configure 100VG-AnyLAN or HP-PB 100Base-T links.

1580 CLAS0001 **MESSAGE: Subsystem is opening link.**

**CAUSE:** An upper level subsystem has called the link module configurator, which has successfully located configuration for the link, and will now proceed to start it up (“Transport” = name of the subsystem which is starting the link, or its subsystem number if the configurator does not know the name).

**ACTION:** None. This is an informational event only.

A similar event will be logged when the link is closed.

1600 CLAS0001 **MESSAGE: Cannot open tracing.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup, but encountered an error trying to open the trace file (“Cause” = 32-bit status from the call to `nmopentrace`).

**ACTION:** This is an informational error that tracing was not started. The link came up, but the error was returned to the upper level subsystem, which may decide to shut the link back down again.

Using NMMGR, check if a filename was configured. If so, verify it is a legal MPE filename. A group and account may need to be specified. Make sure the user starting the link has the necessary capabilities to create that file in the group and account specified.

Check whether the system is low on disk space. Check whether too many `NMTCnnnn.PUB.SYS` trace data files already exist. Purge files as necessary to free up disk space, or add more disks.

Make sure the version of the NMCONFIG file matches the rest of the system software, by running `NMMGRVER.PUB.SYS`.

If none of these suggestions solves the problem, contact your Hewlett-Packard Representative for assistance with configuring a 100VG-AnyLAN or HP-PB 100Base-T link to enable tracing at startup.

1620 CLAS0001 **MESSAGE: Cannot send a trace request.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup. After successfully opened a trace file, the configurator encountered an error trying to enable driver tracing ("Cause" = 32-bit status from the call to `sio_trace_req`).

**ACTION:** This is an informational error that tracing was not enabled. The link came up, but the error was returned to the upper level subsystem, which may decide to shut the link back down again.

Probably the link driver returned an error reply when asked to enable tracing. The driver may have a problem. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , "Submitting a CR."

1630 CLAS0001 **MESSAGE: Cannot stop tracing.**

**CAUSE:** After a link-open operation by an upper level subsystem failed, the link module configurator tried to clean up, but encountered an error trying to disable driver tracing ("Cause" = 32-bit status from the call to `sio_trace_req`).

**ACTION:** This is an informational error that tracing was not disabled. If this error occurs it is because some other error has already occurred. The link open did not succeed.

Probably the link driver returned an error reply when asked to disable tracing. The driver may have a problem, or may already have shut down. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , "Submitting a CR."

1640 CLAS0001 **MESSAGE: Cannot read current multicast list.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator tried to read the current list of multicast addresses produced by the subsystem, but encountered an error on the read ("Cause" = 32-bit status from the call to `ieee_multicast_read`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Run `NMMAINT.PUB.SYS;PARM=74` or `;PARM=77`, for 100VG-AnyLAN or HP-PB 100Base-T respectively, and check that the multicast services are present. If present, try starting a ThinLAN link, to see if the same errors occur; or try restarting the system, then retry the operation. If not present, you may need to reinstall ThinLAN software (which

contains the multicast for 100VG-AnyLAN and HP-PB 100Base-T) or obtain newer patches; contact your Hewlett-Packard Representative for assistance. If reinstalling software does not solve the problem, see Appendix A , “Submitting a CR.”

1650 CLAS0001 **MESSAGE: The link is already started.**

**CAUSE:** During the first link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created and has been opened at least once (“Cause” = 32-bit status from the call to `io_configure`, saying the link is already started).

**ACTION:** This is an informational warning only. The module configurator will leave the link driver up and stop trying to start it again. Usually preceded by another error.

1660 CLAS0001 **MESSAGE: Cannot add to link table.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator successfully started the driver, but encountered an error trying to add the link to the link table (“Cause” = 32-bit status from the call to `lsslktbladd`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Possibly too many links are started.

If not, try starting a different link, to see if that works. If not, first try doing a `:LINKCONTROL @` command to see if any LSS errors occur. If they do, you may need to reinstall MPE software; contact your Hewlett-Packard Representative for assistance. Otherwise try restarting the system to see if it corrects the problem or LINKCONTROL errors. If none of these suggestions helps, see Appendix A , “Submitting a CR.”

1700 CLAS0001 **MESSAGE: Cannot freeze a memory area.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator was preparing to send new configuration data to the driver, but encountered an error while trying to freeze that data into memory (“Cause” = 32-bit status from the call to `freeze`).

**ACTION:** The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation. The driver did not receive the updated configuration data. The module deconfigurator attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1720 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator was preparing to send updated configuration data to the driver, but encountered an error while trying

to send the port message (“Cause” = 32-bit status from the call to send\_msg).

**ACTION:** There may be a system problem, or another subsystem has already shut the driver down while this one was trying to close it. The driver did not receive the updated configuration data. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1740 CLAS0001 **MESSAGE: An unexpected timeout occurred.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, then encountered a timeout while awaiting the correct reply message (“Cause” = 32-bit status from the call to extend\_receive, saying there was a timeout).

**ACTION:** The link driver is probably hung because of a problem in the driver, the driver has already shut down, or the driver may have sent the wrong message back. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1760 CLAS0001 **MESSAGE: Did not receive an expected port message.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, then encountered an error while awaiting the correct reply message (“Cause” = 32-bit status from the call to extend\_receive).

**ACTION:** There may be a system problem with message ports, or the link driver may have sent the wrong reply message. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1780 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, but the driver returned an error in the reply message (“Cause” is not used here).

**ACTION:** If this error occurs, there may be additional driver-specific errors logged, giving more information about the problem. Attempt to locate those errors and look them up also. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1800 CLAS0001 **MESSAGE: Subsystem is closing link.**

**CAUSE:** An upper level subsystem has called the link module deconfigurator, which has successfully located the link, and will now proceed to close it.



**ACTION:** None. This is an informational event only. A similar event was logged when the link was opened.

1820 CLAS0001 **MESSAGE: Cannot stop tracing.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator encountered an error trying to disable driver tracing (“Cause” = 32-bit status from the call to `sio_trace_req`).

This is an informational error that tracing was not disabled. The module deconfigurator reported an error, but attempted to continue with the close.

Probably the link driver returned an error reply when asked to disable tracing. The driver may have a problem, or may already have shut down. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If this happens every time, see Appendix A , “Submitting a CR.”

1840 CLAS0001 **MESSAGE: Cannot read current multicast list.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator tried to read the current list of multicast addresses produced by the subsystem, but encountered an error on the read (“Cause” = 32-bit status from the call to `ieee_multicast_read`).

**ACTION:** The module deconfigurator reported an error, but attempted to continue with the close. Network management services may have been shut down. Otherwise, if this happens every time, see Appendix A , “Submitting a CR.”

1880 CLAS0001 **MESSAGE: Module Configurator cannot access its context area.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator checked its context memory area for validity, but did not find the expected data (“Cause” = 32-bit status saying the context was not accessed).

**ACTION:** The module deconfigurator’s context memory area is being overwritten, or is not working properly. The deconfigurator did not perform the close. If this happens every time, wait until the next time the link is to be closed; instead of closing the link, halt the system and take a memory dump, and see Appendix A , “Submitting a CR.”

1900 CLAS0001 **MESSAGE: Cannot remove driver from I/O system.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete an instance of the link driver, but encountered an I/O system error (“Cause” = 32-bit status from the call to `io_unconfigure`).

**ACTION:** The deconfigurator stopped trying to close the link. However, the driver already received updated configuration data removing the subsystem’s multicast information, but other resources, such as link table, were not updated. The driver may already have been shut down by some other means,

or the system I/O configuration may have been altered. If this happens frequently, see Appendix A , “Submitting a CR.”

1920 CLAS0001 **MESSAGE: Cannot delete from link table.**

CAUSE: During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete the link from the link table, but encountered an error (“Cause” = 32-bit status from the call to `lsslktbldelete`).

ACTION: The module deconfigurator reported an error, but attempted to continue with the close. Network management services may have been shut down. Otherwise, if this happens every time, see Appendix A , “Submitting a CR.”

1940 CLAS0001 **MESSAGE: Cannot release a system plabel.**

CAUSE: During the final link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to release the link’s write initiator procedure (“Cause” = 32-bit status from the call to `hprelsysplabel`).

ACTION: This is an informational warning that some system memory resources may have been lost. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1960 CLAS0001 **MESSAGE: Cannot delete a buffer pool.**

CAUSE: During a link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to delete an outbound buffer pool (“Cause” = 32-bit status from the call to `bmgr_delete_pool`).

ACTION: This is an informational warning that some system memory resources may have been lost. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1980 CLAS0001 **MESSAGE: Cannot delete a buffer pool.**

CAUSE: During a link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to delete a control buffer pool (“Cause” = 32-bit status from the call to `bmgr_delete_pool`).

ACTION: This is an informational warning that some system memory resources may have been lost. Probably not all buffers were freed before the pool was deleted. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

2030 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During final processing of a fatal driver error, the driver attempted a standard auto-reset instead of dying. However, its attempt to send a reset message to itself failed (“Cause” = 32-bit status returned by the call to `send_msg`). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** This error is likely an indication of a more serious system software problem, and may be followed by a system abort. Probably all message frames have been exhausted by some module running on the system. Further recovery actions may not be possible; if the system fails, take a memory dump and reboot.

Otherwise, since the auto-reset failed, the driver dies instead, notifying upper layer software via an asynchronous event message if possible. The network and/or link must now be stopped and restarted. Some upper layers may stop the link on their own in response to an event message. If not, manually stop the network and/or link via the appropriate operator command (for example, `:NETCONTROL STOP`) and then restart it.

2060 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While notifying upper level subsystems that the driver detected a serious error, powerfail, or reset, an attempt to send an asynchronous event message to one of those subsystems failed (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This is a warning that one or more subsystems may not be aware the link has had a problem. The subsystem(s) may have failed to close the driver as part of their shutdown. The driver will continue with its error recovery actions, and no user action is required. If this happens every time, see Appendix A , “Submitting a CR.”

2090 CLAS0001 **MESSAGE: A driver dump was suppressed. Too many dumps already.**

**CAUSE:** During processing of a fatal driver error, the driver attempted a driver dump, but determined it had already dumped too many times since it was initially started (“Cause” is not used here). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** By design, the driver attempts to auto-reset itself after any driver dump. But after 3 dumps, to avoid uncontrollably filling disk space with driver dumps, additional dumps are automatically suppressed. No attempt is made to determine whether the dumps are duplicates of the same problem. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

There is apparently something wrong, since many driver dumps are occurring. Collect binary copies of all dump files (`NETDMP##.PUB.SYS`) on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”

- 2120 CLAS0001    **MESSAGE: Internal error while initiating a dump. Dump failed.**
- CAUSE: During processing of a fatal driver error, the driver attempted a driver dump, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status returned by the call to `vg_start_timer`). This timer was to be used to avoid deadlock in case the dump process did not respond; the driver cannot attempt a dump if a dump timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.
- 2150 CLAS0001    **MESSAGE: Cannot send a port message.**
- CAUSE: During final processing of a fatal driver error, the driver attempted a driver dump, but was unable to send a dump event to the dump process (“Cause” = 32-bit status returned by the call to `send_msg`). If this error is reported, it is because the driver has already encountered some other error.
- ACTION: The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.
- 2180 CLAS0001    **MESSAGE: Internal error while initiating a dump. Dump failed.**
- CAUSE: During processing of some other fatal driver error, the driver attempted a driver dump, but encountered an error. It then encountered this second error while trying to clean up, when attempting to release a dump timer it had obtained (“Cause” = 32-bit status returned by the call to `vg_stop_timer`).
- ACTION: Typically preceded by another error giving better information about the original cause; check log data for that error and look it up also. This error is mainly informational, since the driver did not dump, but may be indicative of other, possibly-related problems. The driver will still attempt to auto-reset itself, up to a total of 12 times or more.
- 2210 CLAS0001    **MESSAGE: Cannot get a system timer.**
- CAUSE: The driver attempted to get a system timer from I/O Services but encountered an error (“Cause” = 32-bit status returned by the call to `io_get_timer`). This is either caused by exhausting all timers due to heavy system load, or by system software either failing to release timers, or having some other bug.
- ACTION: This is a fatal software error. The number of available timers is not configurable, and the driver cannot operate without the necessary timers. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. Typically followed by another error giving more information about what kind of timer the driver needed; check log data for that error and look it up also.

If you suspect a heavy load, you can try shutting some processes down, then restart the driver. Otherwise use Control-B at the console to halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

2240 CLAS0001 **MESSAGE: Cannot reset a system timer.**

**CAUSE:** The driver attempted to reset a system timer previously obtained from I/O Services but encountered an error (“Cause” = 32-bit status returned by the call to `io_reset_timer`). This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a fatal software error. The driver cannot operate without all necessary timers. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, use Control-B at the console to halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

2270 CLAS0001 **MESSAGE: Cannot free a system timer.**

**CAUSE:** The driver attempted to release a system timer previously obtained from I/O Services but encountered an error (“Cause” = 32-bit status returned by the call to `io_release_timer`). This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a warning that some timer resources may have been lost. The driver will attempt to continue. Unless this happens constantly, the system should continue to run. Possibly followed by another error giving more information about what kind of timer the driver was releasing; check log data for that error and look it up also. If the problem happens every time, see Appendix A , “Submitting a CR.”

2530 CLAS0001 **MESSAGE: Pending message table full. Driver not finishing fast enough.**

**CAUSE:** While processing a new blocking request (requiring a driver exit and later reply) and scanning a table in which to save the request, the driver found an unused entry, but an entry counter indicated the table was full (“Cause” is not used here).

**ACTION:** This fatal software error is only caused by a bug, because the in use flags and counters should match. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, use Control-B at the console to halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

2560 CLAS0001 **MESSAGE: Pending message table full. Driver not finishing fast enough.**

**CAUSE:** While processing a new blocking request (requiring a driver exit and later reply) and scanning a table in which to save the request, the

driver was unable to find an unused entry (“Cause” is not used here).

**ACTION:** This fatal software error is only caused by a bug, since message port subqueue controls should have prevented the table from filling. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart.

Most likely some subsystem has sent a message to an incorrect subqueue. If the problem persists, try to determine which program, networking subsystem, or operator command causes it; then activate link tracing, reproduce the problem, and save the resulting trace file (NMTC#####.PUB.SYS) for analysis by Hewlett-Packard. See Appendix A , “Submitting a CR.”

2590 CLAS0001 **MESSAGE: Illegal access to saved port message area.**

**CAUSE:** While completing an old blocking request (requiring a driver exit and later reply), the driver found that the entry in the pending message save area, where the request was supposedly saved, was no longer in use (“Cause” = table entry number where the request was supposed to be).

**ACTION:** This fatal software error is only caused by a bug, because the driver should never be trying to complete the same message twice. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, try to determine which program, networking subsystem, or operator command causes it; then activate link tracing, reproduce the problem, and save the resulting trace file (NMTC#####.PUB.SYS) for analysis by Hewlett-Packard. See Appendix A , “Submitting a CR.”

2620 CLAS0001 **MESSAGE: Illegal access to saved port message area.**

**CAUSE:** While completing an old blocking request (requiring a driver exit and later reply), the driver found that the index specified for an entry in the pending message save area, where the request was supposedly saved, was not within the range of legal table indexes (“Cause” = the bad table entry number specified).

**ACTION:** This fatal software error is only caused by memory corruption or a bug, because the driver should never passing an illegal index. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, try to determine which program, networking subsystem, or operator command causes it; then activate link tracing, reproduce the problem, and save the resulting trace file (NMTC#####.PUB.SYS) for analysis by Hewlett-Packard. See Appendix A , “Submitting a CR.”

2650 CLAS0001 **MESSAGE: Out of internal comm frame resources.**

**CAUSE:** While attempting to request action from its ISR module, the driver found that no available communication frames were available on the referenced queue (“Cause” is not used here). The number of available comm frames is not configurable, and the driver cannot

operate if frames run out.

**ACTION:** This is a fatal software error. After reporting this error, the driver will attempt a driver dump, then will auto-reset and attempt to continue. Typically followed by another error giving more information about what kind of comm the driver was trying to send; check log data for that error and look it up also.

Collect binary copies of all NETDMP##.PUB.SYS dump files on tape for analysis by Hewlett-Packard and see Appendix A , "Submitting a CR."

2680 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While attempting to send a reply to an earlier request message from an upper level subsystem or tool, the driver encountered an error on the send ("Cause" = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is sometimes fatal, causing the remainder of the driver's processing to be skipped. May be followed by another error giving more information about what kind of reply the driver was trying to send; check log data for that error and look it up also. If the link does not seem to be responding, attempt to shut down and restart the network and/or link. If the problem persists, wait until it occurs again, then use Control-B at the console to halt the system, take a memory dump, and reboot. See Appendix A , "Submitting a CR."

2710 CLAS0001 **MESSAGE: Open table full. Too many driver users.**

**CAUSE:** Too many subsystems are attempting to open the driver at the same time, or subsystems are shutting down without closing the driver ("Cause" = maximum number of driver opens allowed).

**ACTION:** The driver allows 11 simultaneous opens. It was not opened by the additional subsystem. Shut down any networking subsystems that are not currently needed and try again.

A side-effect of this error may be that the driver becomes unusable; if so, run VGPBA and execute the Reset function to see if that restores normal operation.

2740 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While starting up the link, the driver attempted to request ADA memory from the MPE I/O system, but encountered an error trying to send a memory request message to the I/O Memory Port ("Cause" = 32-bit status from the call to `send_msg`).

**ACTION:** This is a fatal software error. The driver cannot operate the adapter card without ADA memory. After reporting this error, the driver will return a configuration error, then die and wait to be shut down; the configuration routine should shut it down automatically.

The problem can be caused either by lack of memory or by a bug. If you suspect high memory usage and have the GLANCE tool, run it and check system memory usage. If usage is high, try closing some

applications or subsystems, then retry link startup. If the problem persists, shut down the system to clear memory, then reboot but try starting the link earlier, before too many other applications get going.

If still low on memory, you may need to add more memory hardware. First, however, Hewlett-Packard can try to determine if more memory would help, or if instead there is a bug. Use NMMGR to make sure all logging classes are enabled for the link type, for disk logging. Reproduce the problem, then collect all NM log files (NMLG####.PUB.SYS) and see Appendix A , “Submitting a CR.”

2770 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While shutting down the link, the driver attempted to free ADA memory previously obtained from the MPE I/O system, but encountered an error trying to send a memory request message to the I/O Memory Port (“Cause” = 32-bit status from the call to `send_msg`).

**ACTION:** This is a warning that some memory resources may have been lost. The driver will attempt to continue. Unless this happens frequently, the system should continue to run.

If the problem happens every time, enable link tracing via `:LINKCONTROL` then reproduce the link shutdown problem (the trace file will close automatically). Save the resulting trace file (NMTC####.PUB.SYS) on tape for Hewlett-Packard analysis, and see Appendix A , “Submitting a CR.”

2800 CLAS0003 **MESSAGE: Driver is shutting down.**

**CAUSE:** The driver is being shut down. The last subsystem that was using the driver is now closing it.

**ACTION:** This event is informational only. No action is needed.

2830 CLAS0001 **MESSAGE: No adapter card found on specified HP-PB bus.**

**CAUSE:** During initial driver startup, an HP-PB bus was not found at the hardware path specified in NMCONFIG.

**ACTION:** The driver did not start up. Use NMMGR to verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card is installed in your computer backplane. If the path resides on a bus converter, use SYSGEN to make sure a path to that bus converter exists in the I/O configuration. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as MAPPER, or an online utility such as SYSMAP, to precisely determine your hardware configuration. If necessary, change the SYSGEN or NMCONFIG configurations or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.



- 2860 CLAS0001    **MESSAGE: Bad hardware ID or path.**
- CAUSE: During initial driver startup, a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card was not found at the hardware path specified in NMCONFIG.
- ACTION: The driver did not start up. Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100VG-AnyLAN or HP-PB 100Base-T adapter card is installed in the computer backplane. Verify the Power LED is lit on that adapter. If necessary, contact your Hewlett-Packard Representative for hardware assistance.
- 2890 CLAS0001    **MESSAGE: Cannot install interrupt handler.**
- CAUSE: During initial driver startup, the driver was unable to add its ISR into the MPE I/O system, as an interrupt handler routine for any adapter card interrupts on that EIR bit ("Cause" = 32-bit status returned by the call to `io_config_int`).
- ACTION: The driver did not start up. There is probably an MPE software installation problem, with incomplete or incompatible O/S software. Verify the system is running an MPE release which supports 100-Mbit link drivers. The only other cause is a software bug; see Appendix A , "Submitting a CR."
- 2920 CLAS0001    **MESSAGE: Powerfail detected.**
- CAUSE: During a 100VG-AnyLAN link connect attempt, the driver detected all 1's on a hardware register read, and, upon checking further, saw that its hardware I/O address space was disabled, indicating a powerfail had already occurred.
- ACTION: None. This error can be ignored. Power failures can occur at any moment. The driver was executing at the moment power failed. Power then returned, and the driver ran to completion, noticing this error along the way. Upon exit, the driver was then officially notified of a powerfail by MPE. The driver then attempted powerfail recovery, and should now be operating the same as before.
- 2950 CLAS0001    **MESSAGE 1: Powerfail detected.**
- CAUSE: During a 100VG-AnyLAN link connect attempt, the driver attempted to request a training interval from the hub, but detected all 1's on an MII hardware register read, indicating a powerfail had already occurred.
- ACTION: None. This error can usually be ignored. Power failures can occur at any moment. The driver was executing at the moment power failed. Power then returned, and the driver ran to completion, noticing this error along the way. Upon exit, the driver was then officially notified of a powerfail by MPE. The driver then attempted powerfail recovery, and should now be operating the same as before.
- The link did not connect. If you suspect power did not really fail but the problem persists, the adapter card may be faulty. If retrying the connect

does not help, replace the adapter card.

2950 CLAS0001 **MESSAGE 2: MII read error on adapter card.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver attempted to request a training interval from the hub, but its read from an MII hardware register on the adapter card failed to return the proper acknowledgment bit.

**ACTION:** The link did not connect. MII reads can be sensitive to software timing. If you have GLANCE or a similar tool, run it and check the CPU load on the system. If the load is high, try reducing the CPU load, then retry the connect. If the problem persists, the adapter card has probably failed; replace the adapter card.

2980 CLAS0001 **MESSAGE 1: Powerfail detected.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver attempted to request a training interval from the hub, but detected all 1's on an MII hardware register read, indicating a powerfail had already occurred. The driver was trying to read from a PHY status register to clear it, when the powerfail or error occurred.

**ACTION:** None. This error can usually be ignored. Power failures can occur at any moment. The driver was executing at the moment power failed. Power then returned, and the driver ran to completion, noticing this error along the way. Upon exit, the driver was then officially notified of a powerfail by MPE. The driver then attempted powerfail recovery, and should now be operating the same as before.

The link did not connect. If you suspect power did not really fail but the problem persists, the adapter card may be faulty. If retrying the connect does not help, replace the adapter card.

2980 CLAS0001 **MESSAGE 2: MII read error on adapter card.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver attempted to request a training interval from the hub, but its read from an MII hardware register on the adapter card failed to return the proper acknowledgment bit.

**ACTION:** The link did not connect. MII reads can be sensitive to software timing. If you have GLANCE or a similar tool, run it and check the CPU load on the system. If the load is high, try reducing the CPU load, then retry the connect. If the problem persists, the adapter card has probably failed; replace the adapter card.

3010 CLAS0001 **MESSAGE: Powerfail detected.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver detected all 1's on a hardware register read, and, upon checking further, saw that its hardware I/O address space was disabled, indicating a powerfail had already occurred. The driver was reading from adapter card memory to check a received training frame, when power failed.

**ACTION:** None. This error can be ignored. Power failures can occur at any moment. The driver was executing at the moment power failed. Power then returned, and the driver ran to completion, noticing this error along the way. Upon exit, the driver was then officially notified of a powerfail by MPE. The driver then attempted powerfail recovery, and should now be operating the same as before.

3040 CLAS0001 **MESSAGE 1: Powerfail detected.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver attempted to request a training interval from the hub, but detected all 1's on an MII hardware register read, indicating a powerfail had already occurred. The driver was trying to read from a PHY control register before writing back to it, when the powerfail or error occurred.

**ACTION:** None. This error can usually be ignored. Power failures can occur at any moment. The driver was executing at the moment power failed. Power then returned, and the driver ran to completion, noticing this error along the way. Upon exit, the driver was then officially notified of a powerfail by MPE. The driver then attempted powerfail recovery, and should now be operating the same as before.

The link did not connect. If you suspect power did not really fail but the problem persists, the adapter card may be faulty. If retrying the connect does not help, replace the adapter card.

3040 CLAS0001 **MESSAGE 2: MII read error on adapter card.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver attempted to request a training interval from the hub, but its read from an MII hardware register on the adapter card failed to return the proper acknowledgment bit.

**ACTION:** The link did not connect. MII reads can be sensitive to software timing. If you have GLANCE or a similar tool, run it and check the CPU load on the system. If the load is high, try reducing the CPU load, then retry the connect. If the problem persists, the adapter card has probably failed; replace the adapter card.

3070 CLAS0002 **MESSAGE 2: Link connected.**

**CAUSE:** The first upper layer subsystem to bind to the driver triggered a link connect, which was successful ("Mode" = the connection mode: 100VG, 100Base-TX, or 10Base-T "Duplex" = Full or Half). This event is also logged after the link or cable has been successfully reconnected after being disconnected, or on a link reconnect following a hub retrain, severe line-hit, power failure, or other recoverable error.

**ACTION:** This event is informational only.

No action is needed unless the message appears frequently while the link is up, indicating possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference, and is of the proper UTP category or grade for the type of

link (CAT-5 for HP-PB 100Base-T, CAT-3 or -5 for 100VG-AnyLAN).

3100 CLAS0002 **MESSAGE: Link disconnected.**

**CAUSE:** The last upper layer subsystem has unbound itself from the driver, triggering a link disconnect. This event is also logged if the link unexpectedly drops due to a cable disconnect, hub retrain request, powerfail, severe line hit, or other recoverable error ("Status" = 32-bit status giving the reason for the disconnect, 0 = normal).

**ACTION:** This event is informational only. If the network is being shut down, no action is required.

However, if the link was supposed to be up or the message appears frequently while the link is up, this indicates possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference, and is of the proper UTP category or grade for the type of link (CAT-5 for HP-PB 100Base-T, CAT-3 or -5 for 100VG-AnyLAN).

3130 CLAS0003 **MESSAGE: Driver is starting adapter card.**

**CAUSE:** The driver has completed initial startup of the adapter card, or a restart following a reset, powerfail, dump, or other recoverable condition ("Status" = 32-bit status giving the result of the startup attempt, 0=successful).

**ACTION:** This event is informational. No action is required unless the status is nonzero. Nonzero status indicates the startup failed; this may be preceded by other specific errors.

3160 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** After successful or unsuccessful completion of initial hardware startup, the driver attempted to reply to a pending configuration request from its module configurator, but encountered an error on the send ("Cause" = 32-bit status returned by the call to `vg_dvr_send_reply`).

**ACTION:** This is a fatal software error. It might be caused by heavy CPU load, or by attempting to operate the network subsystem or tool which started the link at too low of a CPU process priority, causing a timeout. Any condition, such as a timeout or abort, which causes the driver's module configurator to cease awaiting the reply and dispose of its reply port, might also cause this error.

The module configurator did not receive the reply, therefore network and/or link startup will fail. The driver now "dies" and awaits a shutdown, which the module configurator should attempt automatically.

3190 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** Following an unsuccessful initial startup of its adapter card, or a restart because of a powerfail or reset, the driver sent a bad reply to

the pending config request message, if any, logged this error, then died (“Cause” = 32-bit status giving the reason startup failed).

**ACTION:** This event indicates a fatal driver software condition. May be preceded by other errors giving more information about the original failure, which may help you determine whether it was a hardware or software problem.

If this occurred on initial startup, the driver’s module configurator should shut the driver down automatically. If not, it may mean the adapter card has failed because of a hardware problem, or that a software reset attempt has failed. The driver may need to be manually shut down and restarted, using an appropriate network subsystem command (such as `:NETCONTROL STOP`). If you wish, you may first try running the VGPBA diagnostic; execute the Reset function to see if that clears the problem.

3220 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 100VG-AnyLAN link connect attempt, the driver was unable to allocate and start or reset its training timer. The timer was to be used to quiesce the driver and ISR prior to link training (“Cause” = 32-bit status returned by the call to `vg_start_timer`).

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. The driver cannot connect the link without the timer, and it will now “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

3250 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** During initial driver startup, the driver encountered an error during configuration (“Cause” = 32-bit status returned by the call to `vg_dvr_port_msg_exec`). Probably there are already too many opens against the driver.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. This error can only be caused by a bug, a mismatch between driver’s state and open table.

The open request failed. If the problem occurs repeatedly, see Appendix A , “Submitting a CR.”

3280 CLAS0003 **MESSAGE: Driver is starting up.**

**CAUSE:** The driver has just completed initial configuration and is now starting up (“Vers” = driver version number, “Pda” = 64-bit pointer to driver context area: Hewlett-Packard use only). This event only occurs on initial startup, not on restarts after powerfails, resets, etc.

**ACTION:** This event is informational. No action is required.

- 3310 CLAS0001 **MESSAGE: Configuration failed.**
- CAUSE: During initial driver startup, the driver encountered an error during configuration, while attempting to request ADA memory from the MPE I/O system (“Cause” = 32-bit status returned by the call to `vg_dvr_port_msg_exec`). Probably a port message could not be sent.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take.
- The open request failed. The driver will now “die” and must be shut down; the module configurator should do this automatically.
- 3340 CLAS0001 **MESSAGE: Configuration failed.**
- CAUSE: While processing a driver open from an upper layer subsystem, which was not the first open against the driver, the driver encountered an error during configuration (“Cause” = 32-bit status returned by the call to `vg_dvr_port_msg_exec`). Probably there are already too many opens against the driver.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take.
- The driver returned a bad result to the subsystem, and the open request failed. The driver will continue to operate all other subsystems as before.
- 3370 CLAS0001 **MESSAGE: Configuration failed.**
- CAUSE: While processing a driver open from an upper layer subsystem, which was not the first open against the driver, the driver encountered an error during configuration (“Cause” = 32-bit status returned by the call to `vg_dvr_send_reply`). Probably a port message could not be sent.
- ACTION: The driver allows 11 simultaneous opens. The open attempt by the additional subsystem failed. Shut down any subsystems that are not currently needed and try again.
- A side-effect of this error may be that the driver becomes unusable; if so, run VGPBA and execute the Reset function to see if that restores normal operation.
- 3400 CLAS0001 **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a new open from an upper layer subsystem, at a time the driver was not able to process these requests, such as during shutdown or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).
- ACTION: The open failed. Check the system console; if the driver is shutting down or doing a dump, wait until that completes. Retry the

operation. If the problem persists, the driver may be broken; run the VGPBA diagnostic and attempt a Reset function. If the problem still persists, run VGPBA, attempt a Dump function, and save the resulting file (NETDMP##.PUB.SYS) for analysis by Hewlett-Packard. If the driver still does not become usable after this, use Control-B at the console to halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

3430 CLAS0001 **MESSAGE: A driver request failed.**

CAUSE: While attempting to forward a diagnostic request to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

3460 CLAS0001 **MESSAGE: Driver encountered a software problem.**

CAUSE: Before attempting to forward a diagnostic request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).

ACTION: If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the diagnostic request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

3490 CLAS0001 **MESSAGE: Link tracing is already disabled.**

CAUSE: The driver received a request to turn link tracing off when it was already off. Typically this condition is caught at the C.I. level, however in this case trace may be under the control of a different mechanism.

ACTION: No action is required; this error is informational only. An error reply was sent in response to the request. Trace was not stopped by this request this time, but it remains off.

3520 CLAS0001 **MESSAGE: A driver request failed.**

CAUSE: While processing a request to turn link trace off, the driver was unable to locate a free storage element in which to save reply information (“Cause” = 32-bit status returned by the call to `vg_dvr_save_msg`).

ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up

that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

3550 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** While attempting to forward a disable-trace request to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

3580 CLAS0001 **MESSAGE: Driver initialization failed.**

**CAUSE:** While processing its very first startup message, the driver encountered a problem (“Cause” = 32-bit status returned by the call to `vg_dvr_initialize`). Probably the configured hardware is not present, is not the correct kind of adapter card, or there was a problem configuring the ISR into the I/O system.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log for that error and look it up also, for more actions to take. The driver will attempt to send an error reply for the startup request. It then enters a “broken” state and awaits a shutdown, which the module configurator should attempt automatically.

3610 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While processing its very first startup message, the driver encountered a problem trying to send a reply to that message (“Cause” = 32-bit status returned by the call to `vg_dvr_send_reply`). Probably an underlying call to `send_msg` has failed.

**ACTION:** The link did not start. This informational error should be preceded by other errors giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Possibly the process which was to receive the reply no longer exists. The error occurred on the reply, so if the caller — typically the I/O system — does exist, it will not receive the reply, and may time out. The hardware path may or may not be usable after this error, so a system reboot may be needed before the next retry, however you may attempt a retry anyway.

3640 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a second copy of the first initialization message it would ever get, indicating a second attempt to start the driver (“Cause” = 16-bit encoded value, giving driver input event code



and current state: HP use only).

**ACTION:** The driver sent an error reply in response to the message. Further action may not be required. If the problem occurs frequently, try to determine what operator commands or actions trigger the error, then see Appendix A , “Submitting a CR.”

3670 CLAS0001 **MESSAGE: Late dump-done message received. Dump took too long.**

**CAUSE:** The driver received a driver-dump completion message when it was not working on a dump (“Cause” = 32-bit status saying there was a bad message for the current state).

**ACTION:** This error is informational only. Probably the Network Dump Process was delayed by other system processing, such that it exceeded the time limit set by the driver. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, after which the driver will now attempt to auto-reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disk activity load before the next attempt.

If load is not the problem, see Appendix A , “Submitting a CR.”

3700 CLAS0001 **MESSAGE: Internal error while initiating a dump. Dump failed.**

**CAUSE:** The driver’s dump timer popped while performing a dump operation (“Cause” = 32-bit status indicating a timeout has occurred). Probably a heavy CPU or disk activity load caused the Network Dump Process to take longer than the time allowed by the driver.

**ACTION:** This error is informational only. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, and by the time this error is logged, the driver is already attempting to auto-reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disk activity load before the next attempt.

3730 CLAS0001 **MESSAGE: Link tracing is already enabled.**

**CAUSE:** The driver received a request to turn link tracing on when it was already on. Typically this condition is caught at the C.I. level, however in this case trace may be under the control of a different mechanism.

**ACTION:** No action is required; this error is informational only. An error reply was sent in response to the request. Trace was not started by this request this time, but it remains on.

3760 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a request to turn link tracing on either too early or too late in the driver’s life cycle, or when the driver was already broken (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** Retry the same trace command later. An error reply was sent in response to the request. Trace was not started by this request this time, and remains off.

3790 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** While processing a request to turn link trace on, the driver was unable to locate a free storage element in which to save reply information (“Cause” = 32-bit status returned by the call to `vg_dvr_save_msg`).

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

3820 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** While attempting to forward an enable-trace request to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

3850 CLAS0001 **MESSAGE: Cannot initiate a dump. Already dumping.**

**CAUSE:** A user attempted to force a driver dump while a previous driver dump was still occurring (“Cause” = 32-bit status saying a driver dump is starting).

**ACTION:** A dump of your problem is already being produced. Wait a minute or two for the dump to finish. Forward the resulting `NETDMP##.PUB.SYS` to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”

3880 CLAS0001 **MESSAGE: A driver dump is starting.**

**CAUSE:** A user is forcing a driver dump to occur, typically via the VGPBA diagnostic tool program (“Cause” = 32-bit status saying the driver dump was forced).

**ACTION:** This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting `NETDMP##.PUB.SYS` file to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”

- 3910 CLAS0001    **MESSAGE: Cannot get ADA memory object.**
- CAUSE: During initial startup, the driver attempted to obtain a memory object via the I/O system, but received a bad status in the reply for that request (“Cause” = 32-bit status from the reply message).
- ACTION: The link did not start, and the driver attempted to send back an error reply in response the configuration request from the module configurator. Probably the amount of frozen memory on the system is very high; if you have the GLANCE tool you can try to check memory usage. Try retrying the operation again later, or first terminate some applications and then retry.
- 3940 CLAS0001    **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a get-memory reply message it was not expecting (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).
- ACTION: The driver may already have changed state because of a shutdown or another problem, in which case this message can be ignored. Otherwise, the I/O system may be confused. Either way, some memory may have been lost. The driver will drop this message without further action. If the problem occurs frequently, see Appendix A , “Submitting a CR.”
- 3970 CLAS0001    **MESSAGE: A driver request failed.**
- CAUSE: While attempting to forward a diagnostic reconnect event to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart. The driver dropped this event message without further action.
- 4000 CLAS0001    **MESSAGE: Cannot release ADA memory object.**
- CAUSE: During shutdown, the driver requested the I/O system to release a memory object, but received an error reply in response (“Cause” = 32-bit status from the `mem_reply` message).
- ACTION: This error should not occur. The driver may be confused, or there is a system problem. However, the driver will ignore the error and attempt to continue with the shutdown. If this problem happens frequently when the driver is shutting down, see Appendix A , “Submitting a CR.”

- 4030 CLAS0001    **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a release-memory reply message it was not expecting (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).
- ACTION: The driver may already have changed state because of a shutdown or another problem, in which case this message can be ignored. Otherwise, the I/O system may be confused. The driver will drop this message without further action. If the problem occurs repeatedly, see Appendix A , “Submitting a CR.”
- 4060 CLAS0001    **MESSAGE: A driver request failed.**
- CAUSE: While attempting to forward a protocol rendezvous (bind) message to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart. The driver dropped this request message without further action, likely resulting in timeouts and failure of the network and/or protocol to successfully start up.
- 4090 CLAS0001    **MESSAGE: Driver encountered a software problem.**
- CAUSE: Before attempting to forward a protocol rendezvous (bind) request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).
- ACTION: If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the rendezvous request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.
- 4120 CLAS0001    **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a request to reset itself too early in the driver’s life cycle before it had ever brought up the adapter card, or at a point late in shutdown when recovery is no longer needed (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).
- ACTION: This error is informational only. If the reset request was manually sent by a user, such as via the VGPBA diagnostic tool, an error reply will be returned; resets are not allowed (or needed) when the driver is in the state it is currently in. If the reset was automatically generated by the driver in response to some serious error it detected,

this log event means it is being ignored.

4130 CLAS0001

**MESSAGE: A driver request failed.**

**CAUSE:** While attempting to forward a protocol separate (unbind) message to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart. The driver dropped this request message without further action, likely resulting in timeouts and failure of the network and/or protocol to cleanly shut down.

4134 CLAS0001

**MESSAGE: Driver encountered a software problem.**

**CAUSE:** Before attempting to forward a protocol separate (unbind) request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).

**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the separate request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

4140 CLAS0001

**MESSAGE: A driver request failed.**

**CAUSE:** While attempting to forward a diagnostic or LINKCONTROL statistics request to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart. The driver dropped this request message without further action, likely resulting in timeouts and possibly a hung C.I. or program session. A system reboot may be required to recover from that session hang.

4144 CLAS0001

**MESSAGE: Driver encountered a software problem.**

**CAUSE:** Before attempting to forward a diagnostic or LINKCONTROL statistics request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).

**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the statistics request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

4150 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During an attempt to establish the proper stack context within which to begin 100VG-AnyLAN link training, the driver encountered an error trying to start a timer (“Cause” = 32-bit status returned by the call to `vg_start_timer`).

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. The driver made no attempt to finish the link training request or reply to its ISR. Most likely the previous timer error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

4180 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While attempting to forward successful or unsuccessful 100VG-AnyLAN link training results to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. The driver made no further attempt to finish link training since it cannot communicate with its ISR. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

4210 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** During a link close operation, the driver encountered an error while unconfiguring the link (“Cause” = 32-bit status returned by the call to `vg_dvr_port_msg_exec`).

**ACTION:** The subsystem close did not work. The driver attempted to return an error reply to the sending subsystem. Reaction to that message is subsystem-dependent. Probably the subsystem passed an invalid open ID, or tried to close a link it had not opened. If this problem happens every time the same subsystem is closed, submit an CR against that subsystem, describing the problem; see Appendix A , “Submitting a CR.”

4240 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During a link close operation, the driver encountered an error while sending an unconfigure reply message to an upper layer

subsystem (“Cause” = 32-bit status returned by the call to `vg_dvr_send_reply`).

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. The subsystem’s access to the link was closed, but the subsystem did not get the reply; reaction to this situation is subsystem-dependent. The subsystem have already terminated. If this problem happens every time the same subsystem is closed, submit an CR against that subsystem, describing the problem; see Appendix A , “Submitting a CR.”

The driver may now enter a broken state and not respond to further requests, requiring a system reboot to completely shut the driver down. If other subsystems still need to use the link, if you wish you may try running the VGPBA diagnostic; execute the Reset function to see if that restores access for the other subsystems, until a reboot can happen.

4270 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received an unconfigure request message before it received its first configure request (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** This error is informational only. The driver attempted to return an error reply to the sending subsystem. If this problem happens frequently, try to determine what actions lead to the problem, then see Appendix A , “Submitting a CR.”

4300 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** While processing a diagnostic input-output request message, the driver was unable to locate a free storage element in which to save reply information (“Cause” = 32-bit status returned by the call to `vg_dvr_save_msg`).

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. The driver may not attempt to reply to this request; if not, the session which sent it may hang. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

4330 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** While processing a diagnostic input-output request message, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. The driver may not attempt to

reply to this request; if not, the session which sent it may hang. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

4360 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** Before attempting to forward a diagnostic input-output request message to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests request (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the diagnostic request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

4390 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** While processing a diagnostic register read-write request message, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. The driver may not attempt to reply to this request; if not, the session which sent it may hang. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

4400 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** While attempting to forward a diagnostic hardware-control request to its ISR, the driver encountered an error (“Cause” = 32-bit status returned by the call to `vg_dvr_copy_send_to_isr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

4410 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** Before attempting to forward a diagnostic hardware-control request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).



**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the diagnostic request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

4420 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** Before attempting to forward a diagnostic register read-write request message to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests request (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the diagnostic request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

4450 CLAS0001 **MESSAGE: (*varies*)**

**CAUSE:** A general error occurred during processing of an input event by the main driver DVR state machine, and the code where the error occurred neglected to specify a sublocation code value, so the value 4450 was used.

**ACTION:** Note all logged error messages. The main problem is described by whatever was logged. But the driver also needs to be fixed to specify a unique sublocation for those errors. Please see Appendix A , “Submitting a CR.”

4480 CLAS0001 **MESSAGE: Unimplemented operation attempted.**

**CAUSE:** The main driver DVR state machine was passed an input event for which there is no processing implemented. Either there is a driver bug or some data corruption has occurred (“Cause” = 32-bit ordinal value of the input event code: HP use only).

**ACTION:** Try to determine which operator or program actions led to this error. Then see Appendix A , “Submitting a CR.”

After this problem occurs, the driver will enter a “broken” state where it may not respond to further requests. If possible, run the VGPBA tool program, and use it to force a driver dump, then forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis. After a dump, the driver will attempt to auto-reset itself and continue. You may also use VGPBA to attempt a manual reset of the driver, after which it may be possible to continue.

4510 CLAS0001 **MESSAGE: Driver received an unknown port message.**

**CAUSE:** Some module on the system has sent the driver a message having an unknown message descriptor. The driver does not implement

any messages having that descriptor (“Cause” = 32-bit value of the message descriptor field).

**ACTION:** The driver took no action on the message, and dropped it. However, if the problem occurs frequently, your system may not be set up properly. The driver traces the message which it received. If you can repeat the problem, first enable link tracing. Then reproduce the problem, stop tracing, and save the resulting trace data file for analysis by Hewlett-Packard. See Appendix A , “Submitting a CR.”

4730 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During ISR processing, an attempt by the ISR to wake up the driver by sending a message to it failed (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is likely an indication of a more serious system software problem, and may be followed by a system abort. Probably all message frames have been exhausted by some module running on the system. Further recovery actions may not be possible; if the system fails, take a memory dump and reboot.

The driver wakeup did not occur, so a link hang is now possible. It is also possible that if a system abort does not occur, other activity, such as transmissions by upper layer protocols, will awaken the driver, such that normal operation continues. If the link hangs and a system abort does not occur, try using VGPBA to attempt a manual reset, or try stopping and restarting all networks using the link driver.

4760 CLAS0001 **MESSAGE: Out of internal comm frame resources.**

**CAUSE:** While attempting to request action from its DVR module, the driver’s ISR found that no available communication frames were available on the referenced queue (“Cause” is not used here).

**ACTION:** This is a fatal software error. The number of available comm frames is not configurable, and the driver cannot operate if frames run out. After reporting this error, the driver will attempt a driver dump, then will auto-reset and attempt to continue. Typically followed by another error giving more information about what kind of comm the driver was trying to send; check log data for that error and look it up also.

Collect binary copies of all dump files (`NETDMP##.PUB.SYS`) on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”

4790 CLAS0001 **MESSAGE: General error trying to get a buffer.**

**CAUSE:** While attempting to request action from its DVR module, the driver’s ISR found that no available communication frames were available on the referenced queue (“Cause” is not used here).

**ACTION:** The driver logs this error, then attempts to continue. However, the problem could indicate some serious internal problems within the

buffer manager or its data structures, or with the way the system is configured. Note all log messages, especially the “Cause” status for this error, and see Appendix A , “Submitting a CR.” If the problem persists, take a system memory dump immediately after the problem has occurred.

4820 CLAS0001 **MESSAGE: General error trying to get a buffer.**

**CAUSE:** When attempting to post a queued request for a new buffer manager buffer from a read pool, to replenish the inbound buffer cache for one of its bound protocols, the driver’s ISR encountered an error that was not one of the few legal errors it expected, or was able to handle (“Cause” = 32-bit status returned by the call to `bmgr_get_buffer`).

**ACTION:** The driver logs this error, then attempts to continue. However, the problem could indicate some serious internal problems within the buffer manager or its data structures, or with the way the system is configured. Note all log messages, especially the “Cause” status for this error. If the problem persists, wait until it occurs again, then use Control-B at the console to halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

4850 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While attempting to send a reply to an earlier request message forwarded by the driver from an upper level subsystem or tool, the driver’s ISR encountered an error on the send (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is sometimes fatal, causing the remainder of the driver’s processing to be skipped. May be followed by another error giving more information about what kind of reply the ISR was trying to send; check log data for that error and look it up also. If the link does not seem to be responding, attempt to shut down and restart the network and/or link. If the problem persists, wait until it occurs again, then use Control-B at the console to halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

4880 CLAS0001 **MESSAGE: Driver could not identify the expected PHY on card.**

**CAUSE:** After verifying the PHY chip on the adapter card had been successfully reset, the driver checked the ID of the PHY, but found it did not match any ID expected for this kind of adapter card (“Cause” = 32-bit PHY ID obtained from the card).

**ACTION:** Replace the adapter card. The motherboard and PMC board may be mismatched, the PHY chip may have gone bad, or your software may be out of date. Only the upper 12 bits of the ID need to match the expected value, which varies depending on adapter card type.

The link did not connect. Following this error, the driver may “die” and require a manual shutdown of the network. If the same problem persists even after replacement with a known good card, see Appendix A , “Submitting a CR.”

- 4910 CLAS0001    **MESSAGE: Driver could not identify LAN controller on card.**
- CAUSE: After initializing the PCI bus on the adapter card, the driver checked the ID of the LAN controller chip, but found it did not match any of the known ID's expected ("Cause" = 32-bit chip ID obtained from the card).
- ACTION: Replace the adapter card.
- The link did not start. If the same problem persists even after replacement with a known good card, contact Hewlett-Packard; your software could be out of date, but a patch may be available. Or, depending on the exact cause, a knowledgeable Hewlett-Packard Support Representative may be able to use VGPBA diagnostics to modify your adapter card's EEPROM to work temporarily with your older software.
- 4940 CLAS0001    **MESSAGE: Driver could not identify PCI controller on card.**
- CAUSE: After trying repeatedly, the ID the driver is still receiving the wrong ID from the PCI controller chip on the adapter card ("Cause" = the last 32-bit chip ID obtained from the card).
- ACTION: Replace the adapter card.
- The link did not start. If the same problem persists even after replacement with a known good card, contact Hewlett-Packard: your software could be out of date, but a patch may be available. It is unlikely this would be a system HP-PB bus hardware problem.
- 4970 CLAS0001    **MESSAGE: Powerfail detected.**
- CAUSE: A power failure appears to have occurred during a hard reset of the adapter card during startup ("Cause" is not used here).
- ACTION: This is an informational error only. The driver should have then attempted to recover from the powerfail. If you suspect a powerfail has not occurred, and the same problem occurs on every restart, the adapter card or system HP-PB hardware may have failed. Replace the adapter card. Then, if the problem still persists, contact your Hewlett-Packard Service Representative for help in diagnosing your system hardware.
- 5000 CLAS0001    **MESSAGE: Card did not go ready after hard reset.**
- CAUSE: After performing a hard reset of the adapter card during startup, the HP-PB interface chip did not report "ready" status, or reported an error ("Cause" = 32-bit `io_status` value read from the chip).
- ACTION: Replace the adapter card.
- The link did not start. If the same problem persists even after replacement with a known good card, contact your Hewlett-Packard Representative; your software could be out of date, but a patch may be

available. It is unlikely this would be caused by a system HP-PB bus hardware problem.

5030 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to alter the loopback mode during diagnostic testing, the driver read from the network command register on the LAN controller chip of the adapter card, but encountered an error. Most likely a power failure has occurred (“Cause” = 32-bit status returned by the call to `vg_dio_read8`).

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. But if the same problem happens every time, see Appendix A , “Submitting a CR.”

5060 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to alter the loopback mode during diagnostic testing, the driver read from the generic control register on the PHY chip of the adapter card, but encountered an error. Most likely the PHY has failed, but a power failure may have occurred (“Cause” = 32-bit status returned by the call to `vg_mii_read16`).

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

5090 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to alter 100VG-AnyLAN loopback mode during diagnostic testing, the driver read from the PHY control register on the PHY chip of the adapter card, but encountered an error. Most likely the PHY has failed, but a power failure may have occurred (“Cause” = 32-bit status returned by the call to `vg_mii_read16`).

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

5120 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to alter HP-PB 100Base-T loopback mode during diagnostic testing, the driver read from a loopback control register on the PHY chip of the adapter card, but encountered an error. Most likely the PHY has failed, but a power failure may have occurred (“Cause” = 32-bit status returned by the call to `vg_mii_read16`).

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

- 5150 CLAS0001    **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: While attempting to alter 10Base-T loopback mode during diagnostic testing of a 100VG-AnyLAN adapter card, the driver read from a PHY control register in the LAN controller chip of the card, but encountered an error. Most likely the chip has failed, but a power failure may have occurred (“Cause” = 32-bit status returned by the call to `vg_mii_read16`).
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 5180 CLAS0001    **MESSAGE: An unexpected transmit condition was encountered.**
- CAUSE: While attempting to initiate DMA to send some transmit data to the adapter card, driver software found its data structures to be in an unexpected state (“Cause” is not used here). The state of all transmit queues was not one of the legal states predicted at design time.
- ACTION: This is a fatal software error. The driver will not attempt to continue. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, first activate link tracing, reproduce the problem, stop tracing, and save the resulting link trace file. Then see Appendix A , “Submitting a CR.”
- 5210 CLAS0001    **MESSAGE: A data buffer is too long.**
- CAUSE: During diagnostic loopback testing, the driver was asked to prepare a data block for transmission, but the block length or memory allocation was beyond the driver’s DMA capabilities (“Cause” = 32-bit total length of the requested transmission).
- ACTION: This problem should only be seen in diagnostics, however it should not be occurring at all. Specify a shorter loopback length, and see Appendix A , “Submitting a CR.”
- 5240 CLAS0001    **MESSAGE: Driver encountered a software problem.**
- CAUSE: While beginning a 100VG-AnyLAN link training sequence, the driver started to reset the PHY chip, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait for the PHY reset to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

5270 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver found the PHY chip was not reset yet, and started to reset it again, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait again for the PHY reset to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

5300 CLAS0001 **MESSAGE: Adapter card PHY did not finish reset in the time allowed.**

**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver tried 3 times to reset the PHY chip, but it still did not go “ready” (“Cause” is not used here).

**ACTION:** This is a fatal hardware error. Replace the adapter card.

The driver cannot connect the link if the PHY will not reset. The driver will enter a “broken” state and await a manual shutdown by the operator. If you wish you may try running the VGPBA diagnostic and attempt a reset, however it is unlikely this will fix the problem. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

5330 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver started to power up the PHY chip, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait for the PHY power-up to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

- 5360 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** During a 100VG-AnyLAN link training sequence, after powering up the PHY chip, the driver encountered an error while trying to read the PHY ID (“Cause” = 32-bit status from the call to `vg_isr_init_phy_id`). If this error is reported, it is because the driver has already encountered some other error.  
**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. Most likely there is an adapter card hardware problem.
- 5390 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver attempted to enable MII interrupts, but encountered an error trying to read from the serial I/O register on the LAN controller chip (“Cause” = 32-bit status from the call to `vg_dio_read8`). Most likely a powerfail has occurred.  
**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. But if the same problem happens every time, see Appendix A , “Submitting a CR.”
- 5420 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver attempted to disable broadcast packets, but encountered an error trying to read from the network command register on the LAN controller chip (“Cause” = 32-bit status from the call to `vg_dio_read8`). Most likely a powerfail has occurred.  
**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. But if the same problem happens every time, see Appendix A , “Submitting a CR.”
- 5450 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver attempted to clear PHY interrupts, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.  
**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 5480 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver attempted to clear PHY interrupts, but encountered an error trying to



read from the PHY status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

5510 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver attempted to clear PHY statistics, but encountered an error trying to read all statistics from the LAN controller chip (“Cause” = 32-bit status from the call to `vg_isr_read_clr_tlan_stats`). Most likely a powerfail has occurred.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. If the same problem persists, see Appendix A , “Submitting a CR.”

5540 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver attempted to request a test interrupt, but encountered an error trying to read from the PHY control register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

5570 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 100VG-AnyLAN link training sequence, the driver requested a test interrupt, then encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to verify the test interrupt arrives; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

- 5600 CLAS0001    **MESSAGE: Driver encountered a software problem.**
- CAUSE: During a 100VG-AnyLAN link training sequence, the driver received the expected test interrupt, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to wait for the test interrupt to arrive. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see Appendix A , “Submitting a CR.”
- 5630 CLAS0001    **MESSAGE: Driver encountered a software problem.**
- CAUSE: During a 100VG-AnyLAN link training sequence, the driver’s ISR module attempted to send a training request to its DVR module, but encountered an error (“Cause” = 32-bit status returned by the call to `vg_isr_copy_send_to_dvr`). Probably no comm frame was available.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart. The driver stopped trying to connect the link.
- 5660 CLAS0001    **MESSAGE: An expected PHY interrupt did not arrive.**
- CAUSE: During a 100VG-AnyLAN link training sequence, the driver requested a test interrupt from the PHY chip on the adapter card, but received a timeout instead (“Cause” is not used here). The driver cannot connect the link if PHY interrupts do not work.
- ACTION: Replace the adapter card. The link did not connect. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”
- 5690 CLAS0001    **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 100VG-AnyLAN link training sequence, the driver attempted to enable broadcast packets, but encountered an error trying to read from the network command register on the LAN Controller chip (“Cause” = 32-bit status from the call to `vg_dio_read8`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. But if the same problem happens every time, see Appendix A , “Submitting a CR.”

- 5720 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 100VG-AnyLAN link training sequence, the driver attempted to signal a training failure, but encountered an error trying to read from the PHY control register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 5750 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: While beginning a HP-PB 100Base-T connect sequence, the driver started to reset the PHY chip, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait for the PHY reset to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.
- 5780 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence, the driver found the PHY chip was not reset yet, and started to reset it again, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait again for the PHY reset to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.
- 5810 CLAS0001 **MESSAGE: Adapter card PHY did not finish reset in the time allowed.**
- CAUSE: During a HP-PB 100Base-T connect sequence, the driver tried 3 times to reset the PHY chip, but it still did not go “ready” after the reset (“Cause” is not used here).

**ACTION:** This is a fatal hardware error. Replace the adapter card.

The driver cannot connect the link if the PHY will not reset. The driver will enter a “broken” state and await a manual shutdown by the operator. If you wish you may try running the VGPBA diagnostic and attempt a reset, however it is unlikely this will fix the problem. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

5840 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During a HP-PB 100Base-T connect sequence, after resetting the PHY chip, the driver encountered an error while trying to read the PHY ID (“Cause” = 32-bit status from the call to `vg_isr_init_phy_id`). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. Most likely there is an adapter card hardware problem.

5870 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a HP-PB 100Base-T connect sequence, the driver told the PHY to connect or autonegotiate, then encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was used to wait for the link-up signal to arrive. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see Appendix A , “Submitting a CR.”

5900 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During a HP-PB 100Base-T connect sequence, the driver attempted to check for presence of a link signal, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

- 5930 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE:** During a HP-PB 100Base-T connect sequence, the driver attempted to check for presence of a link signal, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 5960 CLAS0001 **MESSAGE: Autonegotiation reports link settings are incompatible with hub.**
- CAUSE:** If this error occurs, it is probably because the link has reported a remote fault. Usually this means the adapter card and the hub or switch to which it is connected, have failed to agree on a link speed and duplex setting acceptable to both.
- ACTION:** Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.
- Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.
- If a crossover cable is being used, make sure it is correctly wired, and that you have software version A00550B0 or later.
- Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.
- 5990 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE:** During a HP-PB 100Base-T connect sequence, the driver found the link was not connected yet, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait again for the link connect to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.
- ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

- 6020 CLAS0001 **MESSAGE: Hub did not report link up within time allowed.**
- CAUSE: If this error occurs, it is because the link did not connect within 25 to 30 seconds after it was instructed to do so.
- ACTION: Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.
- Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.
- If a crossover cable is being used, make sure it is correctly wired, and that you have software version A00550B0 or later.
- Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.
- 6050 CLAS0001 **MESSAGE: Timeout while awaiting link autonegotiation completion.**
- CAUSE: The link appears to be connected, but the driver thinks it is still waiting for it to connect.
- ACTION: This error should not occur. If it happens frequently, see Appendix A , “Submitting a CR.”
- 6080 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence after the link came up, the driver attempted to check the final connect settings, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 6110 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence after the link came up, the driver attempted to check the final connect settings, but encountered an error trying to read from the autonegotiation advertisement register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

- 6110 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence after the link came up, the driver attempted to check the final connect settings, but encountered an error trying to read from the autonegotiation advertisement register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 6140 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence after the link came up, the driver attempted to check the final connect settings, but encountered an error trying to read from the link partner capabilities register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 6170 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence after the link came up, the driver attempted to check the final connect settings, but encountered an error trying to read from the autonegotiation expansion register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 6180 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence after the link came up, the driver attempted to check the final speed and duplex settings, but encountered an error trying to read from the PHY address register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred. This error cannot occur on older PHY chips.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

- 6200 CLAS0001    **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence, the driver attempted to adjust the duplex setting of the LAN controller chip, but encountered an error trying to read from the network command register on that chip (“Cause” = 32-bit status from the call to `vg_dio_read8`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. But if the same problem happens every time, see Appendix A , “Submitting a CR.”
- 6230 CLAS0001    **MESSAGE: Driver encountered a software problem.**
- CAUSE: During a HP-PB 100Base-T connect sequence, after the link failed to connect, the driver started a retry, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to wait for the link to connect. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see Appendix A , “Submitting a CR.”
- 6260 CLAS0001    **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: While a HP-PB 100Base-T link was connected, the driver received a notification the link may be down, but when it went to check, it encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 7010 CLAS0001    **MESSAGE: Driver encountered a software problem.**
- CAUSE: While beginning a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver started to reset the PHY chip, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait for the PHY reset to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better



information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

7040 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, after resetting the PHY chip, the driver attempted to check if the reset had finished, but encountered an error trying to read from the generic status register on the chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

7070 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver found the PHY chip was not reset yet, and started to reset it again, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait again for the PHY reset to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

7100 CLAS0001 **MESSAGE: Adapter card PHY did not finish reset in the time allowed.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver tried 3 times to reset the PHY chip, but it still did not go “ready” (“Cause” is not used here).

**ACTION:** This is a fatal hardware error. Replace the adapter card.

The driver cannot connect the link if the PHY will not reset. The driver will enter a “broken” state and await a manual shutdown by the operator. If you wish you may try running the VGPBA diagnostic and attempt a reset, however it is unlikely this will fix the problem. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

- 7130 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver started to power up the PHY chip, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to wait for the PHY power-up to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.
- If the problem persists, the system may be low on timers; try stopping some applications before retrying again.
- 7160 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, after resetting the PHY chip, the driver encountered an error while trying to read the PHY ID (“Cause” = 32-bit status from the call to `vg_isr_init_phy_id`). If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. Most likely there is an adapter card hardware problem.
- 7190 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver attempted to enable MII interrupts, but encountered an error trying to read from the serial I/O register on the LAN Controller chip (“Cause” = 32-bit status from the call to `vg_dio_read8`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. But if the same problem happens every time, see [Appendix A](#), “Submitting a CR.”
- 7220 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver attempted to clear PHY interrupts, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be

ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see [Appendix A](#) , “Submitting a CR.”

7250 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver attempted to clear PHY interrupts, but encountered an error trying to read from the PHY status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see [Appendix A](#) , “Submitting a CR.”

7280 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver attempted to request a test interrupt, but encountered an error trying to read from the PHY control register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see [Appendix A](#) , “Submitting a CR.”

7310 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver requested a test interrupt, then encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to verify the test interrupt arrives; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

7340 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver received the expected test interrupt, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to wait for the test interrupt to arrive. If this error is reported,

it is because the driver has already encountered some other error.

**ACTION:** This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see [Appendix A](#), “Submitting a CR.”

7400 CLAS0001 **MESSAGE: An expected PHY interrupt did not arrive.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver requested a test interrupt from the PHY chip, but received a timeout instead (“Cause” is not used here). The driver cannot connect the link if PHY interrupts do not work.

**ACTION:** Replace the adapter card. The link did not connect. If the problem persists with a known good card, see [Appendix A](#), “Submitting a CR.”

7430 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver received the expected link-connected interrupt, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to wait for any interrupt to arrive. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see [Appendix A](#), “Submitting a CR.”

7460 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver received a remote fault interrupt, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to wait for any interrupt to arrive. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see [Appendix A](#), “Submitting a CR.”

- 7490 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, when a timeout occurred instead of an interrupt, the driver attempted to check for presence of a link signal, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see [Appendix A](#), “Submitting a CR.”
- 7520 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, when a timeout occurred instead of an interrupt, the driver attempted to check for presence of a link signal, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see [Appendix A](#), “Submitting a CR.”
- 7550 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, when a timeout occurred instead of an interrupt, the driver noticed a remote fault condition, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to wait for any interrupt to arrive. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: The driver should not be stopping a timer here; please see [Appendix A](#), “Submitting a CR.”
- The other problem is a remote fault is being detected; check cabling and configuration settings.
- 7580 CLAS0001 **MESSAGE: Hub did not report link up within time allowed.**
- CAUSE: If this error occurs, it is because the link did not connect within 25 to 30 seconds after it was instructed to do so.
- ACTION: Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.
- Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.

If a crossover cable is being used, make sure it is correctly wired, and that you have software version A00550B0 or later.

Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.

7610 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, the driver attempted to adjust the duplex setting of the LAN controller chip, but encountered an error trying to read from the network command register on that chip (“Cause” = 32-bit status from the call to `vg_dio_read8`). Most likely a powerfail has occurred.

ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. But if the same problem happens every time, see [Appendix A , “Submitting a CR.”](#)

7640 CLAS0001 **MESSAGE: Driver encountered a software problem.**

CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, after the link failed to connect, the driver started a retry, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to wait for the link to connect. If this error is reported, it is because the driver has already encountered some other error.

ACTION: This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see [Appendix A , “Submitting a CR.”](#)

7670 CLAS0001 **MESSAGE: Driver encountered a software problem.**

CAUSE: During a 10Base-T connect sequence on a 100VG-AnyLAN adapter card, after the link failed to connect, the driver started a retry, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to wait for the link to connect. If this error is reported, it is because the driver has already encountered some other error.

ACTION: This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see [Appendix A , “Submitting a CR.”](#)

- 7700 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: While a 10Base-T link on a 100VG-AnyLAN adapter card was connected, the driver received a notification the link may be down, but when it went to check, it encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `vg_mii_read16`). Most likely a powerfail has occurred.
- ACTION: If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see [Appendix A](#), “Submitting a CR.”
- 7820 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: After attempting to connect the link, the driver’s ISR module determined the link did come up, then encountered an error trying to notify the DVR module of the connect (“Cause” = 32-bit status from the call to `vg_isr_copy_send_to_dvr`). Probably no comm frame was available.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart. The driver stopped trying to connect the link.
- 7830 CLAS0001 **MESSAGE: (*Varies*)**
- CAUSE: This is a generic logging location which reports the driver is having trouble connecting the link. The message varies depending on what the problem is.
- After trying repeatedly for 25–30 seconds to connect the link, the driver’s ISR module determined the link did not come up (“Cause” = 32-bit status from giving the reason the latest attempt failed, also explained in the Message).
- ACTION: This is a warning only. It only appears once, and will not appear again until the link is shut down and restarted.
- This informational error should be accompanied by a message specific to the problem. For some reason, the link is not connecting successfully.
- Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.
- Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.
- If a crossover cable is being used, make sure it is correctly wired, and that you have software version A00550B0 or later.

Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.

7850 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While attempting to logically disconnect the link, the driver encountered a problem (“Cause” = 32-bit status from the call to `Vg_isr_call_phy_state_machine`). Probably a power failure or system timer problem has occurred.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. If a power failure has occurred, this error may be ignored; the driver will soon attempt to recover. Otherwise, most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

7880 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** After attempting to disconnect the link, the driver’s ISR module determined the link did disconnect, then encountered an error trying to notify the DVR module of the disconnect (“Cause” = 32-bit status from the call to `Vg_isr_copy_send_to_dvr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

7910 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** After an attempt failed to connect the link, the driver’s ISR module started to prepare for a later retry, then encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to awaken the driver so it could retry the connect; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.



- 7940 CLAS0001    **MESSAGE: Heartbeat timeout. Adapter card appears to be hung.**
- CAUSE: The LAN Controller chip on the adapter card has failed to produce any interrupt from normal activity for over 5 seconds. It has also failed, for an additional 5 seconds, to respond to the driver's inquiry by producing a test interrupt. The driver has decided the card is dead or hung ("Cause" is not used here).
- ACTION: This is a fatal hardware error. Replace the adapter card.
- The driver will enter a "broken" state and await a manual shutdown by the operator. If you wish you may try running the VGPBA diagnostic and attempt a reset. If the problem persists with a known good card, see Appendix A , "Submitting a CR."
- 7970 CLAS0001    **MESSAGE: Driver encountered a software problem.**
- CAUSE: The driver was in the middle of a periodic check of whether the card is still healthy, but encountered an error while trying to get or reset a timer ("Cause" = 32-bit status from the call to `vg_start_timer`). This same timer has been used repeatedly to reawaken the driver so it can check the card, so occurrence of this error probably indicates a larger system problem or corruption of data structures. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.
- 8000 CLAS0001    **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: The driver was in the middle of a periodic check of whether the card is still healthy, but encountered an error trying to read from the generic status register on the PHY chip ("Cause" = 32-bit status from the call to `vg_mii_read16`). Most likely a hardware problem has occurred, not a power failure.
- ACTION: The MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , "Submitting a CR." If a power failure has actually occurred, this error can be ignored; the driver should recover automatically.
- 8010 CLAS0001    **MESSAGE: Driver encountered a software problem.**
- CAUSE: While attempting to de-select a PHY chip during diagnostic loopback testing of the adapter card, the driver encountered some kind of lower level error ("Cause" = 32-bit status from the call to `vg_isr_set_loopback_mode`).

**ACTION:** This informational error is typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Depending on the cause of that error, you may decide that replacement of the adapter card is necessary.

Since diagnostic testing is in progress, the driver should report the error, then attempt to continue. However, later tests may also fail as a result of this error.

8020 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a diagnostic test of adapter card memory, a test segment took too long, so the driver tried to initiate a brief pause, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to awaken the driver so the test could continue. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more, even though this happened during diagnostic testing. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

8030 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While the link was disconnected, the driver received an interrupt from the PHY chip on the adapter card, and began to initiate a link reconnect, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to `vg_stop_timer`). This timer was used to reawaken the driver for a reconnect attempt if no interrupt arrived. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see Appendix A , “Submitting a CR.”

8060 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a link connect attempt, the driver received an interrupt from the PHY chip on the adapter card and passed that to a lower level, but the lower level returned an error (“Cause” = 32-bit status from the call to `vg_isr_call_phy_state_machine`).

**ACTION:** This informational error is typically preceded by another error message giving better information about the original cause; check log

data for that error and look it up also. At this level, the error is just logged, then the driver will attempt to continue, if the lower level error was not already fatal.

8090 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While the link was connected and working, the driver received an interrupt from the PHY chip on the adapter card and passed that to a lower level, but the lower level returned an error (“Cause” = 32-bit status from the call to `vg_isr_call_phy_state_machine`). Probably the link has unexpectedly disconnected.

**ACTION:** This informational error is typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. At this level, the error is just logged, then the driver will attempt to continue, if the lower level error was not already fatal.

8120 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a link connect attempt, an interval timer used to control the PHY chip on the adapter card popped and the driver passed that to a lower level, but the lower level returned an error (in older software, “Cause” is not used here; otherwise “Cause” = 32-bit status from the call to `vg_isr_call_phy_state_machine`).

**ACTION:** This informational error is typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. At this level, the error is just logged, then the driver will attempt to continue, if the lower level error was not already fatal.

8150 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While the link was disconnected, the driver initiated a link reconnect attempt, but received an error from lower level software used to control the PHY chip on the adapter card (in older software, “Cause” is not used here; otherwise “Cause” = 32-bit status from the call to `vg_isr_call_phy_state_machine`).

**ACTION:** This informational error is typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. At this level, the error is just logged, then the driver will attempt to continue, if the lower level error was not already fatal.

8180 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a new bind (rendezvous) from an upper layer protocol, at a time when the driver was not able to process these requests, such as before receiving its initial configuration data, during shutdown, or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

Check the system console; if the driver is shutting down or doing a dump, wait until that completes. In these cases, several protocols may experience this same error. If the driver is not shutting down or dying, the protocol may be sending binds to the driver at the wrong time. See Appendix A , “Submitting a CR,” and file an CR against the network subsystem being started.

8210 CLAS0001 **MESSAGE: One or more bad bind parms passed by upper level protocol.**

**CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module, but the pointer to the information block was not specified (“Cause” is not used here).

**ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

8240 CLAS0001 **MESSAGE: One or more bad bind parms passed by upper level protocol.**

**CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module, but the specified length of the information block header was not the length expected (“Cause” = 32-bit value giving the bad length which was specified).

**ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

- 8270 CLAS0001 **MESSAGE: One or more bad bind parms passed by upper level protocol.**
- CAUSE: The driver received a bind (rendezvous) from an upper layer protocol module, but the specified length of the information block body was not the length expected ("Cause" = 32-bit value giving the bad length which was specified).
- ACTION: This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.
- Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.
- 8300 CLAS0001 **MESSAGE: One or more bad bind parms passed by upper level protocol.**
- CAUSE: The driver received a bind (rendezvous) from an upper layer protocol module, but the specified open ID was out of range of legal open ID values for this driver ("Cause" = 32-bit value giving the bad ID which was specified).
- ACTION: This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.
- Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.
- 8330 CLAS0001 **MESSAGE: One or more bad bind parms passed by upper level protocol.**
- CAUSE: The driver received a bind (rendezvous) from an upper layer protocol module, but the pointer to that protocol's inbound buffer pool was not specified ("Cause" is not used here).
- ACTION: This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

8360 CLAS0001 **MESSAGE: One or more bad bind parms passed by upper level protocol.**

**CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module, but the specified SDI address family was not one of the values supported by the driver ("Cause" = 32-bit value giving the bad address family which was specified).

**ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

8390 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module, but when it attempted to save information about that protocol's inbound buffer pool, a lower level routine reported an error, as described by the Message ("Cause" is not used here). Most likely the either the table is full, there is an internal problem with the Buffer Manager, or the size of physical buffers in the pool is smaller than the minimum supported by the driver.

**ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding.

The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

If the table is full, too many protocols are started; close some unnecessary subsystems and try again. Otherwise there may be something wrong with the buffer pool or Buffer Manager, system memory may be low, or there may be a driver bug. Shut down the network and restart it. If the problem happens every time, see Appendix A , "Submitting a CR."

8420 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module, but when it attempted to save information about that

protocol's address (SAP), a lower-level routine reported an error, as described by the Message ("Cause" = 32-bit encoded value of the SAP being bound). Most likely either the address is already in the driver's table, or the table is full.

**ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding.

The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

If a duplicate address is in the table already, either an attempt has been made to start the same subsystem twice, or a previous instance of that subsystem did not properly shut down; a system reboot may be required to shut it. Otherwise there could be a driver bug, if two protocols are truly different but the driver thinks they are the same. Shut down the network and restart it. If the problem happens every time, see Appendix A , "Submitting a CR."

8450 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module and added it to driver tables, but encountered an error trying to obtain a block of buffers from that protocol's inbound buffer pool ("Cause" = 32-bit status from the call to `vg_isr_fill_buf_cache`). Most likely a serious, unexpected Buffer Manager error was reported on a call to `bmgr_get_buffer`, which was not one of the expected, legal errors the driver is designed to handle.

**ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding.

The bind failed. The driver logged the error, then attempted to clean up, send an error reply message back to the protocol module, and continue. There may be something wrong with the buffer pool or Buffer Manager, system memory may be low, or there may be a driver bug. Shut down the network and restart it. If the problem happens every time, see Appendix A , "Submitting a CR."

8480 CLAS0003 **MESSAGE: Subsystem is binding to link driver.**

**CAUSE:** An upper layer protocol has successfully bound (rendezvoused) to the link driver ("Addr" = 32-bit encoded protocol address (SAP) value for this protocol module). Being bound means the driver can now route incoming data frames to this protocol.

**ACTION:** None. This is an informational message only. A similar message is logged later, when the protocol unbinds. If this is the first bind, the link driver will now attempt to reconnect the link.

- 8510 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: While beginning a driver start or restart operation, the driver tried to set the heartbeat timer, but encountered an error (“Cause” = 32-bit status from the call to `vg_start_timer`). This timer was to be used to periodically awaken the driver so it could verify card health; the driver cannot start if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.
- If the problem persists, the system may be low on timers; try stopping some applications before retrying again.
- 8540 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: While beginning a driver start or restart operation, the driver tried to initialize the adapter card registers, but lower level software reported an error (“Cause” = 32-bit status from the call to `vg_isr_init_card_regs`). If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. If necessary, replace the adapter card.
- 8570 CLAS0001 **MESSAGE: One or more bad unbind parms passed by upper level protocol.**
- CAUSE: The driver received an unbind (separate) from an upper layer protocol module, but the specified rendezvous ID was out of range of legal rendezvous ID values for this driver (“Cause” = 32-bit value giving the bad ID which was specified). The protocol was supposed to pass a rendezvous ID value previously returned to it by the driver, when that protocol did a bind.
- ACTION: This problem most likely occurred while stopping a running network subsystem. Attempt to determine which subsystem was being stopped when the error occurred and, if possible, which upper layer protocol was unbinding.
- The unbind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue. The driver still thinks the protocol is bound. Future attempts to start that same protocol will probably fail until the entire network is stopped or the system is rebooted.
- Either there is a bug in the driver or upper layer protocol software, memory data corruption has occurred, or there is a system software mismatch. You may require additional software patches; contact your



Hewlett-Packard Representative for assistance.

8600 CLAS0001 **MESSAGE: One or more bad unbind parms passed by upper level protocol.**

**CAUSE:** The driver received an unbind (separate) from an upper layer protocol module, but the driver's corresponding rendezvous table entry state indicated no bind had occurred or an unbind had already occurred ("Cause" = 32-bit value giving the bad ID which was specified). The protocol may be trying to unbind twice, or unbind from the wrong link.

**ACTION:** This problem most likely occurred while stopping a running network subsystem. Attempt to determine which subsystem was being stopped when the error occurred and, if possible, which upper layer protocol was unbinding.

The unbind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue. The driver still thinks the protocol is bound. Future attempts to start that same protocol will probably fail until the entire network is stopped or the system is rebooted.

Either there is a bug in the driver or upper layer protocol software, memory data corruption has occurred, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

8630 CLAS0003 **MESSAGE: Subsystem is unbinding from link driver.**

**CAUSE:** An upper layer protocol has begun to unbind (separate) from the link driver ("Addr" = 32-bit encoded protocol address (SAP) value for this protocol module). Once unbound, the driver can no longer route incoming data frames to this protocol.

**ACTION:** None. This is an informational message only. A similar message is logged earlier, when the protocol binds. If this is the last bind, the link driver will now attempt to disconnect the link.

If any errors occur as a result of the unbind, they will appear after, not before, this log event; the unbind will still complete, and the protocol will be successfully unbound.

8660 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** After completing a start or restart operation, the driver's ISR then encountered an error trying to notify the DVR module of the restart completion ("Cause" = 32-bit status from the call to `Vg_isr_copy_send_to_dvr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to "die", then will either attempt an auto-reset or else require a manual shutdown and restart.

- 8690 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: After completing a trace enable request, the driver's ISR then encountered an error trying to notify the DVR module of the request completion ("Cause" = 32-bit status from the call to `Vg_isr_copy_send_to_dvr`). Probably no comm frame was available.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to "die", then will either attempt an auto-reset or else require a manual shutdown and restart.
- 8720 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: After completing a trace disable request, the driver's ISR then encountered an error trying to notify the DVR module of the request completion ("Cause" = 32-bit status from the call to `Vg_isr_copy_send_to_dvr`). Probably no comm frame was available.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to "die", then will either attempt an auto-reset or else require a manual shutdown and restart.
- 8780 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: While initializing for 100VG-AnyLAN link training, the driver's ISR attempted to copy a training frame into adapter card memory, but encountered an error while trying to construct the necessary data structure ("Cause" = 32-bit status from the call to `vg_isr_build_util_step`). Probably no DMA step was available.
- ACTION: This is a fatal error. The link may require a manual shutdown and restart to recover from this error. In later versions, the driver may "die", then will either attempt an auto-reset or else require a manual shutdown and restart. DMA steps are a well-controlled driver resource, and should not run out. If this problem happens repeatedly, see Appendix A , "Submitting a CR."
- 8810 CLAS0001 **MESSAGE: Driver received an unknown port message.**
- CAUSE: The driver received a port message which it does not implement, or containing a function code which it does not implement ("Cause" = 32-bit ISR state machine input event tag value (HP use only)).
- ACTION: This is an informational error only. If this error occurred as part of a driver reset operation, it may be ignored.
- The driver traced the unknown message then ignored it. The driver did not attempt to return an error reply to the message sender. That sender may now be hung, awaiting a reply. Attempt to determine what action

caused the error. Activate link tracing, reproduce the problem, then stop link tracing and save the resulting NMTcnnnn . PUB . SYS trace data file. See Appendix A , “Submitting a CR.”

8840 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a utility register access request from an upper level tool program such as PVGUTIL, at a time when the driver was not able to process these requests, such as before initializing the adapter card, during shutdown, or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** This problem most likely occurred while diagnosing some previous problem. It will not be possible to complete these requests at this time. The driver logged the error, then attempted to send an error reply message back to the sender and continue.

Check the system console; if the driver is shutting down or doing a dump, wait until that completes. If this happens regardless of when the operation is attempted, see Appendix A , “Submitting a CR.”

8870 CLAS0001 **MESSAGE: One or more bad utility parms passed to driver.**

**CAUSE:** The driver received a utility register access request from an upper level tool program such as PVGUTIL, but the register number specified was out of the range of legal register values for the selected register set (“Cause” = 32-bit value of the selected register-set number, not register number: HP use only).

**ACTION:** This is an informational error only. Retry the operation using a legal register number for the register set you have selected.

This problem most likely occurred while diagnosing some previous problem. The driver logged the error, then attempted to send an error reply message back to the sender and continue.

8900 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a utility I/O request from an upper level tool program such as PVGUTIL, at a time when the driver was not able to process these requests, such as initializing the adapter card, during shutdown, or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** This problem most likely occurred while diagnosing some previous problem. It will not be possible to complete these requests at this time. The driver logged the error, then attempted to send an error reply message back to the sender and continue.

Check the system console; if the driver is shutting down or doing a dump, wait until that completes. If this happens regardless of when the operation is attempted, see Appendix A , “Submitting a CR.”

- 8930 CLAS0001   **MESSAGE: Driver encountered a software problem.**
- CAUSE: The driver received a utility I/O request from an upper level tool program such as PVGUTIL, but encountered an error while trying to construct the necessary data structure (“Cause” = 32-bit status from the call to `vg_isr_build_util_step`). Probably no DMA step was available.
- ACTION: This problem most likely occurred while diagnosing some previous problem. The driver logged the error, then attempted to send an error reply message back to the sender and continue. DMA steps are a well-controlled driver resource, and should not run out. If this problem happens repeatedly, note whether you were trying to do a read or a write, then see Appendix A , “Submitting a CR.”
- 8960 CLAS0001   **MESSAGE: Driver encountered a software problem.**
- CAUSE: After completing a utility I/O request, the driver’s ISR then encountered an error trying to notify the DVR module of the request completion (“Cause” = 32-bit status from the call to `Vg_isr_copy_send_to_dvr`). Probably no comm frame was available.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.
- 8990 CLAS0001   **MESSAGE: (*Varies*)**
- CAUSE: A general error occurred during processing of an input event by the main driver ISR state machine, and the code where the error occurred neglected to specify a sublocation code value, so the value 8990 was used.
- ACTION: Note all logged error messages. The main problem is described by whatever was logged. But the driver also needs to be fixed to specify a unique sublocation for those errors. Please see Appendix A , “Submitting a CR.”
- 9020 CLAS0001   **MESSAGE: Unimplemented operation attempted.**
- CAUSE: The main driver ISR state machine was passed an input event for which there is no processing implemented. Either there is a driver bug or some data corruption has occurred (“Cause” = 32-bit ordinal value of the input event code: HP use only).
- ACTION: Try to determine which operator or program actions led to this error. Then see Appendix A , “Submitting a CR.”
- After this problem occurs, the driver will enter a “broken” state where it may not respond to further requests. If possible, run the VGPBA tool program, and use it to force a driver dump, then forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis. After a dump,

the driver will attempt to auto-reset itself and continue. You may also use VGPBA to attempt a manual reset of the driver, after which it may be possible to continue.

9050 CLAS0001 **MESSAGE: An illegal bind ID was encountered.**

**CAUSE:** The driver finished transferring a data frame and was preparing to pass it to an upper layer protocol, when it discovered the rendezvous ID associated with the frame was out of range of legal ID values for this driver (“Cause” = 32-bit value giving the bad ID which was specified). The driver avoided a SysAbort by making this check.

**ACTION:** This is a fatal error. The driver will attempt to perform a dump of all host context memory data structures, then reset itself and continue. Save the resulting NETDMP###.PUB.SYS dump data file for analysis by Hewlett-Packard. If the problem occurs frequently, wait for the problem to occur, then quickly take a system memory dump. See Appendix A , “Submitting a CR.”

9140 CLAS0001 **MESSAGE: Error from upper layer protocol read completer.**

**CAUSE:** The driver finished transferring a data frame and passed it to an upper layer protocol, but the protocol’s read completer returned an error which was not one of the expected, legal errors the driver was able to handle (“Cause” = 32-bit status returned from the read completer).

**ACTION:** This is an informational error only. The driver incremented a statistic, logged the error, then attempted to free the read buffer and continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung.

There may be a problem in the upper layer protocol. Also, if the protocol had already freed the buffer, this may have resulted in a SysAbort from the Buffer Manager. If the problem occurs frequently, start link tracing, reproduce the problem, then stop link tracing and save the resulting NMTIC####. PUB.SYS file for analysis by Hewlett-Packard, and see Appendix A , “Submitting a CR.”

9170 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** The driver finished transferring a data frame, but encountered an error while trying to send the frame to an upper layer protocol via a port message (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is reported at a low level, where the actual send fails. It should be followed by a another error giving more information. Locate that error and look it up also. The driver will now attempt to clean up and continue.

9200 CLAS0001 **MESSAGE: Error from upper layer protocol read completer.**

**CAUSE:** The driver finished transferring a data frame, but encountered an error while trying to send the frame to an upper layer protocol via a port message (“Cause” = 32-bit status returned by the call to

vg\_send\_msg).

**ACTION:** This is an informational error only. The driver has incremented a statistic, logged the error, and will now attempt to free the receive buffer and continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung.

There is probably a problem in the upper layer protocol. Also, if the protocol had already freed the buffer, this may have resulted in a SysAbort from the Buffer Manager. If the problem occurs frequently, start link tracing, reproduce the problem, then stop link tracing and save the resulting NMTC####.PUB.SYS file for analysis by Hewlett-Packard, and see Appendix A , “Submitting a CR.”

9230 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver finished transferring a diagnostic loopback data frame, but then discovered it was either not in loopback mode anymore, or there was no pending diagnostic request message (“Cause” = 32-bit encoded value, giving driver current state: HP use only).

**ACTION:** This problem most likely occurred while diagnosing some previous problem. It an informational error only, and the driver will log it and attempt to continue. If this happens frequently, see Appendix A , “Submitting a CR.”

9260 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a diagnostic loopback test, the driver finished transferring a diagnostic loopback data frame, but encountered an error while trying to stop and release a timer (“Cause” = 32-bit status from the call to vg\_stop\_timer). This timer was used to verify loopback data arrives. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see Appendix A , “Submitting a CR.”

9290 CLAS0001 **MESSAGE: Driver has detected data corruption.**

**CAUSE:** A driver receive-frame DMA operation completed, but in doing a quick check of the DMA'ed data, the driver found all ones in the first 4 words, indicating some kind of driver/adaptor card bug has occurred (“Cause” = 32-bit address of the DMA step against which the corruption was detected). Probably the driver attempted to perform a DMA transfer which was not a 4-byte multiple in length.

**ACTION:** This is a warning that some timer resources may have been lost. The link did not connect. Typically preceded by another error

message giving better information about the original cause; check log data for that error and look it up also. Unless this happens constantly, the system should continue to run, and the driver will probably retry the connect. If the problem happens every time, see Appendix A , “Submitting a CR.”

9320 CLAS0001 **MESSAGE: Powerfail detected.**

**CAUSE:** A driver DMA operation completed, but when the driver read from an adapter card register (`io_dma_link`) to determine where DMA ended, it found all ones. The driver has decided this indicated a power failure has occurred (“Cause” is not used here).

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. But if the same problem happens all the time, see Appendix A , “Submitting a CR.”

9380 CLAS0001 **MESSAGE: Driver is out of DMA resources.**

**CAUSE:** When processing a received data frame, the driver successfully obtained a new buffer, then was unable to obtain a DMA step to transfer the frame into that buffer (“Cause” = 32-bit value of the ring number which was out of steps: HP use only).

**ACTION:** This error indicates a bug in the link driver. The driver is designed to avoid this situation through use of various queues and checks. If the problem happens often, see Appendix A , “Submitting a CR.”

The driver reused the buffer and dropped the received packet. Upper layer protocols typically retransmit lost packets, so operation of the system and applications should continue with only minimal degradation.

9410 CLAS0001 **MESSAGE: Frame received when no queue entry was available.**

**CAUSE:** When processing an interrupt for a received data frame, the driver was not able to locate the adapter card data memory frame containing the data (“Cause” is not used here). The driver thinks there are no more adapter card memory frames in which to receive incoming frames, yet the card has reported another frame anyway. The driver is designed to maintain synchronization with the card, therefore it appears that either an out-of-sync condition exists, or the card has a problem.

**ACTION:** The driver acknowledged and dropped the interrupt and the received packet. Many upper layer protocols typically retransmit lost packets, so operation of the system and applications may continue with only minimal degradation.

Exhausting all receive resources would be a highly unusual condition. If all receive resources have really been exhausted, network load may be extremely high, and/or the HP-PB bus may be preventing frames from being returned to the card in a timely manner; incoming frames

are probably now being dropped. Otherwise there may be a bug in the link driver. If the problem happens often, see Appendix A , “Submitting a CR.”

9440 CLAS0001 **MESSAGE: Frame received when no queue entry was available.**

**CAUSE:** When processing an interrupt for a received diagnostic loopback data frame, the driver was not able to locate the adapter card data memory frame containing the data (“Cause” is not used here).

**ACTION:** This error indicates a bug in the link driver. The driver thinks there are no more adapter card memory frames in which to receive incoming frames, yet the card has reported another frame anyway. The driver is designed to maintain synchronization with the card, therefore it appears that either an out-of-sync condition exists, or the card has a problem.

Note that exhausting all receive resources would be a highly unusual condition, especially for loopback testing. If all receive resources have really been exhausted, the HP-PB bus may be preventing frames from being returned to the card in a timely manner. If the problem happens repeatedly, see Appendix A , “Submitting a CR.”

The driver acknowledged and dropped the interrupt and the received frame. The diagnostic should detect a timeout error then continue.

9470 CLAS0001 **MESSAGE: Adapter card LAN controller reported a fatal error.**

**CAUSE:** The link driver received an adapter check interrupt from the LAN Controller chip on the adapter card, indicating a fatal error has been detected (“Cause” = 32-bit hex value of the channel parameter register in the chip: see the following list).

**ACTION:** This error typically indicates a driver bug has resulted in incorrect use of the LAN Controller chip, however it could also indicate an adapter card hardware problem. The driver will now attempt to perform a dump of all host context data structures and adapter card memory, then reset itself and continue. Decode the “Cause” to determine the next action to take.

The “Cause” field is chip-specific, and is decoded as follows. At the time of the failure:

- Bit 31 is the upper hex bit. Each hex digit is 4 bits long.
- Bit 21 is 1 if a high priority operation was in progress, 0 if normal priority.
- Bit 20 is 1 if the controller was fetching an instruction, 0 if it was transferring frames.
- Bit 19 is 1 if the controller was working on receiving inbound data, 0 if it was a transmitting outbound data.



- Bit 18 is 1 if the controller was attempting to read from adapter card memory, 0 if it was writing.
- Bits 7–0 contain an error code, as follows:
  - \$01 = Bus master data parity error: replace hardware.
  - \$02 = Bus address parity error: replace hardware.
  - \$03 = Master abort: replace hardware first. If problem continues, contact Hewlett-Packard.
  - \$04 = Target abort: replace hardware first. If problem continues, contact Hewlett-Packard.
  - \$05 = List error: driver bug. Save NETDMP##.PUB.SYS file and see Appendix A , “Submitting a CR.”
  - \$06 = Ack error: driver bug. Save NETDMP##.PUB.SYS file and see Appendix A , “Submitting a CR.”
  - \$07 = Interrupt overflow error: driver bug. Save NETDMP##.PUB.SYS file and see Appendix A , “Submitting a CR.”

9480 CLAS0001 **MESSAGE: Adapter card produced an illegal interrupt.**

**CAUSE:** The link driver has received an interrupt from the card during normal operation, but the driver should have specifically disabled that interrupt at startup (“Cause” = 16-bit value of the LAN Controller chip’s host interrupt register: HP use only).

**ACTION:** The driver will attempt to perform a dump of all host context data structures and adapter card memory, then reset itself and continue. Save the resulting NETDMP##.PUB.SYS file for possible analysis by Hewlett-Packard.

But first, replace the adapter card and see if this corrects the problem. If not, see Appendix A , “Submitting a CR.”

9560 (None) **MESSAGE: (None)**

**CAUSE:** 100VG-AnyLAN link training failed because the LAN Controller chip unexpectedly reported a statistics overflow interrupt during 100VG-AnyLAN link training. A hardware failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** The driver cleared statistics already, so none should overflow during link training unless there is a problem.

There could be a hardware or configuration problem with the 100VG-AnyLAN hub or switch. Check the wiring. Try plugging the card into a different port on the 100VG-AnyLAN hub or switch. Replace the

transceiver module in the switch if it has one. If this does not solve the problem, replace the adapter card.

If the problem remains, use NMMGR to modify the LINK configuration for this link, to enable link tracing at startup. Reproduce the problem, then shut down the link and save the resulting NMTCnnnn.PUB.SYS trace data file for analysis by Hewlett-Packard. See Appendix A , “Submitting a CR.”

9590 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because, after the LAN Controller chip reported receiving a training frame, the driver tried to check if the frame was completely transferred into adapter card memory, but detected a powerfail instead. A power failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. If the problem happens every time, see Appendix A , “Submitting a CR.”

9620 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because after the LAN Controller chip reported receiving a training frame, it had still not finished transferring frame data into adapter card memory even after the driver waited 64 microseconds. A hardware failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** Replace the adapter card. If the problem continues, see Appendix A , “Submitting a CR.”

9680 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because the LAN Controller chip unexpectedly reported an interrupt of a type which the driver should have specifically disabled at startup. A hardware failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** Replace the adapter card. If the problem continues, there may be a driver startup bug; see Appendix A , “Submitting a CR.”

9710 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because, after the LAN Controller chip reported a training frame was sent, the driver tried to check if the frame was completely transferred out of adapter card memory, but detected a powerfail instead. A power failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. If the problem happens every time, see Appendix A , “Submitting a CR.”

9740 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because after the LAN Controller chip reported a training frame was sent, it had still not finished transferring frame data out of adapter card memory even after the driver waited 64 microseconds. A hardware failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** Replace the adapter card. If the problem continues, see Appendix A , “Submitting a CR.”

9770 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because after the LAN Controller chip reported a training frame was sent, the driver’s ISR module detected an unexpected connect state. A software failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** This probably indicates a driver bug. If the problem happens frequently, use NMMGR to modify the LINK configuration for this link, to enable link tracing at startup. Reproduce the problem, then shut down the link and save the resulting NMTcnnnn.PUB.SYS trace data file for analysis by Hewlett-Packard. See Appendix A , “Submitting a CR.”

9800 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because, after the LAN Controller chip reported a status interrupt, the driver tried to read the network status register, but detected a powerfail instead. A power failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. If the problem happens every time, see Appendix A , “Submitting a CR.”

9830 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because, after the LAN Controller chip reported a status interrupt, the driver tried to read the PHY status register on the PHY chip, but detected an error. A hardware failure state was then signaled. Probably a powerfail occurred.

If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

9860 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because, after the LAN Controller chip reported a status interrupt, the driver tried to read a statistics register, but detected a powerfail instead. A power failure state was then signaled.

This code would only appear in the formatted PHY chip trace from a 100VG-AnyLAN link connect failure. It would not appear in a log event. Seeing this error implies you are already using link tracing to try to debug a problem, or are analyzing driver context data directly.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. If the problem happens every time, see Appendix A , “Submitting a CR.”

9890 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because, after the LAN Controller chip reported a status interrupt, the driver tried to read the generic register on the PHY chip, but detected an error. A hardware failure state was then signaled. Probably a powerfail occurred.

If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

9920 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because the LAN Controller chip reported a status interrupt, then when the driver tried to read the channel parameter register from the chip, a powerfail was detected instead. A hardware failure state was then signaled.

**ACTION:** If a power failure has actually occurred, this error can be ignored; the driver should recover automatically. Otherwise, the adapter card may have failed, or there may be a driver bug causing the adapter checks. Replace the adapter card.

If the same problem continues to occur, use NMMGR to modify the LINK configuration for this link, to enable link tracing at startup. Reproduce the problem, then shut down the link and save the resulting NMTChnnn.PUB.SYS trace data file for analysis by Hewlett-Packard. See Appendix A , "Submitting a CR."

9950 (None)

**MESSAGE:** *(None)*

**CAUSE:** 100VG-AnyLAN link training failed because the LAN Controller chip unexpectedly reported running out of receive buffers. A hardware failure state was then signaled.

**ACTION:** If the driver was already low on receive buffers at the time the link was trying to reconnect, this error may be ignored; the driver should retry the link connect automatically.

Note that exhausting all receive resources would be a highly unusual condition. If all receive resources have really been exhausted, network load may be extremely high, and/or the HP-PB bus may be preventing frames from being returned to the card in a timely manner.

There could be a hardware or configuration problem with the 100VG-AnyLAN hub or switch. Check the wiring. Try plugging the card into a different port on the hub or switch. Replace the transceiver module in the switch if it has one. If this does not solve the problem, replace the adapter card.

If the problem remains, use NMMGR to modify the LINK configuration for this link, to enable link tracing at startup. Reproduce the problem, then shut down the link and save the resulting NMTChnnn.PUB.SYS trace data file for analysis by Hewlett-Packard. See Appendix A , "Submitting a CR."

9980 CLAS0001 **MESSAGE: Adapter card reported an HP-PB fatal error.**

**CAUSE:** The driver's ISR module awoke to process a DVR request or an interrupt, but after reading status from the HP-PB interface chip on the adapter card, the driver discovered a fatal error bit had been set ("Cause" = 32-bit status value read from the chip: HP use only).

**ACTION:** The driver already verified the bit was not set because of a power failure. The HP-PB chip has signaled a fatal error.

The driver reused the buffer and dropped the received packet. Upper layer protocols typically retransmit lost packets, so operation of the system and applications should continue with only minimal degradation.

There may be a hardware problem with the adapter card or the HP-PB bus. Replace the adapter card.

If the same problem still occurs, there could be excessive activity on the HP-PB bus the card is attached to. Under heavy DMA load, the HP-PB chip might encounter a timeout while trying to complete an HP-PB slave transaction, and post a fatal error. Try to reduce other bus activity by pausing applications. If the system has multiple HP-PB buses, move the card to a less active bus.

If the problem persists, there may be a hardware problem with the HP-PB bus itself. Contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

If the problem still cannot be traced to bus hardware, see Appendix A , "Submitting a CR."

# 17 **PCI 100Base-T Error Messages**

The following error messages gives the meaning of the first 8 bits of 32-bit status values produced by the PCI 100Base-T link driver and its supporting modules. This is the so-called “SDI status” portion. All values are architected, and are intended to provide a generic indication of what the rest of the status means, in a module-independent way.

For more information about the specific status, you must look at the second 8 bits, described in SDI Driver Specific Status Values.

The final (rightmost) 16 bits gives the subsystem number of the module generating the status, or 0 if there was no error or warning.

For the meaning of sublocation codes logged to logfiles of the system console, refer to the section on status values.

## SDI Generic Status Values

- 0 (\$00)      **MESSAGE: No error, info only.**  
CAUSE: None  
ACTION: None
- 1 (\$01)      **MESSAGE: The driver detected an exception in hardware operation.**  
CAUSE: The driver detects an exception in hardware operation. At this state, the only type of requests that would be processed are the diagnostic requests or Module Deconfigurator Call.  
ACTION: Stop the normal operation and execute the diagnostic software.
- 2 (\$02)      **MESSAGE: Adapter card firmware reported an error.**  
CAUSE: The firmware reports an error, at this state, the driver would stop the normal operation and process diagnostic requests or Module Deconfigurator Call.  
ACTION: Stop the normal operation and execute error recovery software.
- 3 (\$03)      **MESSAGE: A power failure occurred.**  
CAUSE: A power failure occurred. The driver failed to process the powerfail recovery.  
ACTION: According to the subsystem.
- 4 (\$04)      **MESSAGE: Error in interface with Operating System.**  
CAUSE: Errors in interfacing with the operating system (example, ports, memory, procedures, I/O services etc.).  
ACTION: According to the situation.
- 5 (\$04)      **MESSAGE: Error in interface with Buffer Manager.**  
CAUSE: An error was detected in interfacing with Buffer Manager (example, Nil buffer pointer in read/write, nil buffer pool ID, etc.).  
ACTION: According to the situation.
- 6 (\$06)      **MESSAGE: General error in operation of link driver software.**  
CAUSE: This is a “catch all” error for the ultimate non-specific driver error.  
ACTION: According to the implementation.



- 7 (\$07)           **MESSAGE: Inadequate resources available to satisfy a request.**  
  
CAUSE: There are inadequate SAP control block, buffers, or link stations available to satisfy the request.  
  
ACTION: According to the situation, close some SAPs/stations or wait.
- 8 (\$08)           **MESSAGE: An adapter card is not responding.**  
  
CAUSE: The driver detects an exception in hardware operation. At this state, the only type of requests that would be processed are the diagnostic requests or Module Deconfigurator Call.  
  
ACTION: Stop the normal operation and execute the diagnostic software.
- 9 (\$09)           **MESSAGE: The require context area was not valid.**  
  
CAUSE: A failure occurred when attempting to dereference an internal link data structure.  
  
ACTION: According to the subsystem; the link may not be able to start properly.
- 10 (\$0A)           **MESSAGE: A data transmission or reception problem occurred.**  
  
CAUSE: The driver encountered an error or unexpected condition when attempting to process transmit or receive data over the link.  
  
ACTION: According to the subsystem.
- 29 (\$41)           **MESSAGE: Could not establish requested connection, but can retry.**  
  
CAUSE: The Connect Request could not establish a requested connection, however, it is a recoverable situation.  
  
ACTION: Start a timer and try again when timer popped.
- 42 (\$2A)           **MESSAGE: Could not establish requested connection, cannot retry.**  
  
CAUSE: The Connect Request could not establish a requested connection and it is not a recoverable situation.  
  
ACTION: Determine the cause for the failure and try again when resolved.
- 43 (\$2B)           **MESSAGE: Could not establish requested connection, no remote response.**  
  
CAUSE: The Connect Request could not establish a requested connection.  
  
ACTION: Check the configuration and make sure the remote system is up and running.
- 44 (\$2C)           **MESSAGE: Remote connections are still active.**  
  
CAUSE: For the Separate Request, there are connections still active on the LSAP, the driver did not close the LSAP or disconnect the

associated connections.

ACTION: Disconnect all the associated connections and try again.

45 (\$2D)

**MESSAGE: Link has lost its connection to the remote link.**

CAUSE: After the link has been established and both link stations are in open state, a link station detected an inoperative condition in either the remote link station or in the transmission medium (the recovery attempt has failed). The driver informs the user that link is inoperative, also, no link station resource has been deallocated.

ACTION: Send a Disconnect Request to the Driver and log the error.

46 (\$2E)

**MESSAGE: Remote link has disconnected.**

CAUSE: For the Disconnect Event, the remote link station issued a Disconnect command to the link station, and the link station has replied that disconnect command and notified the subsystem.

ACTION: According to the subsystem.

47 (\$2F)

**MESSAGE: Link disconnected, although remote has not acknowledged.**

CAUSE: The driver issued a disconnect command to the remote link station as a result of receiving a Disconnect Request. No acknowledgment has been received from the remote link station and the in station has been closed.

ACTION: According to the subsystem.

48 (\$30)

**MESSAGE: An active connection with the remote link already exists.**

CAUSE: The Driver is already configured.

ACTION: According to the subsystem.

81 (\$51)

**MESSAGE: Link sharing conflicts with current usage.**

CAUSE:

- A driver is being exclusively accessed by a subsystem already, no resources have been allocated for the second subsystem.
- A subsystem wants to have exclusive access to a “shared” driver which is currently in use, no resources have been allocated.
- Driver does not support link sharing.
- Configurable parameters conflict.

ACTION: According to the subsystem.

82 (\$52)

**MESSAGE: Configuration file access error.**

CAUSE: A module Configurator/Deconfigurator detected an error in the configuration file on accessing the configuration file.

- ACTION: According to the subsystem.
- 83 (\$53)      **MESSAGE: Error in interface with Link Support Services.**  
CAUSE: A module Configurator/Deconfigurator failed in calling Link Support Services (LSS) procedures.  
ACTION: According to the subsystem.
- 84 (\$54)      **MESSAGE: Error in interface with Trace Services.**  
CAUSE: A module Configurator/Deconfigurator failed to start/stop the TRACE MANAGER, however, the configuration/deconfiguration operation has the completed (example, The Driver has deallocated the Driver's resources).  
ACTION: According to the subsystem.
- 85 (\$55)      **MESSAGE: Resource deallocation error.**  
CAUSE: For the error shutdown handling, all SAPs and all associated link stations are deallocated, and the driver is deconfigured.  
ACTION: None
- 86 (\$56)      **MESSAGE: One or more still active resources were deallocated.**  
CAUSE: For the error shutdown handling, all SAPs and all associated link stations are deallocated, and the driver is deconfigured.  
ACTION: None
- 87 (\$57)      **MESSAGE: Link is already active.**  
CAUSE: The Driver is already configured.  
ACTION: According to the subsystem.
- 121 (\$79)     **MESSAGE: A requested feature is not supported by this link.**  
CAUSE: Feature is not supported/implemented. This might be the result of subsystem "probing" the capability of the driver (example, Connection oriented subsystem over a datagram service).  
ACTION: None
- 122 (\$7A)     **MESSAGE: A requested option is not supported by this link.**  
CAUSE: The Driver understands the option that user requested, however, it does not support the option.  
ACTION: Check Driver ES and make sure you talk to the right Driver.
- 123 (\$7B)     **MESSAGE: Link was expecting optional parameters but they were missing.**  
CAUSE: The Driver was expecting some driver specific information, the driver may or may not be configured (for some drivers, this information may be considered critical; and for some other drivers, this information may be considered optional).

ACTION: According to the subsystem.

124 (\$7C) **MESSAGE: Link did not understand the optional parameters supplied.**

CAUSE: The Driver did not understand the optional parameter in the request message.

ACTION: Check Driver ES and make sure you talk to the right Driver.

125 (\$7D) **MESSAGE: Link type of the named link is not supported.**

CAUSE: The Linkname passed by the Module Configuration Call or Deconfigurator Call is invalid. The particular driver is not configured.

ACTION: Fix the configuration file and try again.

126 (\$7E) **MESSAGE: Link type of the named link is not supported.**

CAUSE: The linktype that stored in the NMCONFIG file which associated with the Linkname in a Module Configurator call is unsupported. The particular driver is not configured.

ACTION: Fix the Configuration file and try again.

127 (\$7F) **MESSAGE: An invalid subsystem open ID was specified.**

CAUSE: The Open ID in the Rendezvous Request or Module Deconfigurator call is invalid. The LSAP is not opened or closed.

ACTION: Use a Valid open ID.

128 (\$80) **MESSAGE: An invalid protocol bind ID was specified.**

CAUSE: The requested Protocol Bind ID does not exist.

ACTION: Make the appropriate changes and reissue the request.

129 (\$81) **MESSAGE: An invalid connection ID was specified.**

CAUSE: The requested Connection ID does not exist.

ACTION: Make the appropriate changes and reissue the request.

130 (\$82) **MESSAGE: Link did not understand the specified address family.**

CAUSE: The Driver detected an error in the address family in the request message.

ACTION: Fix the configuration file and then try again.

131 (\$83) **MESSAGE: Link found an error within the specified address family.**

CAUSE: The Driver detected an error in the address family in the request message.

ACTION: Fix the configuration file and they try again.

- 132 (\$84)      **MESSAGE: An invalid or redundant protocol SAP address was specified.**
- CAUSE: For the Rendezvous Request, the LSAP value is the NULL or Global SAP. For the connect request, this error indicates that this SAP already has a link to the specified RSAP and destination address combination, or the remote SAP specified was the null SAP, global SAP, or a group SAP.
- ACTION: Use an acceptable SAP and Destination Address.
- 133 (\$85)      **MESSAGE: The specified local Protocol SAP was already opened.**
- CAUSE: For the Rendezvous Request, this error indicates that the LSAP has already opened.
- ACTION: Use an acceptable SAP value.
- 161 (\$A1)      **MESSAGE: A request was not accepted due to current state of the link.**
- CAUSE: The requested message cannot be accepted because of the existing state of the link station. (example, A write event message will not be accepted if the link is in the disconnected, opening or closed state).
- ACTION: According to the subsystem.
- 201 (\$C9)      **MESSAGE: A formatter error was detected.**
- CAUSE: A Module Configurator/Deconfigurator failed to start/stop the TRACE MANAGER, however, the configuration/deconfiguration operation has completed (example, The Driver has deallocated the Driver's resources).
- ACTION: According to the subsystem.

## SDI Driver Specific Status Values

The following error messages gives the meaning of the second 8 bits of 32-bit status values produced by the PCI 100Base-T link driver and its supporting modules. This is the so-called “driver status” portion. All values are driver-specific, and are intended to provide additional detail beyond the generic indication provided by the first 8 bits of status.

For information about the generic portion of the status, you must look at the first 8 bits, described in the previous section.

The final (rightmost) 16 bits gives the subsystem number of the module generating the status, or 0 if there was no error or warning.

- 0 (\$00)      **MESSAGE: No error.**  
CAUSE: The operation was successful. No error occurred.  
ACTION: None
- 1 (\$01)      **MESSAGE: Subsystem is opening link.**  
CAUSE: An upper level subsystem has called the link module configurator, which has successfully located configuration for the link, and will now proceed to start it up.  
ACTION: This event is informational. No action is required.
- 2 (\$02)      **MESSAGE: Driver is starting up.**  
CAUSE: The driver has just completed initial configuration and is now starting up.  
ACTION: This event is informational. No action is required.
- 3 (\$03)      **MESSAGE: Driver is starting adapter card.**  
CAUSE: The driver has completed initial startup of the adapter card, or a restart following a reset, dump, or other recoverable condition.  
ACTION: This event is informational. No action is required.
- 4 (\$04)      **MESSAGE: Driver is re-starting adapter card.**  
CAUSE: The driver has completed a restart of the adapter card, following a reset, powerfail, dump, or other recoverable condition.  
ACTION: This event is informational. No action is required.
- 5 (\$04)      **MESSAGE: Link connected.**  
CAUSE: The first upper layer subsystem to bind to the driver triggered a link connect, which was successful. This event is also logged after the link or cable has been successfully reconnected after being disconnected, or on a link reconnect following a severe line hit, hub power loss, or other recoverable error.

**ACTION:** This event is informational. No action is needed unless the message appears frequently while the link is up, indicating possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference, and is of the proper UTP category or grade for the type of link (CAT-5 UTP 100Base-T).

7 (\$07)

**MESSAGE: Link disconnected.**

**CAUSE:** The last upper layer subsystem has unbound itself from the driver, triggering a link disconnect. This event is also logged if the link unexpectedly drops due to a cable disconnect, hub power loss, severe line hit, or other recoverable error.

**ACTION:** This event is informational. No action is required if the network is being shut down. However, if the link was supposed to be up or the message appears frequently while the link is up, this indicates possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference, and is of the proper UTP category or grade for the type of link (CAT-5 for UTP for 100Base-T).

8 (\$08)

**MESSAGE: Driver is shutting down.**

**CAUSE:** The driver is being shut down. The last subsystem that was using the driver is now closing it.

**ACTION:** This event is informational. No action is required.

9 (\$09)

**MESSAGE: Subsystem is binding to link driver.**

**CAUSE:** An upper-layer protocol has successfully bound (rendezvoused) to the link driver. Being bound means the driver can now route incoming data frames to this protocol.

**ACTION:** This event is informational. No action is required. If this is the first bind, the link driver will now attempt to reconnect the link.

10 (\$0A)

**MESSAGE: Subsystem is unbinding from link driver.**

**CAUSE:** An upper-layer protocol has begun to unbind (separate) from the link driver. Once unbound, the driver can no longer route incoming data frames to this protocol.

**ACTION:** This event is informational. No action is required. If this is the last bind, the link driver will now attempt to disconnect the link.

11 (\$0B)

**MESSAGE: Subsystem is closing link.**

**CAUSE:** An upper level subsystem has called the link module deconfigurator, which has successfully located the link, and will now proceed to close it.

**ACTION:** This event is informational. No action is required.

12 (\$0C)

**MESSAGE: Link driver and software were reset.**

**CAUSE:** The link driver was told to reset, or automatically reset itself

following an error.

**ACTION:** None required, this status is informational only. An upper layer protocol previously asked to be notified if a reset occurred in the link driver, and such a reset has occurred, possibly as a result of running diagnostics. However, an earlier error may have also occurred.

13 (\$0D)

**MESSAGE: Powerfail detected.**

**CAUSE:** The driver was notified of a power failure by the I/O system, or detected all 1's on a hardware register read, and, upon checking further, saw that its hardware I/O address space was disabled, indicating a powerfail had already occurred.

**ACTION:** Powerfails should not be detected on PCI platforms (due to UPS support). Verify secure and stable power connections to the system and if the problem continues, contact your HP representative.

14 (\$0E)

**MESSAGE: Cannot release ADA memory object.**

**CAUSE:** During shutdown, the driver requested the I/O system to release a memory object, but received an error reply in response.

**ACTION:** This error should not occur. The driver may be confused, or there is a system problem. However, the driver will ignore the error and attempt to continue with the shutdown. If this happens frequently, see Appendix A , "Submitting a CR,"

15 (\$0F)

**MESSAGE: Driver timed out waiting for ISR to shut down.**

**CAUSE:** During link shutdown, the driver signaled the ISR to shut down, then invoked the ISR. The driver then waited repeatedly for the signal to clear, but it did not.

**ACTION:** This is an informational warning. The driver gave up waiting, and continued with the rest of shutdown. If this happens frequently, see Appendix A , "Submitting a CR."

16 (\$10)

**MESSAGE: Retrying an operation.**

**CAUSE:** An operation which failed or timed out is being tried again. Several retries may be required. If the operation never succeeds, an error may be reported and another action taken.

**ACTION:** No action required, this status is informational only.

17 (\$11)

**MESSAGE: Cannot release a system plabel.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to release the link's write initiator procedure.

**ACTION:** This is an informational warning that some system memory resources may have been lost. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , "Submitting a CR."



- 18 (\$12)      **MESSAGE: Cannot close NM logging.**
- CAUSE: The link module configurator or deconfigurator attempted to close access to the NM logging facility, but encountered an error.
- ACTION: This is an informational warning that the logfile may still be open. Use of the :SWITCHNMLOG command should not be affected, however there may be a delay at system shutdown time. If this happens every time, see Appendix A , “Submitting a CR.”
- 19 (\$13)      **MESSAGE: Cannot unfreeze a memory area.**
- CAUSE: After previously freezing a data structure into system memory, software encountered an error trying to unfreeze the same memory.
- ACTION: This is an informational warning that some system memory resources may have been lost. Software probably continued, ignoring the error. Software may be confused, or the pointer to the memory area may have been changed. If this happens every time, see Appendix A , “Submitting a CR.”
- 20 (\$14)      **MESSAGE: Abnormal interrupts detected by adapter card.**
- CAUSE: While checking the cause of an adapter card interrupt, an abnormal interrupt was found, such as transmit underflow, transmit jabber timeout, receive buffer unavailable, or transmit or receive process stopped.
- ACTION: This event is informational. No action is required. The driver will attempt to recover and continue, sometimes with some frame loss which the upper layer protocols may attempt to recover, depending on which abnormal interrupts occurred. However, most of these interrupts should not occur during normal operation, so if they are occurring frequently, see Appendix A , “Submitting a CR.”
- 22 (\$16)      **MESSAGE: No DMA buffer was available for a received frame.**
- CAUSE: On receipt of an inbound data frame, the driver attempted to dequeue a buffer from the inbound buffer cache for one of the bound protocols, but the cache was empty.
- ACTION: This is an internal warning. The driver may use it to detect the need to request more buffers. Typically the inbound frame is discarded in this case for flow control reasons, instead of being queued.
- 25 (\$19)      **MESSAGE: Cannot initiate a dump. Already dumping.**
- CAUSE: A user attempted to force a driver dump while a previous driver dump was still occurring.
- ACTION: A dump of your problem is already being produced. Wait a minute or two for the dump to finish. Forward the resulting NETDMP##.PUB.SYS to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”

- 26 (\$1A)      **MESSAGE: Internal error while initiating a dump. Dump failed.**  
**CAUSE:** During processing of some other fatal driver error, the driver attempted a driver dump, but encountered an error.  
**ACTION:** This error is mainly informational, since the driver did not dump, but may be indicative of other, possibly-related problems. The driver will still attempt to auto-reset itself, up to a total of 12 times or more.
- 27 (\$1B)      **MESSAGE: Late dump-done message received. Dump took too long.**  
**CAUSE:** The driver received a driver-dump completion message when it was not working on a dump.  
**ACTION:** This error is informational only. Probably the Network Dump Process was delayed by other system processing, such that it exceeded the time limit set by the driver. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, after which the driver will now attempt to auto-reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disk activity load before the next attempt. If load is not the problem, see Appendix A , “Submitting a CR.”
- 28 (\$1C)      **MESSAGE: A driver dump is starting.**  
**CAUSE:** A user is forcing a driver dump to occur, typically via the VGPBA diagnostic tool program.  
**ACTION:** This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”
- 29 (\$1D)      **MESSAGE: A driver dump is starting.**  
**CAUSE:** The driver has requested a dump, and the dump process is logging that the dump is about to occur. This is logged during setup of the dump file.  
**ACTION:** This error is informational only; however, the dump may be occurring because the link driver detected other errors. Look for any other errors logged by the link driver and note them. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”
- 31 (\$1F)      **MESSAGE: A driver dump was suppressed. Too many dumps already.**  
**CAUSE:** During processing of a fatal driver error, the driver attempted a driver dump, but determined it had already dumped too many times since it was initially started.  
**ACTION:** By design, the driver attempts to auto-reset itself after any driver dump. But after 3 dumps, to avoid uncontrollably filling disk space with driver dumps, additional dumps are automatically

suppressed. No attempt is made to determine whether the dumps are duplicates of the same problem. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. There is apparently something wrong, since many driver dumps are occurring. Collect binary copies of all dump files (NETDMP##.PUB.SYS) on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”

34 (\$22)

**MESSAGE: Low on transmit descriptor resources.**

**CAUSE:** This status should not normally be logged externally. It is designed for internal use by the driver to signal that either no transmit descriptor was available when one was requested for a transmit, or that a given transmit was segmented in too many places and needs to be compacted prior to transmission.

**ACTION:** This status should not be logged externally, so if it is seen, see Appendix A , “Submitting a CR.”

35 (\$23)

**MESSAGE: Received and discarded a long frame.**

**CAUSE:** When processing a frame reception, the link driver found that the adapter has indicated the frame data spanned more than a single descriptor, which is not allowed.

**ACTION:** This is a warning only; the driver automatically reset the receive descriptors and continued. However, some frames may have been lost. If the problem occurs often, use link tracing to determine the source of the long frame transmissions.

39 (\$27)

**MESSAGE: The link is already started.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created.

**ACTION:** This event is informational. No action is required. The module configurator will ignore this warning and continue to bring the link driver up, so that the number of users may be checked.

41 (\$29)

**MESSAGE: Driver received an unknown port message.**

**CAUSE:** The driver received a port message which it does not implement, or containing a function code which it does not implement.

**ACTION:** This is an informational error only. If this error occurred as part of a driver reset operation, it may be ignored. The driver did not attempt to return an error reply to the message sender. That sender may now be hung, awaiting a reply. Attempt to determine what action caused the error. Activate link tracing, reproduce the problem, then stop link tracing and save the resulting NMTcnnnn.PUB.SYS trace data file. See Appendix A , “Submitting a CR.”

43 (\$2B)

**MESSAGE: A received frame could not be delivered.**

**CAUSE:** Just before delivering a received data frame to an upper layer

protocol, the driver found that the rendezvous table entry specified in the buffer was not in the proper state.

**ACTION:** This is an internal error which detects a normal race condition. Probably the protocol separated from the driver while a frame destined for it was in motion. The frame was not delivered, and the buffer was silently released. No action is required.

46 (\$2E)

**MESSAGE: Link tracing is already enabled.**

**CAUSE:** The driver received a request to turn link tracing on when it was already on.

**ACTION:** This event is informational. No action is required. An error reply was sent in response to the request. Trace was not started by this request this time, but it remains on.

47 (\$2F)

**MESSAGE: Link tracing is already disabled.**

**CAUSE:** The driver received a request to turn link tracing off when it was already off.

**ACTION:** This event is informational. No action is required. An error reply was sent in response to the request. Trace was not stopped by this request this time, but it remains off.

50 (\$32)

**MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** This is a generic hardware error, reported when any of the driver's hardware access routines reports an error. By itself it is not descriptive of the problem. This error is often seen as a result of previous power failures, MII or EEPROM read/write errors, or other low-level hardware problems.

**ACTION:** When this error occurs as a result of previous errors, it mainly serves as a way to track the sequence of the failure back to what was happening at the time. Check for those errors and look them up for an additional explanation of the problem.

51 (\$33)

**MESSAGE: Bad hardware ID or path.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find a supported PCI 100Base-T adapter card at the hardware path specified in NMCONFIG.

**ACTION:** Verify the path in NMCONFIG is correct and complete, and matches the path where a supported PCI 100Base-T adapter card is installed in the computer backplane. Verify the Power LED is lit on that adapter. If necessary, reseal the board or contact your Hewlett-Packard Representative for hardware assistance.

52 (\$34)

**MESSAGE: Adapter card reported a fatal bus error.**

**CAUSE:** The driver's ISR module awoke to process a DVR request or an interrupt, but after reading status from the adapter card, the driver discovered a fatal error bit had been set.

- ACTION:** The adapter card or system I/O hardware may have failed. Contact your Hewlett-Packard Representative for hardware assistance.
- 54 (\$36)      **MESSAGE: Unable to read from adapter card PCI configuration space.**
- CAUSE:** During driver startup, during a restart following a reset operation, of during processing of a utility register-read request, the driver called the I/O system to read data from an adapter PCI configuration space register, but the UI/O system reported an error.
- ACTION:** The adapter card may have been removed, moved to a different slot, may not be making the proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power on indicator, verify that it is on. Re-seat the board, or if necessary, contact your HP representative for hardware assistance.
- 55 (\$37)      **MESSAGE: Driver could not identify the expected PHY on card.**
- CAUSE:** After verifying the PHY chip on the adapter card had been successfully reset, the driver checked the ID of the PHY, but found it did not match any ID expected for this kind of adapter card.
- ACTION:** Replace the adapter card.
- 56 (\$38)      **MESSAGE: Unable to write to adapter card PCI configuration space.**
- CAUSE:** During driver startup, during a restart following a reset operation, or during processing of a utility register-write request, the driver called the I/O system to write data to an adapter PCI configuration space register, but the I/O system reported an error.
- ACTION:** The adapter card may have been removed, moved to a different slot, may not be making the proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power on indicator, verify that it is on. Re-seat the board, or if necessary, contact your HP representative for hardware assistance.
- 57 (\$39)      **MESSAGE: MII read error on adapter card.**
- CAUSE:** During a link connect, disconnect, or management operation, the driver attempted to read from an MII hardware register in a PHY chip on the adapter card, but the read failed to return the proper acknowledgment bit. This indicates good data was not returned.
- ACTION:** MII reads can be sensitive to software timing. If you have GLANCE or a similar tool, run it and check the CPU load on the system. If the load is high, try reducing the CPU load, then retry the operation. If the problem persists, the adapter card has probably failed; replace the adapter card.
- 58 (\$3A)      **MESSAGE: EEPROM read error on adapter card.**
- CAUSE:** During link startup or a diagnostic operation, the driver attempted to read from an EEPROM non-volatile storage chip on the

adapter card, but the read failed to return one of the necessary acknowledgment bits. This indicates good data was not returned.

**ACTION:** EEPROM reads can be sensitive to software timing. If you have GLANCE or a similar tool, run it and check the CPU load on the system. If the load is high, try reducing the CPU load, then retry the operation. If the problem persists, the adapter card has probably failed; replace the adapter card.

60 (\$3C) **MESSAGE: Adapter card PHY did not finish reset in the time allowed.**

**CAUSE:** During a link connect sequence, the driver tried 3 times to reset the PHY chip, but it still did not go “ready” after the reset.

**ACTION:** This is a fatal hardware error. Replace the adapter card. The driver cannot connect the link if the PHY will not reset. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

62 (\$3E) **MESSAGE: No adapter card found on specified PCI bus.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find an PCI bus at the hardware path specified in NMCONFIG.

**ACTION:** Verify the path in NMCONFIG is correct and complete, and matches the path where a supported PCI 100Base-T adapter card is installed in your computer backplane. If necessary, change NMCONFIG or specify the correct path. The driver automatically configures software to drive any high-level bus converters leading to that path, so there should be no need to install them in SYSGEN, but check SYSGEN for possible path conflicts. If necessary, contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

63 (\$3F) **MESSAGE: Adapter card found does not match software configuration.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found a supported adapter card at the path specified in NMCONFIG, but it was not the right type of card for the link being started.

**ACTION:** Correct the network configuration or plug in the correct type of adapter card, and retry the operation.

75 (\$4B) **MESSAGE: Cannot install interrupt handler.**

**CAUSE:** During initial driver startup, the driver was unable to add its ISR into the MPE I/O system, as an interrupt handler routine for any adapter card interrupts on that EIR bit.

**ACTION:** The driver did not start up. There is probably an MPE software installation problem, with incomplete or incompatible O/S software. Verify that the I/O path specified for the adapter card for a supported adapter. The only other cause is a software bug; see

Appendix A , “Submitting a CR.”

76 (\$4C)

**MESSAGE: Cannot get ADA memory object.**

**CAUSE:** During initial startup, the driver attempted to obtain a memory object via the I/O system, but received a bad status in the reply for that request.

**ACTION:** Probably the amount of frozen memory on the system is very high; if you have the GLANCE tool you can try to check memory usage. Try retrying the operation again later, or first terminate some applications and then retry.

78 (\$4E)

**MESSAGE: Cannot reset a system timer.**

**CAUSE:** The driver attempted to get a system timer from I/O Services but encountered an error. This is either caused by exhausting all timers due to heavy system load, or by system software either failing to release timers, or having some other bug.

**ACTION:** This is a fatal software error. The number of available timers is not configurable, and the driver cannot operate without the necessary timers. Typically followed by another error giving more information about what kind of timer the driver needed; check log data for that, see Appendix A , “Submitting a CR.”

79 (\$4F)

**MESSAGE: Cannot free a system timer.**

**CAUSE:** The driver attempted to release a system timer previously obtained from I/O Services but encountered an error. This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a warning that some timer resources may have been lost. Possibly followed by another error giving more information about what kind of timer the driver was releasing; check log data for that error and look it up also. If the problem happens every time, see Appendix A , “Submitting a CR.”

80 (\$50)

**MESSAGE: Cannot send a port message.**

**CAUSE:** This is a generic error saying that the link driver, module configurator or deconfigurator, or other module of the link subsystem encountered an error when trying to send a port message. This error could be caused by the target module having been already shut down. It could also be an indication of a more serious system software problem, and may be followed by a system abort; probably all message frames have been exhausted by some module running on the system.

**ACTION:** Severity and side effects of this error are dependent upon the purpose of the message that was not sent. Attempt to determine the conditions that led to the error. If it occurred during a shutdown, possibly this error can be ignored. Otherwise, if the same problem happens repeatedly, or if a system abort occurs, take a memory dump

and see Appendix A , “Submitting a CR.”

81 (\$51)

**MESSAGE: Error from upper layer protocol read completer.**

**CAUSE:** The driver finished transferring a data frame and passed it to an upper layer protocol, but the protocol’s read completer returned an error which was not one of the expected, legal errors the driver was able to handle.

**ACTION:** This is an informational error only. The driver incremented a statistic then attempted to continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung. There may be a problem in the upper layer protocol. If the problem occurs frequently, take a link trace showing the problem, then see Appendix A , “Submitting a CR.”

84 (\$54)

**MESSAGE: Cannot load driver plabel.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load the code for the driver.

**ACTION:** Probably not all software required to operate this type of link is installed. The software was incorrectly installed, or you may need to purchase additional link or MPE software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

85 (\$55)

**MESSAGE: Cannot add driver to I/O system.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but encountered an error which was not one of the legal errors the configurator was able to handle.

**ACTION:** Verify the path in NMCONFIG is correct and complete, and matches the path where a supported PCI 100Base-T adapter card is installed in your computer backplane. If necessary, change NMCONFIG to specify the correct path, so there should be no need to install them in SYSGEN, but check SYSGEN for possible path conflicts. If necessary, contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

86 (\$56)

**MESSAGE: Cannot remove driver from I/O system.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete an instance of the link driver, but encountered an I/O system error.

**ACTION:** Not all resources were released. The driver may already have been shut down by some other means, or the system I/O configuration may have been altered. If this happens frequently, see Appendix A , “Submitting a CR.”



- 87 (\$57)           **MESSAGE: Cannot load a system routine.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load code for the write initiator procedure needed for the link type configured in NMCONFIG.
- ACTION: Probably not all software required to operate this type of link is installed. Software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the software or contact your Hewlett-Packard Representative for assistance.
- 88 (\$58)           **MESSAGE: Cannot open NM logging.**
- CAUSE: During a link open attempt by an upper-level subsystem, the link module configurator encountered a positive (error) status when trying to open NM logging against the link's subsystem ID.
- ACTION: This event is informational. No action is required. The module configurator cleared the error and will attempt to continue. However, NM logging may not be available to the link. You may need to install new NM logging patches. If the problem occurs every time, see Appendix A , "Submitting a CR."
- 89 (\$59)           **MESSAGE: Cannot freeze a memory area.**
- CAUSE: This is a generic error that during a link-open or some other operation by an upper level subsystem, link software encountered an error while trying to freeze some data into memory before passing the driver a pointer to that data.
- ACTION: The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation.
- 90 (\$5A)           **MESSAGE: Did not receive an expected port message.**
- CAUSE: This is a generic error that during a link-open or some other operation by an upper level subsystem, link software sent a port message to the driver, then encountered an error while awaiting the correct reply message.
- ACTION: Severity and side effects of this error are dependent upon the purpose of the message that was not received. There may be a system problem with message ports, or the link driver may have sent the wrong reply message. If this happens every time, see Appendix A , "Submitting a CR."
- 94 (\$5E)           **MESSAGE: Could not releas4 an I/O virtual address.**
- CAUSE: After successfully allocating an I/O virtual address and saving it, the driver encountered an error while trying to release that same address later on.

**ACTION:** The driver will attempt to continue, and it will attempt to log the error unless a system abort occurs first. If the problem occurs repeatedly, too many system I/O resources may become lost; take a memory dump and see Appendix A , “Submitting a CR.”

95 (\$5F)

**MESSAGE: Could not allocate or reassign an I/O virtual address.**

**CAUSE:** The driver attempted to allocate a new I/O virtual address (to describe a temporary data buffer in memory which would be referenced by the adapter card), or reassign an I/O virtual address previously allocated to a different block of memory, but the I/O system reported an error.

**ACTION:** If this error was logged, it means that I/O virtual address was required for normal operation so acquisition cannot be delayed. The driver cannot continue, but will attempt to log the error unless a system abort occurs first. Probably the system is out of I/O virtual addresses. You may need to start fewer links and/or mass storage devices, move some adapter cards onto different I/O buses, or add more I/O buses to the system.

96 (\$60)

**MESSAGE: Unable to autoconfigure underlying I/O paths.**

**CAUSE:** During startup, the driver asked the I/O system to start I/O drivers for each higher-level bus component leading to the configured path of the 100Base-T adapter card, but encountered an error.

**ACTION:** Check the cardcage and/or run an I/O map utility to verify the correct 100Base-T I/O path was specified in the NMCONFIG file. Ensure the 100Base-T path ends in “/0/0”. Run SYSGEN and check entry I/O context. Verify the I/O path is not already configured for a different kind of device; if so, modify and save the configuration, and reboot the system. If none of this helps, contact your Hewlett-Packard Representative for assistance.

98 (\$62)

**MESSAGE: Link common reported an inbound buffering problem.**

**CAUSE:** Varies. Usually related to an underlying error condition or resource contention problem in the buffer manager.

**ACTION:** See Appendix A , “Submitting a CR.”

99 (\$63)

**MESSAGE: Link common reported a receive processing problem.**

**CAUSE:** Varies. The driver encountered an error condition when attempting to bind with an upper layer protocol.

**ACTION:** Check the log file for additional errors related to a specified sublocation in the code, and look up those sublocation errors for more specific information, see Appendix A , “Submitting a CR.”

100 (\$64)

**MESSAGE: Link common reported a protocol bind problem.**

**CAUSE:** Varies. The driver encountered an error condition when attempting to bind with an upper layer protocol.

- ACTION:** Check the log file for additional errors related to a specific sublocation in the code, and look up those sublocation errors for more specific information, see Appendix A , “Submitting a CR.”
- 101 (\$65)      **MESSAGE: Link common reported a protocol unbind problem.**
- CAUSE:** Varies. The driver encountered an error condition when attempting to unbind from an upper layer protocol.
- ACTION:** Check the log file for additional errors related to a specific sublocation in the code, and look up those sublocation errors for more specific information. The link may be shutting down or may perform an auto-reset as part of the error recovery. If the problem persists, see Appendix A , “Submitting a CR.”
- 105 (\$69)      **MESSAGE: General buffer manager error encountered.**
- CAUSE:** The driver encountered an unexpected error either from the buffer manager (such as when trying to copy received loopback data to a return buffer), when calling the Link Common module to do a buffer related operation (such as refill an inbound buffer cache), or when obtaining a required buffer.
- ACTION:** Depending on the error, the driver may attempt to continue, however some data may not have been transferred, a protocol may now be low on buffers, etc. If the error did not prevent driver startup, try stopping and restarting the network. If the problem persists, see Appendix A , “Submitting a CR.”
- 106 (\$6A)      **MESSAGE: General error trying to get a buffer.**
- CAUSE:** When attempting to directly obtain a new buffer manager buffer from a read pool, to replenish the inbound buffer cache for one of its bound protocols, the driver’s ISR encountered an error that was not one of the few legal errors it expected, or was able to handle.
- ACTION:** The problem could indicate some serious internal problems within the buffer manager or its data structures, or with the way the system is configured. Note all log messages, especially the “Cause” status for this error, and see Appendix A , “Submitting a CR.” If the problem persists, take a system memory dump immediately after the problem has occurred.
- 107 (\$6B)      **MESSAGE: Cannot create a buffer pool.**
- CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to create an outbound buffer pool or control buffer pool.
- ACTION:** The system may be low on available memory. Try stopping some applications or sessions and retry the operation. If the problem persists, stop all networking and restart it, or restart the system. The buffer size and pool size are not configurable. If the problem still occurs, there could be a problem with the buffer manager. See Appendix A ,

“Submitting a CR.”

108 (\$6C)

**MESSAGE: Cannot delete a buffer pool.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to delete an outbound buffer pool or control buffer pool.

**ACTION:** This is an informational warning that some system memory resources may have been lost. Probably not all buffers were freed before the pool was deleted. If this happens every time, see Appendix A , “Submitting a CR.”

115 (\$73)

**MESSAGE: Driver encountered a software problem.**

**CAUSE:** This is a generic software error, reported when any of the driver’s non-hardware routines reports an error. By itself it is not descriptive of the problem. This error is often seen as a result of previous errors from intrinsics, reply messages, or validity checks.

**ACTION:** When this error occurs as a result of previous errors, it mainly serves as a way to track the sequence of the failure back to what was happening at the time. Check for those errors and look them up for an additional explanation of the problem.

116 (\$74)

**MESSAGE: Internal driver error.**

**CAUSE:** While processing a request, the link driver encountered a problem indicating there is something internally wrong with some other module of system software. Specific instances include: range or bounds violation errors while storing or clearing a statistics buffer.

**ACTION:** This is an indication of a bug in the link software. If possible, note exactly what actions caused the error to occur, then see Appendix A , “Submitting a CR.”

117 (\$75)

**MESSAGE: A driver request failed.**

**CAUSE:** This is a generic software error, used when the driver receives a new request but cannot process it because of an earlier failure. It is used in the reply to the outside module which requested the operation, to indicate it could not be processed.

**ACTION:** If this status is reported, it is because of some earlier failure. Check log files and locate any previous errors for this link, to try to find the reason this error is now occurring. By running the VGPBA diagnostic and trying the Reset function, you may be able to clear the error.

118 (\$76)

**MESSAGE: Serious error encountered while trying to start heartbeats.**

**CAUSE:** During startup, the link driver was unable to obtain a system timer resource for use in periodic monitoring of the health of the adapter card and link connection. This is either caused by exhausting

all timers due to heavy system load, or by system software either failing to release timers, or having some other bug.

**ACTION:** This is a fatal software error. The number of available timers is not configurable, and the driver cannot operate reliably without the ability to monitor the card. The same problem will likely prevent attempts to get other required timers also. If you suspect a heavy load, you can try shutting some processes down, then restart the driver. Otherwise halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

119 (\$77)

**MESSAGE: Driver dump was forced.**

**CAUSE:** A user is forcing a driver dump to occur, typically via the VGPBA diagnostic tool program.

**ACTION:** This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”

121 (\$79)

**MESSAGE: Driver is going down.**

**CAUSE:** A request to the driver failed because the driver is in the process of shutting down, or because it has encountered a fatal software error and has not yet been shut down.

**ACTION:** If this status is reported during a shutdown operation, it may be ignored. Otherwise this should be a signal to the operator that the link driver has a problem and needs to be shut down, or dumped and/or reset.

125 (\$7D)

**MESSAGE: Driver has detected data corruption.**

**CAUSE:** The link driver encountered conditions which should only occur if memory structures have been corrupted. For example, following a full reset of the driver data structures, the next transmit resource obtained was not the first in the list.

**ACTION:** These errors are extremely serious. The driver halted operations and attempted to capture a snapshot dump of the problem. The trouble may or may not be the fault of the link driver; another application on the system could be walking on memory. Collect all NETDMP##.PUB.SYS dump files and see Appendix A , “Submitting a CR.”

128 (\$80)

**MESSAGE: Illegal access to saved port message area.**

**CAUSE:** While completing an old blocking request (requiring a driver exit and later reply), the driver found that the entry in the pending message save area, where the request was supposedly saved, was no longer in use, or was not within the range of legal table indexes.

**ACTION:** This fatal software error is only caused by a bug or memory corruption, because the driver should never be trying to complete the same message twice, or passing an illegal index. After reporting this

error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, take a link trace of the problem, then see Appendix A , “Submitting a CR.”

130 (\$82)

**MESSAGE: Cannot read current multicast list.**

**CAUSE:** During a link-open or close operation by an upper level subsystem, the link module configurator tried to read the current list of multicast addresses produced by the subsystem, but encountered an error on the read.

**ACTION:** Try starting a different link, to see if the same errors occur. Next try restarting the system, and retry the operation. If the problem persists, you may need to install Link Common patches (Link Common contains the multicast services) or obtain newer 100Base-T patches; contact your Hewlett-Packard Representative for assistance.

131 (\$83)

**MESSAGE: An unexpected timeout occurred.**

**CAUSE:** This is a generic error reporting that a timeout occurred during a link driver operation, such as a diagnostic loopback test or a dump operation, or while awaiting a reply message from the driver for an operation initiated by the link module configurator or deconfigurator.

**ACTION:** A required message or interrupt has not arrived in time. Reset the link driver using VGPBA diagnostics, or shut it down and restart. Retry the operation. If the same problem occurs, replace the adapter card if this is a loopback test, otherwise check system load or see Appendix A , “Submitting a CR.”

132 (\$84)

**MESSAGE: Module Configurator cannot access its context area.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator checked its context memory area for validity, but did not find the expected data.

**ACTION:** The module deconfigurator’s context memory area is being overwritten, or is not working properly. The deconfigurator did not perform the close. If this happens every time, wait until the next time the link is to be closed; instead of closing the link, halt the system and take a memory dump, and see Appendix A , “Submitting a CR.”

147 (\$93)

**MESSAGE: Open table full. Too many driver users.**

**CAUSE:** Too many subsystems are attempting to open the driver at the same time, or subsystems are shutting down without closing the driver.

**ACTION:** Shut down any networking subsystems that are not currently needed and try again. A side-effect of this error may be that the driver becomes unusable; if so, run VGPBA and execute the Reset function to see if that restores normal operation.

- 150 (\$96)      **MESSAGE: Pending message table full. Driver not finishing fast enough.**
- CAUSE: While processing a new blocking request (requiring a driver exit and later reply) and scanning a table in which to save the request, the driver found an unused entry, but an entry counter indicated the table was full.
- ACTION: This fatal software error is only caused by a bug, because the in use flags and counters should match. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, take a memory dump and reboot. See Appendix A , “Submitting a CR.”
- 151 (\$97)      **MESSAGE: Out of internal comm frame resources.**
- CAUSE: While attempting to request action from its ISR module, the driver found that no available communication frames were available on the referenced queue. The number of available comm frames is not configurable, and the driver cannot operate if frames run out.
- ACTION: This is a fatal software error. After reporting this error, the driver will attempt a driver dump, then will auto-reset and attempt to continue. Typically followed by another error giving more information about what kind of comm the driver was trying to send; check log data for that error and look it up also. Collect binary copies of all NETDMP##.PUB.SYS dump files on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”
- 152 (\$98)      **MESSAGE: Driver initialization failed.**
- CAUSE: While processing its very first startup message, the driver encountered a problem. Probably the configured hardware is not present, is not the correct kind of adapter card, or there was a problem configuring the ISR into the I/O system or binding to the lower bus manager. The link is unusable.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data for that error and look it up also, for more actions to take. The driver will attempt to send an error reply for the startup request. It then enters a “broken” state and awaits a shutdown, which the module configurator should attempt automatically.
- 154 (\$9A)      **MESSAGE: Configuration failed.**
- CAUSE: This is a generic error, reported after successful or unsuccessful completion of initial hardware startup, if the driver encountered an error bringing up the adapter card, or when opening the link, or while attempting to send the reply to a pending configuration request from its module configurator.

**ACTION:** This is a fatal software error. It might be caused by a bad adapter card, by having too many driver users, by a heavy CPU load, or by attempting to operate the network subsystem or tool which started the link at too low of a CPU process priority, causing a timeout. Any condition, such as a timeout or abort, which causes the driver's module configurator to cease awaiting the reply and dispose of its reply port, might also cause this error. The driver now "dies" and awaits a shutdown, which the module configurator should attempt automatically.

160 (\$A0)

**MESSAGE: Heartbeat timeout. Adapter card appears to be hung.**

**CAUSE:** The LAN controller chip on the adapter card has failed to produce any interrupt from normal activity for over 5 seconds. It has also failed, for an additional 5 seconds, to respond to the driver's inquiry by producing a test interrupt. The driver has decided the card is dead or hung.

**ACTION:** This is a fatal hardware error. Replace the adapter card. The driver will enter a "broken" state and await a manual shutdown by the operator. If you wish you may try running the VGPBA diagnostic and attempt a reset. If the problem persists with a known good card, see Appendix A , "Submitting a CR."

161 (\$A1)

**MESSAGE: Card did not go ready after hard reset.**

**CAUSE:** After performing a hard reset of the adapter card during startup, the HP-PB interface chip did not report "ready" status, or reported an error.

**ACTION:** Replace the adapter card. If the same problem persists even after replacement with a known good card, contact Hewlett-Packard: your software could be out of date, but a patch may be available. It is unlikely this would be caused by a system HP-PB bus hardware problem.

170 (\$AA)

**MESSAGE: Hub did not report link up within time allowed.**

**CAUSE:** During a link connect attempt, the driver instructed the link interface chip to connect, but afterward the LINK signal still did not appear within the 3 second time allowed. The hub may not have liked some or all of the frames, although it responded anyway. If this error is logged, it is because the link did not connect within 25 to 30 seconds after it was instructed to do so.

**ACTION:** This error is informational only. The driver will retry the connect. If the problem happens every time, try checking the hub port configuration, or replacing the cable and/or adapter card.

175 (\$AF)

**MESSAGE: Timeout while awaiting link autonegotiation completion.**

**CAUSE:** The link appears to be connected, but the driver thinks it is still waiting for it to connect.



- ACTION:** This error should not occur. If it happens frequently, see Appendix A , “Submitting a CR.”
- 183 (\$B7)      **MESSAGE: Driver bug prevents link training. File CR.**
- CAUSE:** During an attempt to establish the proper stack context within which to begin 100VG-AnyLAN link training, the driver tried repeatedly to run without the ISR underneath it, but failed to even after 4 retries.
- ACTION:** Shut down the link and restart it. If the same problem still occurs, see Appendix A , “Submitting a CR.”
- 188 (\$BC)      **MESSAGE: Autonegotiation reports link settings are incompatible with hub.**
- CAUSE:** If this error occurs, it is probably because the link has reported a remote fault. Usually this means the adapter card and the hub or switch to which it is connected, have failed to agree on a link speed and duplex setting acceptable to both.
- ACTION:** Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other. Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable. If a crossover cable is being used, make sure it is correctly wired. Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.
- 194 (\$C2)      **MESSAGE: Unexpected loss of link signal from hub.**
- CAUSE:** While the link was supposedly connected, an event occurred causing the link driver to check if the link was connected, and when the PHY chip on the adapter card was checked, it was found that the link was not connected. Probably the cable was disconnected from the hub or card.
- ACTION:** This event is informational. No action is required. The driver will attempt to reconnect the link automatically.
- 198 (\$C6)      **MESSAGE: Cannot open configuration file.**
- CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to open the configuration file.
- ACTION:** Verify an NMCONFIG.PUB.SYS file exists. If so, try to verify its format matches rest of the operating system. If the system was updated, you may need to run NMMGRVER.PUB.SYS to convert the file to a newer format. If the system was backdated, you may need to restore an older copy of NMCONFIG from a backup tape. Perform a :LISTF, 3 command and make sure the file is not protected by a lockword, and

that the user starting the link has the necessary access rights to open the file. Perform a `:DSTAT ALL` command and make sure the disk drive the file resides on is present and mounted. Make sure the file resides on Ldev 1. If not, use Fcopy and a file equation with a `“;DEV=1”` option to force a copy of the file onto Ldev 1. Perform a `:SHOWPROC 1;TREE;SYSTEM` command and verify an NMFILE process exists. If not, shut down and restart the system, and retry the operation. If the problem persists, contact your Hewlett-Packard Representative for assistance with NMCONFIG file open problems.

199 (\$C7)

**MESSAGE: Cannot read from configuration file.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was able to open the configuration file, but encountered an error while trying to read data for the link being started.

**ACTION:** Using NMMGR, verify the path `LINK.linkname` exists in the NMCONFIG file and is the exact same `linkname` which is now being started. Verify the `“Data=Y”` flag is set at the top of that LINK screen (meaning that ENTER has been pressed to save the configuration data there). If the link is being used with NS or DTS, use the VALIDATE function to validate the network configuration. Correct any configuration errors and retry the operation.

200 (\$C8)

**MESSAGE: Cannot validate configuration file.**

**CAUSE:** After successfully reading configuration data for a link being started, the link module configurator checked the data and found it was not valid. For NS/3000, probably the link type and NI type do not match.

**ACTION:** Using NMMGR, verify the path `LINK.linkname` exists in the NMCONFIG file and is either a 100Base-T link type. If the subsystem being started is NS, verify the link type matches the NI type for the network being started. If these are not the problem, an incorrect version of NMMGR may have been used to create the NMCONFIG file on your system. Run `NMMAINT.PUB.SYS;PARM=24` to check versions of NMMGR components. The format of your NMCONFIG file may be incompatible with the link driver version installed on your system. Run `NMMGRVER.PUB.SYS` to update your NMCONFIG file to a newer version, or restore an older version from a backup tape, whichever is appropriate. If the problem still occurs, contact your Hewlett-Packard Representative for assistance in using NMMGR to configure 100Base-T links.

203 (\$CB)

**MESSAGE: Cannot determine link type.**

**CAUSE:** Early in a link open operation by an upper level subsystem, the link module configurator encountered an error while attempting to use Link Support Services to determine the type of link being started. Probably the link is not completely configured.

**ACTION:** If the link is already started, LSS tries to read the link type from its own link table. Otherwise, it tries to read it from the NMCONFIG file. Using NMMGR, verify the path `LINK.linkname` exists in the NMCONFIG file and is the exact same *linkname* which is now being started. Verify the “Data=Y” flag is set at the top of that LINK screen (meaning that ENTER has been pressed to save the configuration data there). If the link is being used with NS or DTS, use the VALIDATE function to validate the network configuration. Correct any configuration errors and retry the operation.

204 (\$CC)

**MESSAGE: Cannot read from link table.**

**CAUSE:** Early in a link open operation by an upper level subsystem, the link module configurator attempted to determine if the link was already running, by trying to read from the link table, but an error occurred which was not one of the expected, legal errors the configurator was designed to handle.

**ACTION:** If the linkname being started is a valid linkname, then there may be a problem with Link Support Services. Halt the system, take a system memory dump, then restart the system. If the problem still occurs, see Appendix A , “Submitting a CR.”

205 (\$CD)

**MESSAGE: Cannot add to link table.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator successfully started the driver, but encountered an error trying to add the link to the link table.

**ACTION:** Possibly too many links are started. If not, try starting a different link, to see if that works. If not, first try doing a `:LINKCONTROL @` command to see if any LSS errors occur. If they do, you may need to reinstall MPE software; contact your Hewlett-Packard Representative for assistance. Otherwise try restarting the system to see if it corrects the problem or LINKCONTROL errors. If none of these suggestions helps, see Appendix A , “Submitting a CR.”

206 (\$CE)

**MESSAGE: Cannot delete from link table.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete the link from the link table, but encountered an error.

**ACTION:** The module deconfigurator reported an error, but attempted to continue with the close. Network management services may have been shut down. Otherwise, if this happens every time, see Appendix A , “Submitting a CR.”

208 (\$D0)

**MESSAGE: Cannot open tracing.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup, but encountered an error trying to open the trace file.

**ACTION:** Using NMMGR, check if a filename was configured. If so, verify it is a legal MPE filename. A group and account may need to be specified. Make sure the user starting the link has the necessary capabilities to create that file in the group and account specified. Check whether the system is low on disk space. Check whether too many NMTCnnnn.PUB.SYS trace data files already exist. Purge files as necessary to free up disk space, or add more disks. Make sure the version of the NMCONFIG file matches the rest of the system software, by running NMMGRVER.PUB.SYS. If none of these suggestions solves the problem, contact your Hewlett-Packard Representative for assistance with configuring a 100Base-T link to enable tracing at startup.

209 (\$D1)

**MESSAGE: Cannot stop tracing.**

**CAUSE:** After a link-open operation by an upper level subsystem failed, the link module configurator tried to clean up, but encountered an error trying to disable driver tracing.

**ACTION:** Probably the link driver returned an error reply when asked to disable tracing. The driver may have a problem, or may already have shut down. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , “Submitting a CR.”

210 (\$D2)

**MESSAGE: Cannot send a trace request.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup. After successfully opened a trace file, the configurator encountered an error trying to enable driver tracing.

**ACTION:** Probably the link driver returned an error reply when asked to enable tracing. The driver may have a problem. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , “Submitting a CR.”

218 (\$DA)

**MESSAGE: Unimplemented operation attempted.**

**CAUSE:** The driver was asked to, or attempted to perform an operation which it is not currently designed to handle.

**ACTION:** If possible, the driver will attempt to send an error reply in response to the request. However, depending on the operation, the driver may not know how to do this, and will not attempt it. Determine what you were trying to do, then contact your Hewlett-Packard Representative for assistance.

220 (\$DC)

**MESSAGE: Buffer chaining is not supported.**

**CAUSE:** An upper layer protocol attempted to send data to the driver using a buffer containing chained data. No link subsystems support this data format.

**ACTION:** There is a problem in the upper-layer protocol. Attempt to determine which application produced the error, then see Appendix A , “Submitting a CR.”

223 (\$DF)

**MESSAGE: One or more bad bind parms passed by upper level protocol.**

**CAUSE:** This is a generic error, reported when the driver received a bind (rendezvous) from an upper layer protocol, but the parameters in the request were not satisfactory to the driver. There are a number of separate causes; look up the specific sublocation code that was logged, for more information.

**ACTION:** All such errors are caused by bugs in the upper layer protocol. Attempt to determine what protocol was trying to bind, then see Appendix A , “Submitting a CR.”

224 (\$E0)

**MESSAGE: A data buffer is too long.**

**CAUSE:** During diagnostic loopback testing, the driver was asked to prepare a data block for transmission, but the block length or memory allocation was beyond the driver’s DMA capabilities.

**ACTION:** This problem should only be seen in diagnostics, however it should not be occurring at all. Specify a shorter loopback length, and see Appendix A , “Submitting a CR.”

225 (\$E1)

**MESSAGE: One or more bad utility parms passed to driver.**

**CAUSE:** The driver received a utility register access request from an upper level tool program such as LNKUTIL, but the register number specified was out of the range of legal register values for the selected register set.

**ACTION:** This is an informational error only. This problem most likely occurred while diagnosing some previous problem. Retry the operation using a legal register number for the register set you have selected.

226 (\$E2)

**MESSAGE: A data buffer is too short.**

**CAUSE:** A diagnostic status, loopback, or statistics operation did not provide a buffer large enough for the link driver to return all the driver information being requested.

**ACTION:** All such errors are caused by version mismatches between the link driver and the modules requesting the data, or bugs in the modules requesting the data. Contact your Hewlett-Packard Representative to determine if additional software patches are already available to correct this problem.

232 (\$E8)

**MESSAGE: Unsupported address format.**

**CAUSE:** An upper layer protocol attempted to send data through the link driver’s write initiator routine, using an address family which the driver does not support.

**ACTION:** All such errors are caused by bugs in the upper layer protocol or mismatched software revisions. Attempt to determine which protocol was trying to send, then see Appendix A , “Submitting a CR.”

239 (\$EE)

**MESSAGE: Bad message for current state.**

**CAUSE:** This is a generic error, reported when the driver received a request from outside when the driver was not in a state where it could process that type of request, or the when driver has already processed a message of this type and was not expecting another. The driver may have encountered a previous fatal error, may be in the middle of startup, shutdown, or a recovery or dump operation, a message may have arrived too late, or the sender may be confused.

**ACTION:** If the message has replies, the driver will attempt to send an error reply back to the sender. If another error has already occurred, this event may be ignored. Otherwise, if the problem happens frequently, or if external subsystems are noticeably impacted after the error, see Appendix A , “Submitting a CR.”

240 (\$F0)

**MESSAGE: Unknown file record format.**

**CAUSE:** The trace or log formatter attempted to decode a record header to obtain basic information such as length and version, but on inspection found that the record does not appear to be a 100Base-T record supported by this formatter.

**ACTION:** The formatter will attempt to print this record in raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if patches are already available to update the software on your current system.

242 (\$F2)

**MESSAGE: Unknown data format.**

**CAUSE:** The trace or log formatter attempted to decode a data entry header. There was sufficient data to cover the entry’s stored length, and the entry header looked OK, but when decoding was attempted, the entry had an unknown tag, there wasn’t enough entry data for this version of the entry, or a decoder routine was missing code to handle this version of the entry.

**ACTION:** The formatter will attempt to print this record in the raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if patches are already available to update the software on your current system.

243 (\$F3)

**MESSAGE: Unknown data version.**

**CAUSE:** The trace or log formatter attempted to decode a record header to obtain general information such as link type and link name, but on inspection found that the version of that data was not supported by his formatter, thus no other fields could be decoded.

**ACTION:** The formatter will attempt to print this record in the raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if patches are already available to update the software on your current system.

244 (\$F4)

**MESSAGE: Error encountered while decoding an entry.**

**CAUSE:** The trace or log formatter encountered an entry having an unrecognized entry tag value. The formatter cannot decode entries of this type.

**ACTION:** The formatter will attempt to print this record in raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if patches are already available to correct this problem.

245 (\$F5)

**MESSAGE: Incomplete data was encountered.**

**CAUSE:** The trace or log formatter attempted to decode an entry, but on inspection found that the entry did not contain at least the minimum length of data required for this version of the data.

**ACTION:** The trace or log file may be corrupted, or you may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. The formatter will attempt to print this entry in raw form. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if patches are already available to correct this problem.

## Logging Sublocation Codes

The following are the logging sublocation codes reported by the 100Base-T link drivers, including sublocation code, log class, log message, and the appropriate cause of and action to take for each.

For meanings of 32-bit status values generated by the driver, refer to the sections on status values.

1020 CLAS0001 **MESSAGE: Cannot freeze a memory area.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was preparing to send configuration data to the driver, but encountered an error while trying to freeze that data into memory (“Cause” = 32-bit status from the call to freeze).

**ACTION:** The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

1040 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was preparing to send configuration data to the driver, but encountered an error while trying to send the port message (“Cause” = 32-bit status from the call to `send_msg`).

**ACTION:** There may be a system problem, or another subsystem has already shut the driver down while this one was trying to start it. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Retry the operation. If this does not help, try stopping all networks using the link, then retry. If the problem still persists, halt the system and take a memory dump, then see Appendix A , “Submitting a CR.”

1060 CLAS0001 **MESSAGE: An unexpected timeout occurred.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, then encountered a timeout while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`, saying there was a timeout).

**ACTION:** The link driver is probably hung because of a problem in the driver, or the driver may have sent the wrong message back. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Perform a `:LINKCONTROL @` command to see if an entry exists for the linkname being started. If so, then run the VBPBA diagnostic tool and attempt to force a driver dump. If that works, save the resulting `NETDMP##.PUB.SYS` file for analysis by Hewlett-Packard. Otherwise, halt the system and take a memory dump. The dump should tell



Hewlett-Packard what actions the driver took. See Appendix A ,  
“Submitting a CR.”

1080 CLAS0001 **MESSAGE: Did not receive an expected port message.**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, then encountered an error while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`).

ACTION: There may be a system problem with message ports, or the link driver may have sent the wrong reply message. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Perform a `:LINKCONTROL @` command to see if an entry exists for the linkname being started. If so, then run the VBPBA diagnostic tool and attempt to force a driver dump. If that works, save the resulting `NETDMP##.PUB.SYS` file for analysis by Hewlett-Packard. Otherwise, halt the system and take a memory dump. The dump should tell Hewlett-Packard what actions the driver took. See Appendix A ,  
“Submitting a CR.”

1100 CLAS0001 **MESSAGE: (Varies)**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, but the driver returned an error in the reply message (“Cause” is not used here).

ACTION: If this error occurs, there may be additional driver-specific errors logged, giving more information about the problem. Attempt to locate those errors and look them up also. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

1110 CLAS0001 **MESSAGE: No adapter card found on specified PCI bus.**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator did not find a PCI bus at the hardware path specified in `NMCONFIG` (“Cause” is not used here).

ACTION: The module configurator cleaned up and returned an error to the subsystem.

Verify the path in `NMCONFIG` is correct and complete, and matches the path where a supported 100Base-T adapter card is installed in your computer backplane. If the path passes through bus converters, verify the `SYSGEN` configuration has entries for the higher-level bus converters leading to that path. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. If necessary, change `NMCONFIG` or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

- 1120 CLAS0001    **MESSAGE: Bad hardware ID or path.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator did not find a supported 100Base-T adapter card at the hardware path specified in NMCONFIG.
- ACTION: The module configurator cleaned up and returned an error to the subsystem.
- Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100Base-T adapter card is installed in the computer backplane. If necessary, reseal the board or contact your Hewlett-Packard Representative for hardware assistance.
- 1130 CLAS0001    **MESSAGE: Adapter card found does not match software configuration.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator found a supported adapter card at the path specified in NMCONFIG, but it was not the right type of card for the link being started.
- ACTION: Correct the network configuration or plug in the correct type of adapter card, and retry the operation. The module configurator cleaned up and returned an error to the subsystem.
- 1140 CLAS0001    **MESSAGE: Cannot create a buffer pool.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to create an outbound buffer pool (“Cause” = 32-bit status from the call to `bmgr_create_pool`).
- ACTION: The system may be low on available memory. The module configurator cleaned up and returned an error to the subsystem.
- Try stopping some applications or sessions and retry the operation. If the problem persists, stop all networking and restart it, or restart the system.
- The buffer size and pool size are not configurable. If the problem still occurs, there could be a problem with the buffer manager. See Appendix A , “Submitting a CR.”
- 1160 CLAS0001    **MESSAGE: Cannot load driver plabel.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load the code for the driver (“Cause” = 32-bit status from the call to `io_get_mgr_entry`).
- ACTION: Probably not all software required to operate this type of link is installed. The software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for

assistance.

1170 CLAS0001 **MESSAGE: Cannot load a system routine.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load code for the write initiator procedure needed for the link type configured in NMCONFIG (“Cause” = 32-bit status from the call to `hpgetsysplabel`).

**ACTION:** Probably not all software required to operate this type of link is installed. Software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

1200 CLAS0001 **MESSAGE: The link is already started.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created (“Cause” = 32-bit status from the call to `io_configure`).

**ACTION:** This event is informational. No action is required. It probably would not appear as a log event. The module configurator will ignore this warning and continue to bring the link driver up, so that the number of users may be checked. May be followed by another error.

1220 CLAS0001 **MESSAGE: Unable to auto-configure underlying I/O paths.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but encountered an error when configuring the underlying I/O paths (“Cause” = 32-bit status from the call to `io_configure_path`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100Base-T adapter card is installed in your computer backplane. If the path passes through bus converters, verify the SYSGEN configuration has entries for the higher-level bus converters leading to that path.

A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1240 CLAS0001 **MESSAGE: Cannot add driver to I/O system.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but encountered an error which was not one of the legal errors the configurator was able to handle (“Cause” = 32-bit status from the call to `io_configure`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100Base-T adapter card is installed in your computer backplane. If the path passes through bus converters, verify the SYSGEN configuration has entries for the higher-level bus converters leading to that path. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1400 CLAS0001 **MESSAGE: Cannot open configuration file.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to open the configuration file ("Cause" = 32-bit status from the call to nmconfopen).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify an NMCONFIG.PUB.SYS file exists. If so, try to verify its format matches rest of the operating system. If the system was updated, you may need to run NMMGRVER.PUB.SYS to convert the file to a newer format. If the system was backdated, you may need to restore an older copy of NMCONFIG from a backup tape.

Perform a :LISTF,3 command and make sure the file is not protected by a lockword, and that the user starting the link has the necessary access rights to open the file.

Perform a :DSTAT ALL command and make sure the disk drive the file resides on is present and mounted. Make sure the file resides on Ldev 1. If not, use Fcopy and a file equation with a ";DEV=1" option to force a copy of the file onto Ldev 1.

Perform a :SHOWPROC 1;TREE;SYSTEM command and verify an NMFILE process exists. If not, shut down and restart the system, and retry the operation. If the problem persists, contact your Hewlett-Packard Representative for assistance with NMCONFIG file open problems.

1420 CLAS0001 **MESSAGE: Cannot read from configuration file.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was able to open the configuration file, but encountered an error while trying to data for the link being started ("Cause" = 32-bit status from the call to nmconfopen).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Using NMMGR, verify the path LINK.linkname exists in the

NMCONFIG file and is the exact same *linkname* which is now being started. Verify the “Data=Y” flag is set at the top of that LINK screen (meaning that ENTER has been pressed to save the configuration data there). If the link is being used with NS or DTS, use the VALIDATE function to validate the network configuration. Correct any configuration errors and retry the operation.

1440 CLAS0001 **MESSAGE: Cannot validate configuration file.**

**CAUSE:** After successfully reading configuration data for a link being started, the link module configurator checked the data and found it was not valid (“Cause” is not used here). For NS/3000, probably the link type and NI type do not match.

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Using NMMGR, verify the path `LINK.linkname` exists in the NMCONFIG file and is either a 100Base-T link type. If the subsystem being started is NS, verify the link type matches the NI type for the network being started.

If these are not the problem, an incorrect version of NMMGR may have been used to create the NMCONFIG file on your system. Run `NMMAINT.PUB.SYS;PARM=24` to check versions of NMMGR components.

The format of your NMCONFIG file may be incompatible with the link driver version installed on your system. Run `NMMGRVER.PUB.SYS` to update your NMCONFIG file to a newer version, or restore an older version from a backup tape, whichever is appropriate.

If the problem still occurs, contact your Hewlett-Packard Representative for assistance in using NMMGR to configure 100Base-T links.

1580 CLAS0001 **MESSAGE: Subsystem is opening link.**

**CAUSE:** An upper level subsystem has called the link module configurator, which has successfully located configuration for the link, and will now proceed to start it up (“Transport” = name of the subsystem which is starting the link, or its subsystem number if the configurator does not know the name).

**ACTION:** None. This is an informational event only.

A similar event will be logged when the link is closed.

1600 CLAS0001 **MESSAGE: Cannot open tracing.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup, but encountered an error trying to open the trace file (“Cause” = 32-bit status from the call to `nmopentrace`).

**ACTION:** This is an informational error that tracing was not started. The link came up, but the error was returned to the upper level subsystem, which may decide to shut the link back down again.

Using NMMGR, check if a filename was configured. If so, verify it is a legal MPE filename. A group and account may need to be specified. Make sure the user starting the link has the necessary capabilities to create that file in the group and account specified.

Check whether the system is low on disk space. Check whether too many NMTChnnn.PUB.SYS trace data files already exist. Purge files as necessary to free up disk space, or add more disks.

Make sure the version of the NMCONFIG file matches the rest of the system software, by running NMMGRVER.PUB.SYS.

If none of these suggestions solves the problem, contact your Hewlett-Packard Representative for assistance with configuring a 100Base-T link to enable tracing at startup.

1620 CLAS0001 **MESSAGE: Cannot send a trace request.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup. After successfully opened a trace file, the configurator encountered an error trying to enable driver tracing ("Cause" = 32-bit status from the call to sio\_trace\_req).

**ACTION:** This is an informational error that tracing was not enabled. The link came up, but the error was returned to the upper level subsystem, which may decide to shut the link back down again.

Probably the link driver returned an error reply when asked to enable tracing. The driver may have a problem. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , "Submitting a CR."

1630 CLAS0001 **MESSAGE: Cannot stop tracing.**

**CAUSE:** After a link-open operation by an upper level subsystem failed, the link module configurator tried to clean up, but encountered an error trying to disable driver tracing ("Cause" = 32-bit status from the call to sio\_trace\_req).

**ACTION:** This is an informational error that tracing was not disabled. If this error occurs it is because some other error has already occurred. The link open did not succeed.

Probably the link driver returned an error reply when asked to disable tracing. The driver may have a problem, or may already have shut down. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , "Submitting a CR."

- 1640 CLAS0001    **MESSAGE: Cannot read current multicast list.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator tried to read the current list of multicast addresses produced by the subsystem, but encountered an error on the read ("Cause" = 32-bit status from the call to `ieee_multicast_read`).
- ACTION: The module configurator cleaned up and returned an error to the subsystem.
- Run `NMMAINT.PUB.SYS;PARM=80`, and verify that Link Common Services are present. If present, and if the problem persists, try restarting the system, then retry the operation. If not present, you may need to obtain newer patches; contact your Hewlett-Packard Representative for assistance. If reinstalling software does not solve the problem, see Appendix A , "Submitting a CR."
- 1650 CLAS0001    **MESSAGE: The link is already started.**
- CAUSE: During the first link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created and has been opened at least once ("Cause" = 32-bit status from the call to `io_configure`, saying the link is already started).
- ACTION: This is an informational warning only. The module configurator will leave the link driver up and stop trying to start it again. Usually preceded by another error.
- 1660 CLAS0001    **MESSAGE: Cannot add to link table.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator successfully started the driver, but encountered an error trying to add the link to the link table ("Cause" = 32-bit status from the call to `lsslktbladd`).
- ACTION: The module configurator cleaned up and returned an error to the subsystem.
- Possibly too many links are started.
- If not, try starting a different link, to see if that works. If not, first try doing a `:LINKCONTROL @` command to see if any LSS errors occur. If they do, you may need to reinstall MPE software; contact your Hewlett-Packard Representative for assistance. Otherwise try restarting the system to see if it corrects the problem or LINKCONTROL errors. If none of these suggestions helps, see Appendix A , "Submitting a CR."
- 1700 CLAS0001    **MESSAGE: Cannot freeze a memory area.**
- CAUSE: During a link-close operation by an upper level subsystem, the link module deconfigurator was preparing to send new configuration data to the driver, but encountered an error while trying to freeze that data into memory ("Cause" = 32-bit status from the call to `freeze`).

**ACTION:** The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation. The driver did not receive the updated configuration data. The module deconfigurator attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1720 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator was preparing to send updated configuration data to the driver, but encountered an error while trying to send the port message (“Cause” = 32-bit status from the call to `send_msg`).

**ACTION:** There may be a system problem, or another subsystem has already shut the driver down while this one was trying to close it. The driver did not receive the updated configuration data. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1740 CLAS0001 **MESSAGE: An unexpected timeout occurred.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, then encountered a timeout while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`, saying there was a timeout).

**ACTION:** The link driver is probably hung because of a problem in the driver, the driver has already shut down, or the driver may have sent the wrong message back. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1760 CLAS0001 **MESSAGE: Did not receive an expected port message.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, then encountered an error while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`).

**ACTION:** There may be a system problem with message ports, or the link driver may have sent the wrong reply message. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1780 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, but the driver returned an error in the reply message (“Cause” is not used here).



**ACTION:** If this error occurs, there may be additional driver-specific errors logged, giving more information about the problem. Attempt to locate those errors and look them up also. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1800 CLAS0001 **MESSAGE: Subsystem is closing link.**

**CAUSE:** An upper level subsystem has called the link module deconfigurator, which has successfully located the link, and will now proceed to close it.

**ACTION:** None. This is an informational event only. A similar event was logged when the link was opened.

1840 CLAS0001 **MESSAGE: Cannot read current multicast list.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator tried to read the current list of multicast addresses produced by the subsystem, but encountered an error on the read (“Cause” = 32-bit status from the call to `ieee_multicast_read`).

**ACTION:** The module deconfigurator reported an error, but attempted to continue with the close. Network management services may have been shut down. Otherwise, if this happens every time, see Appendix A , “Submitting a CR.”

1880 CLAS0001 **MESSAGE: Module Configurator cannot access its context area.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator checked its context memory area for validity, but did not find the expected data (“Cause” = 32-bit status saying the context was not accessed).

**ACTION:** The module deconfigurator’s context memory area is being overwritten, or is not working properly. The deconfigurator did not perform the close. If this happens every time, wait until the next time the link is to be closed; instead of closing the link, halt the system and take a memory dump, and see Appendix A , “Submitting a CR.”

1900 CLAS0001 **MESSAGE: Cannot remove driver from I/O system.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete an instance of the link driver, but encountered an I/O system error (“Cause” = 32-bit status from the call to `io_unconfigure`).

**ACTION:** The deconfigurator stopped trying to close the link. However, the driver already received updated configuration data removing the subsystem’s multicast information, but other resources, such as link table, were not updated. The driver may already have been shut down by some other means, or the system I/O configuration may have been altered. If this happens frequently, see Appendix A , “Submitting a CR.”

- 1920 CLAS0001    **MESSAGE: Cannot delete from link table.**
- CAUSE: During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete the link from the link table, but encountered an error (“Cause” = 32-bit status from the call to `lsslktbldelete`).
- ACTION: The module deconfigurator reported an error, but attempted to continue with the close. Network management services may have been shut down. Otherwise, if this happens every time, see Appendix A , “Submitting a CR.”
- 1940 CLAS0001    **MESSAGE: Cannot release a system plabel.**
- CAUSE: During the final link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to release the link’s write initiator procedure (“Cause” = 32-bit status from the call to `hprelsysplabel`).
- ACTION: This is an informational warning that some system memory resources may have been lost. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”
- 1960 CLAS0001    **MESSAGE: Cannot delete a buffer pool.**
- CAUSE: During a link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to delete an outbound buffer pool (“Cause” = 32-bit status from the call to `bmgr_delete_pool`).
- ACTION: This is an informational warning that some system memory resources may have been lost. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”
- 2210 CLAS0001    **MESSAGE: Cannot get a system timer.**
- CAUSE: The driver attempted to get a system timer from I/O Services but encountered an error (“Cause” = 32-bit status returned by the call to `io_get_timer`). This is either caused by exhausting all timers due to heavy system load, or by system software either failing to release timers, or having some other bug.
- ACTION: This is a fatal software error. The number of available timers is not configurable, and the driver cannot operate without the necessary timers. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. Typically followed by another error giving more information about what kind of timer the driver needed; check log data for that error and look it up also.
- If you suspect a heavy load, you can try shutting some processes down, then restart the driver. Otherwise use Control-B at the console to halt

the system, take a memory dump, and reboot. See Appendix A ,  
“Submitting a CR.”

2230 CLAS0001 **MESSAGE: Internal error while initiating a dump. Dump failed.**

**CAUSE:** While processing a request from an upper level diagnostic tool, the dump surrogate for the PCI 100Base-T driver encountered an error. Additional messages may have been directed to the console by the dump surrogate process which provide more detail about the error.

**ACTION:** The dump surrogate was unable to complete the dump request. Note any messages from the console; make sure that any dump request issued in an upper level tool had the proper syntax and linkname specified. If the problem persists, see Appendix A ,  
“Submitting a CR.”

2240 CLAS0001 **MESSAGE: Cannot reset a system timer.**

**CAUSE:** The driver attempted to reset a system timer previously obtained from I/O Services but encountered an error (“Cause” = 32-bit status returned by the call to `io_reset_timer`). This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a fatal software error. The driver cannot operate without all necessary timers. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

2250 CLAS0001 **MESSAGE: Driver dump is starting.**

**CAUSE:** In response to a request from an upper level diagnostic tool, the PCI 100Base-T dump surrogate has initiated a dump of the driver.

**ACTION:** This is informational; the dump was most likely requested to assist in diagnosing another problem with the driver. Wait for the dump to complete and then send the dump file (`NETDMP###.PUB.SYS`) to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

2270 CLAS0001 **MESSAGE: Cannot free a system timer.**

**CAUSE:** The driver attempted to release a system timer previously obtained from I/O Services but encountered an error (“Cause” = 32-bit status returned by the call to `io_release_timer`). This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a warning that some timer resources may have been lost. The driver will attempt to continue. Unless this happens constantly, the system should continue to run. Possibly followed by another error giving more information about what kind of timer the driver was releasing; check log data for that error and look it up also. If

the problem happens every time, see Appendix A , “Submitting a CR.”

2600 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While notifying upper level subsystems that the driver detected a serious error, powerfail, or reset, an attempt to send an asynchronous event message to one of those subsystems failed (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This is a warning that one or more subsystems may not be aware the link has had a problem. The subsystem(s) may have failed to close the driver as part of their shutdown. The driver will continue with its error recovery actions, and no user action is required. If this happens every time, see Appendix A , “Submitting a CR.”

2630 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During final processing of a fatal driver error, the driver attempted a standard auto- reset instead of dying. However, its attempt to send a reset message to itself failed (“Cause” = 32-bit status returned by the call to `send_msg`). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** This error is likely an indication of a more serious system software problem, and may be followed by a system abort. Probably all message frames have been exhausted by some module running on the system. Further recovery actions may not be possible; if the system fails, take a memory dump and reboot.

Otherwise, since the auto-reset failed, the driver dies instead, notifying upper layer software via an asynchronous event message if possible. The network and/or link must now be stopped and restarted. Some upper layers may stop the link on their own in response to an event message. If not, manually stop the network and/or link via the appropriate operator command (e.g., `:NETCONTROL STOP`) and then restart it.

2660 CLAS0001 **MESSAGE: A driver dump was suppressed. Too many dumps already.**

**CAUSE:** During processing of a fatal driver error, the driver attempted a driver dump, but determined it had already dumped too many times since it was initially started (“Cause” is not used here). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** By design, the driver attempts to auto-reset itself after any driver dump. But after 3 dumps, to avoid uncontrollably filling disk space with driver dumps, additional dumps are automatically suppressed. No attempt is made to determine whether the dumps are duplicates of the same problem. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

There is apparently something wrong, since many driver dumps are occurring. Collect binary copies of all dump files (`NETDMP##.PUB.SYS`)

on tape for analysis by Hewlett-Packard and see Appendix A ,  
“Submitting a CR.”

2690 CLAS0001 **MESSAGE: Internal error while initiating a dump. Dump failed.**

**CAUSE:** During processing of a fatal driver error, the driver attempted a driver dump, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status returned by the call to `lnk_timer_start`). This timer was to be used to avoid deadlock in case the dump process did not respond; the driver cannot attempt a dump if a dump timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

2720 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During final processing of a fatal driver error, the driver attempted a driver dump, but was unable to send a dump event to the dump process (“Cause” = 32-bit status returned by the call to `send_msg`). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

2750 CLAS0001 **MESSAGE: Internal error while initiating a dump. Dump failed.**

**CAUSE:** During processing of some other fatal driver error, the driver attempted a driver dump, but encountered an error. It then encountered this second error while trying to clean up, when attempting to release a dump timer it had obtained (“Cause” = 32-bit status returned by the call to `lnk_timer_stop`).

**ACTION:** Typically preceded by another error giving better information about the original cause; check log data for that error and look it up also. This error is mainly informational, since the driver did not dump, but may be indicative of other, possibly-related problems. The driver will still attempt to auto- reset itself, up to a total of 12 times or more.

2780 CLAS0001 **MESSAGE: General error trying to get a buffer**

**CAUSE:** When attempting to build a setup frame for the PCI 100Base-T card (e.g., due to a change in the active multicast address list), the driver’s DVR module encountered an error while trying to allocate a buffer from the driver’s read buffer pool (“Cause” = 32-bit status returned by the call to `bmgr_get_buffer`).

**ACTION:** The driver logs this error, then attempts to continue. However, the problem could indicate some serious internal problems within the buffer manager or its data structures, or with the way the system is

configured.

Although the driver may attempt to continue using the previously read multicast address list, the failure to allocate a data buffer and send a new setup frame to the PCI 100Base-T card could result in some network services/upper layer protocols (ULPs) not operating properly (data frames intended for those ULPs may not be recognized by the 100Base-T card).

If that occurs, try to quiesce any active network traffic/sessions, then bring down the network link (e.g., `NETCONTROL STOP`). Restart the network.

Note all log messages, especially the “Cause” status for this error, and check to see if the driver generated an internal dump file (`NETDMP##.PUB.SYS`); see Appendix A , “Submitting a CR.”

2810 CLAS0003 **MESSAGE: Cannot read current multicast list.**

**CAUSE:** In response to a request to update the multicast address list (and build a new setup frame for the PCI 100Base-T card), the DVR was unable to successfully read the current multicast list of addresses because it was too large for the driver to support. A maximum of 14 multicast addresses can be active at any one time on a single PCI 100Base-T link. There are likely too many network services/upper level subsystems competing for resources on this link.

**ACTION:** The driver will try to continue to operate using the previously activated multicast address list, but this error may prevent some upper level subsystems from operating properly and receiving data over the network. Try to quiesce any current network activity on the link and then bring down the network link (e.g., `NETCONTROL STOP`).

Restart the network link, but limit the load of services/protocols that are running on the same link. If multiple 100Base-T links are available and configured on the system, consider balancing the load of upper level subsystems running over each link.

3040 CLAS0003 **MESSAGE: Pending message table full. Driver not finishing fast enough.**

**CAUSE:** While processing a new blocking request (requiring a driver exit and later reply) and scanning a table in which to save the request, the driver found an unused entry, but an entry counter indicated the table was full (“Cause” is not used here).

**ACTION:** This fatal software error is only caused by a bug, because the in use flags and counters should match. After reporting this error, the driver will die, then will either attempt an auto- reset or else require a manual shutdown and restart. If the problem persists, use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

3070 CLAS0003 **MESSAGE: Pending message table full. Driver not finishing fast enough.**

**CAUSE:** While processing a new blocking request (requiring a driver exit and later reply) and scanning a table in which to save the request, the driver was unable to find an unused entry (“Cause” is not used here).

**ACTION:** This fatal software error is only caused by a bug, since message port subqueue controls should have prevented the table from filling. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart.

Most likely some subsystem has sent a message to an incorrect subqueue. If the problem persists, try to determine which program, networking subsystem, or operator command causes it; then activate link tracing, reproduce the problem, and save the resulting trace file (NMTC#####.PUB.SYS) for analysis by Hewlett-Packard, see Appendix A , “Submitting a CR.”

3100 CLAS0002 **MESSAGE: Illegal access to saved port message area.**

**CAUSE:** While completing an old blocking request (requiring a driver exit and later reply), the driver found that the entry in the pending message save area, where the request was supposedly saved, was no longer in use (“Cause” = table entry number where the request was supposed to be).

**ACTION:** This fatal software error is only caused by a bug, because the driver should never be trying to complete the same message twice. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, try to determine which program, networking subsystem, or operator command causes it; then activate link tracing, reproduce the problem, and save the resulting trace file (NMTC#####.PUB.SYS) for analysis by Hewlett-Packard, see Appendix A , “Submitting a CR.”

3130 CLAS0003 **MESSAGE: Illegal access to saved port message area.**

**CAUSE:** While completing an old blocking request (requiring a driver exit and later reply), the driver found that the index specified for an entry in the pending message save area, where the request was supposedly saved, was not within the range of legal table indexes (“Cause” = the bad table entry number specified).

**ACTION:** This fatal software error is only caused by memory corruption or a bug, because the driver should never pass an illegal index. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart. If the problem persists, try to determine which program, networking subsystem, or operator command causes it; then activate link tracing, reproduce the problem, and save the resulting trace file (NMTC#####.PUB.SYS) for analysis by Hewlett-Packard, see Appendix A ,

“Submitting a CR.”

**ACTION:** This fatal software error is only caused by a bug, since message port subqueue controls should have prevented the table from filling. After reporting this error, the driver will die, then will either attempt an auto-reset or else require a manual shutdown and restart.

Most likely some subsystem has sent a message to an incorrect subqueue. If the problem persists, try to determine which program, networking subsystem, or operator command causes it; then activate link tracing, reproduce the problem, and save the resulting trace file (NMTIC####.PUB.SYS) for analysis by Hewlett-Packard, see Appendix A , “Submitting a CR.”

3160 CLAS0001 **MESSAGE: Out of internal comm frame resources.**

**CAUSE:** While attempting to request action from its ISR module, the driver found that no available communication frames were available on the referenced queue (“Cause” is not used here). The number of available comm frames is not configurable, and the driver cannot operate if frames run out.

**ACTION:** This is a fatal software error. After reporting this error, the driver will attempt a driver dump, then will auto-reset and attempt to continue. Typically followed by another error giving more information about what kind of comm the driver was trying to send; check log data for that error and look it up also.

Collect binary copies of all NETDMP####.PUB.SYS dump files on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”

3190 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** While attempting to process a request involving reading and updating the current multicast address list, the DVR was unable to queue a new setup frame to be sent down to the PCI 100Base-T card. An error occurred when attempting to create a data buffer containing the new setup frame. Possibly there are too many network services/upper level subsystems competing for resources on this link.

**ACTION:** The driver will continue to try to operate using the previously activated multicast address list, but this error may prevent some upper layer protocols from operating properly and receiving data over the network. Try to quiesce any current network activity on the link and then bring down the network link (e.g., NETCONROL STOP).

Restart the network, but limit the load of services/protocols that are running on the same link. If multiple 100Base-T links are available and configured on the system, consider balancing the load of network services running over each link.



3220 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** When preparing to send a setup frame to the PCI 100Base-T card, the DVR was unable to reserve an available transmit descriptor from the descriptor ring. This could be a temporary bottleneck condition because of heavy data traffic on the network, or it could indicate an internal problem in the driver or with the PCI 100Base-T card.

**ACTION:** No action is immediately needed. The driver will retry the operation automatically to see if more transmit descriptors have been freed for use (once the PCI 100Base-T card has finished transmitting previously queued data frames).

However, if the problem persists or there is an interruption of outbound network traffic, the driver may be broken; run the VGPBA diagnostic and attempt a Reset function. If the problem still persists, run VGPBA, attempt a Dump function, and save the resulting file (NETDMP##.PUB.SYS) for analysis by HP. If the driver still does not become usable after this, use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

If none of the above steps resolve the problem, this could also be the result of a bad PCI 100Base-T card. The card may need to be replaced.

3250 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** When preparing to send a setup frame to the PCI 100Base-T card, the DVR was unable to reserve an available transmit descriptor from the descriptor ring. This could be a temporary bottleneck condition because of heavy data traffic on the network, or it could indicate an internal problem in the driver or with the PCI 100Base-T card.

**ACTION:** No action is immediately needed. The driver will retry the operation automatically to see if more transmit descriptors have been freed for use (once the PCI 100Base-T card has finished transmitting previously queued data frames).

However, if the problem persists or there is an interruption of outbound network traffic, the driver may be broken; run the VGPBA diagnostic and attempt a Reset function. If the problem still persists, run VGPBA, attempt a Dump function, and save the resulting file (NETDMP##.PUB.SYS) for analysis by HP. If the driver still does not become usable after this, use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

If none of the above steps resolve the problem, this could also be the result of a bad PCI 100Base-T card. The card may need to be replaced.

3280 CLAS0003 **MESSAGE: Could not allocate or reassign an I/O virtual address.**

**CAUSE:** While attempting to build a transmit request to be sent down to the PCI 100Base-T card, the DVR received an error attempting to

obtain the proper virtual address mapping for the data (“Cause” = 32-bit status returned by the call to `Lnk_load_io_addr_for_virt`).

**ACTION:** No immediate action is required. This could be a temporary condition caused by heavy system load and I/O resource contention. The driver will continue operating and will try the transmit operation again periodically until the required system resources are available.

If the problem persists, it may indicate a more serious problem in the I/O system. Halt the system as soon as possible after the error occurs and generate a system dump, see Appendix A , “Submitting a CR.”

3310 CLAS0003 **MESSAGE: Cannot send a port message.**

**CAUSE:** While attempting to send a reply to an earlier request message from an upper level subsystem or tool, the driver encountered an error on the send (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is sometimes fatal, causing the remainder of the driver’s processing to be skipped. May be followed by another error giving more information about what kind of reply the driver was trying to send; check log data for that error and look it up also. If the link does not seem to be responding, attempt to shut down and restart the network and/or link. If the problem persists, wait until it occurs again, then use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

3340 CLAS0001 **MESSAGE: Open table full. Too many drive users.**

**CAUSE:** Too many subsystems are attempting to open the driver at the same time, or subsystems are shutting down without closing the driver (“Cause” = maximum number of driver opens allowed).

**ACTION:** The driver allows 11 simultaneous opens. It was not opened by the additional subsystem. Shut down any networking subsystems that are not currently needed and try again.

A side-effect of this error may be that the driver becomes unusable; if so, run VGPBA and execute the Reset function to see if that restores normal operation.

3370 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While starting up the link, the driver attempted to request ADA memory from the MPE I/O system, but encountered an error trying to send a memory request message to the I/O Memory Port (“Cause” = 32-bit status from the call to `send_msg`).

**ACTION:** This is a fatal software error. The driver cannot operate the adapter card without ADA memory. After reporting this error, the driver will return a configuration error, then die and wait to be shut down; the configuration routine should shut it down automatically.

The problem can be caused either by lack of memory or by a bug. If you suspect high memory usage and have the GLANCE tool, run it and check system memory usage. If usage is high, try closing some applications or subsystems, then retry link startup. If the problem persists, shut down the system to clear memory, then reboot but try starting the link earlier, before too many other applications get going.

If still low on memory, you may need to add more memory hardware. First, however, Hewlett-Packard can try to determine if more memory would help, or if instead there is a bug. Use NMMGR to make sure all logging classes are enabled for the link type, for disk logging. Reproduce the problem, then collect all NM log files (NMLG#####.PUB.SYS) and see Appendix A , “Submitting a CR.”

3400 CLAS0001 **MESSAGE: Cannot send a port message.**

CAUSE: While shutting down the link, the driver attempted to free ADA memory previously obtained from the MPE I/O system, but encountered an error trying to send a memory request message to the I/O Memory Port (“Cause” = 32-bit status from the call to `send_msg`).

ACTION: This is a warning that some memory resources may have been lost. The driver will attempt to continue. Unless this happens frequently, the system should continue to run.

If the problem happens every time, enable link tracing via `:LINKCONTROL` then reproduce the link shutdown problem (the trace file will close automatically). Save the resulting trace file (NMTC#####.PUB.SYS) on tape for Hewlett-Packard analysis, and see Appendix A , “Submitting a CR.”

3460 CLAS0003 **MESSAGE: Driver is shutting down.**

CAUSE: The driver is being shut down. The last subsystem that was using the driver is now closing it.

ACTION: This event is informational only. No action is needed.

3520 CLAS0001 **MESSAGE: No adapter card found on specified PCI bus.**

CAUSE: During initial driver startup, a PCI bus was not found at the hardware path specified in NMCONFIG.

ACTION: The driver did not start up. Use NMMGR to verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100Base-T adapter card is installed in your computer backplane. If the path resides on a bus converter, use SYSGEN to make sure a path to that bus converter exists in the I/O configuration. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. If necessary, change the SYSGEN or NMCONFIG configurations or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

- 3550 CLAS0001 **MESSAGE: Driver is shutting down.**
- CAUSE: During initial driver startup, a supported 100Base-T adapter card was not found at the hardware path specified in NMCONFIG.
- ACTION: The driver did not start up. Verify the path in NMCONFIG is correct and complete, and matches the path where a supported 100Base-T adapter card is installed in the computer backplane. If necessary, contact your Hewlett-Packard Representative for hardware assistance.
- 3750 CLAS0001 **MESSAGE: Link tracing is already enabled.**
- CAUSE: The driver received a request to turn link tracing on when it was already on. Typically this condition is caught at the C.I. level, however in this case trace may be under the control of a different mechanism.
- ACTION: No action is required; this error is informational only. An error reply was sent in response to the request. Trace was not started by this request this time, but it remains on.
- 3780 CLAS0001 **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a request to turn link tracing on either too early or too late in the driver's life cycle, or when the driver was already broken ("Cause" = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).
- ACTION: Retry the same trace command later. An error reply was sent in response to the request. Trace was not started by this request this time, and remains off.
- 3810 CLAS0001 **MESSAGE: A driver request failed.**
- CAUSE: While processing a request to turn link trace on, the driver was unable to locate a free storage element in which to save reply information ("Cause" = 32-bit status returned by the call to pbt\_dvr\_save\_msg).
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to "die", then will either attempt an auto-reset or else require a manual shutdown and restart.
- 3840 CLAS0001 **MESSAGE: Link tracing is already disabled.**
- CAUSE: The driver received a request to turn link tracing off when it was already off. Typically this condition is caught at the C.I. level, however in this case trace may be under the control of a different mechanism.
- ACTION: No action is required, this error is informational only. An error reply was sent in response to the request. Trace was not stopped by this

request this time, but it remains off.

3870 CLAS0001 **MESSAGE: A driver request failed.**

**CAUSE:** While processing a request to turn link trace on, the driver was unable to locate a free storage element in which to save reply information (“Cause” = 32-bit status returned by the call to pbt\_dvr\_save\_msg).

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

3900 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** Before attempting to forward a protocol rendezvous (bind) request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).

**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the rendezvous request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

3910 CLAS0001 **MESSAGE: Cannot get ADA memory object.**

**CAUSE:** During initial startup, the driver attempted to obtain a memory object via the I/O system, but received a bad status in the reply for that request (“Cause” = 32-bit status from the reply message).

**ACTION:** The link did not start, and the driver attempted to send back an error reply in response the configuration request from the module configurator. Probably the amount of frozen memory on the system is very high; if you have the GLANCE tool you can try to check memory usage. Try retrying the operation again later, or first terminate some applications and then retry.

3930 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** Before attempting to forward a protocol separate (unbind) request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).

**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the separate request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

- 3960 CLAS0001 **MESSAGE: Bad message for current state.**
- CAUSE: Before attempting to forward a diagnostic or LINKCONTROL statistics request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).
- ACTION: If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the statistics request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.
- 3990 CLAS0001 **MESSAGE: Bad message for current state.**
- CAUSE: Before attempting to forward a diagnostic or LINKCONTROL statistics request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).
- ACTION: If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the statistics request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.
- 4020 CLAS0001 **MESSAGE: Bad message for current state.**
- CAUSE: Before attempting to forward a diagnostic hardware-control request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).
- ACTION: If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the statistics request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.
- 4030 CLAS0001 **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a release-memory reply message it was not expecting (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).
- ACTION: The driver may already have changed state because of a shutdown or another problem, in which case this message can be ignored. Otherwise, the I/O system may be confused. The driver will drop this message without further action. If the problem occurs repeatedly, see Appendix A , “Submitting a CR.”

4050 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** Before attempting to forward a diagnostic or LINKCONTROL statistics request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).

**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply fro the statistics request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

4080 CLAS0001 **MESSAGE: Unimplemented operation attempted.**

**CAUSE:** The main driver DVR state machine was passed an input event for which there is no processing implemented. Either there is a driver bug or some data corruption has occurred (“Cause” = 32-bit ordinal value of the input event code: Hewlett-Packard use only).

**ACTION:** Try to determine which operator or program actions led to this error. Then see Appendix A , “Submitting a CR.”

After this problem occurs, the driver will enter a “broken” state where is may not respond to further requests. If possible, run the VGPBA tool program, and use it to force a driver dump, then forward the resulting NETDMP##.PUB.SYS file to HP for analysis. After a dump, the driver will attempt to auto-reset itself and continue. You may also use VGPBA to attempt a manual reset of the driver, after which it may be possible to continue.

4110 CLAS0001 **MESSAGE: Cannot install interrupt handler.**

**CAUSE:** During initial driver startup, the driver was unable to add its ISR into the MPE I/O system, as an interrupt handler routine for any adapter card interrupts on that EIR bit (“Cause” = 32-bit status returned by the call to `io_config_int`).

**ACTION:** The driver did not start up. There is probably an MPE software installation problem, with incomplete or incompatible O/S software. Verify the system is running an MPE release which supports PCI 100Base-T link drivers. The only other cause is a software bug; see Appendix A , “Submitting a CR.”

4140 CLAS0001 **MESSAGE: Internal driver error.**

**CAUSE:** During initialization, the driver attempted to obtain information about the PCI device (BAR information) from the I/O system but encountered an error (“Cause” = 32-bit status returned from `io_get_pci_dev_info`).

**ACTION:** The driver did not start up. Check that the 100Base-T adapter card is properly seated in its PCI slot and that the I/O path has been properly configured. If the problem persists, it may indicate a problem

with the system software installation; the software may need to be reinstalled, or additional software patches may be required, see Appendix A , “Submitting a CR,” or contact your Hewlett-Packard Representative to verify you have the required level of software installed.

4170 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While attempting to reply to a change multicast list request (most likely from upper level subsystem DLPI), the driver encountered an error sending the reply message (“Cause” = 32-bit status returned from `pbt_dvr_send_reply`).

**ACTION:** The process which sent the multicast list request message (likely DLPI) may be hung waiting for the reply message that the driver was unable to send.

If that is the case, try stopping the link to see if that allows the DLPI process to terminate. Additional errors may have been logged which give more information about why the send failed.

If the problem persists, collect all available information logged by this link (driver) from the log file; also check for driver-generated dump files (`NETDMP##.PUB.SYS`), see Appendix A , “Submitting a CR.”

4200 CLAS0002 **MESSAGE: Link connected.**

**CAUSE:** The first upper layer subsystem to bind to the driver triggered a link connect, which was successful (“Mode” = the connection mode: 100BT, 10BT, etc.; “Duplex” = Full or Half). This event is also logged after the link or cable has been successfully reconnected after being disconnected, or on a link reconnect following a severe line hit or other recoverable error.

**ACTION:** This event is informational only.

No action is needed unless the message appears frequently while the link is up, indicating possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference, and is of the proper UTP category or grade for the type of link (CAT-5 for 100Base-T).

4230 CLAS0002 **MESSAGE: Link disconnected.**

**CAUSE:** The last upper layer subsystem has unbound itself from the driver, triggering a link disconnect This event is also logged if the link unexpectedly drops due to a cable disconnect, hub retrain request, powerfail, severe line hit, or other recoverable error (“Status” = 32-bit status giving the reason for the disconnect, 0 = normal).

**ACTION:** This event is informational only. If the network is being shut down, no action is required.

However, if the link was supposed to be up or the message appears frequently while the link is up, this indicates possible cabling problems;



make sure cabling is securely connected and properly routed away from sources of interference, and is of the proper UTP category or grade for the type of link (CAT-5 for 100Base-T).

4260 CLAS0003 **MESSAGE: Driver is starting adapter card.**

**CAUSE:** The driver has completed initial startup of the adapter card, or a restart following a reset, dump, or other recoverable condition (“Status” = 32-bit status giving the result of the startup attempt, 0 = successful).

**ACTION:** This event is informational. No action is required unless the status is nonzero. Nonzero status indicates the startup failed; this may be preceded by other specific errors.

4290 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** After successful or unsuccessful completion of initial hardware startup, the driver attempted to reply to a pending configuration request from its module configurator, but encountered an error on the send (“Cause” = 32-bit status returned by the call to `pbt_dvr_send_reply`).

**ACTION:** This is a fatal software error. It might be caused by heavy CPU load, or by attempting to operate the network subsystem or tool which started the link at too low of a CPU process priority, causing a timeout. Any condition, such as a timeout or abort, which causes the driver’s module configurator to cease awaiting the reply and dispose of its reply port, might also cause this error.

The module configurator did not receive the reply, therefore network and/or link startup will fail. The driver now “dies” and awaits a shutdown, which the module configurator should attempt automatically.

4320 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** Following an unsuccessful initial startup of its adapter card, or a restart because of a powerfail or reset, the driver sent a bad reply to the pending config request message, if any, logged this error, then died (“Cause” = 32-bit status giving the reason startup failed).

**ACTION:** This event indicates a fatal driver software condition. May be preceded by other errors giving more information about the original failure, which may help you determine whether it was a hardware or software problem.

If this occurred on initial startup, the driver’s module configurator should shut the driver down automatically. If not, it may mean the adapter card has failed because of a hardware problem, or that a software reset attempt has failed. The driver may need to be manually shut down and restarted, using an appropriate network subsystem command (such as `:NETCONTROL STOP`). If you wish, you may first try running the VGPBA diagnostic; execute the Reset function to see if that

clears the problem.

4350 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** During initial driver startup, the driver encountered an error during configuration (“Cause” = 32-bit status returned by the call to `pbt_dvr_port_msg_exec`). Probably there are already too many opens against the driver.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. This error can only be caused by a bug, a mismatch between driver’s state and open table.

4380 CLAS0003 **MESSAGE: Driver is starting up.**

**CAUSE:** The driver has just completed initial configuration and is now starting up (“Vers” = driver version number, “Pda” = 64-bit pointer to driver context area: HP use only). This event only occurs on initial startup, not on restarts after resets, etc.

**ACTION:** This event is informational. No action is required.

4410 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** During initial driver startup, the driver encountered an error during configuration, while attempting to request ADA memory from the MPE I/O system (“Cause” = 32-bit status returned by the call to `pbt_dvr_port_msg_exec`). Probably a port message could not be sent.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take.

The open request failed. The driver will now “die” and must be shut down; the module configurator should do this automatically.

4440 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** While processing a driver open from an upper layer subsystem, which was not the first open against the driver, the driver encountered an error during configuration (“Cause” = 32-bit status returned by the call to `pbt_dvr_port_msg_exec`). Probably there are already too many opens against the driver.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take.

The driver returned a bad result to the subsystem, and the open request failed. The driver will continue to operate all other subsystems as before.

4470 CLAS0001 **MESSAGE: Configuration failed.**

**CAUSE:** While processing a driver open from an upper layer subsystem, which was not the first open against the driver, the driver encountered an error during configuration (“Cause” = 32-bit status returned by the call to `pbt_dvr_send_reply`). Probably a port message could not be sent.

**ACTION:** The driver allows 11 simultaneous opens. The open attempt by the additional subsystem failed. Shut down any subsystems that are not currently needed and try again.

A side-effect of this error may be that the driver becomes unusable; if so, run VGPBA and execute the Reset function to see if that restores normal operation.

4500 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a new open from an upper layer subsystem, at a time the driver was not able to process these requests, such as during shutdown or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).

**ACTION:** The open failed. Check the system console; if the driver is shutting down or doing a dump, wait until that completes. Retry the operation. If the problem persists, the driver may be broken; run the VGPBA diagnostic and attempt a Reset function. If the problem still persists, run VGPBA, attempt a Dump function, and save the resulting file (`NETDMP##.PUB.SYS`) for analysis by Hewlett-Packard. If the driver still does not become usable after this, use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

4560 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** Before attempting to forward a diagnostic request to its ISR, the driver discovered the ISR was already in a “dead” state and unable to process requests (“Cause” = 32-bit status stating the driver is “dying”).

**ACTION:** If the operator already knows the driver is in the process of being closed, this error can be ignored. The driver attempted to send an error reply for the diagnostic request. The ISR may also be “dead” as a result of a serious previous error. A diagnostic reset action may clear this condition.

4590 CLAS0001 **MESSAGE: Driver initialization failed.**

**CAUSE:** While processing its very first startup message, the driver encountered a problem (“Cause” = 32-bit status returned by the call to `pbt_dvr_chk_chard_type`). Probably the configured hardware is not present, is not the correct kind of adapter card, or there was a problem configuring the ISR into the I/O system.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log for that error and look it up also, for more actions to take. The driver will attempt to send an error reply for the startup request. It then enters a “broken” state and awaits a shutdown, which the module configurator should attempt automatically.

4620 CLAS0001 **MESSAGE: Driver initialization failed.**

**CAUSE:** The driver was unable to successfully bind to its lower manager; the lower manager’s port number supplied by the I/O system is nil.

**ACTION:** The link did not start, because erroneous information was passed to the driver by the I/O system. This could indicate a serious problem with the system software, or a problem with the I/O system. If the problem persists, halt the system as soon as possible after the error occurs and generate a dump; see Appendix A , “Submitting a CR.”

4650 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During initialization, the driver was unable to successfully bind to its lower manager. Probably an underlying call to `send_msg` failed.

**ACTION:** The link did not start. This error may be preceded by other errors in the log file giving a more specific reason for the failure. Check the log data and look up additional errors for more possible actions. You may retry the operation (try starting the link again), but the hardware path may be unusable. If the problem persists, halt the system and generate a dump; see Appendix A , “Submitting a CR.”

4680 CLAS0001 **MESSAGE: Driver initialization failed.**

**CAUSE:** The driver was unable to successfully bind to its lower manager; an error occurred when attempting to send a bind request message to the lower.

**ACTION:** The link did not start. This error may be preceded by other errors in the log file giving a more specific reason for the failure. Check the log data and look up additional errors for more possible actions. You may retry the operation (try starting the link again), but the hardware path may be unusable. If the problem persists, halt the system and generate a dump; see Appendix A , “Submitting a CR.”

4710 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** The driver received a second copy of the first initialization message it would ever get, indicating a second attempt to start the driver.

**ACTION:** The driver sent an error reply in response to the message. Further action may not be required. If the problem occurs frequently, try to determine what operator commands or actions trigger the error, then see Appendix A , “Submitting a CR.”

- 4740 CLAS0001 **MESSAGE: Cannot send a port message.**  
CAUSE: The driver was unable to successfully unbind from its lower manager. Probably an underlying call to `send_msg` failed.  
ACTION: No action is required; this is an informational message. This error may be preceded by other errors in the log file giving a more specific reason for the failure. Check the log data and look up additional errors for more possible actions. If the problem persists, halt the system and generate a dump; see Appendix A , “Submitting a CR.”
- 4770 CLAS0001 **MESSAGE: Cannot send a port message.**  
CAUSE: During shutdown, the driver was unable to successfully unbind from its lower manager. Probably an underlying call to `send_msg` failed.  
ACTION: No action is required; this is an informational message. There might be a system problem that precipitated the shutdown which is preventing messages from being sent successfully. If the problem persists, collect all the relevant data from the log file and check those errors for additional actions. If the problem persists halt the system as soon as possible after the problem occurs and generate a dump; see Appendix A , “Submitting a CR.”
- 4800 CLAS0001 **MESSAGE: Late dump-done message received. Dump took too long.**  
CAUSE: The driver received a driver-dump completion message when it was not working on a dump (“Cause” = 32-bit status saying there was a bad message for the current state).  
ACTION: This error is informational only. Probably the Network Dump Process was delayed by other system processing, such that it exceeded the time limit set by the driver. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, after which the driver will now attempt to auto-reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disk activity load before the next attempt.  
If load is not the problem, see Appendix A , “Submitting a CR.”
- 4830 CLAS0001 **MESSAGE: Internal error while initiating a dump. Dump failed.**  
CAUSE: The driver’s dump timer popped while performing a dump operation (“Cause” = 32-bit status indicating a timeout has occurred). Probably a heavy CPU or disk activity load caused the Network Dump Process to take longer than the time allowed by the driver.  
ACTION: This error is informational only. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, and by the time this error is logged, the driver is already attempting to auto- reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disk activity load before the next attempt.

- 4860 CLAS0001    **MESSAGE: Cannot initiate a dump. Already dumping.**
- CAUSE: A user attempted to force a driver dump while a previous driver dump was still occurring (“Cause” = 32-bit status saying a driver dump is starting).
- ACTION: A dump of your problem is already being produced. Wait a minute or two for the dump to finish. Forward the resulting NETDMP##.PUB.SYS to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”
- 4890 CLAS0001    **MESSAGE: A driver dump is starting.**
- CAUSE: A user is forcing a driver dump to occur, typically via the VGPBA diagnostic tool program (“Cause” = 32-bit status saying the driver dump was forced).
- ACTION: This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”
- 4920 CLAS0001    **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During initial startup, while attempting to initialize the ADA data structure, the driver encountered an error. Previous errors may also have been logged which provide more detail on the error.
- ACTION: The link did not start, and the driver attempted to send back an error reply in response to the configuration request from the module configurator. Retry the operation again. If the problem persists, try forcing a driver dump via the VGPBA diagnostic tool program; send the resulting NETDMP##.PUB.SYS to Hewlett-Packard for analysis.
- 4950 CLAS0001    **MESSAGE: Cannot get ADA memory object.**
- CAUSE: During initial startup, the driver attempted to obtain a memory object via the I/O system, but received a bad status in the reply for that request (“Cause” = 32-bit status from the reply message).
- ACTION: The link did not start, and the driver attempted to send back an error reply in response the configuration request from the module configurator. Probably the amount of frozen memory on the system is very high; if you have the GLANCE tool you can try to check memory usage. Try retrying the operation again later, or first terminate some applications and then retry.
- 4980 CLAS0001    **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a get-memory reply message it was not expecting (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).
- ACTION: The driver may already have changed state because of a shutdown or another problem, in which case this message can be

ignored. Otherwise, the I/O system may be confused. Either way, some memory may have been lost. The driver will drop this message without further action. If the problem occurs frequently, see Appendix A , “Submitting a CR.”

5010 CLAS0001 **MESSAGE: Cannot release ADA memory object.**

CAUSE: During shutdown, the driver requested the I/O system to release a memory object, but received an error reply in response (“Cause” = 32-bit status from the mem\_reply message).

ACTION: This error should not occur. The driver may be confused, or there is a system problem. However, the driver will ignore the error and attempt to continue with the shutdown. If this problem happens frequently when the driver is shutting down, see Appendix A , “Submitting a CR.”

5040 CLAS0001 **MESSAGE: Bad message for current state.**

CAUSE: The driver received a release- memory reply message it was not expecting (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).

ACTION: The driver may already have changed state because of a shutdown or another problem, in which case this message can be ignored. Otherwise, the I/O system may be confused. The driver will drop this message without further action. If the problem occurs repeatedly, see Appendix A , “Submitting a CR.”

5070 CLAS0001 **MESSAGE: Bad message for current state.**

CAUSE: The driver received a request to reset itself too early in the driver’s life cycle before it had ever brought up the adapter card, or at a point late in shutdown when recovery is no longer needed (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).

ACTION: This error is informational only. If the reset request was manually sent by a user, such as via the VGPBA diagnostic tool, an error reply will be returned; resets are not allowed (or needed) when the driver is in the state it is currently in. If the reset was automatically generated by the driver in response to some serious error it detected, this log event means it is being ignored.

5100 CLAS0001 **MESSAGE: A driver request failed.**

CAUSE: During a link close operation, the driver encountered an error while unconfiguring the link (“Cause” = 32-bit status returned by the call to pbt\_dvr\_port\_msg\_exec).

ACTION: The subsystem close did not work. The driver attempted to return an error reply to the sending subsystem. Reaction to that message is subsystem-dependent. Probably the subsystem passed an invalid open ID, or tried to close a link it had not opened. If this

problem happens every time the same subsystem is closed, submit an CR against that subsystem, describing the problem; see Appendix A , “Submitting a CR.”

5130 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During a link close operation, the driver encountered an error while sending an unconfigure reply message to an upper layer subsystem (“Cause” = 32-bit status returned by the call to pbt\_dvr\_send\_reply).

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. The subsystem’s access to the link was closed, but the subsystem did not get the reply; reaction to this situation is subsystem-dependent. The subsystem have already terminated. If this problem happens every time the same subsystem is closed, submit an CR against that subsystem, describing the problem; see Appendix A , “Submitting a CR.”

The driver may now enter a broken state and not respond to further requests, requiring a system reboot to completely shut the driver down. If other subsystems still need to use the link, if you wish you may try running the VGPBA diagnostic; execute the Reset function to see if that restores access for the other subsystems, until a reboot can happen.

5160 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received an unconfigure request message before it received its first configure request (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).

**ACTION:** This error is informational only. The driver attempted to return an error reply to the sending subsystem. If this problem happens frequently, try to determine what actions lead to the problem, then see Appendix A , “Submitting a CR.”

5220 CLAS0001 **MESSAGE: Unimplemented operation attempted.**

**CAUSE:** The main driver DVR state machine was passed an input event for which there is no processing implemented. Either there is a driver bug or some data corruption has occurred (“Cause” = 32-bit ordinal value of the input event code: Hewlett-Packard use only).

**ACTION:** Try to determine which operator or program actions led to this error. Then see Appendix A , “Submitting a CR.”

After this problem occurs, the driver will enter a “broken” state where is may not respond to further requests. If possible, run the VGPBA tool program, and use it to force a driver dump, then forward the resulting NETDMP##.pub.sys file to Hewlett-Packard for analysis. After a dump, the driver will attempt to auto-reset itself and continue. You may also use VGPBA to attempt a manual reset of the driver, after which it may



be possible to continue.

5250 CLAS0001 **MESSAGE: Driver received an unknown port message.**

**CAUSE:** Some module on the system has sent the driver a message having an unknown message descriptor. The driver does not implement any messages having that descriptor (“Cause” = 32-bit value of the message descriptor field).

**ACTION:** The driver took no action on the message, and dropped it. However, if the problem occurs frequently, your system may not be set up properly. The driver traces the message which it received. If you can repeat the problem, first enable link tracing. Then reproduce the problem, stop tracing, and save the resulting trace data file for analysis by Hewlett-Packard, see Appendix A , “Submitting a CR.”

5650 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During ISR processing, an attempt by the ISR to wake up the driver by sending a message to it failed (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is likely an indication of a more serious system software problem, and may be followed by a system abort. Probably all message frames have been exhausted by some module running on the system. Further recovery actions may not be possible; if the system fails, take a memory dump and reboot.

The driver wakeup did not occur, so a link hang is now possible. It is also possible that if a system abort does not occur, other activity, such as transmissions by upper layer protocols, will awaken the driver, such that normal operation continues. If the link hangs and a system abort does not occur, try using VGPBA to attempt a manual reset, or try stopping and restarting all networks using the link driver.

5680 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** While attempting to request action from its DVR module, the driver’s ISR found that no available communication frames were available on the referenced queue (“Cause” is not used here).

**ACTION:** This is a fatal software error. The number of available comm frames is not configurable, and the driver cannot operate if frames run out. After reporting this error, the driver will attempt a driver dump, then will auto-reset and attempt to continue. Typically followed by another error giving more information about what kind of comm the driver was trying to send; check log data for that error and look it up also.

Collect binary copies of all dump files (`NETDMP##.PUB.SYS`) on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”

- 5710 CLAS0001 **MESSAGE: Cannot send a port message.**
- CAUSE:** During ISR processing, an attempt by the ISR to send a reply to a previously received message failed (“Cause” = 32-bit status returned by the call to `send_msg`).
- ACTION:** This error is likely an indication of a more serious system software problem, and may be followed by a system abort. Probably all message frames have been exhausted by some module running on the system. Further recovery actions may not be possible; if the system fails, take a memory dump and reboot.
- If the link hangs and a system abort does not occur, try using VGPBA to attempt a manual reset, or try stopping and restarting all networks using the link driver.
- 5740 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE:** The ISR attempted to terminate transmit processing on the PCI 100Base-T card (e.g., in response to a reset or shutdown request, in order to change active characteristics on the link, etc.), but did not receive the expected acknowledgment from the card indicating the request was received and processed.
- ACTION:** The driver may become unusable or attempt an auto-reset. If the driver appears to hang, try to shutdown the network manually and then restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.
- If the problem persists, it could indicate a bad PCI 100Base-T card. A new adapter card may be needed.
- 5770 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE:** The ISR attempted to terminate receive processing on the PCI 100Base-T card (e.g., in response to a reset or shutdown request, in order to change the active characteristics of the link, etc.), but did not receive the expected acknowledgment from the card indicating the request was received and processed.
- ACTION:** The driver may become unusable or attempt an auto-reset. If the driver appears to hang, try to shutdown the network manually and then restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.
- If the problem persists, it could indicate a bad PCI 100Base-T card. A new adapter card may be needed.
- 5800 CLAS0001 **MESSAGE: Driver has detected data corruption.**
- CAUSE:** While starting up, the ISR was unable to allocate a transmit descriptor in order to send an initial setup frame to the PCI 100Base-T card. This indicates a corruption of the driver’s data structures, since

the descriptor ring should be in a newly initialized state.

**ACTION:** The driver did not start up, though it may attempt an auto-reset. Check to see if the driver was able to generate a dump file (NETDMP##.PUB.SYS) file, and send the file to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

5830 CLAS0001 **MESSAGE: Driver has detected data corruption.**

**CAUSE:** While starting up, the ISR attempted to allocate a transmit descriptor in order to send an initial setup frame to the PCI 100Base-T card, but did not get back the “head” descriptor as expected. This indicates a corruption of the driver’s data structures, since the descriptor ring should be in a newly initialized state.

**ACTION:** The driver did not start up, though it may attempt an auto-reset. Check to see if the driver was able to generate a dump file (NETDMP##.PUB.SYS) file, and send the file to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

5860 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** During startup, while attempting to build an initial setup frame for the PCI 100Base-T card, the ISR encountered an error. Other error messages may have been logged which describe the error in more detail.

**ACTION:** The driver did not start up, though it may attempt an auto-reset. Check to see if the driver generated an internal dump file (NETDMP##.PUB.SYS), and send the file to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

5890 CLAS0001 **MESSAGE: Could not allocate or reassign an I/O virtual address.**

**CAUSE:** During startup, while attempting to send an initial setup frame to the PCI 100Base-T card, the ISR was not able to map the I/O virtual address of the data (“Cause” = 32-bit status returned from `lnk_load_io_addr_for_virt`). This could indicate resource contention or severe memory pressure on the system.

**ACTION:** The driver did not start up, though it may attempt an auto-reset. If the system is under heavy load, try shutting down any unnecessary applications and subsystems, and try again. If the problem persists, this could indicate a serious problem in the I/O system. Halt the system as soon as possible after the problem occurs and generate a dump; see Appendix A , “Submitting a CR.”

5920 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During startup, while attempting to complete the hardware initialization sequence for the PCI 100Base-T card, the ISR did not receive the expected response from the card (the transmit process did not suspend after the initial setup frame was sent).

**ACTION:** The driver did not start up, though it may attempt an

auto-reset. This error could indicate a problem with the PCI 100Base-T adapter card. Check all connections, make sure the card is properly seated in the PCI slot, and try to restart the link. If the problem persists, try replacing the card.

5950 CLAS0001 **MESSAGE: EEPROM read error on adapter card.**

**CAUSE:** During link startup or reset, the driver attempted to read the adapter card's factory station address from the card's EEPROM non-volatile storage chip, but the read failed.

**ACTION:** EEPROM read operations are timing-sensitive. If the load on the system (CPU) is very high, retry the startup operation when the system is under a lighter load. If the problem persists, the adapter card has probably failed; try replacing the card.

5980 CLAS0001 **MESSAGE: Unable to write to adapter card PCI configuration space.**

**CAUSE:** During driver startup or reset, the driver attempted to write the memory BAR information to the adapter card's PCI configuration space, but the I/O system reported an error. ("Cause" = 32-bit status returned from `io_pci_cfg_write_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

6010 CLAS0001 **MESSAGE: Unable to read from adapter card PCI configuration space.**

**CAUSE:** During driver startup or restart, the driver attempted to read the subsystem ID register from the adapter card's PCI configuration space, but the I/O system reported an error. ("Cause" = 32-bit status returned from `io_pci_cfg_read_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

6040 CLAS0001 **MESSAGE: Unable to read from adapter card PCI configuration space.**

**CAUSE:** During driver startup or restart, the driver attempted to read the configuration ID register from the adapter card's PCI configuration space, but the I/O system reported an error. ("Cause" = 32-bit status returned from `io_pci_cfg_read_bit32`).

**ACTION:** The adapter card may have been removed, moved to a

different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

6070 CLAS0001 **MESSAGE: Unable to read from adapter card PCI configuration space.**

**CAUSE:** During driver startup or restart, the driver attempted to read the configuration revision information from the adapter card's PCI configuration space, but the I/O system reported an error.  
("Cause" = 32-bit status returned from `io_pci_cfg_read_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

6100 CLAS0001 **MESSAGE: Unable to write to adapter card PCI configuration space.**

**CAUSE:** During driver startup or reset, the driver attempted to write data to the device and driver area in the adapter card's PCI configuration space, but the I/O system reported an error.  
("Cause" = 32-bit status returned from `io_pci_cfg_write_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

6130 CLAS0001 **MESSAGE: Unable to read from adapter card PCI configuration space.**

**CAUSE:** During driver startup or restart, the driver attempted to read the command and status register from the adapter card's PCI configuration space, but the I/O system reported an error.  
("Cause" = 32-bit status returned from `io_pci_cfg_read_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

6160 CLAS0001 **MESSAGE: Unable to write to adapter card PCI configuration space.**

**CAUSE:** During driver startup or reset, the driver attempted to write data to the command and status register in the adapter card's PCI

configuration space, but the I/O system reported an error.  
("Cause" = 32-bit status returned from `io_pci_cfg_write_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

6190 CLAS0001 **MESSAGE: Unable to write to adapter card PCI configuration space.**

**CAUSE:** During driver startup or reset, the driver attempted to write data to the latency timer register in the adapter card's PCI configuration space, but the I/O system reported an error.  
("Cause" = 32-bit status returned from `io_pci_cfg_write_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

6390 CLAS0001 **MESSAGE: Driver could not identify the expected PHY on card.**

**CAUSE:** After verifying the PHY chip on the adapter card had been successfully reset, the driver checked the ID of the PHY, but found it did not match any ID expected for this kind of adapter card  
("Cause" = 32-bit PHY ID obtained from the card).

**ACTION:** The PHY chip may have gone bad, or the software may be out of date.

The link did not connect. Following this error, the driver may "die" and require a manual shutdown of the network. If the same problem persists even after the software version has been verified and the adapter card has been replaced with a known-good card, see Appendix A , "Submitting a CR."

6420 CLAS0001 **MESSAGE: Driver encountered a software error.**

**CAUSE:** While the ISR was attempting to reset the PHY, an error occurred when the driver tried to start a system timer ("Cause" = 32-bit status from `lnk_timer_start`).

**ACTION:** The driver may become unusable or may try and auto-reset. If necessary, stop and restart the link manually. Check for any driver dump files (`NETDMP##.PUB.SYS`) and if present, send to Hewlett-Packard for analysis; see Appendix A , "Submitting a CR."

6450 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting to reset the PHY, a read of the MII failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

6480 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While the ISR was attempting to reset the PHY, an error occurred when the driver tried to start a system timer (“Cause” = 32-bit status from `lnk_timer_start`).

**ACTION:** The driver may become unusable or may try and auto-reset. If necessary, stop and restart the link manually. Check for any driver dump files (`NETDMP##.PUB.SYS`) and if present, send to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

6510 CLAS0001 **MESSAGE: Adapter card PHY did not finish reset in the time allowed.**

**CAUSE:** During a link connect sequence, the driver tried 3 times to reset the PHY chip, but it still did not go “ready” after the reset.

**ACTION:** The PHY chip on the adapter card may be bad; replace the card. If the problem persists with a known good adapter card, contact your Hewlett-Packard representative for assistance.

6540 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While the ISR was attempting to reset the PHY, an error occurred when the driver tried to start a system timer (“Cause” = 32-bit status from `lnk_timer_start`).

**ACTION:** The driver may become unusable or may try and auto-reset. If necessary, stop and restart the link manually. Check for any driver dump files (`NETDMP##.PUB.SYS`) and if present, send to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

6570 CLAS0001 **MESSAGE: Driver detected a hardware problem.**

**CAUSE:** The driver was unable to initialize the PHY chip on the adapter card.

**ACTION:** The driver may not start, or may become unusable or try to auto-reset. Additional errors may have been logged which provide more specific information about the error; check those errors for additional suggested actions.

If the problem persists, the PHY chip on the adapter card may be bad; try replacing the card. If it still occurs with a known good card, contact your Hewlett-Packard representative.

6600 CLAS0001 **MESSAGE: Driver detected a software problem.**

**CAUSE:** While the ISR was attempting to initialize the PHY, an error occurred when the driver tried to start a system timer (“Cause” = 32-bit status from `lnk_timer_start`).

**ACTION:** The driver may become unusable or may try and auto-reset. If necessary, stop and restart the link manually. Check for any driver dump files (NETDMP##.PUB.SYS) and if present, send to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

6630 CLAS0001 **MESSAGE: Driver detected a hardware problem.**

**CAUSE:** During a 100Base-T connect sequence, the driver attempted to check for presence of a link signal, but encountered an error trying to read from a register on the PHY chip (“Cause” = 32-bit status from the call to pbt\_mii\_read16).

**ACTION:** If there has been an interruption of power, the driver may recover automatically; otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

6660 CLAS0001 **MESSAGE: Driver detected a hardware problem.**

**CAUSE:** During a 100Base-T connect sequence, the driver attempted to check for presence of a link signal, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to pbt\_mii\_read16).

**ACTION:** If there has been an interruption of power, the driver may recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”

6690 CLAS0001 **MESSAGE: Autonegotiation reports link settings are incompatible with hub.**

**CAUSE:** If this error occurs, it is probably because the link has reported a remote fault. Usually this means the adapter card and the hub or switch to which it is connected, have failed to agree on a link speed and duplex setting acceptable to both.

**ACTION:** Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.

Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.

If a crossover cable is being used, make sure it is correctly wired.

Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.

6720 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 100Base-T connect sequence, the driver found the link was not connected yet, but encountered an error while trying to get or



reset a timer (“Cause” = 32-bit status from the call to `lnk_timer_start`). This timer was to be used to wait again for the link connect to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

6750 CLAS0001 **MESSAGE: Hub did not report link up within time allowed.**

**CAUSE:** If this error occurs, it is because the link did not connect within 25 to 30 seconds after it was instructed to do so.

**ACTION:** Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.

Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.

If a crossover cable is being used, make sure it is correctly wired.

Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.

6780 CLAS0001 **MESSAGE: Timeout while awaiting link autonegotiation completion.**

**CAUSE:** The link appears to be connected, but the driver thinks it is still waiting for it to connect.

**ACTION:** This error should not occur. If it happens frequently, see Appendix A , “Submitting a CR,” or contact your Hewlett-Packard representative.

6810 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting perform autonegotiation, a read of the PHY’s BMSR register failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

6840 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting perform autonegotiation, a read of the PHY’s ANAR register failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

6870 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting perform autonegotiation, a read of the PHY's ANLPAR register failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

6900 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting perform autonegotiation, a read of the PHY's ANER register failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

6930 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting perform autonegotiation and detect the link speed, a read of the PHY's PAR register failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

6940 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to update the speed/duplex settings on the PHY, the ISR first tried to stop the transmit processing on the adapter card, but received an error. ("Cause" = 32-bit status from `pbt_isr_stop_tx`). Additional errors may have been logged with more information about the failure.

**ACTION:** The driver may become unusable or attempt an auto-reset. If the driver appears to hang, try to shutdown the network manually and then restart it. Most likely, once the reset is complete and the driver has "reinitialized" the hardware (card), the driver can resume operating normally.

If the problem persists, it may indicate a bad adapter card; try replacing the card.

6950 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to update the speed/duplex settings on the PHY, the ISR first tried to stop the receive processing on the adapter

card, but received an error. (“Cause” = 32-bit status from `pbt_isr_stop_rx`). Additional errors may have been logged with more information about the failure.

**ACTION:** The driver may become unusable or attempt an auto-reset. If the driver appears to hang, try to shutdown the network manually and then restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.

If the problem persists, it may indicate a bad adapter card; try replacing the card.

6960 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While attempting to process a link connection failure and reconnect the link, an extraneous input message was received in the PHY state machine (`pbt_do_phy_state_connfail`). The ISR attempted to stop the PHY timer (a system timer) when the event occurred, but received an error (“Cause” = 32-bit status from `lnk_timer_stop`).

**ACTION:** This is an informational message; the driver will attempt to recover from this error and continue processing. If it can’t, the driver may try an auto-reset. If the link appears to hang or become unusable, try shutting down and restarting the network link manually.

If the problem persists, note the conditions under which it occurs, whether the system is under heavy load, etc. Collect all available information from the log file(s); see Appendix A , “Submitting a CR.” Repeated, regular occurrences of the problem may indicate a problem in the system software; a system dump file may be needed.

6990 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting perform a link connect operation, an unexpected event/message was detected in the PHY state machine. The driver attempted to check the status of the PHY by reading one of its status registers but the read operation failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

7020 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While beginning a 100Base-T connect sequence, the driver started to reset the PHY chip, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `lnk_timer_start`). This timer was to be used to wait for the PHY reset to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

7050 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While beginning a 100Base-T connect sequence, the driver attempted to read data from one of the PHY registers, but the read operation failed.

**ACTION:** This is an informational error; it is possible the read failed because the PHY chip had not completed its reset sequence. The driver will attempt to continue processing and try the connect sequence again later. If successive attempts at connecting are unsuccessful, the link will not start up.

If this particular problem persists and the driver can not read data successfully from the PHY, it may indicate the PHY chip is bad; try replacing the adapter card.

7080 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 100Base-T connect sequence, the driver found the PHY chip was not reset yet, and started to reset it again, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `lnk_timer_start`). This timer was to be used to wait again for the PHY reset to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

7110 CLAS0001 **MESSAGE: Adapter card PHY did not finish reset in the time allowed.**

**CAUSE:** During a 10Base-T connect sequence on a PCI 100Base-T adapter card, the driver tried 3 times to reset the PHY chip, but it still did not go “ready” (“Cause” is not used here).

**ACTION:** This is a fatal hardware error. The adapter card may be bad, and may need replacing.

The driver cannot connect the link if the PHY will not reset. The driver will enter a “broken” state and await a manual shutdown by the operator. If you wish you may try running the VGPBA diagnostic and

attempt a reset, however it is unlikely this will fix the problem. If the problem persists with a known-good card, see Appendix A , “Submitting a CR.”

7140 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 100Base-T connect sequence, the driver attempted to power up the PHY, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `lnk_timer_start`). This timer was to be used to wait again for the PHY power up to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

7170 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** During a 100Base-T connect sequence, after resetting the PHY chip, the driver encountered an error while trying to read the PHY ID (“Cause” = 32-bit status from the call to `pbt_isr_init_phy_id`). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. Most likely there is an adapter card hardware problem; the card may need to be replaced.

7200 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a 100Base-T connect sequence, the driver attempted to set a “watchdog” timer to wait for the PHY to complete bringing the link up, but encountered an error while trying to get or reset a timer (“Cause”= 32-bit status from the call to `lnk_timer_start`). The driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

- 7230 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 100Base-T connect sequence, the driver attempted to check for presence of a link signal, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `pbt_mii_read16`).
- ACTION: If an interruption in power has occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 7260 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: During a 100Base-T connect sequence, the driver attempted to check for presence of a link signal, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `pbt_mii_read16`).
- ACTION: If an interruption in power has occurred, this error can be ignored; the driver should recover automatically. Otherwise, the MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.”
- 7290 CLAS0001 **MESSAGE: Autonegotiation reports link settings are incompatible with hub.**
- CAUSE: If this error occurs, it is probably because the link has reported a remote fault. Usually this means the adapter card and the hub or switch to which it is connected, have failed to agree on a link speed and duplex setting acceptable to both.
- ACTION: Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.
- Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.
- If a crossover cable is being used, make sure it is correctly wired.
- Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.
- 7320 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: During a 100Base-T connect sequence, the driver found the link was not connected yet, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `lnk_timer_start`). This timer was to be used to wait again for the link connect to finish; the driver cannot connect the link if a PHY timer cannot be started. If this error is reported, it is because the driver has

already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

7350 CLAS0001 **MESSAGE: Hub did not report link up within time allowed.**

**CAUSE:** If this error occurs, it is because the link did not connect within 25 to 30 seconds after it was instructed to do so.

**ACTION:** Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.

Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.

If a crossover cable is being used, make sure it is correctly wired, and that you have software version A00550B0 or later.

Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.

7380 CLAS0001 **MESSAGE: Timeout while awaiting link autonegotiation completion.**

**CAUSE:** The link appears to be connected, but the driver thinks it is still waiting for it to connect.

**ACTION:** This error should not occur. If it happens frequently, see Appendix A , "Submitting a CR."

7410 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting perform autonegotiation, a read of the PHY's BMSR register failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

7440 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While the ISR was attempting perform autonegotiation, a read of the PHY's ANAR register failed.

**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.

- 7470 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** While the ISR was attempting perform autonegotiation, a read of the PHY's ANLPAR register failed.  
**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.
- 7500 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** While the ISR was attempting perform autonegotiation, a read of the PHY's ANER register failed.  
**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.
- 7530 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** While the ISR was attempting bring up the link and detect the speed and duplex settings for the link, a read of the PHY's general status register failed.  
**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.
- 7560 CLAS0001 **MESSAGE: Driver encountered a software error.**  
**CAUSE:** During the 100Base-T link connect sequence, the driver attempted to stop a system timer that was used to coordinate communication with the PHY chip, but an error was detected ("Cause" = 32-bit status from `lnk_timer_stop`). There could be an internal software error or corruption of data structures.  
**ACTION:** This is an informational message; the driver may attempt an auto-reset in response to the error. If the problem persists, it may indicate a problem with the system software or data structures. If possible, halt the system and generate a dump as soon as possible after the error is observed; see Appendix A , "Submitting a CR."
- 7590 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
**CAUSE:** While the ISR was attempting to check the status of the link, a read of the PHY's general status register failed.  
**ACTION:** The driver may have become unusable and may try to auto-reset. If necessary, stop and restart the link manually. If the problem persists, the PHY chip may have gone bad; try replacing the PCI 100Base-T adapter card.



- 7610 CLAS0001 **MESSAGE: Unimplemented operation attempted.**
- CAUSE: While attempting to enable a loopback mode at the request of a diagnostic tool, the driver detected that the specified mode of loopback support is not available on the PHY.
- ACTION: Not all PHY chips support all loopback modes; make sure that the proper diagnostic request was issued, and that the driver supports the operation requested. Also make sure that the adapter card is the correct type and model number, with a revision level that is supported by the driver software. Contact your Hewlett-Packard representative if you need assistance.
- 7620 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: While attempting to set loopback mode on the PHY, the ISR first tried to stop the transmit processing on the adapter card, but received an error. ("Cause" = 32-bit status from `pbt_isr_stop_tx`). Additional errors may have been logged with more information about the failure.
- ACTION: The driver may become unusable or attempt an auto-reset. If the driver appears to hang, try to shutdown the network manually and then restart it. Most likely, once the reset is complete and the driver has "reinitialized" the hardware (card), the driver can resume operating normally.
- If the problem persists, it may indicate a bad adapter card; try replacing the card.
- 7650 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: While attempting to set loopback mode on the PHY, the ISR first tried to stop the receive processing on the adapter card, but received an error. ("Cause" = 32-bit status from `pbt_isr_stop_rx`). Additional errors may have been logged with more information about the failure.
- ACTION: The driver may become unusable or attempt an auto-reset. If the driver appears to hang, try to shutdown the network manually and then restart it. Most likely, once the reset is complete and the driver has "reinitialized" the hardware (card), the driver can resume operating normally.
- If the problem persists, it may indicate a bad adapter card; try replacing the card.
- 7680 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: While attempting to enable loopback mode, the driver encountered an error while trying to read a register from the PHY ("Cause" = 32-bit status from `pbt_mii_read16`).
- ACTION: The driver may become unusable or attempt an auto-reset. If the driver appears to hang, shut down the network manually and then

restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.

If the problem persists, it may indicate a bad adapter card; try replacing the card.

7710 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to enable loopback mode, the driver encountered an error while trying to read a register from the PHY (“Cause” = 32-bit status from `pbt_mii_read16`).

**ACTION:** The driver may become unusable or attempt an auto-reset. If the driver appears to hang, shut down the network manually and then restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.

If the problem persists, it may indicate a bad adapter card; try replacing the card.

7740 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to enable loopback mode, the driver encountered an error while trying to read a register from the PHY (“Cause” = 32-bit status from `pbt_mii_read16`).

**ACTION:** The driver may become unusable or attempt an auto-reset. If the driver appears to hang, shut down the network manually and then restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.

If the problem persists, it may indicate a bad adapter card; try replacing the card.

7770 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to enable loopback mode, the driver encountered an error while trying to read a register from the PHY (“Cause” = 32-bit status from `pbt_mii_read16`).

**ACTION:** The driver may become unusable or attempt an auto-reset. If the driver appears to hang, shut down the network manually and then restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.

If the problem persists, it may indicate a bad adapter card; try replacing the card.

7820 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** After attempting to connect the link, the driver's ISR module determined the link did come up, then encountered an error trying to notify the DVR module of the connect ("Cause" = 32-bit status from the call to `pbt_isr_copy_send_to_dvr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to "die", then will either attempt an auto- reset or else require a manual shutdown and restart. The driver stopped trying to connect the link.

7830 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** This is a generic logging location which reports the driver is having trouble connecting the link. The message varies depending on what the problem is.

After trying repeatedly for 25–30 seconds to connect the link, the driver's ISR module determined the link did not come up ("Cause" = 32-bit status from giving the reason the latest attempt failed, also explained in the Message).

**ACTION:** This is a warning only. It only appears once, and will not appear again until the link is shut down and restarted.

This informational error should be accompanied by a message specific to the problem. For some reason, the link is not connecting successfully.

Verify that the cable is securely connected to the adapter card at one end, and to a 100Base-TX or 10Base-T hub at the other.

Verify the cable is a correctly wired, Category-5 UTP cable. Category 3 or 4 cables are not acceptable.

If a crossover cable is being used, make sure it is correctly wired.

Check the configuration of the hub or switch port to which the adapter card is connected. Adjust that configuration and, if necessary, use NMMGR to adjust the configuration of the link, so that something will match. If necessary, specify a forced speed and duplex setting, and disable autonegotiation, at both ends.

7860 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While attempting to logically disconnect the link, the driver encountered a problem ("Cause" = 32-bit status from the call to `pbt_isr_call_phy_state_machine`). Probably a power failure or system timer problem has occurred.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up

that error also, for more actions to take. If a power failure has occurred, this error may be ignored; the driver will soon attempt to recover. Otherwise, most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

7890 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While attempting to logically disconnect the link, the driver encountered a problem (“Cause” = 32-bit status from the call to `Pbt_isr_call_phy_state_machine`). Probably a power failure or system timer problem has occurred.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. If a power failure has occurred, this error may be ignored; the driver will soon attempt to recover. Otherwise, most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

7920 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While processing a disconnect request, the ISR detected that upper level subsystem(s) were still rendezvoused to the driver. It tried to set a “wake up” PHY timer to try to reconnect the link once the timer popped, but it was unable to allocate a system timer (“Cause” = 32-bit status from `lnk_timer_start`).

**ACTION:** This is an information message; the driver can not reconnect the link without successfully setting the PHY timer. The link may need to be manually shut down and restarted; if the problem persists, there could be a shortage of system timers. Try the operation again when fewer applications are running.

7950 CLAS0001 **MESSAGE: Heartbeat timeout. Adapter card appears to be hung.**

**CAUSE:** The LAN controller chip on the adapter card has failed to produce any interrupt from normal activity for over 5 seconds. It has also failed, for an additional 5 seconds, to respond to the driver’s inquiry by producing a test interrupt. The driver has decided the card is dead or hung (“Cause” is not used here).

**ACTION:** This is a fatal hardware error. Replace the adapter card.

The driver will enter a “broken” state and await a manual shutdown by the operator. If you wish you may try running the VGPBA diagnostic and attempt a reset. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

- 7980 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: The driver was in the middle of a periodic check of whether the card is still healthy, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status from the call to `lnk_timer_start`). This same timer has been used repeatedly to reawaken the driver so it can check the card, so occurrence of this error probably indicates a larger system problem or corruption of data structures. If this error is reported, it is because the driver has already encountered some other error.
- ACTION: Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. If the problem persists, the system may be low on timers; try stopping some applications before retrying again.
- 8010 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**
- CAUSE: The driver was in the middle of a periodic check of whether the card is still healthy, but encountered an error trying to read from the generic status register on the PHY chip (“Cause” = 32-bit status from the call to `pbt_mii_read16`). Most likely a hardware problem has occurred, not a power failure.
- ACTION: The MII bus may have failed; replace the adapter card. If the same problem persists, see Appendix A , “Submitting a CR.” If a power failure has actually occurred, this error can be ignored; the driver should recover automatically.
- 8040 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: While attempting to de-select a PHY chip during diagnostic loopback testing of the adapter card, the driver encountered some kind of lower- level error (“Cause” = 32-bit status from the call to `pbt_isr_set_loopback_mode`).
- ACTION: This informational error is typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. Depending on the cause of that error, you may decide that replacement of the adapter card is necessary.
- Since diagnostic testing is in progress, the driver should report the error, then attempt to continue. However, later tests may also fail as a result of this error.
- 8070 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: During a link connect attempt, the driver received an interrupt from the PHY chip on the adapter card and passed that to a lower level, but the lower level returned an error (“Cause” = 32-bit status from the call to `pbt_isr_call_phy_state_machine`).

**ACTION:** This informational error is typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. At this level, the error is just logged, then the driver will attempt to continue, if the lower level error was not already fatal.

8100 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** During a link connect attempt, the driver received an interrupt from the PHY chip on the adapter card and passed that to a lower level, but the lower level returned an error (“Cause” = 32-bit status from the call to `pbt_isr_call_phy_state_machine`).

**ACTION:** This informational error is typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. At this level, the error is just logged, then the driver will attempt to continue, if the lower level error was not already fatal.

8300 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to process a restart request, the ISR first tried to stop the transmit processing on the adapter card, but received an error. (“Cause” = 32-bit status from `pbt_isr_stop_tx`). Additional errors may have been logged with more information about the failure.

**ACTION:** The driver may become unusable or attempt an auto-reset. If the driver appears to hang, try to shutdown the network manually and then restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.

If the problem persists, it may indicate a bad adapter card; try replacing the card.

8330 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** While attempting to process a restart request, the ISR first tried to stop the receive processing on the adapter card, but received an error. (“Cause” = 32-bit status from `pbt_isr_stop_rx`). Additional errors may have been logged with more information about the failure.

**ACTION:** The driver may not be able to complete the restart. If the driver appears to hang, try to shut down the network manually and then restart it. Most likely, once the reset is complete and the driver has “reinitialized” the hardware (card), the driver can resume operating normally.

If the problem persists, it may indicate a bad adapter card; try replacing the card.

- 8360 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: While processing a restart request, the ISR attempted to stop the previously enabled heartbeat timer, but was returned an error (“Cause” = 32-bit status from `lnk_timer_stop`).
- ACTION: The restart can not be completed if the driver can not successfully reinitialize the heartbeat timer. The driver may do an MESSAGE: auto-reset. If the driver appears to hang, try a manual shutdown and restart of the network link.
- If the problem persists, it could indicate a system software error or possible data corruption of system data structures. In that case, try to halt the system and generate a dump as soon as possible after the problem is detected; see Appendix A , “Submitting a CR.”
- 8540 CLAS0001 **MESSAGE: Driver encountered a software problem.**
- CAUSE: After completing a start or restart operation, the driver’s ISR then encountered an error trying to notify the DVR module of the restart completion (“Cause” = 32-bit status from the call to `Pbt_isr_copy_send_to_dvr`). Probably no comm frame was available.
- ACTION: This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.
- 8570 CLAS0001 **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a new bind (rendezvous) from an upper layer protocol, at a time when the driver was not able to process these requests, such as before receiving its initial configuration data, during shutdown, or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).
- ACTION: This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.
- Check the system console; if the driver is shutting down or doing a dump, wait until that completes. In these cases, several protocols may experience this same error. If the driver is not shutting down or dying, the protocol may be sending binds to the driver at the wrong time. See Chapter A , “Submitting a CR,” and file an CR against the network subsystem being started.

- 8600 CLAS0001 **MESSAGE: One or more bad bind parms passed by upper level protocol.**
- CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module, but the specified SDI address family was not one of the values supported by the driver (“Cause” = 32-bit value giving the bad address family which was specified).
- ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.
- Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.
- 8630 CLAS0001 **MESSAGE: Link common reported a protocol bind problem.**
- CAUSE:** While attempting to setup a rendezvous entry (by calling `lnk_rendez`), an error was returned to the ISR. (“Cause” = 32-bit integer specifying the SAP that was trying to rendezvous).
- ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.
- Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.
- 8660 CLAS0001 **MESSAGE: Link common reported an inbound buffering problem.**
- CAUSE:** While attempting to complete a rendezvous request, the ISR received an error from link common (`lnk_buf_init`) when attempting to set up inbound buffering for the SAP. (“Cause” = 32-bit integer specifying the SAP that was trying to rendezvous).
- ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.
- Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional



software patches; contact your Hewlett-Packard Representative for assistance.

8690 CLAS0003 **MESSAGE: Subsystem is binding to link driver.**

**CAUSE:** An upper-layer protocol has successfully bound (rendezvoused) to the link driver (“Addr” = 32-bit encoded protocol address (SAP) value for this protocol module). Being bound means the driver can now route incoming data frames to this protocol.

**ACTION:** None. This is an informational message only. A similar message is logged later, when the protocol unbinds. If this is the first bind, the link driver will now attempt to reconnect the link.

8720 CLAS0003 **MESSAGE: Subsystem is unbinding from link driver.**

**CAUSE:** An upper-layer protocol has begun to unbind (separate) from the link driver (“Addr” = 32-bit encoded protocol address (SAP) value for this protocol module). Once unbound, the driver can no longer route incoming data frames to this protocol.

**ACTION:** None. This is an informational message only. A similar message is logged earlier, when the protocol binds. If this is the last bind, the link driver will now attempt to disconnect the link.

If any errors occur as a result of the unbind, they will appear after, not before, this log event; the unbind will still complete, and the protocol will be successfully unbound.

8750 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While processing a trace enable request, the driver’s ISR then encountered an error trying to notify the DVR module of the request completion (“Cause” = 32-bit status from the call to `Pbt_isr_copy_send_to_dvr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

8780 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While processing a trace disable request, the driver’s ISR then encountered an error trying to notify the DVR module of the request completion (“Cause” = 32-bit status from the call to `Pbt_isr_copy_send_to_dvr`). Probably no comm frame was available.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Most likely the previous error was fatal and the driver is about to “die”, then will either attempt an auto-reset or else require a manual shutdown and restart.

- 8810 CLAS0001 **MESSAGE: Driver received an unknown port message.**
- CAUSE: The driver received a port message which it does not implement, or containing a function code which it does not implement ("Cause" = 32-bit ISR state machine input event tag value (Hewlett-Packard use only)).
- ACTION: This is an informational error only. If this error occurred as part of a driver reset operation, it may be ignored.
- The driver traced the unknown message then ignored it. The driver did not attempt to return an error reply to the message sender. That sender may now be hung, awaiting a reply. Attempt to determine what action caused the error. Activate link tracing, reproduce the problem, then stop link tracing and save the resulting NMTcnnnn.PUB.SYS trace data file. See Appendix A , "Submitting a CR,"
- 8840 CLAS0001 **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a utility register access request from an upper level tool program such as LNKUTIL, at a time when the driver was not able to process these requests, such as before initializing the adapter card, during shutdown, or after a fatal software error ("Cause" = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).
- ACTION: This problem most likely occurred while diagnosing some previous problem. It will not be possible to complete these requests at this time. The driver logged the error, then attempted to send an error reply message back to the sender and continue.
- Check the system console; if the driver is shutting down or doing a dump, wait until that completes. If this happens regardless of when the operation is attempted, see Appendix A , "Submitting a CR,"
- 8870 CLAS0001 **MESSAGE: One or more bad utility parms passed to driver.**
- CAUSE: The driver received a utility register access request from an upper level tool program such as LNKUTIL, but the register number specified was out of the range of legal register values for the selected register set ("Cause" = 32-bit value of the selected register-set number, not register number: Hewlett-Packard use only).
- ACTION: This is an informational error only. Retry the operation using a legal register number for the register set you have selected.
- This problem most likely occurred while diagnosing some previous problem. The driver logged the error, then attempted to send an error reply message back to the sender and continue.
- 8900 CLAS0001 **MESSAGE: Unable to read from adapter card PCI configuration space.**
- CAUSE: While processing a request from an upper level tool program such as LNKUTIL, the ISR encountered an error when trying to read a

register (data field) from the adapter card's PCI configuration space. ("Cause" = 32-bit status returned from `io_pci-cfg_read_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

8930 CLAS0001 **MESSAGE: Unable to write to adapter card PCI configuration space.**

**CAUSE:** While processing a request from an upper level tool program such as LNKUTIL, the ISR encountered an error when trying to write to a register (data field) in the adapter card's PCI configuration space. ("Cause" = 32-bit status returned from `io_pci-cfg_write_bit32`).

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Reseat the board, and if necessary call your Hewlett-Packard representative for hardware assistance. If the problem persists, the adapter card may be bad; try replacing the card.

8960 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** A general error occurred during processing of an input event by the main driver ISR state machine, and the code where the error occurred neglected to specify a sublocation code value, so the value 8960 was used.

**ACTION:** Note all logged error messages. The main problem is described by whatever was logged. But the driver also needs to be fixed to specify a unique sublocation for those errors. Please see Appendix A , "Submitting a CR."

9020 CLAS0001 **MESSAGE: Unimplemented operation attempted.**

**CAUSE:** The main driver ISR state machine was passed an input event for which there is no processing implemented. Either there is a driver bug or some data corruption has occurred ("Cause" = 32-bit ordinal value of the input event code: Hewlett-Packard use only).

**ACTION:** Try to determine which operator or program actions led to this error. Then see Appendix A , "Submitting a CR."

After this problem occurs, the driver will enter a "broken" state where it may not respond to further requests. If possible, run the VGPBA tool program, and use it to force a driver dump, then forward the resulting `NETDMP##.PUB.SYS` file to HP for analysis. After a dump, the driver will attempt to auto-reset itself and continue. You may also use VGPBA to attempt a manual reset of the driver, after which it may be possible to continue.

9390 CLAS0001 **MESSAGE: Internal driver error.**

**CAUSE:** While processing a received frame, the ISR detected an unsupported packet format. ("Cause" = 32-bit status returned from `Lnk_recv_strip_hdr`). Because this should have been caught during the rendezvous with the upper level system (SAP), this is an unexpected error condition.

**ACTION:** This is an informational error only. The driver incremented a statistic, logged the error, then attempted to free the read buffer and continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung.

There may be a problem in the upper layer protocol. Also, if the protocol had already freed the buffer, this may have resulted in a SysAbort from the Buffer Manager. If the problem occurs frequently, start link tracing, reproduce the problem, then stop link tracing and save the resulting `NMTC####.PUB.SYS` file for analysis by HP, and see Appendix A , "Submitting a CR."

9420 CLAS0001 **MESSAGE: Internal driver error.**

**CAUSE:** While processing a received frame, the ISR encountered an error when trying to swap buffers between the driver's receive pool and the SAP's buffer pool. ("Cause" = 32-bit status from `Bmgr_io_exchange_pb`).

**ACTION:** This is an informational error only. The driver incremented a statistic, logged the error, then attempted to free the read buffer and continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung.

There may be a problem in the upper layer protocol. Also, if the protocol had already freed the buffer, this may have resulted in a SysAbort from the Buffer Manager. If the problem occurs frequently, start link tracing, reproduce the problem, then stop link tracing and save the resulting `NMTC####.PUB.SYS` file for analysis by HP, and see Appendix A , "Submitting a CR."

9450 CLAS0001 **MESSAGE: Error from upper layer protocol read completer.**

**CAUSE:** The driver finished transferring a data frame and passed it to an upper layer protocol, but the protocol's read completer returned an error which was not one of the expected, legal errors the driver was able to handle ("Cause" = 32-bit status returned from the read completer).

**ACTION:** This is an informational error only. The driver incremented a statistic, logged the error, then attempted to free the read buffer and continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung.

There may be a problem in the upper layer protocol. Also, if the protocol had already freed the buffer, this may have resulted in a SysAbort from the Buffer Manager. If the problem occurs frequently, start link tracing,

reproduce the problem, then stop link tracing and save the resulting NMTC####.PUB.SYS file for analysis by Hewlett-Packard, and see Appendix A , “Submitting a CR.”

9480 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** The driver finished transferring a data frame, but encountered an error while trying to send the frame to an upper layer protocol via a port message (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is reported at a low level, where the actual send fails. It should be followed by a another error giving more information. Locate that error and look it up also. The driver will now attempt to clean up and continue.

9510 CLAS0001 **MESSAGE: Error from upper layer protocol read completor.**

**CAUSE:** The driver finished transferring a data frame and passed it to an upper layer protocol, but the protocol’s read completor returned an error which was not one of the expected, legal errors the driver was able to handle (“Cause” = 32-bit status returned from the read completor).

**ACTION:** This is an informational error only. The driver incremented a statistic, logged the error, then attempted to free the read buffer and continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung.

There may be a problem in the upper layer protocol. Also, if the protocol had already freed the buffer, this may have resulted in a SysAbort from the Buffer Manager. If the problem occurs frequently, start link tracing, reproduce the problem, then stop link tracing and save the resulting NMTC####.PUB.SYS file for analysis by Hewlett-Packard, and see Appendix A , “Submitting a CR.”

9540 CLAS0001 **MESSAGE: Link common reported an inbound buffering problem.**

**CAUSE:** After completing a read and delivering a data buffer to an upper layer protocol, the ISR encountered an error when trying to refill the SAP’s buffer cache. (“Cause” = 32-bit status from `Lnk_buf_refill`).

**ACTION:** This message is informational; this might be because of contention on the system for buffers. However, if the underlying contention or problem persists, the SAP may run out of buffers and no longer be able to receive data over the network.

If upper level network subsystems appear hung, try shutting them down manually, or shutting down and restarting the network link; if the problem persists, see Appendix A , “Submitting a CR.”

9570 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver finished transferring a diagnostic loopback data frame, but then discovered it was either not in loopback mode anymore, or there was no pending diagnostic request message (“Cause” = 32-bit encoded value, giving driver current state: Hewlett-Packard use only).

**ACTION:** This problem most likely occurred while diagnosing some previous problem. It an informational error only, and the driver will log it and attempt to continue. If this happens frequently, see Appendix A , “Submitting a CR.”

9630 CLAS0001 **MESSAGE: General buffer manager error encountered.**

**CAUSE:** While attempting to reset the receive descriptor ring data structure, the ISR received an error from the buffer manager (“Cause” = 32-bit status from Pbt\_bmgr\_get\_buffer).

**ACTION:** This error message is informational. If the receive descriptor ring is being reset, the driver may be in the middle of an auto-restart; the driver will likely try another restart.

If the problem persists, there might be data corruption in the driver or in the buffer manager data structures. Try forcing a driver dump via the VGPBA tool and send the dump file (NETDMP##.PUB.SYS) to Hewlett-Packard for analysis; seem Appendix A , “Submitting a CR.”

9660 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While attempting to reset the receive descriptor ring data structure and rebuild the receive descriptors, the ISR encountered an error. (“Cause” = 32-bit status from Pbt\_isr\_rebuild\_rd).

**ACTION:** This error message is informational. Most likely, the driver is already in the middle of an auto-reset for some other reason. The driver will likely have to try another restart.

If the problem persists, there might be data corruption in the driver. Try forcing a driver dump via the VGPBA tool and send the dump file (NETDMP##.PUB.SYS) to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

9720 CLAS0001 **MESSAGE: Internal driver error.**

**CAUSE:** After processing a received frame, the ISR attempted to return a receive descriptor the rd ring but encountered an error. (“Cause” = 32-bit status from Pbt\_isr\_rebuild\_rd).

**ACTION:** This error message is informational. The error could indicate data corruption in the driver’s data structures; the driver will try to perform an internal dump and perform an auto-reset. Check for a dump file (NETDMP##.PUB.SYS) and send to Hewlett-Packard for analysis; see Appendix A , “Submitting a CR.”

9750 CLAS0001 **MESSAGE: Could not unmap an I/O virtual address.**

**CAUSE:** Most likely during a shutdown of the driver (normal shutdown or because of an auto-reset precipitated by an earlier error), the ISR was attempting to release its data structures, including previously allocated I/O virtual addresses. However, an error was returned. (“Cause” = 16-bit SDI status returned from Lnk\_unload\_io\_addr).

**ACTION:** This error is informational. The driver will continue to shutdown. However, if the error persists, there could be data corruption in the driver or the I/O system. Depending on how frequently the error is seen, or if other similar errors are noted, this may require a system dump file to diagnose; see Appendix A , “Submitting a CR.”

9780 CLAS0001 **MESSAGE: Could not unmap and I/O virtual address.**

**CAUSE:** Most likely during a shutdown of the driver (normal shutdown or because of an auto-reset precipitated by an earlier error), the ISR was attempting to release its data structures, including previously allocated I/O virtual addresses. However, an error was returned. (“Cause” = 16-bit SDI status returned from `Lnk_unload_io_addr`).

**ACTION:** This error is informational. The driver will continue to shutdown. However, if the error persists, there could be data corruption in the driver or the I/O system. Depending on how frequently the error is seen, or if other similar errors are noted, this may require a system dump file to diagnose; see Appendix A , “Submitting a CR.”

9810 CLAS0001 **MESSAGE: Abnormal interrupts detected by adapter cards.**

**CAUSE:** The adapter card generated an abnormal interrupt that was detected by the ISR. (“Cause” = 32-bit status containing the contents of the adapter card’s status register).

**ACTION:** This error message is informational; the driver may be able to continue processing and recover from the abnormal interrupt, after updating statistics and logging the event. However, if the problem persists, it could indicate a hardware problem on the network or with the network configuration. The “cause” field (adapter card status register contents) may indicate which type(s) of abnormal condition were detected by the adapter card:

- Bit 1: Transmit process stopped (this may be in response to a specific request from the driver, depending on recent events/requests processed by the driver).
- Bit 3: Transmit jabber timeout.
- Bit 5: Transmit underflow.
- Bit 7: Receive buffer unavailable.
- Bit 8: Receive process stopped (this may be in response to a specific request from the driver, depending on recent events/requests processed by the driver).
- Bit 9: Receive watchdog timeout.
- Bit 13: Fatal bus error.

9840 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While processing a receive completion interrupt from the adapter card, the ISR encountered an error ("Cause" = 32-bit status from Pbt\_isr\_receive\_frame).

**ACTION:** This error is informational; if possible the driver will log the error and continue. There may be additional error information and messages logged which provides more information about the error. The driver may perform an auto-reset, depending on the severity of the error.

If the problem persists, try forcing a dump of the driver via the VGPBA tool, or generating a link trace. Send any dump or trace files (NETDMP##.PUB.SYS, NMTC###.PUB.SYS) to Hewlett-Packard for analysis; see Appendix A , "Submitting a CR."

9870 CLAS0001 **MESSAGE: Adapter card reported a fatal bus error.**

**CAUSE:** The ISR processed an interrupt from the adapter card and detected the fatal bus error bit was set in the card's status register.

**ACTION:** This is a fatal hardware error. The adapter card or system I/O hardware may have failed. Contact your Hewlett-Packard representative for assistance.



# 18 PCI LAPBMUX Link Error Messages

The following error messages gives the meaning of the first 8 bits of 32-bit status values produced by the PCI LAPBMUX link driver and its supporting modules. This is the so-called “SDI status” portion. All values are architected, and are intended to provide a generic indication of what the rest of the status means, in a module-independent way.

For more information about the specific status, you must look at the second 8 bits, described in SDI Driver Specific Status Values.

The final (rightmost) 16 bits gives the subsystem number of the module generating the status, or 0 if there was no error or warning.

For the meaning of sublocation codes logged to logfiles of the system console, refer to the section on sublocation codes.

## SDI Generic Status Values

- 0 (\$00)      **MESSAGE: No error, info only.**  
CAUSE: None  
ACTION: None
- 1 (\$01)      **MESSAGE: The driver detected an exception in hardware operation.**  
CAUSE: The driver detects an exception in hardware operation. At this state, the only type of requests that would be processed are the diagnostic requests or Module Deconfigurator Call.  
ACTION: Stop the normal operation and execute the diagnostic software.
- 2 (\$02)      **MESSAGE: Adapter card firmware reported an error.**  
CAUSE: The firmware reports an error, at this state, the driver would stop the normal operation and process diagnostic requests or Module Deconfigurator Call.  
ACTION: Stop the normal operation and execute error recovery software.
- 3 (\$03)      **MESSAGE: A power failure occurred.**  
CAUSE: A power failure occurred. The driver failed to process the powerfail recovery.  
ACTION: According to the subsystem.
- 4 (\$04)      **MESSAGE: Error in interface with Operating System.**  
CAUSE: Errors in interfacing with the operating system (example, ports, memory, procedures, I/O services etc.).  
ACTION: According to the situation.
- 5 (\$04)      **MESSAGE: Error in interface with Buffer Manager.**  
CAUSE: An error was detected in interfacing with Buffer Manager (example, Nil buffer pointer in read/write, nil buffer pool ID, etc.).  
ACTION: According to the situation.
- 6 (\$06)      **MESSAGE: General error in operation of link driver software.**  
CAUSE: This is a “catch all” error for the ultimate non-specific driver error.  
ACTION: According to the implementation.

- 7 (\$07)           **MESSAGE: Inadequate resources available to satisfy a request.**  
  
CAUSE: There are inadequate SAP control block, buffers, or link stations available to satisfy the request.  
  
ACTION: According to the situation, close some SAPs/stations or wait.
- 8 (\$08)           **MESSAGE: An adapter card is not responding.**  
  
CAUSE: The driver detects an exception in hardware operation. At this state, the only type of requests that would be processed are the diagnostic requests or Module Deconfigurator Call.  
  
ACTION: Stop the normal operation and execute the diagnostic software.
- 29 (\$41)          **MESSAGE: Could not establish requested connection, but can retry.**  
  
CAUSE: The Connect Request could not establish a requested connection, however, it is a recoverable situation.  
  
ACTION: Start a timer and try again when timer popped.
- 42 (\$2A)          **MESSAGE: Could not establish requested connection, cannot retry.**  
  
CAUSE: The Connect Request could not establish a requested connection and it is not a recoverable situation.  
  
ACTION: Determine the cause for the failure and try again when resolved.
- 43 (\$2B)          **MESSAGE: Could not establish requested connection, no remote response.**  
  
CAUSE: The Connect Request could not establish a requested connection.  
  
ACTION: Check the configuration and make sure the remote system is up and running.
- 44 (\$2C)          **MESSAGE: Remote connections are still active.**  
  
CAUSE: For the Separate Request, there are connections still active on the LSAP, the driver did not close the LSAP or disconnect the associated connections.  
  
ACTION: Disconnect all the associated connections and try again.
- 45 (\$2D)          **MESSAGE: Link has lost its connection to the remote link.**  
  
CAUSE: After the link has been established and both link stations are in open state, a link station detected an inoperative condition in either the remote link station or in the transmission medium (the recovery attempt has failed). The driver informs the user that link is inoperative, also, no link station resource has been deallocated.  
  
ACTION: Send a Disconnect Request to the Driver and log the error.

- 46 (\$2E)      **MESSAGE: Remote link has disconnected.**  
  
CAUSE: For the Disconnect Event, the remote link station issued a Disconnect command to the link station, and the link station has replied that disconnect command and notified the subsystem.  
  
ACTION: According to the subsystem.
- 47 (\$2F)      **MESSAGE: Link disconnected, although remote has not acknowledged.**  
  
CAUSE: The driver issued a disconnect command to the remote link station as a result of receiving a Disconnect Request. No acknowledgment has been received from the remote link station and the in station has been closed.  
  
ACTION: According to the subsystem.
- 48 (\$30)      **MESSAGE: An active connection with the remote link already exists.**  
  
CAUSE: The Driver is already configured.  
  
ACTION: According to the subsystem.
- 81 (\$51)      **MESSAGE: Link sharing conflicts with current usage.**  
  
CAUSE: A driver is being exclusively accessed by a subsystem already, no resources have been allocated for the second subsystem, or a subsystem wants to have exclusive access to a “shared” driver which is currently in use, no resources have been allocated, or a driver does not support link sharing, or configurable parameters conflict.  
  
ACTION: According to the subsystem.
- 82 (\$52)      **MESSAGE: Configuration file access error.**  
  
CAUSE: A module Configurator/Deconfigurator detected an error in the configuration file on accessing the configuration file.  
  
ACTION: According to the subsystem.
- 83 (\$53)      **MESSAGE: Error in interface with Link Support Services.**  
  
CAUSE: A module Configurator/Deconfigurator failed in calling Link Support Services (LSS) procedures.  
  
ACTION: According to the subsystem.
- 84 (\$54)      **MESSAGE: Error in interface with Trace Services.**  
  
CAUSE: A module Configurator/Deconfigurator failed to start/stop the TRACE MANAGER, however, the configuration/deconfiguration operation has the completed (example, The Driver has deallocated the Driver’s resources).  
  
ACTION: According to the subsystem.

- 85 (\$55)           **MESSAGE: Resource deallocation error.**  
CAUSE: For the error shutdown handling, all SAPs and all associated link stations are deallocated, and the driver is deconfigured.  
ACTION: None
- 86 (\$56)           **MESSAGE: One or more still active resources were deallocated.**  
CAUSE: For the error shutdown handling, all SAPs and all associated link stations are deallocated, and the driver is deconfigured.  
ACTION: None
- 87 (\$57)           **MESSAGE: Link is already active.**  
CAUSE: The Driver is already configured.  
ACTION: According to the subsystem.
- 121 (\$79)          **MESSAGE: A requested feature is not supported by this link.**  
CAUSE: Feature is not supported/implemented. This might be the result of subsystem “probing” the capability of the driver (example, Connection oriented subsystem over a datagram service).  
ACTION: None
- 122 (\$7A)          **MESSAGE: A requested option is not supported by this link.**  
CAUSE: The Driver understands the option that user requested, however, it does not support the option.  
ACTION: Check Driver ES and make sure you talk to the right Driver.
- 125 (\$7D)          **MESSAGE: Link type of the named link is not supported.**  
CAUSE: The Linkname passed by the Module Configuration Call or Deconfigurator Call is invalid. The particular driver is not configured.  
ACTION: Fix the configuration file and try again.
- 126 (\$7E)          **MESSAGE: Link type of the named link is not supported.**  
CAUSE: The linktype that stored in the NMCONFIG file which associated with the Linkname in a Module Configurator call is unsupported. The particular driver is not configured.  
ACTION: Fix the Configuration file and try again.
- 127 (\$7F)          **MESSAGE: An invalid subsystem open ID was specified.**  
CAUSE: The Open ID in the Rendezvous Request or Module Deconfigurator call is invalid. The LSAP is not opened or closed.  
ACTION: Use a Valid open ID.
- 128 (\$80)          **MESSAGE: An invalid protocol bind ID was specified.**  
CAUSE: The requested Protocol Bind ID does not exist.

- ACTION: Make the appropriate changes and reissue the request.
- 129 (\$81) **MESSAGE: An invalid connection ID was specified.**  
CAUSE: The requested Connection ID does not exist.  
ACTION: Make the appropriate changes and reissue the request.
- 130 (\$82) **MESSAGE: Link did not understand the specified address family.**  
CAUSE: The Driver detected an error in the address family in the request message.  
ACTION: Fix the configuration file and then try again.
- 131 (\$83) **MESSAGE: Link found an error within the specified address family.**  
CAUSE: The Driver detected an error in the address family in the request message.  
ACTION: Fix the configuration file and they try again.
- 132 (\$84) **MESSAGE: An invalid or redundant protocol SAP address was specified.**  
CAUSE: For the Rendezvous Request, the LSAP value is the NULL or Global SAP. For the connect request, this error indicates that this SAP already has a link to the specified RSAP and destination address combination, or the remote SAP specified was the null SAP, global SAP, or a group SAP.  
ACTION: Use an acceptable SAP and Destination Address.
- 133 (\$85) **MESSAGE: The specified local Protocol SAP was already opened.**  
CAUSE: For the Rendezvous Request, this error indicates that the LSAP has already opened.  
ACTION: Use an acceptable SAP value.
- 161 (\$A1) **MESSAGE: A request was not accepted due to current state of the link.**  
CAUSE: The requested message cannot be accepted because of the existing state of the link station. (example, A write event message will not be accepted if the link is in the disconnected, opening or closed state).  
ACTION: According to the subsystem.
- 201 (\$C9) **MESSAGE: A formatter error was detected.**  
CAUSE: A Module Configurator/Deconfigurator failed to start/stop the TRACE MANAGER, however, the configuration/deconfiguration operation has completed (example, The Driver has deallocated the Driver's resources).  
ACTION: According to the subsystem.

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## SDI Driver Specific Status Values

The following error messages gives the meaning of the second 8 bits of 32-bit status values produced by the WAN ACC Sync MUX link driver and its supporting modules. This is the so-called “driver status” portion. All values are driver-specific, and are intended to provide additional detail beyond the generic indication provided by the first 8 bits of status.

For information about the generic portion of the status, you must look at the first 8 bits, described in the previous section.

The final (rightmost) 16 bits gives the subsystem number of the module generating the status, or 0 if there was no error or warning.

- |          |  |
|----------|--|
| 0 (\$00) | <p><b>MESSAGE: No error.</b></p> <p>CAUSE: The operation was successful. No error occurred.</p> <p>ACTION: None</p>  |
| 1 (\$01) | <p><b>MESSAGE: Subsystem is opening link.</b></p> <p>CAUSE: An upper level subsystem has called the link module configurator, which has successfully located configuration for the link, and will now proceed to start it up.</p> <p>ACTION: This event is informational. No action is required.</p> |
| 2 (\$02) | <p><b>MESSAGE: Driver is starting up.</b></p> <p>CAUSE: The driver has just completed initial configuration and is now starting up.</p> <p>ACTION: This event is informational. No action is required.</p>   |
| 3 (\$03) | <p><b>MESSAGE: Driver is starting adapter card.</b></p> <p>CAUSE: The driver has completed initial startup of the adapter card, or a restart following a reset, powerfail, dump, or other recoverable condition.</p> <p>ACTION: This event is informational. No action is required.</p>              |
| 4 (\$04) | <p><b>MESSAGE: Driver is re-starting adapter card.</b></p> <p>CAUSE: The driver has completed a restart of the adapter card, following a reset, powerfail, dump, or other recoverable condition.</p> <p>ACTION: This event is informational. No action is required.</p>                              |
| 5 (\$04) | <p><b>MESSAGE: Link connected.</b></p> <p>CAUSE: The first upper layer subsystem to bind to the driver triggered a link connect, which was successful. This event is also logged after the link or cable has been successfully reconnected after being</p>   |

disconnected, or on a link reconnect following a hub retrain, severe line hit, power failure, or other recoverable error.

**ACTION:** This event is informational. No action is needed unless the message appears frequently while the link is up, indicating possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference.

7 (\$07)

**MESSAGE: Link disconnected.**

**CAUSE:** The last upper layer subsystem has unbound itself from the driver, triggering a link disconnect. This event is also logged if the link unexpectedly drops due to a cable disconnect, hub retrain request, powerfail, severe line hit, or other recoverable error.

**ACTION:** This event is informational. No action is required if the network is being shut down. However, if the link was supposed to be up or the message appears frequently while the link is up, this indicates possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference.

8 (\$08)

**MESSAGE: Driver is shutting down.**

**CAUSE:** The driver is being shut down. The last subsystem that was using the driver is now closing it.

**ACTION:** This event is informational. No action is required.

9 (\$09)

**MESSAGE: Subsystem is binding to link driver.**

**CAUSE:** An upper-layer protocol has successfully bound (rendezvoused) to the link driver. Being bound means the driver can now route incoming data frames to this protocol.

**ACTION:** This event is informational. No action is required. If this is the first bind, the link driver will now attempt to reconnect the link.

10 (\$0A)

**MESSAGE: Subsystem is unbinding from link driver.**

**CAUSE:** An upper-layer protocol has begun to unbind (separate) from the link driver. Once unbound, the driver can no longer route incoming data frames to this protocol.

**ACTION:** This event is informational. No action is required. If this is the last bind, the link driver will now attempt to disconnect the link.

11 (\$0B)

**MESSAGE: Subsystem is closing link.**

**CAUSE:** An upper level subsystem has called the link module deconfigurator, which has successfully located the link, and will now proceed to close it.

**ACTION:** This event is informational. No action is required.



- 14 (\$0E)           **MESSAGE: Cannot release ADA memory object.**
- CAUSE: During shutdown, the driver requested the I/O system to release a memory object, but received an error reply in response.
- ACTION: This error should not occur. The driver may be confused, or there is a system problem. However, the driver will ignore the error and attempt to continue with the shutdown. If this happens frequently, see Appendix A , “Submitting a CR,”
- 15 (\$0F)           **MESSAGE: Cannot get ADA memory object.**
- CAUSE: During initial startup, the driver attempted to obtain a memory object via the I/O system, but received a bad status in the reply in response.
- ACTION: Probably the amount of frozen memory on the system is very high; if you have the GLANCE tool you can try to check memory usage. Try retrying the operation again later, or first terminate some applications and then retry.
- 18 (\$12)           **MESSAGE: Cannot close NM logging.**
- CAUSE: The link module configurator or deconfigurator attempted to close access to the NM logging facility, but encountered an error.
- ACTION: This is an informational warning that the logfile may still be open. Use of the :SWITCHNMLOG command should not be affected, however there may be a delay at system shutdown time. If this happens every time, see Appendix A , “Submitting a CR.”
- 19 (\$13)           **MESSAGE: Cannot unfreeze a memory area.**
- CAUSE: After previously freezing a data structure into system memory, software encountered an error trying to unfreeze the same memory.
- ACTION: This is an informational warning that some system memory resources may have been lost. Software probably continued, ignoring the error. Software may be confused, or the pointer to the memory area may have been changed. If this happens every time, see Appendix A , “Submitting a CR.”
- 22 (\$16)           **MESSAGE: Powerfail detected.**
- CAUSE: The driver was notified of a power failure by the I/O system, or detected all 1’s on a hardware register read, and, upon checking further, saw that its hardware I/O address space was disabled, indicating a powerfail had already occurred.
- ACTION: This event is informational. No action is required. Power failures can occur at any moment. If the driver was executing at the moment power failed, power then returned, and the driver ran to completion, noticing this error along the way. Upon exit, the driver was then officially notified of a powerfail by MPE. The driver then attempted powerfail recovery, and should now be operating the same as

before.

25 (\$19)

**MESSAGE: Cannot release a system plabel.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to release the link's write initiator procedure.

**ACTION:** This is an informational warning that some system memory resources may have been lost. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , "Submitting a CR."

27 (\$1B)

**MESSAGE: Late dump-done message received. Dump took too long.**

**CAUSE:** The driver received a driver-dump completion message when it was not working on a dump.

**ACTION:** This error is informational only. Probably the Network Dump Process was delayed by other system processing, such that it exceeded the time limit set by the driver. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, after which the driver will now attempt to auto-reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disc activity load before the next attempt. If load is not the problem, see Appendix A , "Submitting a CR."

28 (\$1C)

**MESSAGE: A driver dump is starting.**

**CAUSE:** During driver dumping, Dump Surrogate tried to open the dump file.

**ACTION:** This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , "Submitting a CR."

32 (\$20)

**MESSAGE: A driver dump was suppressed. Too many dumps already.**

**CAUSE:** During processing of some other fatal driver error, the driver attempted a driver dump, but encountered an error.

**ACTION:** This error is mainly informational, since the driver did not dump, but may be indicative of other, possibly-related problems. The driver will still attempt to auto-reset itself, up to a total of 12 times or more.

33 (\$21)

**MESSAGE: Driver is out of DMA resources.**

**CAUSE:** During processing of a fatal driver error, the driver attempted a driver dump, but determined it had already dumped too many times since it was initially started.

**ACTION:** By design, the driver attempts to auto-reset itself after any driver dump. But after 3 dumps, to avoid uncontrollably filling disk space with driver dumps, additional dumps are automatically

suppressed. No attempt is made to determine whether the dumps are duplicates of the same problem. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more. There is apparently something wrong, since many driver dumps are occurring. Collect binary copies of all dump files (NETDMP##.PUB.SYS) on tape for analysis by Hewlett-Packard and see Appendix A , "Submitting a CR."

34 (\$22)

**MESSAGE: Driver dump was forced.**

**CAUSE:** A user is forcing a driver dump to occur, typically via the CI prompt.

**ACTION:** This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , "Submitting a CR."

43 (\$2B)

**MESSAGE: A received frame could not be delivered.**

**CAUSE:** Just before delivering a received data frame to an upper layer protocol, the driver found that the rendezvous table entry specified in the buffer was not in the proper state.

**ACTION:** This is an internal error which detects a normal race condition. Probably the protocol separated from the driver while a frame destined for it was in motion. The frame was not delivered, and the buffer was silently released. No action is required.

46 (\$2E)

**MESSAGE: Link tracing is already enabled.**

**CAUSE:** The driver received a request to turn link tracing on when it was already on.

**ACTION:** This event is informational. No action is required. An error reply was sent in response to the request. Trace was not started by this request this time, but it remains on.

47 (\$2F)

**MESSAGE: Link tracing is already disabled.**

**CAUSE:** The driver received a request to turn link tracing off when it was already off.

**ACTION:** This event is informational. No action is required. An error reply was sent in response to the request. Trace was not stopped by this request this time, but it remains off.

60 (\$3C)

**MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** This is a generic hardware error, reported when any of the driver's hardware access routines reports an error. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.

**ACTION:** When this problem happens, driver will dump the card and itself. If this problems happens repeatedly, then halt the system, take a memory dump, and reboot. see Appendix A , "Submitting a CR."

- 61 (\$3D)      **MESSAGE: Bad hardware ID or path.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator did not find a supported WAN ACC Sync MUX adapter card at the hardware path specified in NMCONFIG.
- ACTION: Verify the path in NMCONFIG is correct and complete, and matches the path where a WAN ACC Sync MUX adapter card is installed in the computer backplane. Verify the Power LED is lit on that adapter. If necessary, reseal the board or contact your Hewlett-Packard Representative for hardware assistance.
- 62 (\$3E)      **MESSAGE: No adapter card found on specified PCI bus.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator did not find an HP-PB bus at the hardware path specified in NMCONFIG.
- ACTION: Verify the path in NMCONFIG is correct and complete, and matches the path where a WAN ACC Sync MUX adapter card is installed in your computer backplane. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.
- 63 (\$3F)      **MESSAGE: Adapter card found does not match software configuration.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator found a supported adapter card at the path specified in NMCONFIG, but it was not the right type of card for the link being started.
- ACTION: Correct the network configuration or plug in the correct type of adapter card, and retry the operation.
- 64 (\$40)      **MESSAGE: Memory test failed: memory data mismatch.**
- CAUSE: Upon reaching the end of a diagnostic test of adapter card memory or LAN controller chip memory, the driver had accumulated at least one data pattern mismatch.
- ACTION: One or more data patterns written by the driver did not match the data read back from those same memory locations. Depending on which test was being performed, either the adapter card or LAN controller chip is faulty. Replace the adapter card.
- 73 (\$49)      **MESSAGE: Cannot install interrupt handler.**
- CAUSE: During initial driver startup, the driver was unable to add its TLIH into the MPE I/O system, as an interrupt handler routine for any adapter card interrupts on that EIR bit.
- ACTION: The driver did not start up. There is probably an MPE software installation problem, with incomplete or incompatible O/S software. Verify the system is running an MPE release which supports

WAN ACC Sync MUX link drivers. The only other cause is a software bug; see Appendix A , “Submitting a CR.”

77 (\$4D)

**MESSAGE: Cannot send a port message.**

**CAUSE:** This is a generic error saying that the link driver, module configurator or deconfigurator, or other module of the link subsystem encountered an error when trying to send a port message. This error could be caused by the target module having been already shut down. It could also be an indication of a more serious system software problem, and may be followed by a system abort; probably all message frames have been exhausted by some module running on the system.

**ACTION:** Severity and side effects of this error are dependent upon the purpose of the message that was not sent. Attempt to determine the conditions that led to the error. If it occurred during a shutdown, possibly this error can be ignored. Otherwise, if the same problem happens repeatedly, or if a system abort occurs, take a memory dump and. See Appendix A , “Submitting a CR.”

78 (\$4E)

**MESSAGE: Cannot reset a system timer.**

**CAUSE:** The driver attempted to reset a system timer previously obtained from I/O Services but encountered an error. This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a fatal software error. The driver cannot operate without all necessary timers. If the problem persists, halt the system, take a memory dump, and reboot. See Appendix A , “Submitting a CR.”

79 (\$4F)

**MESSAGE: Cannot free a system timer.**

**CAUSE:** The driver attempted to release a system timer previously obtained from I/O Services but encountered an error. This is likely caused by a bug in system software, or by corruption of the driver’s PDA context memory.

**ACTION:** This is a warning that some timer resources may have been lost. Possibly followed by another error giving more information about what kind of timer the driver was releasing; check log data for that error and look it up also. If the problem happens every time, see Appendix A , “Submitting a CR.”

80 (\$50)

**MESSAGE: Cannot send a port message.**

**CAUSE:** This is a generic error saying that the link driver, module configurator or deconfigurator, or other module of the link subsystem encountered an error when trying to send a port message. This error could be caused by the target module having been already shut down. It could also be an indication of a more serious system software problem, and may be followed by a system abort; probably all message frames have been exhausted by some module running on the system.

**ACTION:** Severity and side effects of this error are dependent upon the purpose of the message that was not sent. Attempt to determine the conditions that led to the error. If it occurred during a shutdown, possibly this error can be ignored. Otherwise, if the same problem happens repeatedly, or if a system abort occurs, take a memory dump and see Appendix A , “Submitting a CR.”

81 (\$51)

**MESSAGE: Error from upper layer protocol read completer.**

**CAUSE:** The driver finished transferring a data frame and passed it to an upper layer protocol, but the protocol’s read completer returned an error which was not one of the expected, legal errors the driver was able to handle.

**ACTION:** This is an informational error only. The driver incremented a statistic then attempted to continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung. There may be a problem in the upper layer protocol. If the problem occurs frequently, take a link trace showing the problem, then see Appendix A , “Submitting a CR.”

84 (\$54)

**MESSAGE: Cannot load driver plabel.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load the code for the driver.

**ACTION:** Probably not all software required to operate this type of link is installed. The software was incorrectly installed, or you may need to purchase additional link or MPE software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

85 (\$55)

**MESSAGE: Cannot add driver to I/O system.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but encountered an error which was not one of the legal errors the configurator was able to handle.

**ACTION:** Verify the path in NMCONFIG is correct and complete, and matches the path where a WAN ACC Sync MUX adapter card is installed in your computer backplane. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

86 (\$56)

**MESSAGE: Cannot remove driver from I/O system.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete an instance of the link driver, but encountered an I/O system error.

**ACTION:** Not all resources were released. The driver may already have been shut down by some other means, or the system I/O configuration

may have been altered. If this happens frequently, see Appendix A ,  
“Submitting a CR.”

87 (\$57)

**MESSAGE: Cannot load a system routine.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load code for the write initiator procedure needed for the link type configured in NMCONFIG.

**ACTION:** Probably not all software required to operate this type of link is installed. Software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

88 (\$58)

**MESSAGE: Cannot open NM logging.**

**CAUSE:** During a link open attempt by an upper-level subsystem, the link module configurator encountered a positive (error) status when trying to open NM logging against the link’s subsystem ID.

**ACTION:** This event is informational. No action is required. The module configurator cleared the error and will attempt to continue. However, NM logging may not be available to the link. You may need to install new NM logging patches. If the problem occurs every time, see Appendix A , “Submitting a CR.”

89 (\$59)

**MESSAGE: Cannot freeze a memory area.**

**CAUSE:** This is a generic error that during a link-open or some other operation by an upper level subsystem, link software encountered an error while trying to freeze some data into memory before passing the driver a pointer to that data.

**ACTION:** The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation.

90 (\$5A)

**MESSAGE: Did not receive an expected port message.**

**CAUSE:** This is a generic error that during a link-open or some other operation by an upper level subsystem, link software sent a port message to the driver, then encountered an error while awaiting the correct reply message.

**ACTION:** Severity and side effects of this error are dependent upon the purpose of the message that was not received. There may be a system problem with message ports, or the link driver may have sent the wrong reply message. If this happens every time, see Appendix A , “Submitting a CR.”

107 (\$6B)

**MESSAGE: Cannot create a buffer pool.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to create an

outbound buffer pool or control buffer pool.

**ACTION:** The system may be low on available memory. Try stopping some applications or sessions and retry the operation. If the problem persists, stop all networking and restart it, or restart the system. The buffer size and pool size are not configurable. If the problem still occurs, there could be a problem with the buffer manager. See Appendix A , “Submitting a CR.”

108 (\$6C)

**MESSAGE: Cannot delete a buffer pool.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to delete an outbound buffer pool or control buffer pool.

**ACTION:** This is an informational warning that some system memory resources may have been lost. Probably not all buffers were freed before the pool was deleted. If this happens every time, see Appendix A , “Submitting a CR.”

109 (\$6D)

**MESSAGE: General error trying to get a buffer.**

**CAUSE:** When attempting to directly obtain a new buffer manager buffer from a read pool, to replenish the inbound buffer cache for one of its bound protocols, the driver encountered an error that was not one of the few legal errors it expected, or was able to handle.

**ACTION:** The problem could indicate some serious internal problems within the buffer manager or its data structures, or with the way the system is configured. Note all log messages, especially the “Cause” status for this error, and see Appendix A , “Submitting a CR.”. If the problem persists, take a system memory dump immediately after the problem has occurred. see Appendix A , “Submitting a CR.”

116 (\$74)

**MESSAGE: Driver encountered a software problem.**

**CAUSE:** This is a generic software error, reported when any of the driver's non-hardware routines reports an error. By itself it is not descriptive of the problem. This error is often seen as a result of previous errors from intrinsics, reply messages, or validity checks.

**ACTION:** When this error occurs as a result of previous errors, it mainly serves as a way to track the sequence of the failure back to what was happening at the time. Check for those errors and look them up for an additional explanation of the problem.

117 (\$75)

**MESSAGE: A driver request failed.**

**CAUSE:** This is a generic software error, used when the driver receives a new request but cannot process it because of an earlier failure. It is used in the reply to the outside module which requested the operation, to indicate it could not be processed.

**ACTION:** If this status is reported, it is because of some earlier failure. Check log files and locate any previous errors for this link, to try to find



the reason this error is now occurring.

120 (\$78)

**MESSAGE: Module Configurator cannot access its context area.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator checked its context memory area for validity, but did not find the expected data.

**ACTION:** The module deconfigurator's context memory area is being overwritten, or is not working properly. The deconfigurator did not perform the close. If this happens every time, wait until the next time the link is to be closed; instead of closing the link, halt the system and take a memory dump, and see Appendix A , "Submitting a CR."

121 (\$79)

**MESSAGE: Error in configuring Download Surrogate.**

**CAUSE:** During the link start up process, the module configurator tries to configure the Download Surrogate and encountered an error where it got the surrogate's port number as Nil.

**ACTION:** This is a error. Try to restart the link again If the problem persists with a known good card, see Appendix A , "Submitting a CR."

122 (\$7A)

**MESSAGE: The subsys link products are not installed.**

**CAUSE:** Probably not all software required to operate this type of link is installed. Software was incorrectly Installed, or you may need to purchase additional software or install new patches.

**ACTION:** If this status is reported during a startup operation, Reinstall the link software or contact your HP Representative for assistance.

150 (\$94)

**MESSAGE: Bind table full. Too many upper level protocols.**

**CAUSE:** When a new upper-layer protocol attempted to bind (rendezvous) to the link driver, the driver determined all available rendezvous table entries were already in use. Too many different protocols are trying to use the driver.

**ACTION:** Shut down any networking subsystems that are not currently needed and try again.

151 (\$93)

**MESSAGE: Open table full. Too many driver users.**

**CAUSE:** Too many subsystems are attempting to open the driver at the same time, or subsystems are shutting down without closing the driver.

**ACTION:** Shut down any networking subsystems that are not currently needed and try again. A side-effect of this error may be that the driver becomes unusable.

152 (\$98)

**MESSAGE: Driver initialization failed.**

**CAUSE:** While processing its very first startup message, the driver encountered a problem. Probably the configured hardware is not present, is not the correct kind of adapter card, or there was a problem configuring the ISR into the I/O system.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log data for that error and look it up also, for more actions to take. The driver will attempt to send an error reply for the startup request. It then enters a “broken” state and awaits a shutdown, which the module configurator should attempt automatically.

154 (\$9A)

**MESSAGE: Configuration failed.**

**CAUSE:** This is a generic error, reported after successful or unsuccessful completion of initial hardware startup, if the driver encountered an error bringing up the adapter card, or when opening the link, or while attempting to send the reply to a pending configuration request from its module configurator.

**ACTION:** This is a fatal software error. It might be caused by a bad adapter card, by having too many driver users, by a heavy CPU load, or by attempting to operate the network subsystem or tool which started the link at too low of a CPU process priority, causing a timeout. Any condition, such as a timeout or abort, which causes the driver’s module configurator to cease awaiting the reply and dispose of its reply port, might also cause this error. The driver now “dies” and awaits a shutdown, which the module configurator should attempt automatically.

160 (\$A0)

**MESSAGE: Heartbeat timeout. Adapter card appears to be hung.**

**CAUSE:** The firmware on the adapter card has failed to produce any interrupt from normal activity for over 10 seconds. It has also failed, for an additional 5 seconds, to respond to the driver's inquiry by producing a test interrupt. The driver has decided the card is dead or hung.

**ACTION:** This is a fatal hardware error. Replace the adapter card. The driver will enter a “broken” state and await a manual shutdown by the operator. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

162 (\$A2)

**MESSAGE: Adapter card did not finish reset in the time allowed.**

**CAUSE:** During a link startup sequence, the driver to reset the adapter card, but it still did not go “ready” after the reset.

**ACTION:** This is a fatal hardware error. Replace the adapter card. The driver cannot start the link if the card will not reset. If the problem persists with a known good card, see Appendix A , “Submitting a CR.”

198 (\$C6)

**MESSAGE: Cannot open configuration file.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to open the configuration file.

**ACTION:** Verify an NMCONFIG.PUB.SYS file exists. If so, try to verify its format matches rest of the operating system. If the system was

updated, you may need to run `NMMGRVER.PUB.SYS` to convert the file to a newer format. If the system was backdated, you may need to restore an older copy of `NMCONFIG` from a backup tape. Perform a `:LISTF,3` command and make sure the file is not protected by a lockword, and that the user starting the link has the necessary access rights to open the file. Perform a `:DSTAT ALL` command and make sure the disk drive the file resides on is present and mounted. Make sure the file resides on Ldev 1. If not, use `Fcopy` and a file equation with a `“:DEV=1”` option to force a copy of the file onto Ldev 1. Perform a `:SHOWPROC 1;TREE;SYSTEM` command and verify an `NMFILE` process exists. If not, shut down and restart the system, and retry the operation. If the problem persists, contact your Hewlett-Packard Representative for assistance with `NMCONFIG` file open problems.

199 (\$C7)

**MESSAGE: Cannot read from configuration file.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was able to open the configuration file, but encountered an error while trying to data for the link being started.

**ACTION:** Using `NMMGR`, verify the path `LINK.linkname` exists in the `NMCONFIG` file and is the exact same linkname which is now being started. Verify the `“Data=Y”` flag is set at the top of that `LINK` screen (meaning that `ENTER` has been pressed to save the configuration data there). If the link is being used with `NS` or `DTS`, use the `VALIDATE` function to validate the network configuration. Correct any configuration errors and retry the operation.

200 (\$C8)

**MESSAGE: Cannot validate configuration file.**

**CAUSE:** After successfully reading configuration data for a link being started, the link module configurator checked the data and found it was not valid. For `NS/3000`, probably the link type and `NI` type do not match.

**ACTION:** Using `NMMGR`, verify the path `LINK.linkname` exists in the `NMCONFIG` file and is either a `LAPBMUX` link type. If the subsystem being started is `NS`, verify the link type matches the `NI` type for the network being started. If these are not the problem, an incorrect version of `NMMGR` may have been used to create the `NMCONFIG` file on your system. Run `NMMAINT.PUB.SYS;PARM=82` to check versions of `NMMGR` components. The format of your `NMCONFIG` file may be incompatible with the link driver version installed on your system. Run `NMMGRVER.PUB.SYS` to update your `NMCONFIG` file to a newer version, or restore an older version from a backup tape, whichever is appropriate. If the problem still occurs, contact your Hewlett-Packard Representative for assistance in using `NMMGR` to configure `WAN Sync MUX` links.

203 (\$CB)

**MESSAGE: Cannot determine link type.**

**CAUSE:** Early in a link open operation by an upper level subsystem, the link module configurator encountered an error while attempting to use Link Support Services to determine the type of link being started. Probably the link is not completely configured.

**ACTION:** If the link is already started, LSS tries to read the link type from its own link table. Otherwise, it tries to read it from the NMCONFIG file. Using NMMGR, verify the path `LINK.Linkname` exists in the NMCONFIG file and is the exact same linkname which is now being started. Verify the "Data=Y" flag is set at the top of that LINK screen (meaning that ENTER has been pressed to save the configuration data there). Correct any configuration errors and retry the operation.

204 (\$CC)

**MESSAGE: Cannot read from link table.**

**CAUSE:** Early in a link open operation by an upper level subsystem, the link module configurator attempted to determine if the link was already running, by trying to read from the link table, but an error occurred which was not one of the expected, legal errors the configurator was designed to handle.

**ACTION:** If the linkname being started is a valid linkname, then there may be a problem with Link Support Services. Halt the system, take a system memory dump, then restart the system. If the problem still occurs, see Appendix A , "Submitting a CR."

205 (\$CD)

**MESSAGE: Cannot add to link table.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator successfully started the driver, but encountered an error trying to add the link to the link table.

**ACTION:** Possibly too many links are started. If not, try starting a different link, to see if that works. If not, first try doing a `:LINKCONTROL @` command to see if any LSS errors occur. If they do, you may need to reinstall MPE software; contact your Hewlett-Packard Representative for assistance. Otherwise try restarting the system to see if it corrects the problem or LINKCONTROL errors. If none of these suggestions helps, see Appendix A , "Submitting a CR."

206 (\$CE)

**MESSAGE: Cannot delete from link table.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete the link from the link table, but encountered an error.

**ACTION:** The module deconfigurator reported an error, but attempted to continue with the close. Network management services may have been shut down. Otherwise, if this happens every time, see Appendix A , "Submitting a CR."

207 (\$CF)

**MESSAGE: Cannot update to link table.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator successfully started the driver, but encountered an error trying to update the link to the link table (“Cause” = 32-bit status from the call to `lsslktbladd`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem. Possibly too many links are started. Try starting a different link, to see if that works. If not, first try doing a `:LINKCONTROL @` command to see if any LSS errors occur. If they do, you may need to reinstall MPE software; contact your Hewlett-Packard Representative for assistance. Otherwise try restarting the system to see if it corrects the problem or LINKCONTROL errors. If none of these suggestions helps, see Appendix A , “Submitting a CR.”

208 (\$D0)

**MESSAGE: Cannot open tracing.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup, but encountered an error trying to open the trace file.

**ACTION:** Using NMMGR, check if a filename was configured. If so, verify it is a legal MPE filename. A group and account may need to be specified. Make sure the user starting the link has the necessary capabilities to create that file in the group and account specified. Check whether the system is low on disk space. Check whether too many `NMTChnnn.PUB.SYS` trace data files already exist. Purge files as necessary to free up disk space, or add more disks. Make sure the version of the NMCONFIG file matches the rest of the system software, by running `NMMGRVER.PUB.SYS`. If none of these suggestions solves the problem, contact your Hewlett-Packard Representative for assistance with configuring a LAPBMUX link to enable tracing at startup.

209 (\$D1)

**MESSAGE: Cannot stop tracing.**

**CAUSE:** After a link-open operation by an upper level subsystem failed, the link module configurator tried to clean up, but encountered an error trying to disable driver tracing.

**ACTION:** Probably the link driver returned an error reply when asked to disable tracing. The driver may have a problem, or may already have shut down. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , “Submitting a CR.”

210 (\$D2)

**MESSAGE: Cannot send a trace request.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup. After successfully opened a trace file, the configurator encountered an error trying to enable driver tracing.

**ACTION:** Probably the link driver returned an error reply when asked to enable tracing. The driver may have a problem. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , “Submitting a CR.”

216 (\$D8)

**MESSAGE: Driver received an unknown port message.**

**CAUSE:** The driver received a port message which it does not implement, or containing a function code which it does not implement.

**ACTION:** This is an informational error only. If this error occurred as part of a driver reset operation, it may be ignored. The driver did not attempt to return an error reply to the message sender. That sender may now be hung, awaiting a reply. Attempt to determine what action caused the error. Activate link tracing, reproduce the problem, then stop link tracing and save the resulting NMTcnnnn.PUB.SYS trace data file, see Appendix A , “Submitting a CR.”

223 (\$DF)

**MESSAGE: One or more bad bind parms passed by upper level protocol.**

**CAUSE:** This is a generic error, reported when the driver received a bind (rendezvous) from an upper layer protocol, but the parameters in the request were not satisfactory to the driver. There are a number of separate causes; look up the specific sublocation code that was logged, for more information.

**ACTION:** All such errors are caused by bugs in the upper layer protocol. Attempt to determine what protocol was trying to bind, then see Appendix A , “Submitting a CR.”

224 (\$E0)

**MESSAGE: A data buffer is too long.**

**CAUSE:** During the receive, the driver was asked to prepare a data block for receive, but the block length or memory allocation was beyond the driver's configured length.

**ACTION:** This is an informational error only. If this problem happens repeatedly and impacts the normal operation, then try configuring the buffer length to the next higher value and see Appendix A , “Submitting a CR.”

225 (\$E1)

**MESSAGE: One or more bad utility parms passed to driver.**

**CAUSE:** The driver received a utility register access request from an upper level tool program such as PLNKUTIL, but the register number specified was out of the range of legal register values for the selected register set.

**ACTION:** This is an informational error only. This problem most likely occurred while diagnosing some previous problem. Retry the operation using a legal register number for the register set you have selected.

228 (\$E4)

**MESSAGE: One or more bad unbind parms passed by upper level protocol.**

**CAUSE:** The driver received an unbind (separate) from an upper layer protocol module, but the specified rendezvous ID was out of range of legal rendezvous ID values for this driver, or the corresponding rendezvous table entry state indicated no bind had occurred or an unbind had already occurred. The protocol was supposed to pass a rendezvous ID value previously returned to it by the driver, when that protocol did a bind. The protocol may be trying to unbind twice, or unbind from the wrong link.

**ACTION:** This problem most likely occurred while stopping a running network subsystem. Attempt to determine which subsystem was being stopped when the error occurred and, if possible, which upper layer protocol was unbinding. Future attempts to start that same protocol will probably fail until the entire network is stopped or the system is rebooted. Either there is a bug in the driver or upper layer protocol software, memory data corruption has occurred, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

230 (\$E6)

**MESSAGE: Module Configurator cannot get its context area.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator tries to get the context memory area for validity, but found as invalid pointer. ("Cause" = 32-bit status saying the context was not accessed).

**ACTION:** The module configurator's context memory area is being overwritten, or is not working properly. If this happens every time, wait until the next time the link is to be closed; instead of closing the link, halt the system and take a memory dump, and see Appendix A , "Submitting a CR."

235 (\$EB)

**MESSAGE: The same upper level protocol attempted to bind twice.**

**CAUSE:** The driver received a bind (rendezvous) from an upper layer protocol module, but when it attempted to save information about that protocol's address (SAP), a lower-level routine reported an error because the address is already in the driver's rendezvous table.

**ACTION:** Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. If a duplicate address is in the table already, either an attempt has been made to start the same subsystem twice, or a previous instance of that subsystem did not properly shut down; a system reboot may be required to shut it. Otherwise there could be a driver bug, if two protocols are truly different but the driver thinks they are the same. Shut down the network and restart it. If the problem happens every time, see Appendix A , "Submitting a CR."

239 (\$EE)

**MESSAGE: Bad message for current state.**

**CAUSE:** This is a generic error, reported when the driver received a request from outside when the driver was not in a state where it could process that type of request, or the when driver has already processed a message of this type and was not expecting another. The driver may have encountered a previous fatal error, may be in the middle of startup, shutdown, or a recovery or dump operation, a message may have arrived too late, or the sender may be confused.

**ACTION:** If the message has replies, the driver will attempt to send an error reply back to the sender. If another error has already occurred, this event may be ignored. Otherwise, if the problem happens frequently, or if external subsystems are noticeably impacted after the error, see Appendix A , “Submitting a CR.”

240 (\$F0)

**MESSAGE: Unknown file record format.**

**CAUSE:** The trace or log formatter attempted to decode a record header to obtain basic information such as length and version, but on inspection found that the record does not appear to be a WAN ACC record supported by this formatter.

**ACTION:** The formatter will attempt to print this record in raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative.

243 (\$F3)

**MESSAGE: Unknown data version.**

**CAUSE:** The trace or log formatter attempted to decode a record header to obtain general information such as link type and link name, but on inspection found that the version of that data was not supported by this formatter, thus no other fields could be decoded.

**ACTION:** The formatter will attempt to print this record in raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative.

244 (\$F4)

**MESSAGE: Error encountered while decoding an entry.**

**CAUSE:** The trace or log formatter encountered an entry having an unrecognized entry tag value. The formatter cannot decode entries of this type.

**ACTION:** The formatter will attempt to print this entry in raw form. You may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative.



245 (\$F5)

**MESSAGE: Incomplete data was encountered.**

**CAUSE:** The trace or log formatter attempted to decode an entry, but on inspection found that the entry did not contain at least the minimum length of data required for this version of the data.

**ACTION:** The trace or log file may be corrupted, or you may be trying to format a trace or log file taken on a different system that has newer software than the system you are formatting on. The formatter will attempt to print this entry in raw form. Format the file on the system you took the trace or log on, or contact your Hewlett-Packard Representative to check if VGFOS patches are already available to correct this problem.

## Logging Sublocation Codes

The following are the logging sublocation codes reported by the WAN ACC Sync MUX link drivers, including sublocation code, log class, log message, and the appropriate cause of and action to take for each.

For meanings of 32-bit status values generated by the driver, refer to the sections on status values.

1020 CLAS0001 **MESSAGE: Cannot freeze a memory area.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was preparing to send configuration data to the driver, but encountered an error while trying to freeze that data into memory (“Cause” = 32-bit status from the call to freeze).

**ACTION:** The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

1040 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator was preparing to send configuration data to the driver, but encountered an error while trying to send the port message (“Cause” = 32-bit status from the call to `send_msg`).

**ACTION:** There may be a system problem, or another subsystem has already shut the driver down while this one was trying to start it. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Retry the operation. If this does not help, try stopping all networks using the link, then retry. If the problem still persists, halt the system and take a memory dump, then see Appendix A , “Submitting a CR.”

1060 CLAS0001 **MESSAGE: An unexpected timeout occurred.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, then encountered a timeout while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`, saying there was a timeout).

**ACTION:** The link driver is probably hung because of a problem in the driver, or the driver may have sent the wrong message back. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Perform a `:LINKCONTROL @` command to see if an entry exists for the linkname being started. If so, then run the VBPBA diagnostic tool and attempt to force a driver dump. If that works, save the resulting `NETDMP##.PUB.SYS` file for analysis by Hewlett-Packard. Otherwise, halt the system and take a memory dump. The dump should tell

Hewlett-Packard what actions the driver took. See Appendix A ,  
“Submitting a CR.”

1080 CLAS0001 **MESSAGE: Did not receive an expected port message.**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, then encountered a timeout while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`).

ACTION: There may be a system problem with message ports, or the link driver may have sent the wrong reply message. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Perform a `:LINKCONTROL @` command to see if an entry exists for the linkname being started. If so, then run the VBPBA diagnostic tool and attempt to force a driver dump. If that works, save the resulting `NETDMP##.PUB.SYS` file for analysis by Hewlett-Packard. Otherwise, halt the system and take a memory dump. The dump should tell Hewlett-Packard what actions the driver took. See Appendix A ,  
“Submitting a CR.”

1100 CLAS0001 **MESSAGE: (Varies)**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, but the driver returned an error in the reply message (“Cause” is not used here).

ACTION: If this error occurs, there may be additional driver-specific errors logged, giving more information about the problem. Attempt to locate those errors and look them up also. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

1120 CLAS0001 **MESSAGE: Cannot freeze a memory area**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator was preparing to send configuration data to the driver, but encountered an error while trying to freeze that data into memory (“Cause” = 32-bit status from the call to `freeze`).

ACTION: The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

1140 CLAS0001 **MESSAGE: Cannot send a port message.**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator was preparing to send configuration data to the driver, but encountered an error while trying to send the port message (“Cause” = 32-bit status from the call to `send_msg`).

**ACTION:** There may be a system problem, or another subsystem has already shut the driver down while this one was trying to start it. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Retry the operation. If this does not help, try stopping all networks using the link, then retry. If the problem still persists, halt the system and take a memory dump, then see Appendix A , “Submitting a CR.”

1160 CLAS0001 **MESSAGE: An unexpected timeout occurred.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, then encountered a timeout while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`, saying there was a timeout).

**ACTION:** The link driver is probably hung because of a problem in the driver, or the driver may have sent the wrong message back. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Perform a `:LINKCONTROL @` command to see if an entry exists for the linkname being started. If so, halt the system and take a memory dump. The dump should tell Hewlett-Packard what actions the driver took, see Appendix A , “Submitting a CR.”

1180 CLAS0001 **MESSAGE: Did not receive an expected port message.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator sent configuration data to the driver, then encountered an error while awaiting the correct reply message (“Cause” = 32-bit status from the call to `extend_receive`).

**ACTION:** There may be a system problem with message ports, or the link driver may have sent the wrong reply message. The open did not succeed. The module configurator cleaned up and returned an error to the subsystem.

Perform a `:LINKCONTROL @` command to see if an entry exists for the linkname being started. If so, halt the system and take a memory dump. The dump should tell Hewlett-Packard what actions the driver took, see Appendix A , “Submitting a CR.”

1200 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find a PCI bus at the hardware path specified in `NMCONFIG` (“Cause” is not used here).

**ACTION:** If this error occurs, there may be additional driver-specific errors logged, giving more information about the problem. Attempt to locate those errors and look them up also. The open did not succeed. The module configurator cleaned up and returned an error to the

subsystem.

1220 CLAS0001 **MESSAGE: No adapter card found on specified PCI bus.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but encountered an error which was not one of the legal errors the configurator was able to handle (“Cause” = 32-bit status from the call to `io_configure`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in `NMCONFIG` is correct and complete, and matches the path where a supported WAN ACC Sync MUX adapter card is installed in your computer backplane. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as `MAPPER`, or an online utility such as `SYSMAP`, to precisely determine your hardware configuration. If necessary, change `NMCONFIG` or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1240 CLAS0001 **MESSAGE: No adapter card found on specified PCI bus.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find an PCI bus at the hardware path specified in `NMCONFIG` (“Cause” is not used here).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in `NMCONFIG` is correct and complete, and matches the path where a supported WAN ACC Sync MUX adapter card is installed in your computer backplane. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as `MAPPER`, or an online utility such as `SYSMAP`, to precisely determine your hardware configuration. If necessary, change `NMCONFIG` or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1260 CLAS0001 **MESSAGE: Bad hardware ID or path.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find a supported WAN ACC Sync MUX adapter card at the hardware path specified in `NMCONFIG` (“Cause” = 32-bit hex value from a system table which holds the first 4 bytes of `IODC` information from the adapter card).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported WAN ACC Sync MUX adapter card is installed in the computer backplane. Verify the Power LED is lit on that adapter. If necessary, reseal the board or contact your Hewlett-Packard Representative for hardware assistance.

1280 CLAS0001 **MESSAGE: No adapter card found on specified PCI bus.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find a PCI bus at the hardware path specified in NMCONFIG (“Cause” is not used here).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported WAN ACC Sync MUX adapter card is installed in your computer backplane. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as MAPPER, or an online utility such as SYSMAP, to precisely determine your hardware configuration. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1300 CLAS0001 **MESSAGE: Bad hardware ID or path.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find a supported WAN ACC Sync MUX adapter card at the hardware path specified in NMCONFIG (“Cause” = 32-bit hex value from a system table which holds the first 4 bytes of IODC information from the adapter card).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported WAN ACC Sync MUX adapter card is installed in the computer backplane. Verify the Power LED is lit on that adapter. If necessary, reseal the board or contact your Hewlett-Packard Representative for hardware assistance.

1320 CLAS0001 **MESSAGE: Adapter card found does not match software configuration.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found a supported adapter card at the path specified in NMCONFIG, but it was not the right type of card for the link being started.

**ACTION:** Correct the network configuration or plug in the correct type of adapter card, and retry the operation. The module configurator cleaned up and returned an error to the subsystem.

- 1340 CLAS0001    **MESSAGE: Cannot create a buffer pool.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to create an outbound buffer pool (“Cause” = 32-bit status from the call to `bmgr_create_pool`).
- ACTION: The system may be low on available memory. The module configurator cleaned up and returned an error to the subsystem.
- Try stopping some applications or sessions and retry the operation. If the problem persists, stop all networking and restart it, or restart the system.
- The buffer size and pool size are not configurable. If the problem still occurs, there could be a problem with the buffer manager, see Appendix A , “Submitting a CR.”
- 1360 CLAS0001    **MESSAGE: Cannot load a system routine.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load code for the write initiator procedure needed for the link type configured in NMCONFIG (“Cause” = 32-bit status from the call to `hpgetsysplabel`).
- ACTION: Probably not all software required to operate this type of link is installed. Software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.
- 1380 CLAS0001    **MESSAGE: Cannot load driver plabel.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load the code for the driver (“Cause” = 32-bit status from the call to `io_get_mgr_entry`).
- ACTION: Probably not all software required to operate this type of link is installed. The software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.
- 1400 CLAS0001    **MESSAGE: Unable to auto-configure underlying IO paths.**
- CAUSE: During a link-open operation by an upper level subsystem, the link module configurator was attempting to create a new instance of the link driver, but encountered an error when configuring the underlying I/O paths (“Cause” = 32-bit status from the call to `io_configure_path`).
- ACTION: Probably not all software required to operate this type of link is installed. The software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the

link software or contact your Hewlett-Packard Representative for assistance.

1420 CLAS0001 **MESSAGE: Cannot add driver to I/O system.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but encountered an error which was not one of the legal errors the configurator was able to handle ("Cause" = 32-bit status from the call to `io_configure`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported WAN ACC Sync MUX adapter card is installed in your computer backplane. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as MAPPER, or an online utility such as SYSMAP, to precisely determine your hardware configuration. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1440 CLAS0001 **MESSAGE: Cannot load Driver plabel.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to load the code for the DM (Device Manager) ("Cause" = 32-bit status from the call to `io_get_mgr_entry`).

**ACTION:** Probably not all software required to operate this type of link is installed. The software was incorrectly installed, or you may need to purchase additional software or install newer patches. Reinstall the link software or contact your Hewlett-Packard Representative for assistance.

1460 CLAS0001 **MESSAGE: Cannot add driver to I/O system.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the DM (Device Manager) for link driver, but encountered an error which was not one of the legal errors the configurator was able to handle ("Cause" = 32-bit status from the call to `io_configure`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported WAN ACC Sync MUX adapter card is installed in your computer backplane. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as MAPPER, or an online utility such as SYSMAP, to precisely determine your



hardware configuration. If necessary, change NMCONFIG or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

1480 CLAS0001 **MESSAGE: Cannot open configuration file.**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator encountered an error while trying to open the configuration file ("Cause" = 32-bit status from the call to nmconfopen).

ACTION: The module configurator cleaned up and returned an error to the subsystem.

Verify an NMCONFIG.PUB.SYS file exists. If so, try to verify its format matches rest of the operating system. If the system was updated, you may need to run NMMGRVER.PUB.SYS to convert the file to a newer format. If the system was backdated, you may need to restore an older copy of NMCONFIG from a backup tape.

Perform a :LISTF,3 command and make sure the file is not protected by a lockword, and that the user starting the link has the necessary access rights to open the file.

Perform a :DSTAT ALL command and make sure the disk drive the file resides on is present and mounted. Make sure the file resides on Ldev 1. If not, use Fcopy and a file equation with a ";DEV=1" option to force a copy of the file onto Ldev 1.

Perform a :SHOWPROC 1;TREE;SYSTEM command and verify an NMFILE process exists. If not, shut down and restart the system, and retry the operation. If the problem persists, contact your Hewlett-Packard Representative for assistance with NMCONFIG file open problems.

1500 CLAS0001 **MESSAGE: Cannot read from configuration file.**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator was able to open the configuration file, but encountered an error while trying to data for the link being started ("Cause" = 32-bit status from the call to nmconfopen).

ACTION: The module configurator cleaned up and returned an error to the subsystem.

Using NMMGR, verify the path LINK.linkname exists in the NMCONFIG file and is the exact same linkname which is now being started. Verify the "Data=Y" flag is set at the top of that LINK screen (meaning that ENTER has been pressed to save the configuration data there). If the link is being used with NS, use the VALIDATE function to validate the network configuration. Correct any configuration errors and retry the operation.

1520 CLAS0001 **MESSAGE: Cannot validate configuration file.**

**CAUSE:** After successfully reading configuration data for a link being started, the link module configurator checked the data and found it was not valid ("Cause" is not used here). For NS/3000, probably the link type and NI type do not match.

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Using NMMGR, verify the path LINK.linkname exists in the NMCONFIG file and is LAPBMUX link type. If the subsystem being started is NS, verify the link type matches the NI type for the network being started.

If these are not the problem, an incorrect version of NMMGR may have been used to create the NMCONFIG file on your system. Run `NMMAINT.PUB.SYS;PARM=82` to check versions of NMMGR components.

The format of your NMCONFIG file may be incompatible with the link driver version installed on your system. Run `NMMGRVER.PUB.SYS` to update your NMCONFIG file to a newer version, or restore an older version from a backup tape, whichever is appropriate.

If the problem still occurs, contact your Hewlett-Packard Representative for assistance in using NMMGR to configure LAPBMUX links.

1540 CLAS0001 **MESSAGE: Bad hardware ID or path.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator did not find a valid hardware path specified in NMCONFIG ("Cause" = 32-bit hex value from a system table which holds the first 4 bytes of IODC information from the adapter card).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Verify the path in NMCONFIG is correct and complete, and matches the path where a supported WAN ACC Sync MUX adapter card is installed in the computer backplane. Contact your Hewlett-Packard Representative for hardware assistance.

1560 CLAS0001 **MESSAGE: Cannot open tracing.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup, but encountered an error trying to open the trace file ("Cause" = 32-bit status from the call to `nmopentrace`).

**ACTION:** This is an informational error that tracing was not started. The link came up, but the error was returned to the upper level subsystem, which may decide to shut the link back down again.

Using NMMGR, check if a filename was configured. If so, verify it is a legal MPE filename. A group and account may need to be specified. Make sure the user starting the link has the necessary capabilities to create that file in the group and account specified.

Check whether the system is low on disk space. Check whether too many NMTcnnnn.PUB.SYS trace data files already exist. Purge files as necessary to free up disk space, or add more disks.

Make sure the version of the NMCONFIG file matches the rest of the system software, by running NMMGRVER.PUB.SYS.

If none of these suggestions solves the problem, contact your Hewlett-Packard Representative for assistance with configuring a WAN Sync MUX link (SDLCMUX, LAPBMUX) to enable tracing at startup.

1580 CLAS0001 **MESSAGE: Subsystem is opening link.**

CAUSE: An upper level subsystem has called the link module configurator, which has successfully located configuration for the link, and will now proceed to start it up ("Transport" = name of the subsystem which is starting the link, or its subsystem number if the configurator does not know the name).

ACTION: None. This is an informational event only. A similar event will be logged when the link is closed.

1600 CLAS0001 **MESSAGE: Cannot stop tracing.**

CAUSE: After a link-open operation by an upper level subsystem failed, the link module configurator tried to clean up, but encountered an error trying to disable driver tracing ("Cause" = 32-bit status from the call to `sio_trace_req`).

ACTION: This is an informational error that tracing was not disabled. If this error occurs it is because some other error has already occurred. The link open did not succeed.

Probably the link driver returned an error reply when asked to disable tracing. The driver may have a problem, or may already have shut down. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A, "Submitting a CR."

1610 CLAS0001 **MESSAGE: Cannot send a trace request.**

CAUSE: During a link-open operation by an upper level subsystem, the link module configurator found that the link was configured to enable tracing at startup. After successfully opened a trace file, the configurator encountered an error trying to enable driver tracing ("Cause" = 32-bit status from the call to `sio_trace_req`).

ACTION: This is an informational error that tracing was not enabled. The link came up, but the error was returned to the upper level subsystem, which may decide to shut the link back down again.

Probably the link driver returned an error reply when asked to enable tracing. The driver may have a problem. Check for other, driver-specific error messages which may give more information about the problem, and look them up also. If no other errors are found, see Appendix A , “Submitting a CR.”

- 1620 CLAS0001 **MESSAGE: The subsys link products are not installed.**
- CAUSE: Probably not all software required to operate this type of link is installed. Software was incorrectly Installed, or you may need to purchase additional software or install new patches.
- ACTION: If this status is reported during a startup operation, Reinstall the link software or contact your HP Representative for assistance.
- 1640 CLAS0001 **MESSAGE: Cannot release a system plabel.**
- CAUSE: During the link startup operation by an upper level subsystem, the link module configurator encountered an error while trying to release the link’s key routine procedure (“Cause” = 32-bit status from the call to hprelsysplabel).
- ACTION: This is an informational warning that some system memory resources may have been lost. The module configurator reported an error, but attempted to continue with the open. If this happens every time, see Appendix A , “Submitting a CR.”
- 1660 CLAS0001 **MESSAGE: Module Configurator cannot get its context area.**
- CAUSE: During the link start up process, the module configurator tries to configure the Download Surrogate and encountered an error where it got the surrogate’s port number as Nil.
- ACTION: This is an error. Try to restart the link again. If the problem persists with a know good card, see Appendix A , “Submitting a CR.”
- 1680 CLAS0001 **MESSAGE: The link is already started.**
- CAUSE: During the first link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created and has been opened at least once (“Cause” = 32-bit status from the call to io\_configure, saying the link is already started).
- ACTION: This is an informational warning only. The module configurator will leave the link driver up and stop trying to start it again. Usually preceded by another error.
- 1700 CLAS0001 **MESSAGE: Error in configuring download surrogate.**
- CAUSE: During the first link-open operation by an upper level subsystem, the link module configurator attempted to create a new instance of the link driver, but discovered the driver was already created and has been opened at least once (“Cause” = 32-bit status from the call to io\_configure, saying the link is already started).

**ACTION:** This is an informational warning only. The module configurator will leave the link driver up and stop trying to start it again. Usually preceded by another error.

1720 CLAS0001 **MESSAGE: Cannot add to link table.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator successfully started the driver, but encountered an error trying to add the link to the link table (“Cause” = 32-bit status from the call to `lsslktbladd`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Possibly too many links are started.

If not, try starting a different link, to see if that works. If not, first try doing a `:LINKCONTROL @` command to see if any LSS errors occur. If they do, you may need to reinstall MPE software; contact your Hewlett-Packard Representative for assistance. Otherwise try restarting the system to see if it corrects the problem or LINKCONTROL errors. If none of these suggestions helps, see Appendix A , “Submitting a CR.”

1740 CLAS0001 **MESSAGE: Cannot update to link table.**

**CAUSE:** During a link-open operation by an upper level subsystem, the link module configurator successfully started the driver, but encountered an error trying to update the link to the link table (“Cause” = 32-bit status from the call to `lsslktbladd`).

**ACTION:** The module configurator cleaned up and returned an error to the subsystem.

Possibly too many links are started.

If not, try starting a different link, to see if that works. If not, first try doing a `:LINKCONTROL @` command to see if any LSS errors occur. If they do, you may need to reinstall MPE software; contact your Hewlett-Packard Representative for assistance. Otherwise try restarting the system to see if it corrects the problem or LINKCONTROL errors. If none of these suggestions helps, see Appendix A , “Submitting a CR.”

1760 CLAS0001 **MESSAGE: Cannot freeze a memory area.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator was preparing to send new configuration data to the driver, but encountered an error while trying to freeze that data into memory (“Cause” = 32-bit status from the call to `freeze`).

**ACTION:** The system may be low on available memory. Try closing any unnecessary applications or sessions and retry the operation. The driver did not receive the updated configuration data. The module deconfigurator attempted to continue with the close. If this happens

every time, see Appendix A , “Submitting a CR.”

1780 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator was preparing to send updated configuration data to the driver, but encountered an error while trying to send the port message (“Cause” = 32-bit status from the call to send\_msg).

**ACTION:** There may be a system problem, or another subsystem has already shut the driver down while this one was trying to close it. The driver did not receive the updated configuration data. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1800 CLAS0001 **MESSAGE: An unexpected timeout occurred.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, then encountered a timeout while awaiting the correct reply message (“Cause” = 32-bit status from the call to extend\_receive, saying there was a timeout).

**ACTION:** The link driver is probably hung because of a problem in the driver, the driver has already shut down, or the driver may have sent the wrong message back. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1820 CLAS0001 **MESSAGE: Did not receive an expected port message.**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, then encountered an error while awaiting the correct reply message (“Cause” = 32-bit status from the call to extend\_receive).

**ACTION:** There may be a system problem with message ports, or the link driver may have sent the wrong reply message. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1840 CLAS0001 **MESSAGE: (Varies)**

**CAUSE:** During a link-close operation by an upper level subsystem, the link module deconfigurator sent updated configuration data to the driver, but the driver returned an error in the reply message (“Cause” is not used here).

**ACTION:** If this error occurs, there may be additional driver-specific errors logged, giving more information about the problem. Attempt to locate those errors and look them up also. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

- 1860 CLAS0001    **MESSAGE: Subsystem is closing link.**  
  
CAUSE: An upper level subsystem has called the link module deconfigurator, which has successfully located the link, and will now proceed to close it.  
  
ACTION: None. This is an informational event only. A similar event was logged when the link was opened.
- 1880 CLAS0001    **MESSAGE: Module Configurator cannot access its context area.**  
  
CAUSE: During a link-close operation by an upper level subsystem, the link module deconfigurator checked its context memory area for validity, but did not find the expected data (“Cause” = 32-bit status saying the context was not accessed).  
  
ACTION: The module deconfigurator’s context memory area is being overwritten, or is not working properly. The deconfigurator did not perform the close. If this happens every time, wait until the next time the link is to be closed; instead of closing the link, halt the system and take a memory dump, and see Appendix A , “Submitting a CR.”
- 1900 CLAS0001    **MESSAGE: Cannot delete from link table.**  
  
CAUSE: During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete the link from the link table, but encountered an error (“Cause” = 32-bit status from the call to `lsslktbldelete`).  
  
ACTION: The module deconfigurator reported an error, but attempted to continue with the close. Network management services may have been shut down. Otherwise, if this happens every time, see Appendix A , “Submitting a CR.”
- 1920 CLAS0001    **MESSAGE: Cannot delete a buffer pool.**  
  
CAUSE: During a link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to delete a control buffer pool (“Cause” = 32-bit status from the call to `bmgr_delete_pool`).  
  
ACTION: This is an informational warning that some system memory resources may have been lost. Probably not all buffers were freed before the pool was deleted. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”
- 1940 CLAS0001    **MESSAGE: Cannot release a system plabel.**  
  
CAUSE: During the final link-close operation by an upper level subsystem, the link module deconfigurator encountered an error while trying to release the link’s write initiator procedure (“Cause” = 32-bit status from the call to `hprelsysplabel`).  
  
ACTION: This is an informational warning that some system memory

resources may have been lost. The module deconfigurator reported an error, but attempted to continue with the close. If this happens every time, see Appendix A , “Submitting a CR.”

1960 CLAS0001 **MESSAGE: Cannot remove driver from I/O system.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete an instance of the DM of link driver, but encountered an I/O system error (“Cause” = 32-bit status from the call to `io_unconfigure`).

**ACTION:** The deconfigurator stopped trying to close the link. However, the driver already received updated configuration data removing the subsystem’s multicast information, but other resources, such as link table, were not updated. The driver may already have been shut down by some other means, or the system I/O configuration may have been altered. If this happens frequently, see Appendix A , “Submitting a CR.”

1980 CLAS0001 **MESSAGE: Cannot remove driver from I/O system.**

**CAUSE:** During the final link-close operation by an upper level subsystem, the link module deconfigurator attempted to delete an instance of the link driver, but encountered an I/O system error (“Cause” = 32-bit status from the call to `io_unconfigured`).

**ACTION:** The deconfigurator stopped trying to close the link. However, the driver already received updated configuration data removing the subsystem’s multicast information, but other resources, such as link table, were not updated. The driver may already have been shut down by some other means, or the system I/O configuration may have been altered. If this happens frequently, see Appendix A , “Submitting a CR.”

2000 CLAS0001 **MESSAGE: Unable to write to adapter card PCI configuration space.**

**CAUSE:** During driver startup, during a restart following a reset operation, or during processing of a utility register read request, the driver called the I/O System to read data from an adapter register in PCI Configuration Space, but the I/O System reported an error.

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Re-seat the board, and if necessary, contact your HP Representative for hardware assistance.

2040 CLAS0001 **MESSAGE: Unable to read from adapter card PCI configuration space.**

**CAUSE:** During driver startup, during a restart following a reset operation, or during processing of a utility register read request, the driver called the I/O System to read data from an adapter register in PCI Configuration Space, but the I/O System reported an error.

**ACTION:** The adapter card may have been removed, moved to a



different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Re-seat the board, and if necessary, contact your HP Representative for hardware assistance.

2080 CLAS0001 **MESSAGE: Unable to write to adapter card PCI configuration space.**

**CAUSE:** During driver startup, during a restart following a reset operation, or during processing of a utility register read request, the driver called the I/O System to read data from an adapter register in PCI Configuration Space, but the I/O System reported an error.

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Re-seat the board, and if necessary, contact your HP Representative for hardware assistance.

2120 CLAS0001 **MESSAGE: Unable to read from adapter card PCI configuration space.**

**CAUSE:** During driver startup, during a restart following a reset operation, or during processing of a utility register read request, the driver called the I/O System to read data from an adapter register in PCI Configuration Space, but the I/O System reported an error.

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Re-seat the board, and if necessary, contact your HP Representative for hardware assistance.

2160 CLAS0001 **MESSAGE: Unable to write to adapter card PCI configuration space.**

**CAUSE:** During driver startup, during a restart following a reset operation, or during processing of a utility register read request, the driver called the I/O System to read data from an adapter register in PCI Configuration Space, but the I/O System reported an error.

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Re-seat the board, and if necessary, contact your HP Representative for hardware assistance.

2200 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a new open from an upper layer subsystem, at a time the driver was not able to process these requests, such as during shutdown or after a fatal software error ("Cause" = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).

**ACTION:** The open failed. Check the system console; if the driver is

shutting down or doing a dump, wait until that completes. Retry the operation. If the driver still does not become usable after this, use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

2240 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a new open from an upper layer subsystem, at a time the driver was not able to process these requests, such as during shutdown or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).

**ACTION:** The open failed. Check the system console; if the driver is shutting down or doing a dump, wait until that completes. Retry the operation. If the driver still does not become usable after this, use Control-B at the console to halt the system, take a memory dump, and reboot see Appendix A , “Submitting a CR.”

2250 CLAS0001 **MESSAGE: Link disconnected.**

**CAUSE:** The last upper layer subsystem has unbound itself from the driver, triggering a link disconnect This event is also logged if the link unexpectedly drops due to a cable disconnect, powerfail, severe line hit, or other recoverable error (“Status” = 32-bit status giving the reason for the disconnect, 0 = normal).

**ACTION:** This event is informational only. If the network is being shut down, no action is required.

However, if the link was supposed to be up or the message appears frequently while the link is up, this indicates possible cabling problems; make sure cabling is securely connected.

2260 CLAS0001 **MESSAGE: Link connected.**

**CAUSE:** The first upper layer subsystem to bind to the driver triggered a link connect, which was successful (“Mode” = the local mode: DTE or DCE, “Protocol” = SDLC or LAPB). This event is also logged after the link or cable has been successfully reconnected after being disconnected, or on a link reconnect following severe line-hit, power failure, or other recoverable error.

**ACTION:** This event is informational only.

No action is needed unless the message appears frequently while the link is up, indicating possible cabling problems; make sure cabling is securely connected and properly routed away from sources of interference.

2280 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While attempting to send a reset request to a lower manager during startup, the driver encountered an error on the send (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is sometimes fatal, causing the remainder of the driver's processing to be skipped. May be followed by another error giving more information about what kind of reply the driver was trying to send; check log data for that error and look it up also. If the link does not seem to be responding, attempt to shut down and restart the network and/or link. If the problem persists, wait until it occurs again, then use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

2320 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During a shutdown operation by an upper level subsystem, the driver was preparing to send a reply to the `unbind_request`, but encountered an error while trying to send the port message (“Cause” = 32-bit status from the call to `send_msg`).

**ACTION:** There may be a system problem, or another subsystem has already shut the driver down while this one was trying to close it. If this happens every time, see Appendix A , “Submitting a CR.”

2360 CLAS0001 **MESSAGE: No adapter card found on specified PCI bus.**

**CAUSE:** During initial driver startup, a PCI bus was not found at the hardware path specified in NMCONFIG.

**ACTION:** The driver did not start up. Use NMMGR to verify the path in NMCONFIG is correct and complete, and matches the path where a WAN ACC Sync MUX adapter card is installed in your computer backplane. A diagram of the backplane slot paths, often found in the rear of your system near the backplane, may help you. You can also try an offline diagnostic utility such as MAPPER, or an online utility such as SYSMAP, to precisely determine your hardware configuration. If necessary, change the NMCONFIG configurations or contact your Hewlett-Packard Representative for assistance in determining paths or correcting bus hardware problems.

2400 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** While attempting to send a bind request to a lower manager during startup, the driver encountered an error on the send (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is sometimes fatal, causing the remainder of the driver's processing to be skipped. May be followed by another error giving more information about what kind of reply the driver was trying to send; check log data for that error and look it up also. If the link does not seem to be responding, attempt to shut down and restart the network and/or link. If the problem persists, wait until it occurs again, then use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

- 2440 CLAS0001    **MESSAGE: Cannot send a port message.**
- CAUSE: While shutting down the link, the driver attempted to free ADA memory previously obtained from the MPE I/O system, but encountered an error trying to send a memory request message to the I/O Memory Port (“Cause” = 32-bit status from the call to `send_msg`).
- ACTION: This is a warning that some memory resources may have been lost. The driver will attempt to continue. Unless this happens frequently, the system should continue to run.
- If the problem happens every time, enable link tracing via `:LINKCONTROL` then reproduce the link shutdown problem (the trace file will close automatically). Save the resulting trace file (NMTC####.PUB.SYS) on tape for Hewlett-Packard analysis, and see Appendix A , “Submitting a CR.”
- 2480 CLAS0001    **MESSAGE: Cannot send a port message.**
- CAUSE: While starting up the link, the driver attempted to request ADA memory from the MPE I/O system, but encountered an error trying to send a memory request message to the I/O Memory Port (“Cause” = 32-bit status from the call to `send_msg`).
- ACTION: This is a fatal software error. The driver cannot operate the adapter card without ADA memory. After reporting this error, the driver will return a configuration error, then die and wait to be shut down; the configuration routine should shut it down automatically.
- The problem can be caused either by lack of memory or by a bug. If you suspect high memory usage and have the GLANCE tool, run it and check system memory usage. If usage is high, try closing some applications or subsystems, then retry link startup. If the problem persists, shut down the system to clear memory, then reboot but try starting the link earlier, before too many other applications get going.
- If still low on memory, you may need to add more memory hardware. First, however, Hewlett-Packard can try to determine if more memory would help, or if instead there is a bug. Use NMMGR to make sure all logging classes are enabled for the link type, for disk logging. Reproduce the problem, then collect all NM log files (NMLG####.PUB.SYS) and see Appendix A , “Submitting a CR.”
- 2560 CLAS0001    **MESSAGE: Bad message for current state.**
- CAUSE: The driver received a new bind (rendezvous) from an upper layer protocol, at a time when the driver was not able to process these requests, such as before receiving its initial configuration data, during shutdown, or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).
- ACTION: This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer

protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

Check the system console; if the driver is shutting down or doing a dump, wait until that completes. In these cases, several protocols may experience this same error. If the driver is not shutting down or dying, the protocol may be sending binds to the driver at the wrong time. See Appendix A , “Submitting a CR,” and file a CR against the network subsystem being started.

2600 CLAS0001 **MESSAGE: One or more bad bind parms passed by upper level protocol.**

CAUSE: The driver received a bind (rendezvous) from an upper layer protocol module, but the specified SDI address family was not one of the values supported by the driver (“Cause” = 32-bit value giving the bad address family which was specified).

ACTION: This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

2640 CLAS0001 **MESSAGE: Link common reported a protocol bind problem.**

CAUSE: While attempting to setup a rendezvous entry (by calling `lnk_rendez`), an error was returned to the ISR. (“Cause” = 32-bit integer specifying the SAP that was trying to rendezvous).

ACTION: This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your Hewlett-Packard Representative for assistance.

2680 CLAS0001 **MESSAGE: Link common reported an inbound buffering problem.**

CAUSE: After completing a read and delivering a data buffer to an upper layer protocol, the ISR encountered an error when trying to setup inbound buffer pool. (“Cause” = 32-bit status from `Lnk_buf_init1`).

**ACTION:** This problem most likely occurred while starting a new network subsystem. Attempt to determine which subsystem was being started when the error occurred and, if possible, which upper layer protocol was binding. The bind failed. The driver logged the error, then attempted to send an error reply message back to the protocol module and continue.

If upper level network subsystems appear hung, try shutting them down manually, or shutting down and restarting the network link; if the problem persists, see Appendix A , “Submitting a CR.”

Either there is a bug in the driver or upper layer protocol software, or there is a system software mismatch. You may require additional software patches; contact your HP Representative for assistance.

2720 CLAS0001 **MESSAGE: Subsystem is binding to link driver.**

**CAUSE:** An upper layer protocol has successfully bound (rendezvoused) to the link driver (“Addr” = 32-bit encoded protocol address (SAP) value for this protocol module). Being bound means the driver can now route incoming data frames to this protocol.

**ACTION:** None. This is an informational message only. A similar message is logged later, when the protocol unbinds. If this is the first bind, the link driver will now attempt to reconnect the link.

2760 CLAS0001 **MESSAGE: Driver encountered a software problem.**

**CAUSE:** While beginning a driver start or restart operation, the driver tried to set the heartbeat timer, but encountered an error (“Cause” = 32-bit status from the call to `lnk_start_timer`). This timer was to be used to periodically awaken the driver so it could verify card health; the driver cannot start if this timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

If the problem persists, the system may be low on timers; try stopping some applications before retrying again.

2800 CLAS0001 **MESSAGE: Subsystem is unbinding from link driver.**

**CAUSE:** An upper layer protocol has begun to unbind (separate) from the link driver (“Addr” = 32-bit encoded protocol address (SAP) value for this protocol module). Once unbound, the driver can no longer route incoming data frames to this protocol.

**ACTION:** None. This is an informational message only. A similar message is logged earlier, when the protocol binds. If this is the last bind, the link driver will now attempt to disconnect the link.

If any errors occur as a result of the unbind, they will appear after, not before, this log event; the unbind will still complete, and the protocol will be successfully unbound.

2840 CLAS0001 **MESSAGE: Driver encountered a software problem.**

CAUSE: When attempting to separate during a protocol separate (unbind), the driver gets an error from its state machine (“Cause” = 32-bit status stating the driver is “dying”).

ACTION: If the operator already knows the driver is in the process of being closed, this error can be ignored.

2860 CLAS0001 **MESSAGE: Bad hardware ID or path.**

CAUSE: During initial driver startup, a supported Sync MUX adapter card was not found at the hardware path specified in NMCONFIG.

ACTION: The driver did not start up. Verify the path in NMCONFIG is correct and complete, and matches the path where a Sync MUX adapter card is installed in the computer backplane. Verify the Power LED is lit on that adapter. If necessary, contact your Hewlett-Packard Representative for hardware assistance.

2880 CLAS0001 **MESSAGE: Driver is starting adapter card.**

CAUSE: The driver has completed initial startup of the adapter card, or a restart following a reset, powerfail, dump, or other recoverable condition (“Status” = 32-bit status giving the result of the startup attempt, 0 = successful).

ACTION: This event is informational. No action is required unless the status is nonzero. Nonzero status indicates the startup failed; this may be preceded by other specific errors.

2890 CLAS0001 **MESSAGE: Cannot install interrupt handler.**

CAUSE: During initial driver startup, the driver was unable to add its ISR into the MPE I/O system, as an interrupt handler routine for any adapter card interrupts on that EIR bit (“Cause” = 32-bit status returned by the call to `io_config_pci_int`).

ACTION: The driver did not start up. There is probably an MPE software installation problem, with incomplete or incompatible O/S software. Verify the system is running an MPE release which supports WAN Sync MUX link drivers. The only other cause is a software bug; see Appendix A , “Submitting a CR.”

2920 CLAS0001 **MESSAGE: Powerfail detected.**

CAUSE: During a LAPBMUX link connect attempt, the driver detected all 1's on a hardware register read, and, upon checking further, saw that its hardware I/O address space was disabled, indicating a powerfail had already occurred.

**ACTION:** None. This error can be ignored. Power failures can occur at any moment. The driver was executing at the moment power failed. Power then returned, and the driver ran to completion, noticing this error along the way. Upon exit, the driver was then officially notified of a powerfail by MPE. The driver then attempted powerfail recovery, and should now be operating the same as before.

2960 CLAS0001 **MESSAGE: One or more bad utility parms passed to driver.**

**CAUSE:** The driver received a utility register access request from an upper level tool program such as PLNKUTIL, but the register number specified was out of the range of legal register values for the selected register set.

**ACTION:** This is an informational error only. This problem most likely occurred while diagnosing some previous problem. Retry the operation using a legal register number for the register set you have selected.

3000 CLAS0001 **MESSAGE: Unable to read from adapter card PCI configuration space.**

**CAUSE:** During driver startup, during a restart following a reset operation, or during processing of a utility register read request, the driver called the I/O System to read data from an adapter register in PCI Configuration Space, but the I/O System reported an error.

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Re-seat the board, and if necessary, contact your HP Representative for hardware assistance.

3040 CLAS0001 **MESSAGE: Unable to write to the adapter card PCI configuration space.**

**CAUSE:** During driver startup, during a restart following a reset operation, or during processing of a utility register read request, the driver called the I/O System to write data to an adapter register in PCI Configuration Space, but the I/O System reported an error.

**ACTION:** The adapter card may have been removed, moved to a different slot, may not be making proper contact with the PCI backplane, or may not be responding. If the I/O slot has a power indicator, verify it is on. Re-seat the board, and if necessary, contact your HP Representative for hardware assistance.

3080 CLAS0001 **MESSAGE: Error from upper layer protocol read completer.**

**CAUSE:** The driver finished transferring a data frame and passed it to an upper layer protocol, but the protocol's read completer returned an error which was not one of the expected, legal errors the driver was able to handle ("Cause" = 32-bit status returned from the read completer).



**ACTION:** This is an informational error only. The driver incremented a statistic, logged the error, then attempted to free the read buffer and continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung.

There may be a problem in the upper layer protocol. Also, if the protocol had already freed the buffer, this may have resulted in a SysAbort from the Buffer Manager. If the problem occurs frequently, start link tracing, reproduce the problem, then stop link tracing and save the resulting NMTC####.PUB.SYS file for analysis by Hewlett-Packard, and see Appendix A , “Submitting a CR.”

3120 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** The driver finished transferring a data frame, but encountered an error while trying to send the frame to an upper layer protocol via a port message (“Cause” = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error is reported at a low level, where the actual send fails. It should be followed by a another error giving more information. Locate that error and look it up also. The driver will now attempt to clean up and continue.

3160 CLAS0001 **MESSAGE: Error from upper layer protocol read completor.**

**CAUSE:** The driver finished transferring a data frame, but encountered an error while trying to send the frame to an upper layer protocol via a port message (“Cause” = 32-bit status returned by the call to `Acc_send_msg`).

**ACTION:** This is an informational error only. The driver has incremented a statistic, logged the error, and will now attempt to free the receive buffer and continue. However, the protocol may not have received the inbound frame, therefore some applications could be hung.

There is probably a problem in the upper layer protocol. Also, if the protocol had already freed the buffer, this may have resulted in a SysAbort from the Buffer Manager. If the problem occurs frequently, start link tracing, reproduce the problem, then stop link tracing and save the resulting NMTC####.PUB.SYS file for analysis by Hewlett-Packard, and see Appendix A , “Submitting a CR.”

3200 CLAS0001 **MESSAGE: Link common reported an inbound buffering problem.**

**CAUSE:** After completing a read and delivering a data buffer to an upper layer protocol, the ISR encountered an error when trying to refill the SAP’s buffer cache. (“Cause” = 32-bit status from `Lnk_buf_refill`).

**ACTION:** This message is informational; this might be because of contention on the system for buffers. However, if the underlying contention or problem persists, the SAP may run out of buffers and no longer be able to receive data over the network.

If upper level network subsystems appear hung, try shutting them down manually, or shutting down and restarting the network link; if the problem persists, see Appendix A , “Submitting a CR.”

3240 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** This is a generic hardware error, reported when any of the driver’s hardware access routines reports an error. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.

**ACTION:** When this problem happens, driver will dump the card and itself. If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

3280 CLAS0001 **MESSAGE: Driver received an unknown port message.**

**CAUSE:** Some module on the system has sent the driver a message having an unknown message descriptor. The driver does not implement any messages having that descriptor (“Cause” = 32-bit value of the message descriptor field).

**ACTION:** The driver took no action on the message, and dropped it. However, if the problem occurs frequently, your system may not be set up properly. The driver traces the message which it received. If you can repeat the problem, first enable link tracing. Then reproduce the problem, stop tracing, and save the resulting trace data file for analysis by Hewlett-Packard, see Appendix A , “Submitting a CR.”

3400 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a new open from an upper layer subsystem, at a time the driver was not able to process these requests, such as during shutdown or after a fatal software error (“Cause” = 16-bit encoded value, giving driver input event code and current state; Hewlett-Packard use only).

**ACTION:** The open failed. Check the system console; if the driver is shutting down or doing a dump, wait until that completes. Retry the operation. If the problem persists, the driver may be broken. If the driver still does not become usable after this, use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

3580 CLAS0001 **MESSAGE: Driver initialization failed.**

**CAUSE:** While processing its very first startup message, the driver encountered a problem (“Cause” = 32-bit status returned by the call to `acc_initialize`). Probably the configured hardware is not present, is not the correct kind of adapter card, or there was a problem configuring the ISR into the I/O system.

**ACTION:** This informational error should be preceded by another error giving a more specific reason for the failure; check log for that error and

look it up also, for more actions to take. The driver will attempt to send an error reply for the startup request. It then enters a “broken” state and awaits a shutdown, which the module configurator should attempt automatically.

3640 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a second copy of the first initialization message it would ever get, indicating a second attempt to start the driver (“Cause” = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** The driver sent an error reply in response to the message. Further action may not be required. If the problem occurs frequently, try to determine what operator commands or actions trigger the error, then see Appendix A , “Submitting a CR.”

3670 CLAS0001 **MESSAGE: Late dump-done message received. Dump took too long.**

**CAUSE:** The driver received a driver-dump completion message when it was not working on a dump (“Cause” = 32-bit status saying there was a bad message for the current state).

**ACTION:** This error is informational only. Probably the Network Dump Process was delayed by other system processing, such that it exceeded the time limit set by the driver. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, after which the driver will now attempt to auto-reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disk activity load before the next attempt.

If load is not the problem, see Appendix A , “Submitting a CR.”

3700 CLAS0001 **MESSAGE: Internal error while initiating a dump. Dump failed.**

**CAUSE:** The driver’s dump timer popped while performing a dump operation (“Cause” = 32-bit status indicating a timeout has occurred). Probably a heavy CPU or disk activity load caused the Network Dump Process to take longer than the time allowed by the driver.

**ACTION:** This error is informational only. The resulting dump file may or may not be incomplete. A more serious driver problem has already occurred, and by the time this error is logged, the driver is already attempting to auto-reset and continue. If you are trying to reproduce a specific problem but this error occurs every time, reduce the CPU or disk activity load before the next attempt.

3840 CLAS0001 **MESSAGE: Link tracing is already disabled.**

**CAUSE:** The driver received a request to turn link tracing off when it was already off. Typically this condition is caught at the C.I. level, however in this case trace may be under the control of a different mechanism.

**ACTION:** No action is required; this error is informational only. An error reply was sent in response to the request. Trace was not stopped by this request this time, but it remains off.

3850 CLAS0001 **MESSAGE: Cannot initiate a dump. Already dumping.**

**CAUSE:** A user attempted to force a driver dump while a previous driver dump was still occurring (“Cause” = 32-bit status saying a driver dump is starting).

**ACTION:** A dump of your problem is already being produced. Wait a minute or two for the dump to finish. Forward the resulting NETDMP##.PUB.SYS to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”

3880 CLAS0001 **MESSAGE: A driver dump is starting.**

**CAUSE:** A user is forcing a driver dump to occur, typically via CI (“Cause” = 32-bit status saying the driver dump was forced).

**ACTION:** This error is informational only. The dump is probably being forced because the system operator suspects a link driver problem. Forward the resulting NETDMP##.PUB.SYS file to Hewlett-Packard for analysis if necessary, and see Appendix A , “Submitting a CR.”

3910 CLAS0001 **MESSAGE: Cannot get ADA memory object.**

**CAUSE:** During initial startup, the driver attempted to obtain a memory object via the I/O system, but received a bad status in the reply for that request (“Cause” = 32-bit status from the reply message).

**ACTION:** The link did not start, and the driver attempted to send back an error reply in response the configuration request from the module configurator. Probably the amount of frozen memory on the system is very high; if you have the GLANCE tool you can try to check memory usage. Try retrying the operation again later, or first terminate some applications and then retry.

4000 CLAS0001 **MESSAGE: Cannot release ADA memory object.**

**CAUSE:** During shutdown, the driver requested the I/O system to release a memory object, but received an error reply in response (“Cause” = 32-bit status from the mem\_reply message).

**ACTION:** This error should not occur. The driver may be confused, or there is a system problem. However, the driver will ignore the error and attempt to continue with the shutdown. If this problem happens frequently when the driver is shutting down, see Appendix A , “Submitting a CR.”

4000 CLAS0001 **MESSAGE: Link tracing is already enabled.**

**CAUSE:** The driver received a request to turn link tracing off when it was already off. Typically this condition is caught at the C.I. level, however in this case trace may be under the control of a different

mechanism.

**ACTION:** No action is required; this error is informational only. An error reply was sent in response to the request. Trace was not stopped by this request this time, but it remains off.

4040 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received a trace enable request, at a time the driver was not able to process these requests. ("Cause" = 16-bit encoded value, giving driver input event code and current state: Hewlett-Packard use only).

**ACTION:** Try this operation later. If the problem still persists. If the driver still does not become usable after this, use Control-B at the console to halt the system, take a memory dump, and reboot, see Appendix A , "Submitting a CR."

4270 CLAS0001 **MESSAGE: Bad message for current state.**

**CAUSE:** The driver received an unconfigure request message before it received its first configure request ("Cause" = 16-bit encoded value, giving driver input event code and current state: HP use only).

**ACTION:** This error is informational only. The driver attempted to return an error reply to the sending subsystem. If this problem happens frequently, try to determine what actions lead to the problem, then see Appendix A , "Submitting a CR."

4970 CLAS0001 **MESSAGE: Powerfail detected.**

**CAUSE:** A power failure appears to have occurred during a hard reset of the adapter card during startup ("Cause" is not used here).

**ACTION:** This is an informational error only. The driver should have then attempted to recover from the powerfail. If you suspect a powerfail has not occurred, and the same problem occurs on every restart, the adapter card or system HP-PB hardware may have failed. Replace the adapter card. Then, if the problem still persists, contact your Hewlett-Packard Service Representative for help in diagnosing your system hardware.

5000 CLAS0001 **MESSAGE: Level-2 connection not happened within time allowed.**

**CAUSE:** During a WAN link connect attempt, the driver requested a level-2 connection from the remote host, but no connection happened within the connect time allowed.

**ACTION:** This error is informational only. The driver will retry the connect. If the problem happens every time, first check that the cable is good, If the cable is good, then check the NMMGR configuration like clock setting, interface type, Local mode (DTE or DCE) etc.

- 5040 CLAS0001 **MESSAGE: A data buffer is too long.**  
CAUSE: During the receive, the driver got a receive buffer of length greater than the configured value in NMMGR. ("Cause" = 32-bit total length of the requested transmission).  
ACTION: Try to check the NMMGR configuration. Try to set the buffer size greater than 2048 for SDLCMUX link. If the problem persists, first activate link tracing, reproduce the problem, stop tracing, and save the resulting link trace file. Then see Appendix A , "Submitting a CR."
- 5080 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
CAUSE: This is a generic hardware error, reported by firmware when any of the driver's hardware interface routines tries to start the protocol firmware. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.  
ACTION: If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , "Submitting a CR."
- 5120 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
CAUSE: This is a generic hardware error, reported by firmware when any of the driver's hardware interface routines tries to configure the ports on the card. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.  
ACTION: If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , "Submitting a CR."
- 5160 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
CAUSE: This is a generic hardware error, reported by firmware when any of the driver's hardware interface routines tries to configure the port with the protocol configurations on the card. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.  
ACTION: If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , "Submitting a CR."
- 5200 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
CAUSE: This is a generic hardware error, reported by firmware when any of the driver's hardware interface routines tries to start the protocol (level-1)on the ports. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.  
ACTION: If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , "Submitting a CR."
- 5240 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**  
CAUSE: This is a generic hardware error, reported by firmware when any of the driver's hardware interface routines tries to stop the protocol

(bring level-1 down) on the ports. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.

**ACTION:** If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

5280 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** This is a generic hardware error, reported by firmware when any of the driver’s hardware interface routines tries to bring down the ports on the card. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.

**ACTION:** If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

5320 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** This is a generic hardware error, reported by firmware when any of the driver’s hardware interface routines tries to start the protocol (level-2) on the ports. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.

**ACTION:** If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

5360 CLAS0001 **MESSAGE: Driver encountered a hardware problem.**

**CAUSE:** This is a generic hardware error, reported by firmware when any of the driver’s hardware interface routines tries to stop the protocol (bring level-2 down) on the ports. By itself it is not descriptive of the problem. This error is often seen as a result of firmware crash.

**ACTION:** If this problems happens repeatedly, then halt the system, take a memory dump, and reboot, see Appendix A , “Submitting a CR.”

6000 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During final processing of a fatal driver error, the driver attempted a standard auto-reset instead of dying. However, its attempt to send a reset message to itself failed (“Cause” = 32-bit status returned by the call to `send_msg`). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** This error is likely an indication of a more serious system software problem, and may be followed by a system abort. Probably all message frames have been exhausted by some module running on the system. Further recovery actions may not be possible; if the system fails, take a memory dump and reboot.

Otherwise, since the auto-reset failed, the driver dies instead, notifying upper layer software via an asynchronous event message if possible. The network and/or link must now be stopped and restarted. Some upper layers may stop the link on their own in response to an event message. If not, manually stop the network and/or link via the

appropriate operator command (for example, `:NETCONTROL STOP`) and then restart it.

6040 CLAS0001 **MESSAGE: A driver dump was suppressed. Too many dumps already.**

**CAUSE:** During processing of a fatal driver error, the driver attempted a driver dump, but determined it had already dumped too many times since it was initially started (“Cause” is not used here). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** By design, the driver attempts to auto-reset itself after any driver dump. But after 3 dumps, to avoid uncontrollably filling disk space with driver dumps, additional dumps are automatically suppressed. No attempt is made to determine whether the dumps are duplicates of the same problem. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

There is apparently something wrong, since many driver dumps are occurring. Collect binary copies of all dump files (`NETDMP##.PUB.SYS`) on tape for analysis by Hewlett-Packard and see Appendix A , “Submitting a CR.”

6080 CLAS0001 **MESSAGE: Internal error while initiating a dump. Dump failed.**

**CAUSE:** During processing of a fatal driver error, the driver attempted a driver dump, but encountered an error while trying to get or reset a timer (“Cause” = 32-bit status returned by the call to `lnk_timer_start`). This timer was to be used to avoid deadlock in case the dump process did not respond; the driver cannot attempt a dump if a dump timer cannot be started. If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** Typically preceded by another error message giving better information about the original cause; check log data for that error and look it up also. The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.

6120 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During final processing of a fatal driver error, the driver attempted a driver dump, but was unable to send a dump event to the dump process (“Cause” = 32-bit status returned by the call to `send_msg`). If this error is reported, it is because the driver has already encountered some other error.

**ACTION:** The driver did not dump, but will still attempt to auto-reset itself, up to a total of 12 times or more.



6160 CLAS0001 **MESSAGE: Internal error while initiating a dump. Dump failed.**

**CAUSE:** During processing of some other fatal driver error, the driver attempted a driver dump, but encountered an error. It then encountered this second error while trying to clean up, when attempting to release a dump timer it had obtained (“Cause” = 32-bit status returned by the call to `lnk_stop_timer`).

**ACTION:** Typically preceded by another error giving better information about the original cause; check log data for that error and look it up also. This error is mainly informational, since the driver did not dump, but may be indicative of other, possibly-related problems. The driver will still attempt to auto-reset itself, up to a total of 12 times or more.

6200 CLAS0001 **MESSAGE: Cannot send a port message.**

**CAUSE:** During the normal operation, the driver encountered a problem trying to send a reply to that message (“Cause” = 32-bit status returned by the call to `Acc_send_reply`) in `Acc_reply`. Probably an underlying call to `send_msg` has failed.

**ACTION:** This informational error should be preceded by other errors giving a more specific reason for the failure; check log data and look up that error also, for more actions to take. Possibly the process which was to receive the reply no longer exists. The error occurred on the reply, so if the caller, typically the I/O system does exist, it will not receive the reply, and may time out. The hardware path may or may not be usable after this error, so a system reboot may be needed before the next retry, however you may attempt a retry anyway.

PCI LAPBMUX Link Error Messages  
**SDI Driver Specific Status Values**

# 19 FDDI Error Messages

The following error messages may appear when using or installing FDDI on your system. The following list consists of error messages that you may be able to resolve yourself. Other error messages may appear, but require the help of your HP representative. If the message number does not appear in this list, either write down the error if it is displayed on your console, take a system dump, or run the diagnostics before calling your HP representative for help.

- 1           **MESSAGE: FDDI link ! aborted user's request.**  
  
CAUSE: Your request has been aborted due to power fail recovery or the driver was shutting down.  
  
ACTION: This is a warning.
- 19           **MESSAGE: FDDI link ! received frame with unknown 802.2 ctrl option.**  
  
CAUSE: Unknown.  
  
ACTION: This is only a warning.
- 20           **MESSAGE: FDDI link ! received frame with unknown 802.2 ctrl option.**  
  
CAUSE: Unknown.  
  
ACTION: This is only a warning.
- 21           **MESSAGE: FDDI link ! trace manager overrun.**  
  
CAUSE: The driver is generating trace entries faster than the trace manager can process them. This causes some trace entries to be lost.  
  
ACTION: This is only a warning and is indicative of a very busy system. If debugging is a problem use partial tracing if possible (when full data frames are not needed) to ensure trace data is not lost.
- 31           **MESSAGE: FDDI link ! aborted user's request.**  
  
CAUSE: Your request has been aborted due to the power fail recovery or the driver was shutting down.  
  
ACTION: This is a warning.
- 60           **MESSAGE: FDDI link ! hardware reported that the ring went down.**  
  
CAUSE: Unknown.  
  
ACTION: This is a warning. If the ring does not come up shortly, then check network components (adapters, cables, etc.). Have your network provider examine the network.

- 73           **MESSAGE: FDDI link ! found incorrect HW or SW ID.**  
CAUSE: The FDDI driver found an old or incorrect version of the firmware or hardware on the FDDI interface card.  
ACTION: Update the card to the correct version.
- 74           **MESSAGE: FDDI link ! could not read hardware ID.**  
CAUSE: The FDDI driver could not read the FDDI hardware identification codes.  
ACTION: Run the diagnostic program to see if the hardware has failed. If so, replace the card.
- 84           **MESSAGE: Could not open NMCONFIG file for link !**  
CAUSE: The file NMCONFIG.PUB.SYS does not exist or is not readable.  
ACTION: Create NMCONFIG.PUB.SYS with NMMGR.
- 85           **MESSAGE: Could not read NMCONFIG file for link !**  
CAUSE: The file NMCONFIG.PUB.SYS either did not exist or was not readable.  
ACTION: Use NMMGR to create a NMCONFIG file. Check that its file protections are correct.
- 86           **MESSAGE: NMCONFIG file link ! not validated.**  
CAUSE: NMCONFIG.PUB.SYS was not validated after being updated.  
ACTION: Use NMMGR to validate NMCONFIG.PUB.SYS.
- 87           **MESSAGE: Invalid card at path specified for link !**  
CAUSE: The card, as the configured path, is not an FDDI card.  
ACTION: Change your configuration in NMCONFIG.PUB.SYS to the correct path.
- 88           **MESSAGE: No card at path specified for link !**  
CAUSE: The FDDI subsystem could not find a card at the configured path.  
ACTION: Change your configuration in NMCONFIG.PUB.SYS to the correct path.
- 92           **MESSAGE: FDDI driver already created.**  
CAUSE: The driver was already created under a different linkname, or by the diagnostic.  
ACTION: Check your NMCONFIG.PUB.SYS file and correct it if needed, or check to see if the diagnostic is running.

## 20 LAP-B Link Error Messages

Messages generated by the LAP-B Link Modules are the following types:

- **LAP-B Link Startup Error Messages**

These messages are preceded by the text:

```
WAN MODULE CONFIG (linkname)
```

where linkname is the name of a configured LAP-B link.

- **LAP-B Link Driver Error Messages**

These messages are preceded by the text:

```
LAPB (linkname)
```

where linkname is the name of a configured LAP-B link.

- **LAP-B Link Shutdown Error Messages**

These messages are preceded by the text:

```
WAN KILL MODULE (linkname)
```

where linkname is the name of a configured LAP-B link.

## LAP-B Link Startup Error Messages

The following message will automatically be displayed on the operator's console when a network transport tries to startup the WAN driver:

```
WAN MODULE CONFIG (linkname) Version: A0001037
```

This section describes error messages that might occur when you are starting a LAP-B link. They are displayed on the HP e3000 operator's console in the following format:

```
WAN MODULE CONFIG (linkname) Message text
```

```
WAN MODULE CONFIG (linkname) Error ErrorNum,  
Status = Status, Path: PhysPath
```

1       **MESSAGE: The link type is not SDLC, LAP-B, or RJE.**

**CAUSE:** The caller of this module did not set the link type to one of SDLC, LAP-B, or RJE.

**ACTION:** Please record the error information printed on the console and contact your Hewlett-Packard representative.

2       **MESSAGE: Could not open NMCONFIG.PUB.SYS.**

**CAUSE:** Either the NMCONFIG.PUB.SYS file was purged or renamed, or the file NMCONFIG.PUB.SYS was opened with exclusive access.

**ACTION:** Restore the file NMCONFIG.PUB.SYS from a backup tape, or wait for the program or process that has this file opened exclusively to close it.

3       **MESSAGE: Link data not found in NMCONFIG.PUB.SYS.**

**CAUSE:** The link data in the file NMCONFIG.PUB.SYS does not exist.

**ACTION:** Using the program NMMGR.PUB.SYS, create the link data associated with the link you are trying to start up.

4       **MESSAGE: Could not close NMCONFIG.PUB.SYS.**

**CAUSE:** The file NMCONFIG.PUB.SYS, which contains configuration information could not be closed. This did not prevent the link from starting, but it is worth noting because this should not happen. The file system integrity may be in question.

**ACTION:** Please record the error information printed on the console and contact your Hewlett-Packard representative.

5       **MESSAGE: Could not open download file.**

**CAUSE:** Either the file PSILAPB0.PUB.SYS was purged or renamed, or the file was opened for exclusive access.

**ACTION:** Either restore the PSILAPB0.PUB.SYS file from a backup tape, or wait for the program or process that has this file opened exclusively to close it.

6           **MESSAGE: FGETINFO failed to return reccsize and/or numrec.**

**CAUSE:** The file PSILAPB0.PUB.SYS is corrupted.

**ACTION:** Restore the file from a backup tape.

7           **MESSAGE: FREEZE of download file failed.**

**CAUSE:** The system is experiencing memory shortage problems.

**ACTION:** Please record the error information printed on the console and contact your Hewlett-Packard representative.

8           **MESSAGE: Could not open trace file !**

**CAUSE:** Either the trace file name specified is invalid, or the trace file specified was opened for exclusive access.

**ACTION:** Either wait for the program or process that has the trace file opened exclusively to close the file, or specify a different file name or let it default to NMTCxxxxx.PUB.SYS (xxxxx = next available 4 digit number).

9           **MESSAGE: Could not start trace.**

**CAUSE:** There are many causes and the only way to determine them is by the status indicator.

**ACTION:** Please record the error information printed on the console and contact your Hewlett-Packard representative. In the meantime, try running without trace.

10          **MESSAGE: Could not start trace.**

**CAUSE:** Trace may have been turned off via the LINKCONTROL command, but the link software status indicated that it was on.

**ACTION:** Ignore this problem unless you are experiencing other problems. Otherwise record the error information printed on the console and contact your Hewlett-Packard representative.

11          **MESSAGE: Could not freeze the driver configuration data.**

**CAUSE:** The system is experiencing memory shortage problems.

**ACTION:** Please record the error information printed on the console and contact your Hewlett-Packard representative.

12          **MESSAGE: Could not send the configuration message.**

**CAUSE:** Internal system ports problem.

**ACTION:** Please record the error information printed on the console and contact your Hewlett-Packard representative.

- 13           **MESSAGE: Could not receive the config reply message.**  
CAUSE: Internal system ports problem.  
ACTION: Please record the error information printed on the console and contact your Hewlett-Packard representative.
- 14           **MESSAGE: Timeout waiting for the config reply message.**  
CAUSE: Could not configure the link software or the card.  
ACTION: Please record the error information printed on the console and contact your Hewlett-Packard representative.
- 15           **MESSAGE: Received message was not the config reply.**  
CAUSE: An erroneous message was left hanging on the process port data communications subqueue.  
ACTION: Try to start the link again. If this problem continues then record the error information printed on the console and contact your Hewlett-Packard representative.
- 16           **MESSAGE: Link configuration data is invalid.**  
CAUSE: The configuration information was corrupted.  
ACTION: Run `NMMGR.PUB.SYS` and recreate the link data associated with this node. If this does not work then record the error information printed on the console and contact your Hewlett-Packard representative.
- 17           **MESSAGE: Could not unfreeze the configuration data.**  
CAUSE: The system is experiencing memory problems.  
ACTION: Please record the error information printed on the console and contact your Hewlett-Packard representative.
- 18           **MESSAGE: Unable to obtain dump/diag ports.**  
CAUSE: The `Sherlock` diagnostic software and/or Network Dump Process was not installed properly.  
ACTION: Please record the error information printed on the console and contact your Hewlett-Packard representative.
- 19           **MESSAGE: Could not create the auxiliary buffer pool.**  
CAUSE: The buffer size specified is either too small (under 16 bytes) or is too large (over 4096 bytes).  
ACTION: Adhere to the range allowed by `NMMGR` when configuring the buffer size. If this does not fix this problem then record the error information printed on the console and contact your Hewlett-Packard representative.



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**MESSAGE: Could not create or bind with the driver.**

CAUSE: Possible causes for this problem are as follows:

1. (Status = FAxx00D9) The I/O subsystem still has the card configured and marked active.
2. (Status = E0xx00D5) The Bus converter is not configured.
3. (Status = DAxx00D5) There is no card in the slot for the path number given.
4. (Status = CDxx00D5) The card is bad for the path number given.
5. (Status = C3xx00D9) The wrong card exists for the path number given.

ACTION: Possible actions for this problem are as follows:

1. Try shutting down the link first. The system may need to be restarted. If this does not work then record the error information printed on the console and contact your Hewlett-Packard representative.
2. Check the bus converter configuration in SYSGEN. You may need to configure the bus converter using SYSGEN (Series 950 only).
3. Set the correct physical path number in NMCONFIG.PUB.SYS for this link or contact your Hewlett-Packard representative to install a PSI card.
4. Verify that the physical path configured for the link matches with a good PSI card. Run Sherlock Diagnostics to determine if the PSI card is good. Contact your Hewlett-Packard representative if you need to install a good PSI card.
5. Set the correct physical path number in NMCONFIG.PUB.SYS for this link.

21

**MESSAGE: Could not add the link name to the link table.**

CAUSE: Possible causes for this problem are as follows:

1. Another the link with the same name has already started.
2. The link table was corrupted.
3. The link table does not exist.

ACTION: Possible actions for this problem are as follows:

1. Try shutting down the link and starting it up again.
2. Please record the error information printed on the console and contact your Hewlett-Packard representative.
3. The system may need to be restarted.

- 22           **MESSAGE: Could not unfreeze the download file !**  
CAUSE: The system is experiencing memory problems.  
ACTION: Please record the error information printed on the console and contact your Hewlett-Packard representative.
- 23           **MESSAGE: Could not close download file !**  
CAUSE: The system is experiencing file system problems.  
ACTION: Please record the error information printed on the console and contact your Hewlett-Packard representative.
- 24           **MESSAGE: Manager entry not found in the system library.**  
CAUSE: The link software was not installed properly.  
ACTION: Please record the error information printed on the console and contact your Hewlett-Packard representative.
- 25           **MESSAGE: The link has already been started.**  
CAUSE: A link of the same name is currently active. You cannot start the same link twice.  
ACTION: Please record the error information printed on the console and contact your Hewlett-Packard representative.

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## LAP-B Link Driver Error Messages

This section describes error messages generated by the LAP-B Link Driver. They are displayed on the HP e3000 operator's console in the following format:

LAPB (linkname) Message text

LAPB (linkname) Error ErrorNum, Status = Status,  
Path: PhysPath

1000

**MESSAGE: The download file is too small.**

CAUSE: Possible causes for this problem are as follows:

1. The download file is corrupt.
2. There is an incorrect version of the download file.

ACTION: Possible actions for this problem are as follows:

1. Replace the download file from your latest system update tape.
2. Check the version of the download file with `NMMAINT` and call your Hewlett-Packard representative if incorrect.

1001

**MESSAGE: The download file is too large.**

CAUSE: Possible causes for this problem are as follows:

1. The download file is too large.
2. There is an incorrect version of the download file.

ACTION: Possible actions for this problem are as follows:

1. Replace the download file from your latest system update tape.
2. Check the version of the download file with `NMMAINT` and call your Hewlett-Packard representative if incorrect.

1002

**MESSAGE: No STEPs data structures are available.**

CAUSE: A catastrophic internal resource error was detected.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

1003

**MESSAGE: An unknown interrupt type was received from IO\_Services.**

CAUSE: Internal error.

ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

- 1004           **MESSAGE: PSI fatal error, dinmode.**  
CAUSE: Possible causes for this problem are as follows:  
1. The download file is corrupt.  
2. Bad PSI hardware.  
ACTION: Possible actions for this problem are as follows:  
1. Replace the download file from your latest system update tape.  
2. Run the *Sherlock* diagnostics on the PSI and call your Hewlett-Packard representative if a failure is detected.
- 1005           **MESSAGE: PSI fatal bus error.**  
CAUSE: Either the download file is corrupt, or the PSI hardware has failed.  
ACTION: Replace the download file from your latest system update tape, and run the *Sherlock* diagnostics on the PSI. Call your Hewlett-Packard representative if a failure is detected.
- 1006           **MESSAGE: PSI fatal internal error.**  
CAUSE: Either the download file is corrupt, or the PSI hardware has failed.  
ACTION: Replace the download file from your latest system update tape, and run the *Sherlock* diagnostics on the PSI. Call your Hewlett-Packard representative if a failure is detected.
- 1007           **MESSAGE: Unknown PSI fatal error.**  
CAUSE: Either the download file is corrupt, or the PSI hardware has failed.  
ACTION: Replace the download file from your latest system update tape and run the *Sherlock* diagnostics on the PSI and call your Hewlett-Packard representative if a failure is detected.
- 1008           **MESSAGE: The PSI received less data from your Hewlett-Packard system than it expected.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1009           **MESSAGE: The PSI received more data from your Hewlett-Packard system than its internal buffers could handle.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

- 1010           **MESSAGE: The PSI received a bad command from the driver.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1011           **MESSAGE: PSI received a bad DMA command from the driver.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1012           **MESSAGE: Unknown PSI module dependent hard error.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1013           **MESSAGE: The PSI detected a bad length count during download.**  
CAUSE: Either the download file is corrupt, or there is an incorrect version of the download file.  
ACTION: Replace the download file from your latest system update tape. You should also check the version of the download file with `NMMAINT` and call your Hewlett-Packard representative if incorrect.
- 1014           **MESSAGE: PSI detected a bad checksum during download.**  
CAUSE: Possible causes for this problem are as follows:  
1. The download file is corrupt.  
2. There is an incorrect version of the download file.  
ACTION: Possible actions for this problem are as follows:  
1. Replace the download file from your latest system update tape.  
2. Check the version of the download file with `NMMAINT` and call your Hewlett-Packard representative if incorrect.
- 1015           **MESSAGE: PSI received download blocks out of sequence.**  
CAUSE: Possible causes for this problem are as follows:  
1. The download file is corrupt.  
2. There is an incorrect version of the download file.  
ACTION: Possible actions for this problem are as follows:  
1. Replace the download file from your latest system update tape.  
2. Check the version of the download file with `NMMAINT` and call your Hewlett-Packard representative if incorrect.

- 1016           **MESSAGE: Attempt to download to a bad card address.**  
CAUSE: Possible causes for this problem are as follows:  
1. The download file is corrupt.  
2. There is an incorrect version of the download file.  
ACTION: Possible actions for this problem are as follows:  
1. Replace the download file from your latest system update tape.  
2. Check the version of the download file with `NMMAINT` and call your Hewlett-Packard representative if incorrect.
- 1017           **MESSAGE: PSI reported an undefined error during download.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1018           **MESSAGE: PSI detected a severe internal error.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1019           **MESSAGE: PSI detected a severe error on the backplane.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1020           **MESSAGE: PSI reported an unknown severe error type.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1023           **MESSAGE: Unable to obtain IODC information from IO\_GET\_MODULE\_REC during initialization.**  
CAUSE: Internal error.  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1024           **MESSAGE: Unsupported module type in IODC.**  
CAUSE: Possible causes for this problem are as follows:  
1. Bad PSI hardware.  
2. Wrong path name is `NMMGR`.  
3. Wrong card type.

**ACTION:** Possible actions for this problem are as follows:

1. Run the *Sherlock* diagnostics on the PSI and call your Hewlett-Packard representative if there is an error.
2. Verify the configured path name is correct in NMMGR.
3. Verify that the target card is a PSI card.

1025

**MESSAGE: Unsupported software model in IO DC.**

**CAUSE:** Possible causes for this problem are as follows:

1. Bad PSI hardware.
2. Wrong path name is NMMGR.
3. Wrong card type.

**ACTION:** Possible actions for this problem are as follows:

1. Run the *Sherlock* diagnostics on the PSI and call your Hewlett-Packard representative if there is an error.
2. Verify the configured path name is correct in NMMGR.
3. Verify that the target card is a PSI card.

1026

**MESSAGE: Incompatible software version in IO DC.**

**CAUSE:** The version of the PSI is not compatible with this driver.

**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

1027

**MESSAGE: PSI did not return to a ready state after a reset was issued.**

**CAUSE:** Bad PSI hardware.

**ACTION:** Run the *Sherlock* diagnostics on the PSI hardware and call your Hewlett-Packard representative if an error is detected.

1028

**MESSAGE: A call to IO\_CONFIG\_INT failed during driver initialization.**

**CAUSE:** Internal error.

**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

1029

**MESSAGE: A call to IO\_INIT\_PFHANDLER failed during driver initialization.**

**CAUSE:** Internal error.

**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

- 1030           **MESSAGE: PSI register test failed during PSI initialization.**  
CAUSE: Bad PSI hardware.  
ACTION: Run the Sherlock diagnostics on the PSI and call your Hewlett-Packard representative if a failure is detected.
- 1032           **MESSAGE: User invoked dump caused the driver to fail.**  
CAUSE: A user manually instructed the driver to dump via diagnostic utilities when the driver had not encountered previous errors.  
ACTION: If the dump was taken as a snapshot of a problem, call your Hewlett-Packard representative, and save the raw dump file to show to the HP person.
- 1033           **MESSAGE: Dump-sequence failure.**  
CAUSE: Possible causes for this problem are as follows:  
  1. The dump module is missing.
  2. The driver encountered an error while attempting to produce a dump. The driver has unlocked itself and reported to upper levels the error which originally caused the dump attempt; these levels will now destroy the driver. Any dump file produced is probably incomplete.ACTION: Possible actions for this problem are as follows:  
  1. Run `NMMAINT.PUB.SYS` to verify the dump module is present.
  2. Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1034           **MESSAGE: An input message is being ignored.**  
CAUSE: A message received by the driver was not recognized or processing of it could not begin. It is also possible the source port is not operating with the required capabilities. The message was logged and dropped.  
ACTION: The diagnostic system logfile should contain a partial image of the ignored message. Write down the information from this logfile as well as the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1035           **MESSAGE: No TAB data structures available.**  
CAUSE: TAB data structures are used whenever the driver attempts to start new hardware activity. There is a limited number of these data structures available. Unexpected use of incorrect port and subqueues may have created excessive pending hardware activity. This problem may also be reported if a buffer-manager buffer could not be obtained.  
ACTION: Unsupported programs should not contact the driver through incorrect subqueues. This problem should produce a dump; keep the



raw dump file along with the error information displayed on the console, call your Hewlett-Packard representative, and submit an CR.

1036

**MESSAGE: Download file is incorrect for this driver.**

**CAUSE:** Hardware was successfully downloaded, but the downloaded code turned out to be for a different driver. Someone may have incorrectly renamed a download file to have the name of the file expected by the driver, or your download file or installed driver may be extremely old and not matched.

**ACTION:** Run `NMMAINT.PUB.SYS` to verify the version of the download file and driver. If the file is incorrect, attempt to restore a copy from a system backup tape. If this does not solve the problem, you may need to update your system and download file; call your Hewlett-Packard representative.

1037

**MESSAGE: Download file is too old for this driver.**

**CAUSE:** Hardware was successfully downloaded but the revision of the download file cannot be used with the version of the corresponding installed driver because their interfaces are incompatible.

**ACTION:** Check to see if operators forgot to restore the latest download file during a recent system update. If not, try restoring the file from a system backup tape. If this does not solve the problem, you may need to update your system and download file; call your Hewlett-Packard representative.

1038

**MESSAGE: Unable to obtain a buffer manager buffer.**

**CAUSE:** Possible causes for this problem are as follows:

1. Terminating user programs have not freed buffers and/or buffer pools they were using.
2. Some other process had obtained buffers reserved for use by the driver while the driver was trying to initialize itself.

**ACTION:** Possible actions for this problem are as follows:

1. Warmstart the system and correct the user programs.
2. Try restarting the driver. If repeated `link-restarts` fail, a system dump will be required; call your Hewlett-Packard representative.

1039

**MESSAGE: Unable to release a buffer manager buffer.**

**CAUSE:** The driver attempted to free memory which the buffer manager did not recognize as a valid buffer, due to a driver problem or memory data corruption. Also, a problem somewhere may have caused the driver to attempt to free a buffer which was not in use.

**ACTION:** A system dump will probably be required; call your Hewlett-Packard representative.

- 1040           **MESSAGE: Unable to obtain an I/O Services timer.**
- CAUSE: A call to obtain a timer resource returned in error. Too many timers may be in use.
- ACTION: If you suspect your system may be low on timer resources due to heavy loading, try restarting the link later. If repeated attempts fail, warmstart your system. If the problem persists, a system dump will be required; call your Hewlett-Packard representative.
- 1041           **MESSAGE: Unable to reset an I/O Services timer.**
- CAUSE: The system rejected an attempt by the driver to reset a timer supposedly owned by the driver. Memory data corruption may have occurred.
- ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1042           **MESSAGE: Unable to release an I/O Services timer.**
- CAUSE: The driver tried to free a timer which was not recognized by the system as a valid timer. Memory data corruption may have occurred.
- ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1043           **MESSAGE: Unable to obtain an I/O Services message frame.**
- CAUSE: The driver could not obtain a reply-message frame from the source port of a newly arrived request message, or from a transport port in the case of a driver-detected asynchronous event. If the system is otherwise operating well, modules attempting to communicate with the driver may not be operating with the required capabilities.
- ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1044           **MESSAGE: Unable to send an I/O Services message to another process.**
- CAUSE: A call to the system message-send routine returned in error. The destination port may belong to a process which no longer exists or is not operating with the required capabilities.
- ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1045           **MESSAGE: Unable to release an I/O Services message frame.**
- CAUSE: A call to the system message-freeing routine returned in error. The port may belong to a process which no longer exists or is not operating with the required capabilities, or the message frame was not recognized by the system as a valid message frame.
- ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

- 1046           **MESSAGE: Attempting to find I/O Services message on port failed.**  
  
CAUSE: The system rejected an attempt by the driver to locate message frames on its own port. Memory data corruption may have occurred.  
  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1047           **MESSAGE: Attempted impossible state after a request or completion.**  
  
CAUSE: The driver attempted to enter a state which it should never be able to get into, and ceased operations instead. Memory data corruption, a driver bug, or a problem with the execution priorities of the driver and/or its hardware may exist.  
  
ACTION: This problem should produce a dump. Keep the raw dump along with the error information displayed on the console, call your Hewlett-Packard representative, and submit an CR.
- 1048           **MESSAGE: Driver notified of powerfail by system.**  
  
CAUSE: The driver was notified that power returned after a power failure of any duration.  
  
ACTION: The driver is not capable of recovering from power failures, and modem connections were probably lost. Restart the link.
- 1049           **MESSAGE: Request received when driver broken.**  
  
CAUSE: The driver had to reject a request message because it had previously become broken for another reason. The rejected request could not be processed while the driver was broken.  
  
ACTION: Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 1050           **MESSAGE: Request received when driver dead.**  
  
CAUSE: The driver received a request message during a short time interval after shutdown completed, but before the driver's port had been destroyed by the system. The driver should not be receiving new requests after shutdown, and it cannot successfully complete them.  
  
ACTION: If this problem occurs repeatedly, call your Hewlett-Packard representative.
- 1051           **MESSAGE: Request received when hardware in bad state.**  
  
CAUSE: Hardware was not ready to process a request message which required hardware participation.  
  
ACTION: Retry the request at a later time. If the problem persists, call your Hewlett-Packard representative.
- 1052           **MESSAGE: Not enough TARs available to process request.**  
  
CAUSE: The driver could not obtain enough context storage to begin processing a request, so the request was rejected. Unexpected use of

incorrect port subqueues may have created excessive pending hardware activity.

**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

1053

**MESSAGE: Request received in invalid state.**

**CAUSE:** The driver received a sequencing message at the wrong time. This was a startup, shutdown, or dump-control message which arrived out-of-sequence.

**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

1054

**MESSAGE: Unimplemented request received.**

**CAUSE:** The driver recognized a request message but the feature it requested is not applicable to that driver. The message descriptor was known but the message and/or its subfunction code(s) are unimplemented.

**ACTION:** Call your Hewlett-Packard representative and explain what you were trying to do.

1055

**MESSAGE: One or more do\_bind config addresses is zero (0).**

**CAUSE:** Possible causes for this problem are as follows:

1. The path to the hardware may not be configured correctly.
2. The physical path to the hardware may be faulty, or a previously undetected hardware failure may have occurred since system startup.

**ACTION:** Possible actions for this problem are as follows:

1. Check to be sure the configured pathname is correct for the cardslot the PSI is in.
2. Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

1056

**MESSAGE: Critical configuration message data is incorrect.**

**CAUSE:** The configuration buffer passed to the driver during startup was not correctly formatted for the driver it was sent to. That driver did not find its own subsystem number in the expected buffer field.

**ACTION:** Run `NMMAINT.PUB.SYS` to verify the software versions are correct between the driver and module-configurator. Also check your configuration screens and if necessary restore `NMCONFIG.PUB.SYS` from a system backup tape. If the problem does not go away, call your Hewlett-Packard representative.

- 1057           **MESSAGE: Input buffer passed in a message is too small.**
- CAUSE: Data was requested from the driver but the length of the buffer specified in the request was too small to accept all the data. The driver is not capable of returning partial data. The driver also imposes a minimum-size limit on trace buffers.
- ACTION: If the problem occurred when starting trace, try specifying a larger trace buffer size. There may be a version-mismatch between your driver and other supporting software; call your Hewlett-Packard representative.
- 1058           **MESSAGE: Driver tracing is already off.**
- CAUSE: The driver received a trace disable request when trace was already off. The trace manager module should not have passed the request to the driver when trace was off.
- ACTION: This is intended as a warning. You do not need to turn trace off when it is not on.
- 1059           **MESSAGE: Driver tracing is already on.**
- CAUSE: The driver received a trace enable request when trace was already on. The trace manager module should not have passed the request to the driver when trace was on. The driver does not support altering the active trace level in this manner.
- ACTION: This is intended as a warning. You cannot turn trace on when it is already on.
- 1060           **MESSAGE: Bad download file address in configuration data.**
- CAUSE: The driver requires the valid memory address of an open download file to appear in a configuration buffer passed during startup, but the address it found was zero. The module configurator should not have sent the configure message if it could not open the download file. Alternately, configuration buffer formats may be mismatched.
- ACTION: Run `NMMAINT.PUB.SYS` to verify the versions of the driver, module configurator, and download file. If the problem cannot be solved from this information, call your Hewlett-Packard representative.
- 1061           **MESSAGE: Bad middle plane buffer pool in configuration data.**
- CAUSE: The driver requires the valid buffer-pool ID of a pool to be used for read/write datacomm line frames, to appear in a configuration buffer passed during startup, but the ID it found was zero. The transport should not have invoked the module configurator if the buffer pool could not be opened. Alternately, configuration buffer formats may be mismatched.
- ACTION: Check to see if the transport reported any initialization errors. Run `NMMAINT.PUB.SYS` to verify the versions of the driver, module configurator, and download file. If the problem cannot be solved from

this information, call your Hewlett-Packard representative.

1062

**MESSAGE: Bad top plane buffer pool in configuration data.**

**CAUSE:** The driver requires the valid buffer-pool ID of a pool to be used for card trace and other internal I/O, to appear in a configuration buffer passed during startup, but the ID it found was zero. The module configurator should not have sent the configure message if the buffer pool could not be opened. Alternately, configuration buffer formats may be mismatched.

**ACTION:** Run `NMMAINT.PUB.SYS` to verify the versions of the driver, module configurator, and download file. If the problem cannot be solved from this information, call your Hewlett-Packard representative.

1063

**MESSAGE: Timeout during startup.**

**CAUSE:** The driver startup timer expired between the time the driver received its configure message and the time it completed all hardware and software startup. Probably the PSI hung due to a hardware failure, download bug, or corrupt download data not otherwise detected. Though unlikely, it is also possible that completions for driver requests were excessively delayed due to heavy system loading.

**ACTION:** The driver normally allows about 30 seconds for all of startup. In a heavily loaded system, this problem might appear intermittently; try restarting the link. If the problem persists, call your Hewlett-Packard representative.

1064

**MESSAGE: Timeout during selftest.**

**CAUSE:** The driver selftest timer expired between the time the driver received its `do_bind` message and the time the hardware completed selftest. Probably the PSI failed selftest so badly it was unable to report the selftest error.

**ACTION:** The driver normally allows about 30 seconds for selftest to complete. Your PSI hardware is probably dead; write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.

1065

**MESSAGE: Local timer popped.**

**CAUSE:** This timeout should only occur if the PSI hardware hangs due to a hardware failure or a bug in the downloaded code. The driver solicited activity from the hardware `local timeout seconds ago`, and that activity has still not completed. The driver has stopped the hardware and requested a dump.

**ACTION:** This problem should produce a dump; file an CR, keep the raw dump, and call your Hewlett-Packard representative.

- 1066      **MESSAGE: Unknown driver problem.**  
**CAUSE:** The driver detected an error, but did not say what type of error was detected.  
**ACTION:** Write down the error information displayed on the console, submit an CR, and call your Hewlett-Packard representative.
- 2013      **MESSAGE: Unknown error while attempting to autodial.**  
**CAUSE:** Before attempting to autodial, the PSI detected something wrong. Specifically, the PSI detected an active ACR line before attempting to autodial.  
**ACTION:** Check your autodialer and the modem.
- 2014      **MESSAGE: Autodial phone number configured incorrectly.**  
**CAUSE:** The autodial phone number was entered into your configuration screen incorrectly.  
**ACTION:** Check autodial phone number entry in your configuration screen for this link.
- 2015      **MESSAGE: Autodial not completed.**  
**CAUSE:** The autodial was not completed. This may happen when the remote system's modem is not turned on or not functional.  
**ACTION:** Check with your remote system to ensure that its modems are turned on and functional.
- 2016      **MESSAGE: Local autodial modem not powered on.**  
**CAUSE:** Your local autodial modem has not been turned on.  
**ACTION:** Turn on your local autodial modem.
- 2017      **MESSAGE: Local autodial modem is busy.**  
**CAUSE:** Possible causes for this problem are as follows:  
  1. Someone else is using your autodial modem.
  2. A previous user of the modem failed to disconnect from it.**ACTION:** Possible actions for this problem are as follows:  
  1. Check with other users of your system to see if they are using the modem. If the modem is not in use, turn the modem off, wait a few seconds, and turn the modem on and try again.
  2. Powercycle the modem and try again. If you try again and get the same error message, your autodial modem may be broken.

- 2018           **MESSAGE: Cannot autodial because of cabling problems.**
- CAUSE: Either no cable is attached, a non-autodial cable is attached, or a bad autodial cable is attached.
- ACTION: Check to see if the cable is properly attached. If it is, try another cable. If you still get this error, write down the error information displayed on the console, submit an CR, and call your local Hewlett-Packard representative.
- 2500           **MESSAGE: There was a read from the PSI which completed with a error.**
- CAUSE: Possible causes for this problem are as follows:
1. The link is down.
  2. You have a faulty PSI.
  3. Internal driver, firmware or system error.
- ACTION: Possible actions for this problem are as follows:
1. Check the cabling and modem on the PSI.
  2. Run Sherlock Diagnostics on the PSI.
  3. Write down the console error message, file an CR and call your Hewlett-Packard representative.
- 2501           **MESSAGE: The driver does not have any more storage for commands to the PSI.**
- CAUSE: Unexpected use of driver subqueues may create this problem.
- ACTION: Write down the error information displayed on the console, submit an CR and contact your Hewlett-Packard representative.
- 2502           **MESSAGE: The PSI has completed a bad command.**
- CAUSE: Bad Asynchronous event quad completed by the PSI.
- ACTION: Write down the error information displayed on the console, submit an CR and contact your Hewlett-Packard representative.
- 2503           **MESSAGE: The driver is unable to continue operation.**
- CAUSE: The driver received a command or is in a state where it cannot continue operation.
- ACTION: Write down the error information displayed on the console, submit an CR and contact your Hewlett-Packard representative.
- 2504           **MESSAGE: An unexpected command was received by the driver.**
- CAUSE: A completion by the PSI was received in an invalid state.
- ACTION: Write down the error information displayed on the console, submit an CR and contact your Hewlett-Packard representative.



- 2505           **MESSAGE: PSI cannot send a frame across the line.**  
CAUSE: Possible causes for this problem are as follows:  
1. Link could be down.  
2. Bad PSI hardware.  
3. Internal PSI or driver error.  
ACTION: Possible actions for this problem are as follows:  
1. Check the cabling and modem.  
2. Run Sherlock diagnostics to determine the cause.  
3. Write down the console error messages, submit an CR and call your Hewlett-Packard representative.
- 2506           **MESSAGE: Bad message parameter passed to the driver.**  
CAUSE: The driver received a bad meta language tag while binding with NS.  
ACTION: Write down the console error message, submit an CR and call your Hewlett-Packard representative.
- 2507           **MESSAGE: Bad message received from NS.**  
CAUSE: The driver received a bind message while it was already bound.  
ACTION: Write down the error information displayed on the console, submit an CR and contact your Hewlett-Packard representative.
- 2508           **MESSAGE: The PSI card is not ready for operation.**  
CAUSE: The driver was requested to perform a command when the PSI card was not ready.  
ACTION: Write down the error information displayed on the console, submit an CR and contact your Hewlett-Packard representative.
- 2509           **MESSAGE: Bad completion from the PSI.**  
CAUSE: The module dependent field returned by the PSI does not make any sense.  
ACTION: Write down the error information displayed on the console, submit an CR and contact your Hewlett-Packard representative.
- 2510           **MESSAGE: Bad message received from NS.**  
CAUSE: The driver was asked to execute a command without being bound to upper layer.  
ACTION: Write down the error information displayed on the console, submit an CR and contact your Hewlett-Packard representative.

## LAP-B Link Shutdown Error Messages

This section describes error messages that might occur when you are shutting down a LAP-B link. These messages appear when a `NETCONTROL STOP` command calls the `WAN_Kill_Module` and encounters an error. They are displayed on the HPe 3000 operator's console inq the following format:

```
WAN KILL MODULE (linkname) Message text
```

```
WAN KILL MODULE (linkname) Error ErrorNum, Status = Status,  
Path: PhysPath
```

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**MESSAGE: Could not stop trace.**

**CAUSE:** Trace may have been turned off via the `LINKCONTROL` command, but the link software status indicates that it was on.

**ACTION:** Ignore this problem unless you are experiencing other problems. Otherwise record the error information printed on the console and contact your Hewlett-Packard representative.

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**MESSAGE: The link is not in the link table.**

**CAUSE:** The link specified is not active.

**ACTION:** If the link name is incorrect, issue the command again with the correct linkname. If the link name is correct, the link has already been shutdown and no action is necessary.

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**MESSAGE: The link type is not SDLC, LAP-B, or RJE.**

**CAUSE:** The caller of this module did not set the link type to one of SDLC, LAP-B, or RJE.

**ACTION:** Please record the error information printed on the console and contact your Hewlett-Packard representative.

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**MESSAGE: Could not delete the link from the link table.**

**CAUSE:** The link name specified is not in the link table.

**ACTION:** Check that the link name is correct and try again. The link may have already been shutdown.

55

**MESSAGE: Could not unconfigure the link from the system.**

**CAUSE:** The I/O subsystem does not have any record of this link being active.

**ACTION:** Check that the link name is correct and try again. The link may have already been shutdown.

56

**MESSAGE: Could not delete the auxiliary buffer pool.**

**CAUSE:** There are many reasons why this could happen. The status indicator provides more detailed information as to the specific cause of the problem.

**ACTION:** Please record the error information printed on the console and contact your Hewlett-Packard representative.

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**MESSAGE: Could not determine the PSI path number IO Serv.**

**CAUSE:** The I/O subsystem does not have a physical path for the link that was specified and therefore cannot deconfigure it from the system.

**ACTION:** Check that the link name is correct and try again.

LAP-B Link Error Messages  
**LAP-B Link Shutdown Error Messages**

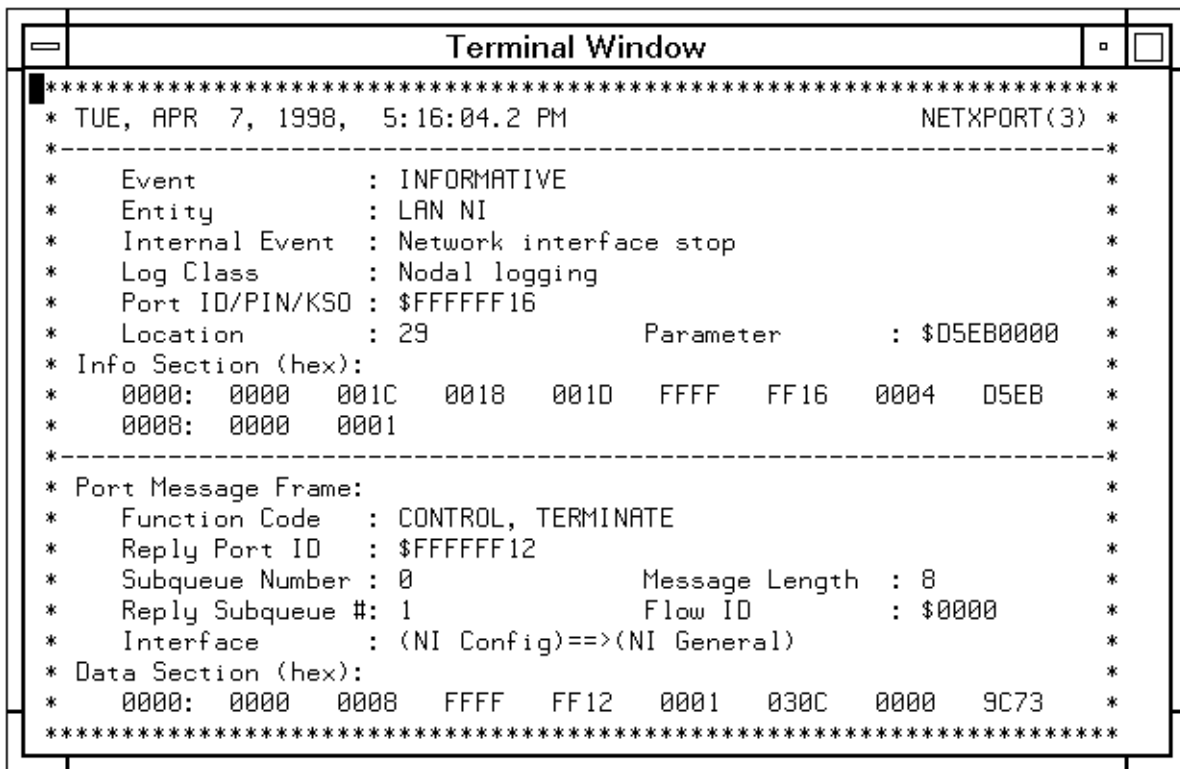
# 21      **Logging Location Codes**

Logging records events such as errors and console commands. You configure logging for each of the subsystems of NS 3000/iX. Within each subsystem, there are different classes of events (such as internal errors). You can record logging to a disk, the system console, and/or the logon device of a user account. If you configure a logging class to log to a user account, then that user will receive logged messages any time there is an active session for that user account.

## Logging Formats

Node Management Services automatically format logging records sent to the console. Logging records sent to a disk file are stored in coded form. These records are decoded and formatted by the NMS Trace/Log File Analyzer (NMDUMP), an NMS system utility program. Figure 21-1 shows a typical log record formatted by NMDUMP. To learn how to use NMDUMP see the Log and Trace Files section in *Using the Node Management Services (NMS) Utilities* manual.

**Figure 21-1** Formatted Log Record



```
Terminal Window
*****
* TUE, APR 7, 1998, 5:16:04.2 PM NETXPORT(3) *
*-----*
* Event      : INFORMATIVE *
* Entity     : LAN NI *
* Internal Event : Network interface stop *
* Log Class  : Nodal logging *
* Port ID/PIN/KSO : $FFFFFF16 *
* Location   : 29 Parameter : $05EB0000 *
* Info Section (hex): *
* 0000: 0000 001C 0018 0010 FFFF FF16 0004 05EB *
* 0008: 0000 0001 *
*-----*
* Port Message Frame: *
* Function Code : CONTROL, TERMINATE *
* Reply Port ID : $FFFFFF12 *
* Subqueue Number : 0 Message Length : 8 *
* Reply Subqueue #: 1 Flow ID : $0000 *
* Interface : (NI Config)==>(NI General) *
* Data Section (hex): *
* 0000: 0000 0008 FFFF FF12 0001 030C 0000 9C73 *
*****
```

Log files and two examples of the information returned in a formatted log file are explained in “Using Log Files” later in this section.

## Logging Subsystems

Each subsystem of NS 3000/iX has its own set of classes for logging events. The subsystem logging classes are summarized in Table 21-1.

**Table 21-1 Logging Subsystems and Class Names**

Subsystem Name	Class Name	Events
SUB0000	CLAS0000	Informative messages
SUB0003	CLAS0001	Serious internal error
Network Transport	CLAS0002	Internal error/operator attention
	CLAS0003	Non-critical errors
	CLAS0004	Nodal messages (start/stop)
	CLAS0005	Informative messages
	CLAS0006	Statistical information
SUB0004	CLAS0000	Notable events
DC/LDM		
SUB0005	CLAS0000	Internal errors
Network IPC	CLAS0001	Resource errors
	CLAS0002	Informative messages
SUB0006	CLAS0002	Resource errors
Network Services	CLAS0003	Internal errors
	CLAS0004	Detailed events (enable with NSCONTROL LOG)
	CLAS0005	NetIPC internal errors
SUB0008	CLAS0000	Internal errors
Link Mgr		
SUB0018	CLAS0000	Errors
Trace Mgr		
SUB0024	CLAS0001	Informational messages
NMMGR		
SUB0025	CLAS0001	Errors
LAN driver	CLAS0002	Warnings
	CLAS0003	Informational messages

**Table 21-1 Logging Subsystems and Class Names**

Subsystem Name	Class Name	Events
SUB0028	CLAS0010	Errors
Lap B Link	CLAS0012	Informational messages
SUB0040	CLAS0001	Catastrophic errors
Remote Link Manager	CLAS0002	Serious errors
	CLAS0003	Notable errors
	CLAS0004	Nodal messages (start/stop)
	CLAS0005	Informative messages
SUB0057	CLAS0001	Fatal errors
SNMP	CLAS0002	Serious errors
	CLAS0003	Warnings
	CLAS0004	Informational messages
SUB0061	CLAS0001	Errors
Token Ring Link	CLAS0002	Warnings
	CLAS0003	Informational messages
SUB0067	CLAS0001	Errors
FDDI Lan		

All logging is configured in `NMCONFIG.PUB.SYS`. See *Using the Node Management Services (NMS) Utilities* manual for more details on logging and configuration.

### Network Transport Subsystem Logging

Logging location codes are used by all modules of the Network Transport (SUB0003) to give uniqueness to each and every point at which an event is logged. Location codes make it easy to locate the logging call in the source code, as well as to be able to explain a particular instance of an error. Since the same error code, for example, may be logged in different parts of the same module, the error may be the same, but the meaning and action to take may be different.

Logging is the only source of information for Network Transport activities. The user or network manager cannot monitor Network Transport events if logging is not enabled for that subsystem.

Each Network Transport logging table contains a list of the logging location code, logging class, explanation, and action for an individual logging message. The explanation for each logging location code



includes the Internal Event description and Parm description, if relevant, as shown in the typical formatted log example in Figure 21-1.

**Table 21-2 Network Transport Entities**

Entity	Entity Number	Description
ARP	124	The address resolution protocol for use on FDDI, Token Ring, and Ethernet LAN networks.
Control Process	66	NETCP is created by the NETCONTROL command. It handles network startup and shutdown.
Dial ID	112	The DIAL protocol is used only for point-to-point links including gateway-half links. It manages autodialing of telephone numbers and connection establishment security.
Gateway Half NI	1	The network interface for gateway half connections such as LAP-B links.
IP	109	Internet Protocol. It handles packet fragmentation assembly and store-forward, compatible with industry standards.
IP Update	110	IPU maintains IP internet routing tables and manages gateway.
L2Resolve	140	Part of the process between NS Transport and SNA Transport that provides NS over SNA/XL functionality. (This product is obsolete.)
LAN NI	0	The network interface for the LAN connection performs functions for IP store and forward over IEEE 802.3 and Ethernet links.
Loopback NI	9	The network interface for software loopback performs loopback by converting outbound messages to inbound messages.
Mapping Table	128	A collection of procedures for the maintenance of intranetwork routing information.
Path	113	The path resolution procedures determine the outbound path and resources for a connection.
Point-to-Point (Router) NI	3	The network interface for the point-to-point connections to LAP-B devices, both direct-connect and dial.
Probe	111	The Probe protocol is a proprietary address-resolution protocol used to resolve nodenames on IEEE 802.3 networks.
PXP PM	105	The Packet Exchange Protocol module performs certain internal protocol functions for Paths and NetIPC.
PXP SIP	106	The PXP Socket Interface Port functions as a controller for the PXP protocol. It handles the creation of sockets and connections.

**Table 21-2 Network Transport Entities**

<b>Entity</b>	<b>Entity Number</b>	<b>Description</b>
SNA NI	10	The network interface for SNA connections. (This product is obsolete.)
TCP PM	103	The TCP protocol module is responsible for connection-oriented protocol functions. There is one TCP PM for each side of a connection. This protocol handles reliable end-to-end packet transmission and reordering.
TCP SIP	104	The TCP socket interface port functions as a controller for the TCP protocol. It handles the creation of sockets and connections, tracing, and other operations not possible on the ICS.
UDP	141	The UDP module is responsible for handling connectionless protocol functions, for transmission of datagram packets, for applications not requiring reliable connections.
User Interface	101	The <code>NETCONTROL</code> command user interface. Interprets all Transport commands and passes them to the control process if they are valid, refer to.
X.25 NI	6	The network interface for X.25 connections passes packets between TCP/IP and the Multiple Connection Manager module for X.25 devices, which in turn interfaces to the DTC.
X.25 PM	118	Interfaces with TCP to provide X.25 protocol functions.
Token Ring NI	11	The network interface for Token Ring connections performs functions for IP store and forward over these links.
FDDI NI	12	The network interface for Fiber Distributed Data Interface connections performs functions for IP store and forward over these links.
ICMP	138	The ICMP server process echoes Ping packets back to other systems.
PXP Read Completor	143	This is a procedure which is called by IP to process incoming packets.
UDP Read Completor	144	This is a procedure which is called by IP to process incoming packets.
TCP Read Completor	145	This is a procedure which is called by IP to process incoming packets.
ICMP Read Completor	146	This is a procedure which is called by IP to process incoming packets.
IP Read Completor	147	This is a procedure which is called by the link driver to pass incoming packets into Transport.

**Table 21-2 Network Transport Entities**

<b>Entity</b>	<b>Entity Number</b>	<b>Description</b>
ARP Read Completer	148	This is a procedure which is called by the link driver to pass incoming ARP packets into Transport.
PROBE Read Completer	149	This is a procedure which is called by the link driver to pass incoming PROBE packets into Transport.
IP Module Configurator and Deconfigurator	151	These procedures create an instance of the IP protocol module when an NI is started, and destroy it when the NI is stopped.
UDP Module Configurator and Deconfigurator	152	These procedures create the UDP general protocol when Transport starts, and destroy it when Transport stops.
ICMP Server Module Configurator and Deconfigurator	153	These procedures create the ICMP Server process when Transport starts, and destroy it when Transport stops.
IP Module Configurator and Deconfigurator	154	These procedures create an instance of the L2Resolve protocol module when an NI is started, and destroy it when the NI is stopped.
X25 Module Configurator and Deconfigurator	155	These procedures create an instance of the X.25 protocol module when an NI is started, and destroy it when the NI is stopped.
NI Module Configurator and Deconfigurator	156	These procedures create and destroy an NI which will operate in a mode specific to the type of link it is configured to use.
PROBE Module Configurator and Deconfigurator	157	These procedures create an instance of the PROBE protocol module when an NI is started, and destroy it when the NI is stopped.
IPU Module Configurator and Deconfigurator	158	These procedures create the IP Update module when Transport starts, and destroy it when Transport stops.
DIAL Module Configurator and Deconfigurator	159	These procedures create an instance of the DIAL protocol module when an NI is started, and destroy it when the NI is stopped.
PXP Module Configurator and Deconfigurator	160	These procedures create the PXP general protocol when Transport starts, and destroy it when Transport stops.
Net Timers	161	This module provides increased capacity and control over timers used by the TCP and ARP Transport modules.

The Path Network Transport Entity logs no event information.

## PARM Value

Many Network Transport logging records contain important information in the Parameter value. This Parameter number indicates the shutdown reason.

In the Network Transport logging location explanations which follow, certain Parameter values refer you to other tables in this manual. “Message Path Error” Internal Events, for example, refer to the Path Result Code Table in this chapter for definition of the Parameter value. Parameter meanings for the “PXP Deactivated,” “PXP Deactivated w/Error,” and “PXP Statistics” internal events are listed in Chapter 10 , “Network Transport Protocol (PMERR) Error Messages,” in this manual, which are the Protocol module errors returned by `IPCHECK`. In general, refer to a specific logging location code explanation for definition of Parameter meaning. For definition of the Parameter value of an ICMP logging location, refer to the “ICMP Type/Code Words” in this chapter.

---

### NOTE

In most instances, the `Parm` value supplied with the explanations in this chapter will be of interest only to your Hewlett-Packard representative.

---

## Network Services Subsystem Logging

The Network Services subsystem (SUB0006) modules are described in Table 21-3. It also lists the corresponding Network Services Logging table for each module.

Logging Messages for the Network Services (SUB0006) are listed under each individual service.

The NS Buffer Management module (BFM) logs no event information.

The logging messages for NS Subsystem Modules are listed in this chapter. However, event messages for the VT module are listed in Chapter 6 , “Virtual Terminal (VT ERROR) Error Messages,” section of this manual. Each error message number listed in the VT error message table is identical to a logging message error number found in the log file for the VT module.

“Actions” advised for individual VT errors listed in Chapter 6 , “Virtual Terminal (VT ERROR) Error Messages,” apply to individual VT logging messages. As described, VT and ENV messages are displayed to the user on `$STDLIST`. However these messages are displayed on `$STDLIST` only if logging is enabled for the Network Services subsystem of NS 3000/iX.

Other Network Services — such as Network File Transfer, Program-to-Program Communication, and Remote File Access, return error information to the user regardless of logging configuration for the Network Services subsystem of NS 3000/iX.

## Network IPC Subsystem Logging

Logging for the NetIPC subsystem (SUB0005) of the associated links should be configured only if users on your system are writing their own NetIPC applications with the intrinsics described in the *NetIPC 3000/XL Programmer's Reference Manual*. NetIPC subsystem logging provides the network manager with a “system check” to determine which NetIPC applications are operating, if any. Most user-repairable errors are returned in the result parameter of the NetIPC intrinsics. These error codes are listed in Chapter 5 , “NetIPC (SOCKERRS) Error Messages,” of this manual.

**Table 21-3 Network Service Modules**

Module	Description
BFM	The NS Buffer Management module provides for the allocation of buffers for the other NS modules. (The NS Buffer Management module is different fro the Buffer Management software used by the transport and translator.)
CX	The Command Executor module parses and executes the NS commands DSLINE, REMOTE, and NSCONTROL. It is also the primary user interface (through the REMOTE command) to the VT service.
DSDAD	The DSDAD process controls the initiation and termination of network services, including creation of server processes.
DSSERVER	There is a DSSERVER process created for each use of the RFA, VT, or RPM services. The DSSERVER process receives and accesses files and terminals required by the service.
DSUTIL	The DSUTIL module contains miscellaneous procedures used by the other NS modules. Included are routines for management of certain NS data structures and handling of process and session termination.
ENV	The Environment module manages the information from DSLINE commands that is used by the various Network Services. This includes environment attributes, remote sessions, and various service-related information.
NFT	Network File Transfer
RASERVER	There is an RASERVER process created for each use of the RFA services. This process receives and processes protocol messages for the service and accesses files and terminals for the service.
RFA	Remote File Access and Remote Database (IMAGE) Access.
RPM	Remote Process Management
VT	Virtual Terminal

Logging codes for the NetIPC subsystem of the associated links are listed in this chapter in the section called “NetIPC Logging Location Codes.”

## Using Log Files

The key information in each log message is the log class and the location code number, which uniquely identify the logging message for that entity, and the `Parm`. You use these numbers to find the explanation and action in the tables in this section and other sections of this manual. The actions given should be performed. Only if there is no clear error reported or the recommended action fails should system level troubleshooting be performed. When the system level tests are done, it is advisable to use the configuration files that have most of the logging classes configured for the console. This saves having to format the log files for the log messages received during the test.

### Internal Errors

Each subsystem has a log class defined for internal errors, as listed in Table 21-1. If an internal error ever occurs, a log message is sent to the console. Record the log message exactly and consult this manual for the recommended action, which in most cases is to contact HP; refer to Appendix A , “Submitting a CR,” of this manual.

Some error messages have an extra parameter whose explanation reads “Parm = BFM result code.” The error codes that are produced by the buffer manager are listed in Table C-1 and Table C-2. Those tables contain all of the error codes returned by the NS 3000/iX native mode and compatibility mode buffer manager interfaces.

### Informative and Non-Critical Errors

The Network Transport logs all normal or informative events to CLAS0005. Because of the high number generated, messages for this class are not normally recorded, even to the disk log file. However, if any of the normal events encounters an error condition, an additional log message is generated that is recorded with the log file. This is CLAS0003, non-critical error.

An example of log class 3, non-critical error, is shown in Figure 21-2. This example shows a non-critical, or Class 3, log message for TCP. The first part describes the log message, including the event, the entity, the internal event and the log class. In Figure 21-2, the internal event is retransmission which indicates that there was an attempt to retransmit a TCP packet. The parameter number indicates the sequence number of the packet that was retransmitted. Also check the explanation and action listed under the Location Code number which is 61 in the example. The TCP PM section describes the protocol module Location Code.

**Figure 21-2 Non-Critical Transport Error**

```

Terminal Window
*****
* TUE, APR 7, 1998, 5:15:09.6 PM NETXPORT(3) *
*-----*
* Event      : OUTBOUND *
* Entity     : TCP *
* Internal Event : Retransmission *
* Log Class  : Informative *
* Port ID/PIN/KSO : $063CC2A0 *
* Location   : 16301 Parameter : $062A8980 *
* Info Section (hex): *
* 0000: 0067 0002 003C 3FAD 063C C2A0 0005 062A *
* 0008: 8980 0001 *
*-----*
* Port Message Frame: *
* Data Section (hex): *
* 0000: 0000 0000 *
*****

```

### Statistics Logging Example

An example of log class 6, statistics, is shown in Figure 21-3. Figure 21-3 shows a statistics log message for TCP. This example shows an informative, or Class 3, log message for TCP. The first part describes the log message, including the event, the entity, the internal event and the log class. The internal event is Statistics, which indicates that the logging message contains statistical information. For more information check the log file of the remote node.

**Figure 21-3** Logging Statistics Example

```

Terminal Window
*****
* TUE, APR 7, 1998, 5:15:46.7 PM                                NETXPORT(3) *
*-----*
*   Event           : INFORMATIVE                               *
*   Entity          : TCP                                       *
*   Internal Event  : Statistics                                *
*   Log Class       : Statistics                                *
*   Port ID/PIN/KSO : $063CC000                                *
*   Location        : 19901                                     *
*   Parameter       : $00000000                                *
* Info Section (hex):                                          *
* 0000: 0067 001C 0051 4080 063C C000 0006 0000             *
* 0008: 0000 0001                                          *
*-----*
* Statistics:                                                 *
* IPC Port ID      : $80000601                                *
* Bytes sent       : 255699080                               Bytes received : 252560178 *
* User pkts sent   : 66                                       User pkts recd  : 43   *
* PM pkts sent     : 23                                       PM pkts recd   : 43   *
* Cn asy pkts sent: 0                                         Cn asy pkts recd: 0   *
* User sends       : 0                                         User receives   : 68   *
* Pkts discarded   : 0                                         Pkts rtx'ed    : 636  *
* Checksum errors  : 46                                       Smooth R/T delay: 22   *
* Init rcv window : 0                                         Init send window: 0   *
* Recv burst size  : 0                                         Send burst size : 1    *
* Max send size    : 0                                         Max rcv size    : 22   *
* Local SAP        : 0                                         Remote SAP      : 42   *
* Flags            : $0000                                       Flags1          : $0000 *
* Flags2           : $0000                                       ICMP msgs recd : 0    *
* Local IP addr    : 0.0.0.0                                   Remote IP addr  : 0.0.0.0 *
* Source quenches : 0                                          *
* Data Section (hex):                                          *
* 0000: 0000 0060 8000 0601 0F3D A888 0F00 C332             *
* 0008: 0000 0042 0000 002B 0000 0017 0000 002B             *
* 0010: 0000 0000 0000 0000 0000 0000 0000 0044             *
* 0018: 0000 0000 0000 027C 0000 002E 0000 0016             *
* 0020: 0000 0000 0000 0001 0000 0016 0000 002A             *
* 0028: 0000 0000 0000 0000 0000 0000 0000 0000             *
* 0030: 0000 0000                                          *
*****

```

The key information in each log message is the log class and the location code number, which uniquely identify the logging message for that entity, and the parameter. You use these numbers to find the explanation and action in this section and other sections of this manual. The “Statistics:” section displays the following fields:

- **IPC Port ID.** Gives the address of the NetIPC port associated with the TCP (or PXP) protocol module for this connection. This is the number to use in matching a TCP/PXP Statistic log message to a



NetIPC log message. Look for the identical number called the Socket Port ID in the NetIPC log message.

- **Bytes sent/received.** Shows the total number of bytes transmitted or received by the PM.
- **User pkts sent/recd.** Shows the number of packets sent or received. May be more than the number of User Sends/Receives because TCP may need to fragment the message into link-size packets.
- **PM pkts sent/recd.** Shows the number of non-data carrying packets sent or received, such as window updates and acknowledgments.
- **Cn ass pkts sent/recd.** Shows the number of connection assurance packets sent or received. A large number of these indicate that the connection is idle for long periods of time.
- **User sends/receives.** Shows the number of messages sent or received.
- **Pkts discarded/rtx'ed.** The number of packets discarded or retransmitted. If there is a problem with the connection, it may be reflected here by an extremely high number for one of these fields. Check for Class 3 logging messages; refer to the specific location code for more information.
- **Checksum errors.** Shows the number of checksum errors for this connection. Check for Class 3 logging messages; refer to the specific location code for more information.
- **Smooth R/T delay.** Shows the observed delay (in milliseconds) required to receive acknowledgments from the remote node. This number is used by TCP to dynamically calculate the retransmission timer.
- **Init rcv/send window.** Shows the size of the window used for flow control. The size varies for each service.
- **Recv/Send burst size.** Shows the burst size for the receiver and the sender. This value is specified with the `IPCONNECT` used to initiate the connection.
- **Max send/rcv size.** Shows the maximum message size for the receiver and the sender. This value is specified with the `IPCONNECT` used to initiate the connection.
- **Local/Remote SAP.** Shows the TCP Service Access Point address for the local and the remote node. If you do not know which application to check on the remote node, use these numbers (reversed) to find the matching PM in the log file for the remote node. Specify a time range when formatting the remote node log file to narrow the search.

- **Flags/Flags1/Flags2.** Internal state flags.
- **ICMP msgs recd.** Total number of ICMP messages that this connection has received from the IP module.
- **Local/Remote IP addr.** Shows the IP address for the local and remote node.
- **Source quenches.** Shows the number of times this connection has been quenched. A connection is quenched when it receives a source quench ICMP message from IP.

## ARP Logging Location Codes

- 1 CLAS0002     **MESSAGE: None**  
CAUSE: A port message was received containing an invalid function code (PARM = function code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0004     **MESSAGE: None**  
CAUSE: ARP protocol started.  
ACTION: Informative message.
- 12 CLAS0003    **MESSAGE: None**  
CAUSE: An ARP packet with a bad ARP header was received from the link.  
ACTION: Either the packet was corrupted in transit or a remote node is not transmitting packets correctly. If the latter case is suspected, see Appendix A , “Submitting a CR,” of this manual.
- 27 CLAS0004    **MESSAGE: None**  
CAUSE: ARP protocol started.  
ACTION: Informative message.
- 28 CLAS0006    **MESSAGE: None**  
CAUSE: ARP statistics are logged prior to port termination.  
ACTION: Informative message.
- 42 CLAS 0002    **MESSAGE: None**  
CAUSE: Received a new (different) station address mapping for our own IP address. This means someone else is using our IP address.  
ACTION: Locate the node with the duplicate IP address.
- 44 CLAS0002    **MESSAGE: None**  
CAUSE: Call to MAP\_ADD\_ENTITY failed trying to add ARP entity to the MAP table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 49 CLAS0002    **MESSAGE: None**  
CAUSE: Call to MAP\_LAN\_UPDATE failed due to MAP internal error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 54 CLAS0002      **MESSAGE: None**  
CAUSE: Unable to create object for ARP port data area.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 55 CLAS0002      **MESSAGE: None**  
CAUSE: Failed to locate ARP’s ICS filter routine in NL.PUB.SYS.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 56 CLAS0002      **MESSAGE: None**  
CAUSE: Failed to locate ARP’s timer routine in NL.PUB.SYS.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 57 CLAS0002      **MESSAGE: None**  
CAUSE: Failed to locate ARP’s port procedure in NL.PUB.SYS.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 58 CLAS0002      **MESSAGE: None**  
CAUSE: Unable to create the ARP port.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 59 CLAS0002      **MESSAGE: None**  
CAUSE: LAN\_STATION\_ADDRESS did not return the local station address for the link.  
ACTION: Issue LINKCONTROL command on the link. Verify that the station address is valid. If the station address is valid, see Appendix A , “Submitting a CR,” of this manual.
- 60 CLAS0002      **MESSAGE: None**  
CAUSE: MAP\_DEL\_ENTITY failed due to an internal error in MAP.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 61 CLAS0002      **MESSAGE: None**  
CAUSE: Unable to send terminate message to the Control Process.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 62 CLAS0002      **MESSAGE: None**  
CAUSE: Received an unexpected message during the ARP module termination.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 64 CLAS0002      **MESSAGE: None**  
CAUSE: Unable to read ARP’s configuration data.

**ACTION:** Verify that the `NMCONFIG.PUB.SYS` file exists. If the file exists, see Appendix A , “Submitting a CR,” of this manual.

65 CLAS0002

**MESSAGE: None**

**CAUSE:** Failed to send ARP request out over the network.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

66 CLAS0002

**MESSAGE: None**

**CAUSE:** Failed to send ARP request out over the network.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

67 CLAS0002

**MESSAGE: None**

**CAUSE:** An attempt to get a buffer failed due to an internal error in the buffer manager.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

68 CLAS0002

**MESSAGE: None**

**CAUSE:** Unable to deallocate timers due to internal errors in the network timers module.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

69 CLAS0002

**MESSAGE: None**

**CAUSE:** Unable to deallocate timers due to internal errors in the network timers module.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

70 CLAS0002

**MESSAGE: None**

**CAUSE:** Unable to reset a timer due to an internal error in the network timers module.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

71 CLAS0002

**MESSAGE: None**

**CAUSE:** Unable to deallocate timers due to internal errors in the network timers module.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

72 CLAS0002

**MESSAGE: None**

**CAUSE:** Unable to abort a buffer pending request during ARP module termination.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

73 CLAS0002

**MESSAGE: None**

**CAUSE:** A frame too small to be an ARP packet arrived with an ARP etype.

**ACTION:** Either the packet was corrupted in transit or a remote node is not transmitting packets correctly. If the latter case is suspected, see Appendix A , “Submitting a CR,” of this manual.

74 CLAS0002

**MESSAGE: None**

**CAUSE:** Failed to update the NS Registry with ARP’s port.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

75 CLAS0002

**MESSAGE: None**

**CAUSE:** Failed to remove ARP from the NS Registry.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

76 CLAS0002

**MESSAGE: None**

**CAUSE:** Failed to send ARP reply out over the network.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

77 CLAS0002

**MESSAGE: None**

**CAUSE:** Failed to send ARP retransmission out over the network.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

78 CLAS0002

**MESSAGE: None**

**CAUSE:** Configuration data is corrupt.

**ACTION:** Create a new configuration file. If that doesn’t resolve the problem, see Appendix A , “Submitting a CR,” of this manual.

## Control Process Logging Location Codes

Control Process logging location codes are generated by the NETCP process of Network Transport. For each of the logging explanations, any or all of the following may be present:

**PARM** = Meaning of the parameter logged.

**PORT** = Transport port number of the Control Process.

**NI** = Network Interface Type against which the event was logged:

- **FDDI** = Fiber Distributed Data Interface LAN.
- **GATEHALF** = Gateway Half network over LAPB.
- **LAN** = IEEE 802.3 or Ethernet LAN.
- **LOOP** = Loopback network.
- **ROUTER** = Point-to-Point network over either PSI LAPB or LAPBMUX Link.
- **SNA** = NS over SNA/iX network (obsolete).
- **TOKEN** = Token Ring LAN.
- **X.25** = Host-based or PC-based X.25 network.

**Link** = Link Type against which the event was logged:

- **DCLDM** = Data Communications Logical Device Manager for LAPB.
- **DTC** = Distributed Terminal Controller configured for X.25.
- **LAN** = IEEE 802.3 or Ethernet LAN link.
- **LAPB** = PSI (Programmable Serial Interface) link.
- **LAPBMUX** = LAPB Link on the MUX card.
- **NS/SNA** = NS over a specific SNA/iX LU (obsolete).
- **TOKEN** = Token Ring LAN link.
- **FDDI** = Fiber Distributed Data Interface LAN link.
- **X.25** = X.25 over a DTC link.

10 CLAS0002

### **MESSAGE: INTERNAL ERROR; Configuration file error**

**CAUSE:** While initially starting NETCP, or while starting NI specific protocols on a LAN, GATEHALF, or ROUTER network, NETCP could not get node name information from the NODENAME path in the NMCONFIG file (PARM = 32-bit status returned by the call to nmconfgetdata).

**ACTION:** One or more network protocols were not completely started. Stop the network and use NMMGR to make sure a nodename is configured and the NMCONFIG file is validated. If the file looks good, try restarting the network. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

19 CLAS0002      **MESSAGE: INTERNAL ERROR; Out of resources**

**CAUSE:** While building the IP alias list, NETCP discovered there are too many network NI's configured in the NMCONFIG file (PARM = maximum networks allowed).

**ACTION:** Check the configuration file, and if it is not the problem see Appendix A , “Submitting a CR,” of this manual.

20 CLAS0002      **MESSAGE: INTERNAL ERROR; Bad/unknown port message**

**CAUSE:** NETCP received an unexpected message that was not a reply, while waiting for a reply message having a specific function code (PARM.(0:16) = function code and PARM.(16:16) = interface code of received message).

**ACTION:** It is not possible to tell from NETCP logging what message it was expecting, however if disk logging was enabled, the entire received message was logged, which may aid debugging. The flow of normal NETCP operations has been interrupted, and a transport hang may be imminent, especially if new :NETCONTROL commands are issued. It may be necessary to restart the system to clear this problem. See Appendix A , “Submitting a CR,” of this manual.

21 CLAS0002      **MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While initially starting NETCP, or while starting NI specific protocols on a LAN, GATEHALF, or ROUTER network, NETCP's attempt to get a buffer for a nodal path report failed (PARM = 32-bit status returned by the call to `bmgr_get_buffer`).

**ACTION:** One or more network protocols were not completely started. Stop transport and retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

22 CLAS0002      **MESSAGE: INTERNAL ERROR; Configuration file error**

**CAUSE:** While initially starting NETCP, or while starting NI specific protocols on a LAN, GATEHALF, or ROUTER network, NETCP could not get path report information from the `NETXPORT.GLOBAL.REPORT` path in the NMCONFIG file (PARM = 32-bit status returned by the call to `nmconfgetdata`).

**ACTION:** One or more network protocols were not completely started. Stop the network and use NMMGR to check the NMCONFIG file and validate it. If the file looks good, try restarting transport. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.



- 25 CLAS0002      **MESSAGE: INTERNAL ERROR; Configuration file error**
- CAUSE: While initially starting up, NETCP's attempt to get the global information record from the `NETXPORT.GLOBAL` path in the NMCONFIG file failed (PARM = 32-bit status returned by the call to `nmconfgetdata`).
- ACTION: Transport did not start. Verify the configuration file exists, and if this is not the problem, see Appendix A , "Submitting a CR," of this manual.
- 27 CLAS0002      **MESSAGE: BUFFER MANAGER; Buffer manager error**
- CAUSE: An attempt to create NETCP's frozen utility buffer pool failed during initial startup (PARM = 32-bit status returned by the call to `bmgr_create_pool`).
- ACTION: Transport did not start. Depending on the error, it is possible too much frozen memory is being used by the system, but this can change with time. Use `GLANCEXL` or a similar utility to check memory usage by the system. If memory is not the cause and the problem persists even if retried after a suitable waiting period, see Appendix A , "Submitting a CR," of this manual.
- 29 CLAS0002      **MESSAGE: IRRECOVERABLE ERROR; Bad CONFIG file version**
- CAUSE: If PARM = 0, during initial startup NETCP discovered the version number in the NMCONFIG file was not in the range expected by Transport.
- ACTION: Transport did not start. Run program `NMMGRVER` to convert the configuration file to the current version, then restart the network.
- CAUSE: If PARM is nonzero, during initial startup NETCP could not read the global information record from the `NETXPORT.GLOBAL` path in the NMCONFIG file (PARM = 32-bit status returned by the call to `nmconfgetdata`).
- ACTION: Transport did not start. Use `NMMGR` to validate the NMCONFIG file, then retry the operation again. If the problem persists, see Appendix A , "Submitting a CR," of this manual.
- 30 CLAS0002      **MESSAGE: PACKET DISCARD; Path resolve failure**
- CAUSE: During initial NETCP startup, an attempt to initialize the Node/Address Path cache by calling `path_cache_init` failed (PARM = maximum cached node names).
- ACTION: Transport did not start. It is not possible to tell from NETCP logging what the result code from `path_cache_init` was, but PATHS may have logged additional errors. See Appendix A , "Submitting a CR," of this manual.

- 33 CLAS0002     **MESSAGE: INTERNAL ERROR; Async request from link**
- CAUSE: NETCP received an asynchronous event message containing a negative error status, from the DCLDM controlling one of the LAPB links on the network (PARM = 32-bit status field from the message).
- ACTION: NETCP stopped the device associated with the link, also stopping any attached protocols and driver. Run the PSIDAD diagnostic on the appropriate PSI card. If the PSI looks good, it may be possible to restart the device using `:NETCONTROL ADDLINK=linkname; NET=niname`. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 40 CLAS0002     **MESSAGE: INTERNAL ERROR; A reads**
- CAUSE: While NETCP was rendezvousing a particular protocol to a driver, an attempt to connect a LAPB device failed for some reason other than a close already being in progress (PARM = 32-bit status returned by the call to `xp_connect_the_driver`).
- ACTION: Check the appropriate PSI card and its cabling. If it looks good, another possibility is that the DCLDM or LAPB driver are hung; see Appendix A , “Submitting a CR,” of this manual.
- 42 CLAS0002     **MESSAGE: INTERNAL ERROR; Device open**
- CAUSE: An attempt to physically start a device failed with a nonzero status meaning an unexpected error or warning occurred (PARM = 32-bit status returned by the call to `nslopenlink`). Physical startup includes all creation and startup of a link driver and its dependent modules, selftest, startup, downloading and configuration of link hardware, plus optional creation of a DCLDM, so any error along the way will be detected here by NETCP.
- ACTION: Stop Transport and enable all available logging for the link subsystem corresponding to the NI type of the network reporting the error, then restart Transport and reproduce the problem, monitoring logged data for any problems. If this does not reveal the cause, link tracing can be used on the affected link to collect even more data.
- Check that the physical path specified in the NMCONFIG file is correct for all link devices on the network being started, and that a card is installed in the slot for that path. You can stop the system then use IOMAP to verify physical path numbers.
- For links other than X25, probably the link driver failed to obtain a resource, the link hardware was already in use by an IBM communications subsystem such as NRJE, the link hardware failed selftest or its firmware version is not supported by the driver, the download file was inaccessible, corrupt or has the wrong version, or executing the download caused the link hardware to hang and resulted in a driver or module configurator timeout or other problem. Use NMMGR to check the link configuration in NMCONFIG and use SYSDIAG to check the link hardware.

For X.25 links (and/or hardwired terminals), if a DTC link is in use the DTC and network links may have same physical path specified in NMMGR; try specifying separate physical LAN cards. Make sure the DTC configuration was validated with NMMGR. Another common cause with X25 networks is that the NMCONFIG file may have specified a DTC address or card which is inoperative or does not exist, resulting in one or more timeouts, some of which may have been accidentally sent to NETCP. Using NMMGR, compare the specified DTC configuration with the actual DTC hardware, and delete any DTC cards that are not physically present. Any DTC changes made, or re-validation of the DTC configuration, may require a system restart to take effect.

If the problem persists after investigating all these causes, see Appendix A , “Submitting a CR,” of this manual.

45 CLAS0002

**MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While NETCP was starting a specific network NI, an attempt to create a frozen outbound buffer pool for that NI failed (PARM = 32-bit status returned by the call to `bmgr_create_pool`).

**ACTION:** The NI did not start. Using NMMGR, check the configured packet size for the affected link. In particular, look for a packet size of 8224, which may indicate the NMCONFIG file has been corrupted, probably by an incompatible version of NMMGR. If the packet size is configured correctly, then depending on the error, it is possible too much frozen memory is being used by the system, but this can change with time. Use GLANCEXL or a similar utility to check memory usage by the system. If these are not the causes and the problem persists even if retried after a suitable waiting period, see Appendix A , “Submitting a CR,” of this manual.

50 CLAS0002

**MESSAGE: Transport start**

**CAUSE:** As one of the first things it does during initial startup, NETCP logs that a new instance of Transport is starting (PIN=0, and PARM = PIN number of the NETCP system process).

**ACTION:** None. This is an informative message only. It does not imply successful startup, only that a startup is beginning. When starting Transport after a previous instance of it has just been stopped, it is possible for this message to appear before the other instance’s Transport stop message appears.

51 CLAS0002

**MESSAGE: Transport stop**

**CAUSE:** As one of the last things NETCP does during shutdown, it logs that instance of Transport has stopped. After this, NETCP will close logging access, disconnect from NMMON, release its message port, then terminate (PARM = 0).

**ACTION:** None. This is an informative message only. It is only logged after all outstanding replies have been received from the general

protocols. This message does not imply that Transport is completely down, nor does it imply successful shutdown, only that there is very little cleanup left to do. It is possible that another instance of Transport can be successfully started before this message appears.

54 CLAS0002

**MESSAGE: INTERNAL ERROR; Device close**

**CAUSE:** An attempt to physically stop a device failed with a negative nonzero status meaning an unexpected error (not a warning) occurred (PARM = 32-bit status returned by the call to `nsllcloselink`). Physical stop includes all shutdown and deletion of a link driver and its dependent modules and any connections to the NMS subsystem or the operating system, reset of link hardware, plus optional deletion of a DCLDM, so any error along the way will be detected here by NETCP.

**ACTION:** This problem in itself was not fatal, and link shutdown continued. However, there may be a problem with the link driver software or hardware.

Most shutdown problems are warnings, not errors (see error 283). Usually the link driver failed to release a resource, possibly due to a previous error, or the link hardware failed to stop in an orderly manner resulting in a driver or module configurator timeout or other problem, or an attempt to close logging resulted in a warning which was incorrectly reported as an error. If the link hardware is suspect, use SYSDIAG to check it. For X25 networks, verify the X25 switch has not failed.

If you wish to pursue the cause further, stop Transport and enable all available logging for the link subsystem corresponding to the NI type of the network reporting the error, then restart and stop the same network again to reproduce the problem, monitoring logged data for any problems. If this does not reveal the cause, link tracing may be attempted on the affected link to collect even more data, though because the device is shutting down, keep in mind the system may automatically stop the tracing before the point at which the problem is detected.

If the problem persists after investigating all these causes, see Appendix A , “Submitting a CR,” of this manual.

58 CLAS0002

**MESSAGE: INTERNAL ERROR; Configuration file error**

**CAUSE:** At the beginning of NETCP shutdown due to a system shutdown, a `:NETCONTROL STOP` command, or an error during initial startup, NETCP encountered an error trying to close the NMCONFIG file it had previously opened (PARM = 32-bit status returned by the call to `nmconfclose`).

**ACTION:** This error in itself was not fatal, and shutdown continued. However, the NMCONFIG file may be inaccessible. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

- 84 CLAS0002      **MESSAGE: INTERNAL ERROR; Bad/unknown port message**
- CAUSE: A message with an unrecognized function code was received on the NETCP port while NETCP was idle and waiting for new commands (PARM = the 16-bit unknown message function code).
- ACTION: The message was ignored and NETCP went back to waiting for the next new command. However, some other modules on the system are still waiting for the message exchange that mistakenly went to NETCP, and this could cause problems in those other modules. If disk logging was enabled, NETCP logged the entire received message to the current NM logfile, which may aid in diagnosis. It may not have been a transport message at all. If necessary, see Appendix A , “Submitting a CR,” of this manual.
- 101 CLAS0002      **MESSAGE: INTERNAL ERROR; Write aborted by link**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that, in addition to some other error, one or more queued outbound write operations were aborted by the LAPB PSI driver (PARM = 16-bit internal ldev number of device whose writes were aborted). This error is always preceded by another asynchronous link error (for example, errors 257 and 259) indicating the original cause of the failure that resulted in the aborts.
- ACTION: None; this is an informative message only, and only serves to indicate that queued outbound data was not sent when the error occurred. Additional information may be gained by enabling logging classes 10 and 12 for link subsystem 28 (LAPB) and class 0 for subsystem 4 (DCLDM), then reproducing the problem. If this does not reveal the cause, see Appendix A , “Submitting a CR,” of this manual.
- 106 CLAS0002      **MESSAGE: INTERNAL ERROR; Trace**
- CAUSE: After successfully disabling tracing for an entity at the Transport level, NETCP encountered an error trying to stop it at the NMS subsystem level (PARM = 32-bit status returned by the call to nmclose TRACE).
- ACTION: This error was not fatal, and NETCP continued running. However, the trace file may not have been closed, and thus would not be available for access until after the next system restart. If the problem occurs every time, see Appendix A , “Submitting a CR,” of this manual.
- 118 CLAS0002      **MESSAGE: INTERNAL ERROR; Trace**
- CAUSE: While attempting to enable tracing for an entity, NETCP encountered an error attempting to get a trace ID from the NMS subsystem (PARM = 32-bit status returned by the call to nmgettraceid).
- ACTION: No message to enable tracing was sent to the desired entity. Check that sufficient disk space is available on the system, and that trace filename specified in the link screen of the NMCONFIG file, or in

the `:NETCONTROL TRACEON` command is legal and does not violate file system security rules. If this does not reveal the cause, see Appendix A , “Submitting a CR,” of this manual.

136 CLAS0002

**MESSAGE: INTERNAL ERROR; Device open**

**CAUSE:** While attempting to rendezvous a specific protocol to the link driver, NETCP encountered an error (PARM = 32-bit status returned by the call to `ns_rendezvous_to_driver`).

**ACTION:** NETCP assumed the rendezvous failed. If this was a LAPB device, it was also not told to connect. See Appendix A , “Submitting a CR,” of this manual.

138 CLAS0002

**MESSAGE: INTERNAL ERROR; Configuration file error**

**CAUSE:** During early initialization of NETCP during startup, validation of the NMCONFIG file failed (PARM = 16-bit result code returned by the call to `validatenetxport`).

**ACTION:** The transport did not start. Using NMMGR, open and validate the NMCONFIG configuration file to find any errors. Correct the errors and validate again. Then restart the network.

143 CLAS0002

**MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While starting a network NI having a nonzero number of buffers configured for IP Store/Forward, NETCP was unable to create a frozen buffer pool to provide those buffers (PARM = 32-bit status returned by the call to `bmgr_create_pool`).

**ACTION:** The NI was not started. Using NMMGR, check total Store/Forward buffers for each NI configured. Depending on the error, it is possible too much frozen memory is being used by the system, but this can change with time. Use GLANCEXL or a similar utility to check memory usage by the system. If memory is not the cause and the problem persists even if retried after a suitable waiting period, see Appendix A , “Submitting a CR,” of this manual.

163 CLAS0002

**MESSAGE: Path verify**

**CAUSE:** NETCP is about to execute a Path Verify operation because of a possible path change detected by the Transport software, such as excessive retransmissions or a redirect message from a GATEWAY. NETCP logs this event, then forwards Path Verify messages to all general protocols and to the ICMP server, if any, then waits up to 15 seconds for replies to all those messages. General protocols which fail to respond will cause logging of error 629 after the timeout (PARM = number of duplicates).

Path Verify storms (a large number of Path Verify operations during a short time period) can occur if a heavily used high speed link suddenly fails. During storms, if NETCP receives new Path Verifies or any other requests while awaiting previous replies, they are queued for later

execution if they are unique. If a new Path Verify is a duplicate of one already queued, the new one is counted and then discarded. Later, after all replies arrive or a timeout occurs, the oldest queued Path Verify is executed (PARM = number of duplicates of this Path Verify received and discarded while awaiting replies; nonzero indicates a storm is occurring, and larger numbers mean more severe storms). This continues until no Path Verifies arrive while awaiting replies. Other NETCP requests such as :NETCONTROL STATUS, can then be processed. If a new Path Verify arrives after that point, even if it duplicates one already processed it is treated as new and unique.

ACTION: None. This is an informative message only.

167 CLAS0002 **MESSAGE: STATIC UPDATE: Update**

CAUSE: NETCP is about to send a GATEWAY update message to IPU for a specific IP address, because a network is starting (PARM = 32-bit IP address being updated).

ACTION: None. This is an informative message only. IPU will use information in the message to update its tables.

168 CLAS0002 **MESSAGE: Device restarting**

CAUSE: NETCP is restarted a device either because DIAL failed to make a connection (for instance due to a bad security string), or because idle device timeouts were enabled in the configuration and a timeout occurred (PARM = 16-bit NETCP device index of affected device).

ACTION: If you suspect a security problem, you may wish to address that issue. Otherwise, no action is required; this is an informative error message only. NETCP disconnected the device, then cleaned up for the next device startup.

169 CLAS0002 **MESSAGE: BUFFER MANAGER; Buffer manager error**

CAUSE: While attempting to build GATEWAY update information for IPU because a network was starting, NETCP was unable to obtain a buffer from its own pool to hold the information for a specific NI (PARM = 32-bit status returned by the call to `bmgr_get_buffer`).

ACTION: NETCP attempted to continue with the next NI, possibly resulting in additional errors. Probably all the NETCP buffers have somehow been used up, though it should have allowed for enough to support starting any supported network configuration. Stop Transport and use NMMGR to validate the NMCONFIG file and check for obvious file corruption, then restart the network. If the problem persists, see Appendix A , "Submitting a CR," of this manual.

170 CLAS0005 **MESSAGE: STATIC UPDATE: Update**

CAUSE: NETCP is about to send a GATEWAY update message to IPU for a specific IP address, because a network is stopping (PARM = 32-bit IP address being updated).

**ACTION:** None. This is an informative message only. IPU will use information in the message to update its tables.

171 CLAS0002

**MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While attempting to collect current address configuration data from NMCONFIG because an X25 network was either starting or being updated, NETCP was unable to obtain a logical buffer from its own pool to hold all the X25 information (PARM = 32-bit status returned by the call to `bmgr_get_buffer`).

**ACTION:** Check the configuration file using NMMGR, to see that the amount of X25 configuration data seems to be within limits. Also verify your system has any and all software patches that may be needed to use the amount of X25 configuration data you are specifying, especially if your configuration contains more than 1024 X.25 paths. If the problem still cannot be isolated, the NMCONFIG file may be corrupt, or there may be a bug in NETCP or the NMS subsystem; see Appendix A , “Submitting a CR,” of this manual.

222 CLAS0002

**MESSAGE: PACKET DISCARD; Allowable max exceeded**

**CAUSE:** While configuring a GATEHALF or a ROUTER network mapping entry, NETCP was unable to find free space in a global array to hold another new phone number (PARM = maximum phone numbers per system, in hex).

**ACTION:** Even after attempting to eliminate duplicate phone numbers, no free cells were available for an additional number; all entries appear to be in use. If phone numbers have been changed via `:NETCONTROL UPDATE`, stop and restart the network, stop any started ROUTER or GATEHALF networks that are not needed, or decrease the number of unique phone numbers configured in the `NETXPORT.NI.niname.MAPPING.entryname` paths of your NMCONFIG file. Depending on the version of Transport you are running, the maximum number of unique phone numbers is either 1024 or 4096 for the whole system, and the per-NI limit is either 256 or 1024 respectively.

232 CLAS0002

**MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While attempting to build a DCN start message for IPU because of a network start, a `:NETCONTROL ADDLINK` command, or an X25 auto restart, NETCP was unable to obtain a buffer from its own pool to hold alias list information (PARM = 32-bit status returned by the call to `bmgr_get_buffer`).

**ACTION:** Though no DCN message was sent, network startup probably continued to completion, but connections over the affected network may not work. Probably all the NETCP buffers have somehow been used up, though it should have allowed for enough to support starting any supported network configuration. Stop Transport and use NMMGR to validate the NMCONFIG file and check for obvious file corruption, then



restart the network. If the problem persists, see Appendix A ,  
“Submitting a CR,” of this manual.

238 CLAS0002

**MESSAGE: INTERNAL ERROR: Configuration file error**

CAUSE: During NETCP processing of a network start or update command, after an earlier successful validation of the NMCONFIG file a later validation of the file failed (PARM = 16-bit result code returned by the call to `validatenetxport`).

ACTION: The specified network was not started. Possibly the NMCONFIG file was being modified while networks were running, and the changes made were incomplete or incorrect. Stop Transport and use NMMGR to open and validate the NMCONFIG configuration file and find any errors. Correct the errors and validate again. Then restart the network.

241 CLAS0002

**MESSAGE: INTERNAL ERROR; Port**

CAUSE: During later phases of its initial startup, NETCP was unable to create a process port for itself (PARM = 32-bit status returned by the call to `create_port`).

ACTION: The transport was not started. There is a problem with the operating system or a bug in NETCP; see Appendix A , “Submitting a CR,” of this manual.

242 CLAS0002

**MESSAGE: INTERNAL ERROR; Configuration file error**

CAUSE: During later phases of its initial startup, after NETCP was finished using the NMCONFIG file, it encountered an error while trying to close the file (PARM = 32-bit status returned by the call to `nmconfclose`).

ACTION: This error in itself was not fatal, and startup continued. However, the NMCONFIG file may be inaccessible, and to be safe NETCP assumed it still has the file open. If Transport is later stopped, NETCP will again try to close the file. Possibly an earlier run of NMMGR left the file in a bad state. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

251 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

CAUSE: While creating and initializing a specific network NI because a `:NETCONTROL START` command was issued, the NI module configurator reported an error when trying to create the NI port data area or port, or when sending an initialization message to the new NI (PARM = 32-bit escape code returned by the call to `ni_module_config`). Always preceded by another error from the module configurator (having a different Entity number, such as 151–160), logging the reason for the original failure.

ACTION: Record the previous error and this error. See Appendix A , “Submitting a CR,” of this manual.

- 254 CLAS0002     **MESSAGE: INTERNAL ERROR; Configuration file error**
- CAUSE: NETCP tried to search the NMCONFIG file to determine if an NI having a specific name was configured or not, but was unable to open the file (PARM = 32-bit status returned by the call to nmconfopen).
- ACTION: Check that the NMCONFIG file exists and is not already opened by some other user, such as a STORE process or someone running NMMGR. If this is not the problem, there may be a bug in the NMS subsystem or in NETCP; see Appendix A , “Submitting a CR,” of this manual.
- 256 CLAS0002     **MESSAGE: INBOUND; Device disconnected**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI link was disconnected (PARM = 32-bit NETCP device state bitmask for the device). NETCP will not attempt to reconnect the device because it appears neither level 1 nor level 2 connections were established when this event occurred. May be followed by informative error 101 if outbound data was queued when the error occurred.
- ACTION: This error may follow a previous asynchronous link error, which may indicate an earlier problem. Additional information may be gained by enabling logging classes 3 for Transport subsystem 3, 10 and 12 for link subsystem 28 (LAPB) and class 0 for subsystem 4 (DCLDM), then reproducing the problem. It may be possible to manually restart the device using a :NETCONTROL ADDLINK=linkname; NET=niname command. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 257 CLAS0003     **MESSAGE: INBOUND; Device disconnected**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI link was closed (PARM = 16-bit internal ldev number of the device). NETCP will attempt to reconnect the device because it appears either level 1 or level 2 connections, or both, were established when the event occurred. May be followed by informative error 101 if outbound data was queued when the error occurred.
- ACTION: None. This is an informative error message only. The link will reconnect automatically unless error 256 appears. This event may follow a previous asynchronous link error, which may indicate an earlier problem. If the situation continues, there may be a problem with the phone system; additional information may be gained by enabling logging classes 10 and 12 for link subsystem 28 (LAPB) and class 0 for subsystem 4 (DCLDM).
- 258 CLAS0003     **MESSAGE: INBOUND; Device connected**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI link has established a level 2 connection (PARM = 16-bit internal ldev number of the device).

**ACTION:** None. This is an informative message only. The LAPB link is now successfully engaged in protocol handshaking, and will stay up unless an error, disconnect, or idle timeout occurs, or the network is stopped.

259 CLAS0003 **MESSAGE: INBOUND; Device disconnected**

**CAUSE:** NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI link was disconnected by its remote side (PARM = 0). May be followed by informative error 101 if outbound data was queued when the error occurred.

**ACTION:** None. This is an informative error message only. NETCP will now tell the driver on the local side to disconnect, so informative error 257 should follow.

260 CLAS0002 **MESSAGE: PACKET DISCARD; Illegal phone number**

**CAUSE:** NETCP received an asynchronous event message from the DCLDM indicating that its LAPB driver had some problem handling a phone number change request (PARM = 32-bit NETCP device state bitmask for the device).

**ACTION:** This error may be related to the syntax or length of the phone number, but could also be caused by some internal problem. Use NMMGR to check the syntax of the telephone number in the NMCONFIG file for the affected link. Then attempt a :NETCONTROL ADDLINK=linkname; NET=niname command. If the error persists, see Appendix A , "Submitting a CR," of this manual.

261 CLAS0002 **MESSAGE: INBOUND; Device disconnected**

**CAUSE:** NETCP received an asynchronous event message from the DCLDM indicating that closing its LAPB PSI link failed (PARM = 16-bit internal ldev number of the device). NETCP will attempt to bring down the device and its driver. May be followed by informative error 101 if outbound data was queued when the error occurred.

**ACTION:** See Appendix A , "Submitting a CR," of this manual.

262 CLAS0005 **MESSAGE: INBOUND; INTERNAL ERROR; Async request from link**

**CAUSE:** NETCP received an asynchronous event message from the DCLDM indicating its LAPB PSI link reported some sort of miscellaneous warning (PARM = 16-bit internal ldev number of the device).

**ACTION:** None. This is an informative message only.

265 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While creating an NI because a specific network was starting, NETCP encountered an error trying to create a message pool for the new NI port (PARM = 32-bit status returned by the call to create\_pool).

**ACTION:** None. The network was not started. See Appendix A , “Submitting a CR,” of this manual.

266 CLAS0002     **MESSAGE: INTERNAL ERROR; Configuration file error**

**CAUSE:** NETCP tried to search the NMCONFIG file to determine if an NI having a specific name was configured or not, but after successfully opening the file it was unable to close it (PARM = 32-bit status returned by the call to nmconfclose).

**ACTION:** This error in itself was not fatal, and NETCP continued. However, the NMCONFIG file may be inaccessible. Check that the NMCONFIG file exists and is not already opened by some other user, such as someone running NMMGR. If this is not the problem and the message persists, see “Appendix A , “Submitting a CR,” of this manual.

267 CLAS0002     **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While creating an NI because a network was starting, NETCP encountered an error trying to create a new mapping table for the NI (PARM = 32-bit status returned by the call to map\_create\_table).

**ACTION:** The network was not started. Depending on the error, it is possible too much frozen memory is being used by the system, but this can change with time. Use GLANCEXL or a similar utility to check memory usage by the system. If memory is not the cause and the problem persists even if retried after a suitable waiting period, see Appendix A , “Submitting a CR,” of this manual.

268 CLAS0002     **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While creating an NI because a network was starting, NETCP successfully created a new mapping table for the NI, but then encountered an error trying to add the NETCP entity into the table (PARM = 32-bit status returned by the call to map\_add\_entity).

**ACTION:** The network was not started. See Appendix A , “Submitting a CR,” of this manual.

278 CLAS0002     **MESSAGE: INTERNAL ERROR; Configuration file error**

**CAUSE:** While processing a :NETCONTROL command to start or update a network or add a link, NETCP successfully opened the NMCONFIG file, but was unable to lock it (PARM = 32-bit status returned by the call to nmconflockfile).

**ACTION:** The command did not execute, and NETCP closed the open file. Check that the NMCONFIG file exists and is not already opened by some other user, such as someone running NMMGR. If this is not the problem and the message persists, see Appendix A , “Submitting a CR,” of this manual.

- 280 CLAS0002      **MESSAGE: INTERNAL ERROR; Configuration file error**
- CAUSE: While processing a :NETCONTROL command to start or update a network or add a link, NETCP was unable to open the NMCONFIG file (PARM = 32-bit status returned by the call to nmconfopen).
- ACTION: The command did not execute. Check that the NMCONFIG file exists and is not already opened by some other user, such as someone running NMMGR. If this is not the problem and the message persists, see Appendix A , “Submitting a CR,” of this manual.
- 281 CLAS0002      **MESSAGE: INTERNAL ERROR; Internal resource error**
- CAUSE: NETCP received a dial request message but the entity whose reply port was in the message was not one of the network specific protocols known to NETCP for this NI (PARM = 0).
- ACTION: Some entity other than DIAL may be attempting dial requests. See Appendix A , “Submitting a CR,” of this manual.
- 282 CLAS0003      **MESSAGE: Device Startup Warning**
- CAUSE: An attempt to physically start a device was successful, but returned a positive status meaning some sort of unexpected warning occurred (PARM = 32-bit status returned by the call to nslopenlink).
- ACTION: None. This is an informative error message, and exists for pre-5.0 systems only. If you want more information, try enabling additional logging for the link subsystem corresponding to the type of NI for the network reporting the warning, then reproduce the message. If this still does not reveal the cause, see Appendix A , “Submitting a CR,” of this manual.
- 283 CLAS0003      **MESSAGE: Device Shutdown Warning**
- CAUSE: An attempt to physically stop a device failed with a positive nonzero status meaning an unexpected warning (not an error) occurred (PARM = 32-bit status returned by the call to nslcloselink). Physical stop includes all shutdown and deletion of a link driver and its dependent modules and any connections to the NMS subsystem or the operating system, reset of link hardware, plus optional deletion of a DCLDM, so any error along the way will be detected here by NETCP.
- ACTION: This problem in itself was not fatal, and link shutdown continued. However, there may be a problem with the link driver software or hardware.
- Most shutdown problems are warnings, not errors (see error 54). Usually the link driver failed to release a resource, possibly due to a previous error, or the link hardware failed to stop in an orderly manner resulting in a driver or module configurator timeout or other problem, or an attempt to close logging resulted in a warning which was incorrectly reported as an error. If the link hardware is suspect, use SYSDIAG to check it. For X25 networks, verify the X25 switch has not

failed.

If you wish to pursue the cause further, stop Transport and enable all available logging for the link subsystem corresponding to the NI type of the network reporting the error, then restart and stop the same network again to reproduce the problem, monitoring logged data for any problems. If this does not reveal the cause, link tracing may be attempted on the affected link to collect even more data, though because the device is shutting down, keep in mind the system may automatically stop the tracing before the point at which the problem is detected.

If the problem persists after investigating all these causes, see Appendix A , “Submitting a CR,” of this manual.

284 CLAS003

**MESSAGE: Device restarting**

**CAUSE:** NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI link received a second SABM frame after a connection was already established, meaning the link has connected again (PARM = 0).

**ACTION:** None. This is an informative error message only, of interest to operators who wish to know when new connections occur. Handling a second SABM is a normal part of the LAPB protocol.

285 CLAS0003

**MESSAGE: INTERNAL ERROR; NM Entry**

**CAUSE:** During NETCP's early initial startup, immediately after attempting to create the NS Registry, NETCP was unable to add Transport's subsystem number to it (PARM = 32-bit status returned by the call to `reg_add_subsys`).

**ACTION:** This error was not fatal, and startup continued; use of the Registry here is not critical. However, creation of the NS Registry by NETCP may have failed, in which case all subsequent calls to it will also result in errors being logged. If this message occurs every time, see Appendix A , “Submitting a CR,” of this manual.

286 CLAS0003

**MESSAGE: INTERNAL ERROR; NM Entry**

**CAUSE:** Near the end of NETCP's early initial startup, it was unable to put its port number into a new entity named “NetCP” in the NS Registry (PARM = 32-bit status returned by the call to `reg_add_entity`).

**ACTION:** This error was not fatal, and startup continued; use of the Registry here is not critical. However, creation of the NS Registry by NETCP may have failed (see error 285), or the Registry may be full. If the message occurs every time, see Appendix A , “Submitting a CR,” of this manual.

- 289 CLAS0003      **MESSAGE: INTERNAL ERROR; NM Entry**
- CAUSE: While creating a network NI for which IP Store and Forward was enabled, NETCP was unable to put the new Store and Forward buffer pool ID into a new entity, having the same name as the NI, in the NS Registry (PARM = 32-bit status returned by the call to `reg_add_entity`).
- ACTION: This error was not fatal, and startup continued; use of the Registry here is not critical. However, creation of the NS Registry by NETCP may have failed (see error 285), or the Registry may be full. If the message occurs every time, see Appendix A , “Submitting a CR,” of this manual.
- 290 CLAS0003      **MESSAGE: INTERNAL ERROR; NM Entry**
- CAUSE: During NETCP’s early initial startup, it was unable to put the NETCP utility buffer pool ID into a new entity named “CP POOL” in the NS Registry (PARM = 32-bit status returned by the call to `reg_add_entity`).
- ACTION: This error was not fatal, and startup continued; use of the Registry here is not critical. However, creation of the NS Registry by NETCP may have failed (see error 285), or the Registry may be full. If the message occurs every time, see Appendix A , “Submitting a CR,” of this manual.
- 291 CLAS0003      **MESSAGE: INTERNAL ERROR; NM Entry**
- CAUSE: While creating an NI because a network was being started, NETCP was unable to put that NI outbound buffer pool ID into a new entity, having the same name as the NI, in the NS Registry (PARM = 32-bit status returned by the call to `reg_add_entity`).
- ACTION: This error was not fatal, and startup continued; use of the Registry here is not critical. However, creation of the NS Registry by NETCP may have failed (see error 285), or the Registry may be full. If the message occurs every time, see Appendix A , “Submitting a CR,” of this manual.
- 292 CLAS0002      **MESSAGE: BUFFER MANAGER; Buffer manager error**
- CAUSE: While building a buffer containing all X25 configuration data for a network, NETCP successfully obtained a buffer of the supposedly correct size, but later encountered an error attempting to write a block of Network Directory address information to the buffer (PARM = 32-bit status returned by the call to `bmgr_write_buffer`).
- ACTION: Check the configuration file using NMMGR, to see that the amount of X25 configuration data seems to be within limits. Also verify your system has any and all software patches that may be needed to use the amount of X25 configuration data you are specifying. If the problem still cannot be isolated, see Appendix A , “Submitting a CR,” of this manual.

- 293 CLAS0002     **MESSAGE: INTERNAL ERROR; Auto dial failure**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI's autodial operation failed due to an internal autodialer problem (PARM = 16-bit internal ldev number of the device).
- ACTION: Check the autodialer cabling and strapping or configuration, and diagnose the autodialer hardware. Then retry the operation.
- 294 CLAS0003     **MESSAGE: PACKET DISCARD; Illegal phone number**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI card was passed a bad autodial telephone number (PARM = 16-bit internal ldev number of the device).
- ACTION: Use NMMGR to check the syntax of the telephone number in the NMCONFIG file for the affected link. Then retry the dialing operation. If the problem persists, see Appendix A , "Submitting a CR," of this manual.
- 295 CLAS0003     **MESSAGE: PACKET DISCARD; Auto dial not completed**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that a LAPB PSI's autodial operation was not completed, possibly because the site being dialed is either busy or not picking up (PARM = 16-bit internal ldev number of the device).
- ACTION: Attempt to dial out again at a later time, or reconfigure the remote site and the local NMCONFIG mappings to provide additional phone connections into that site.
- 296 CLAS0003     **MESSAGE: INTERNAL ERROR; No auto dialer power**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI autodial operation was attempted while the autodialer hardware was not powered up (PARM = 16-bit internal ldev number of the device).
- ACTION: Turn on the autodial unit and check for power and correct cabling. Then attempt to dial out again.
- 303 CLAS0003     **MESSAGE: OUTBOUND; Data line occupied**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI autodial failed because the line was busy or a phone line was not available (PARM = 16-bit internal ldev number of the device). (Some pre-5.0 versions of Transport also incorrectly reported wrong autodialer cables under this location; now see error 674).
- ACTION: Attempt to dial out again later when a phone line is free.



- 304 CLAS0003      **MESSAGE: Device restarting**
- CAUSE: NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI link experienced a power failure, resulting in a disconnect of the phone line (PARM = 16-bit internal ldev number of the device). May be followed by informative error 101 if outbound data was queued when the error occurred.
- ACTION: None. This is an informative error message only. NETCP will now automatically attempt to bring the device driver down and then back up.
- 305 CLAS0002      **MESSAGE: INTERNAL ERROR; Internal resource error**
- CAUSE: During later stages of NETCP's initial startup, NETCP was unable to create a message pool for its own process port (PARM = 32-bit status returned by the call to `create_pool`).
- ACTION: The transport was not started. There is a problem with the operating system or a bug in NETCP; see Appendix A , "Submitting a CR," of this manual.
- 306 CLAS0003      **MESSAGE: INTERNAL ERROR; NM Entry**
- CAUSE: During later stages of NETCP's initial startup, NETCP was unable to add its own port message pool ID to the NS Registry (PARM = 32-bit status returned by the call to `reg_add_entity`).
- ACTION: This error was not fatal, and startup continued; use of the Registry here is not critical. However, creation of the NS Registry by NETCP may have failed (see error 285), or the Registry may be full. If the message occurs every time, see Appendix A , "Submitting a CR," of this manual.
- 311 CLAS0003      **MESSAGE: INTERNAL ERROR; Dial**
- CAUSE: While restarting a link requiring autodial, because an unexpected error occurred while connected (see error 257), NETCP instructed the local side to establish a level 2 connection. This failed because NETCP received an asynchronous DCLDM event message indicating its LAPB PSI link reported that the remote side was establishing or had already established a connection (PARM = 16-bit connect event code from LAPB).
- ACTION: None. This is an informative error message only. The connection was successfully established, but through the initiative of the remote side, not the local. NETCP then disconnected the device at the local side.
- 312 CLAS0003      **MESSAGE: INTERNAL ERROR; Dial**
- CAUSE: While restarting a link requiring autodial, because an unexpected error occurred while connected (see error 257), NETCP instructed the local side to establish a level 2 connection. A connection was established, but then failed because NETCP received an

asynchronous DCLDM event message indicating its LAPB PSI link reported another failure (PARM = upper 16 bits of status from the call to `xp_connect_the_driver`: usually the connect event code from LAPB).

**ACTION:** NETCP disconnected the device and notified protocols that the link went down. This is most likely a link level problem. Consult the link diagnostics and check the modems. Confirm that the link connection is working for the affected link. If the link is connection is working, then see Appendix A , “Submitting a CR,” of this manual.

313 CLAS0003

**MESSAGE: INTERNAL ERROR; Dial**

**CAUSE:** While restarting a LAPB PSI link because an unexpected error occurred while connected (see error 257), NETCP encountered an error when it instructed the local side to reestablish a level 1 connection so that a level 2 connection can be established later (PARM = 32-bit status returned by the call to `xp_connect_the_driver`).

**ACTION:** NETCP brought the device and its driver down, and notified protocols that the link went down. This is most likely a link level problem. Another possibility is that the DCLDM or LAPB driver are hung. Consult the link diagnostics and check the modems. Confirm that the link connection is working for the affected link. If the link is connection is working, then see Appendix A , “Submitting a CR,” of this manual.

315 CLAS0003

**MESSAGE: INTERNAL ERROR; Dial**

**CAUSE:** While processing a legal dial request message, NETCP found that the link appeared to already be connected, so dialing was not possible (PARM = adjusted LAPB status).

**ACTION:** None. This is an informative error message only. Another class-3 logging message may have preceded this, indicating that the link just connected.

316 CLAS0003

**MESSAGE: INTERNAL ERROR; Dial**

**CAUSE:** NETCP received a legal dial request message but encountered an error while downloading the phone number to the link (PARM = 32-bit status returned by the call to `xp_driver_config_dial`).

**ACTION:** This event may follow a previous asynchronous link error, which may indicate the original problem. Another possibility is that the DCLDM or LAPB driver are hung. Also check the validity of the phone number in the configuration. If the situation continues, additional information may be gained by enabling logging classes 10 and 12 for link subsystem 28 (LAPB), and class 0 for subsystem 4 (DCLDM). If this still does not reveal the problem, see Appendix A , “Submitting a CR,” of this manual.

**CAUSE:** NETCP received a legal dial request message but encountered an error while trying to establish a level 2 connection at the LAPB

driver, through the DCLDM (PARM = 32-bit adjusted status returned by the call to `xp_connect_the_driver`: add decimal 256 to get the actual status).

**ACTION:** This event may follow a previous asynchronous link error, which may indicate the original problem. Another possibility is that the DCLDM or LAPB driver are hung. Also check the validity of the phone number in the configuration. If the situation continues, additional information may be gained by enabling logging classes 10 and 12 for link subsystem 28 (LAPB), and class 0 for subsystem 4 (DCLDM). If this still does not reveal the problem, see Appendix A , “Submitting a CR,” of this manual.

322 CLAS0003 **MESSAGE: INTERNAL ERROR; Dial**

**CAUSE:** While processing a legal dial request message, NETCP found that the link was already closed, due to system timing conditions (PARM = adjusted LAPB status).

**ACTION:** This is an informative error message only. Attempt to dial out again if necessary.

401 CLAS0003 **MESSAGE: 2 IP adr for 1 adr key**

**CAUSE:** While collecting configuration data for startup of an X25 network, NETCP found two IP addresses mapping to the same X25 address key (PARM = 0).

**ACTION:** This error in itself was not fatal, and collection of the X25 data continued. The logging does not tell which address was involved. You may wish to run NMMGR and inspect the X25 configuration data for mistakes.

404 CLAS0002 **MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** An attempt to create a frozen inbound buffer pool for a particular NI device failed (PARM = 32-bit status returned by the call to `bmgr_create_pool`). Always followed by another error indicating whether LAPB (see error 407) or non-LAPB (see error 619) pool creation was being attempted.

**ACTION:** The NI did not start. Check the packet size configured in the NMCONFIG file. For LAPB links, pool creation parameters are obtained from this file, but other link types have a more complex process for determining packet size. Depending on the error, it is possible too much frozen memory is being used by the system, but this can change with time. Use GLANCEXL or a similar utility to check memory usage by the system. If these are not the causes and the problem persists even if retried after a suitable waiting period, see Appendix A , “Submitting a CR,” of this manual.

406 CLAS0003 **MESSAGE: INTERNAL ERROR; NM Entry**

**CAUSE:** While creating a frozen inbound buffer pool for a particular NI

device because its network was being started, NETCP was unable to put that pool ID into a new entity, having a name that is the ASCII version of the decimal buffer size, in the NS Registry (PARM = 32-bit status returned by the call to `reg_add_entity`).

**ACTION:** This error was not fatal, and startup continued; use of the Registry here is not critical. However, creation of the NS Registry by NETCP may have failed (see error 285), or the Registry may be full. If the message occurs every time, see Appendix A , “Submitting a CR,” of this manual.

407 CLAS0002 **MESSAGE: INTERNAL ERROR; Device open**

**CAUSE:** While attempting to start a LAPB PSI device on an existing NI, NETCP was unable to create a frozen inbound buffer pool for that device's reads (PARM = 32-bit status returned by the call to `cp_get_read_pool`). Always preceded by another error indicating the original failure (see error 404).

**ACTION:** The device did not start. Check the packet size configured in the NMCONFIG file; for LAPB links, pool creation parameters are obtained from this file. Depending on the error, it is possible too much frozen memory is being used by the system, but this can change with time. Use GLANCEXL or a similar utility to check memory usage by the system. If these are not the causes and the problem persists even if retried after a suitable waiting period, see Appendix A , “Submitting a CR,” of this manual.

410 CLAS0002 **MESSAGE: INTERNAL ERROR; Device close**

**CAUSE:** While shutting down a specific protocol on a network, NETCP encountered an error attempting to unbind that protocol from a device driver (PARM = 32-bit status returned by the call to `ns_separate_from_driver`). NETCP did not expect any error since it supposedly bound that protocol to the driver during network startup. (Some pre-5.0 versions of Transport also reported unbind errors for shutdown of specific devices under this location; now see error 673).

**ACTION:** This error in itself was not failed, and protocol shutdown continued. If this error occurs every time, see Appendix A , “Submitting a CR,” of this manual.

411 CLAS0003 **MESSAGE: Overwrote X25 Addr/DDN**

**CAUSE:** While collecting configuration data for startup of an X25 network, NETCP found that a user had specified an X25 address for a remote node was on a DDN Network, but had also supplied the actual address. Instead, the X25 address should be derived from the IP address by the Transport code (PARM = 0).

**ACTION:** Verify that the network interface started is actually for a DDN Network. If the network is DDN, no action is required, since all configured X25 addresses will be ignored. If not, reconfigure the DTC (using the DTC manager), then stop and restart the network NI on the

host. This error message is only printed once per startup, even if multiple X25 addresses have this problem.

412 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** NETCP received an unrecognized message on port subqueue 2 or 4, which are only designed for asynchronous event messages (PARM = first 16 bits of message, which should give the message type.) NETCP was expecting either a DCLDM event message (type 340) or an SDI async event message (type 390).

**ACTION:** This error in itself was not fatal, and NETCP continued operating. However, some other modules on the system may still be waiting for a message exchange that mistakenly went to NETCP, and this could cause problems in those other modules. If disc logging was enabled, NETCP logged the entire received message to the current NM logfile, which may aid in diagnosis. It may not have been a Transport message at all. If necessary, see Appendix A , “Submitting a CR,” of this manual.

413 CLAS0002

**MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While collecting configuration data for startup of an X25 network, NETCP successfully obtained a buffer to hold the data, but later on was unable to write data into that buffer (PARM = 32-bit status returned by the call to `bmgr_write_buffer`).

**ACTION:** Not all the configuration data was collected, and startup of that network failed. Check the configuration file using NMMGR, to see that the amount of X25 configuration data seems to be within limits. Also verify your system has any and all software patches that may be needed to use the amount of X25 configuration data you are specifying. If the problem still cannot be isolated, see Appendix A , “Submitting a CR,” of this manual.

414 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** NETCP received an asynchronous DCLDM event message, but the device number in the message did not correspond to any known device in NETCP’s tables (PARM = 16-bit internal ldev number from the message).

**ACTION:** This error in itself was not fatal, and NETCP continued operating. Some kind of timing condition may have occurred. Another possibility is NETCP or a DCLDM may be confused. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

416 CLAS0002

**MESSAGE: INTERNAL ERROR; Async request from link**

**CAUSE:** NETCP received an asynchronous SDI event message, but the specific type of event was something other than an exception event, the only message type NETCP was expecting (PARM = 32-bit SDI status field from the message).

**ACTION:** This error in itself was not fatal, and NETCP continued operating. However, some other modules on the system may still be waiting for the event message that mistakenly went to NETCP, and this could cause problems in those other modules. If disc logging was enabled, NETCP logged the entire received message to the current NM logfile, which may aid in diagnosis. If necessary, see Appendix A , “Submitting a CR,” of this manual.

417 CLAS0003      **MESSAGE: Level 3 Up on DTC**

**CAUSE:** NETCP received an SDI asynchronous event message from X25 informing it that a level 3 connection has been established on a DTC for an X25 link already started by the Transport (PARM = 32-bit SDI status field from the message).

**ACTION:** None. This is an informational message only. NETCP has connected the device, and Transport will now begin using this link.

418 CLAS0003      **MESSAGE: INTERNAL ERROR; Async request from link**

**CAUSE:** NETCP received an SDI asynchronous event message informing it that an X25 device reported an error (PARM = 32-bit SDI status field from the message).

**ACTION:** NETCP will bring down the X25 device and its driver, then start a 2-minute automatic restart timer. If the problem occurs repeatedly, stop the network or use the `:NETCONTROL DELLINK=linkname; NET=niname` command to remove the DTC link from Transport use. Verify that the DTC LAN link on the host is functioning correctly (via LANDAD) then verify that the link on the DTC is functioning correctly (via the Openview DTC Manager). Once the errors are corrected, restart the network or use a `:NETCONTROL ADDLINK=linkname; NET=niname` command to allow the Transport to use the DTC link again.

419 CLAS0002      **MESSAGE: INTERNAL ERROR; Device open**

**CAUSE:** While starting an 802.3 LAN device prior to opening its driver, NETCP encountered an error attempting to add multicast addresses to the driver's KSO (PARM = 32-bit status returned by the call to `ieee_multicast_add`).

**ACTION:** The LAN network did not start. Use the LANDAD tool to verify the LAN hardware is functioning correctly. If it looks good, there may be a problem with the LAN driver software or a bug in NETCP; see Appendix A , “Submitting a CR,” of this manual.

420 CLAS0002      **MESSAGE: INTERNAL ERROR; Device close**

**CAUSE:** While stopping an 802.3 LAN device prior to closing its driver, NETCP encountered an error attempting to delete multicast addresses it supposedly added previously to the driver's KSO (PARM = 32-bit status returned by the call to `ieee_multicast_delete`).

**ACTION:** This error in itself was not fatal, and device shutdown continued. After shutdown, use the LANDAD tool to verify the LAN hardware is functioning correctly. If it looks good but the problem persists, then see Appendix A , “Submitting a CR,” of this manual.

423 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While stopping an X25 network, NETCP encountered an error attempting to delete the X25 Flow Control Manager (PARM = 32-bit status returned by the call to `netfc_kill`). The Flow Control Manager dynamically allocates the flow control buffer pools for X25.

**ACTION:** This error in itself was not fatal, and shutdown of the X25 NI continued. If the error occurs every time, see Appendix A , “Submitting a CR,” of this manual.

428 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** NETCP was about to send a level 3 restart message to the X25 protocol, but the NETCP tables showed a restart had already been sent (PARM = 0).

**ACTION:** No restart message was sent this time, but this situation should not have occurred. If it occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

429 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** NETCP was about to send a level 3 stop message to the X25 protocol, but the NETCP tables showed a restart had already been sent (PARM = 0).

**ACTION:** No stop message was sent this time, but this situation should not have occurred. If it occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

431 CLAS0003

**MESSAGE: Level 3 Down on DTC**

**CAUSE:** NETCP received an SDI async event message informing it that the X25 RLM was not ready, meaning that levels 3 and 2 have gone down on the DTC for an X25 link already started by Transport (PARM = 32-bit SDI status field from the message).

**ACTION:** None. This is an informative message only. In many cases the DTC will recover on its own. If this does not happen, use the DTC Manager to find the reason why levels 2/3 are not up. Once the problem is corrected on the DTC, the host will be informed and will start using the device.

500 CLAS0005

**MESSAGE: LOGGING; Log**

**CAUSE:** NETCP has received a message instructing it to process one of the general :NETCONTROL commands (PARM = hex 330). Examples of these are START, ADDLINK, DELLINK, STOP, and UPDATE commands: anything except for STATUS.

ACTION: None. This is an informative message only.

501 CLAS0005 **MESSAGE: LOGGING; Log**

CAUSE: NETCP has received a message instructing it to process a :NETCONTROL STATUS command (PARM = hex 332).

ACTION: None. This is an informative message only.

600 CLAS0002 **MESSAGE: Bad status**

CAUSE: When NETCP attempted to send a reply message back to NETUI to complete a blocked :NETCONTROL command, or send a reply back to NMMON to complete initial creation of NETCP after either a successful or an unsuccessful startup, an error occurred on the send (PARM = 32-bit status returned by the call to send\_msg).

ACTION: If user session which issued the command exists, it will now be hung. Since it also owns resources, it cannot be aborted, and a system restart will be needed to recover. However, depending on the command that hung, most other network operations should continue to work normally. If not, you may try restarting the network. If the command that hangs attempted to mix several :NETCONTROL operations in the same command, try avoiding this, issuing separate commands instead. If the separate commands are in a batch job or a UDC, try adding some :PAUSE commands between the network commands. If the problem still persists, see Appendix A , “Submitting a CR,” of this manual.

601 CLAS0002 **MESSAGE: Bad status**

CAUSE: While attempting to send a request message to the PROBE module to cause it to send a packet to a network, NETCP encountered an error on the send (PARM = 32-bit status returned by the call to send\_msg).

ACTION: Other systems on the network may be unaware that this node is up. This, in itself, will not prohibit connections into or out from this node. If the desired connectivity cannot be achieved, restart the network. If the problem persists, then see Appendix A , “Submitting a CR,” of this manual.

602 CLAS0002 **MESSAGE: Bad status**

CAUSE: While attempting to send an X25 restart request message to the X25 protocol module, NETCP encountered an error on the send (PARM = 32-bit status returned by the call to send\_msg).

ACTION: X25 did not receive the restart request. This will cause the X25 network to enter a bad state. Stop and restart that network. If this problem continues, see Appendix A , “Submitting a CR,” of this manual.

603 CLAS0002 **MESSAGE: Bad status**

CAUSE: On an SNA network NI, while attempting to send a bind message to the L2RESOLVE module of SNA, NETCP encountered an



error on the send (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** This will prevent SNA from establishing any connections. Stop and restart the network. If this problem continues, see Appendix A , “Submitting a CR,” of this manual.

604 CLAS0002 **MESSAGE: Bad status**

**CAUSE:** On an SNA network NI, while attempting to send a device disconnect message to the L2RESOLVE module of SNA for a device which had previously established a level 1 connection, NETCP encountered an error on the send (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** The device was not disconnected. Restart the network. If this problem continues, then see Appendix A , “Submitting a CR,” of this manual.

605 CLAS0003 **MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** In the last phases of stopping the last device on an NI that was being shut down, NETCP encountered an error while trying to delete that NI inbound buffer pool (PARM = 32-bit status returned by the call to `bmgr_delete_pool`).

**ACTION:** This error was not fatal, and network shutdown continued. However, the amount of system memory used by the pool may be inaccessible until the next system restart. Probably some buffers for the pool were lost, or are still outstanding in protocol modules which had previously encountered errors. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

606 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** In the last phases of stopping the last device on an NI that was being shut down, NETCP found the NI inbound buffer pool ID in its device table, but not in its read pool table (PARM = 16-bit buffer size for the missing pool ID; this number was used internally in the NS Registry to name that pool).

**ACTION:** This error was not fatal, and network shutdown continued. However, since pool ID's should always appear in both tables, NETCP is confused. Even if the pool ID in the device table was valid, NETCP could not be sure, so to be safe the buffer pool was not deleted, and the NS Registry may still contain that pool ID. The amount of system memory used by this buffer pool may be inaccessible until the next system restart. If the problem occurs again, see Appendix A , “Submitting a CR,” of this manual.

607 CLAS0002 **MESSAGE: Bad status**

**CAUSE:** While attempting to disable tracing on one of the Transport modules, in response to a system shutdown or a user's `:NETCONTROL`

command, NETCP encountered an error trying to send a trace disable message to that module (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error was not fatal, and network operation continued. Though it is not possible to tell from console logging which module was affected, disc logging will show the entire message, including the interface code of the entity being sent to. After this error, NETCP disabled the affected module's tracing at the NMS subsystem level, closing the trace file. While this may result in additional module specific errors if the module tries writing more trace data later on, at least the file will be available for analysis. If this problem occurs repeatedly, see Appendix A , "Submitting a CR," of this manual.

608 CLAS0002     **MESSAGE: Bad status**

**CAUSE:** While attempting to enable tracing on one of the Transport modules, in response to a user's `:NETCONTROL` command, NETCP encountered an error trying to send a trace enable message to that module (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error was not fatal, and network operation continued. Even though a new trace file was created, the module will not record any trace data in it, and more errors may occur when tracing is disabled later on. The specified module may have failed or may not exist. When convenient, try restarting the network. If the problem still persists, see Appendix A , "Submitting a CR," of this manual.

609 CLAS0002     **MESSAGE: INTERNAL ERROR; Data dictionary error**

**CAUSE:** While stopping Transport due to a system shutdown or a `:NETCONTROL STOP` command, NETCP was unable to delete a CM Port Dictionary entry named "NMCONFIG", into in which it had previously stored the name of the NMCONFIG file (PARM = 16-bit result code returned by the call to `dict_delete`). The entry was used as a way to partially lock the file, so NMMGR could tell Transport was up and running. The CM Port Dictionary is an operating system lookup service used by, but not part of, Transport.

**ACTION:** This error in itself was not fatal, and shutdown continued. However, the entry should have been there. If the same error occurs again, see Appendix A , "Submitting a CR," of this manual.

610 CLAS0002     **MESSAGE: Bad status**

**CAUSE:** While shutting down Transport due to a system shutdown or a `:NETCONTROL STOP` command, NETCP encountered an error trying to delete the NETIPC Socket Timers module (PARM = 32-bit status returned by the call to `sk_ti_stop`).

**ACTION:** This error in itself was not fatal, and shutdown continued. However, it may not be possible to restart Transport without first restarting the system. See Appendix A , "Submitting a CR," of this manual.

- 611 CLAS0002      **MESSAGE: INTERNAL ERROR; Module Deconfig Failed**
- CAUSE: While shutting down Transport due to a system shutdown or a :NETCONTROL STOP command, NETCP encountered an error when trying to stop one of the general protocols (PARM = 32-bit escape code returned by the call to the module deconfigurator that failed). Always preceded by another error from another entity (having a different Entity number, such as 151–160), indicating the cause of the original failure.
- ACTION: This error in itself was not fatal, and shutdown continued. However, some system resources may be lost until the next system restart. Inspect the previous error, and if necessary see Appendix A , “Submitting a CR,” of this manual.
- 612 CLAS0003      **MESSAGE: INTERNAL ERROR; NM Entry**
- CAUSE: While shutting down Transport due to a system shutdown or a :NETCONTROL STOP command, NETCP encountered an error trying to delete the NS Registry (PARM = 32-bit status returned by the call to reg\_del\_register).
- ACTION: This error in itself was not fatal, and shutdown continued. However, it may not be possible to restart Transport without first restarting the system. If necessary, see Appendix A , “Submitting a CR,” of this manual.
- 613 CLAS0002      **MESSAGE: BUFFER MANAGER; Buffer manager error**
- CAUSE: While shutting down Transport due to a system shutdown or a :NETCONTROL STOP command, NETCP encountered an error trying to delete its utility buffer pool (PARM = 32-bit status returned by the call to bmgr\_delete\_pool).
- ACTION: This error was not fatal, and network shutdown continued. However, the amount of system memory used by the pool may be inaccessible until the next system restart. Probably some buffers for the pool were lost, or are still outstanding in modules which remain in the background after NETCP terminates. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.
- 614 CLAS0002      **MESSAGE: INTERNAL ERROR; Data dictionary error**
- CAUSE: While shutting down Transport due to a system shutdown or a :NETCONTROL STOP command, NETCP encountered an error trying to delete a CM Port Dictionary entry named “NetCP”, into which it had stored its own port number, for use by various CM transport modules such as PROBE (PARM = 16-bit result code returned by the call to dict\_delete). The CM Port Dictionary is an operating system lookup service used by, but not part of, Transport.
- ACTION: This error in itself was not fatal, and shutdown continued. However, it may not be possible to restart Transport without first restarting the system, since if the Dictionary entry does still exist,

future :NETCONTROL commands may either hang or cause a system abort. See Appendix A , “Submitting a CR,” of this manual.

615 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

CAUSE: During the later phases of initial NETCP startup, NETCP encountered an error trying to add its port ID into the NMMON port table, so that NETCP would receive a shutdown message if the system or NMMON were later shut down (PARM = 32-bit status returned by the call to nnmonaddid).

ACTION: This error was not fatal, and network startup continued. However, shutting down the system will not stop Transport, to avoid ungraceful connection losses, attempt a :NETCONTROL STOP command before attempting the next system shutdown. Try restarting the network, if the problem still occurs, NMMON may not be running, though that would more likely cause a NETCP hang. Run NMMMAINT and check for version mismatches on subsystem 0. If there is no mismatch, try restarting the system. If the problem still occurs, see Appendix A , “Submitting a CR,” of this manual.

616 CLAS0002 **MESSAGE: INTERNAL ERROR; Data dictionary error**

CAUSE: Dictionary error.

ACTION: This error was not fatal, and network startup continued. However, additional problems, including system aborts, may occur because other modules of Transport will not be able to find NETCP. Also, additional errors will occur later when NETCP tries to delete the Dictionary entry (see error 614). If another instance of Transport was just shut down, it is possible a collision occurred. Stop and restart the network. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

617 CLAS0002 **MESSAGE: INTERNAL ERROR; Data dictionary error**

CAUSE: During the later phases of initial NETCP startup, NETCP encountered an error trying to add its own port number into a CM Port Dictionary entry named “NetCP”, for use by various CM transport modules such as PROBE (PARM = 16-bit result code returned by the call to dict\_add). The CM Port Dictionary is an operating system lookup service used by, but not part of, Transport.

ACTION: This error was not fatal, and network startup continued. However, additional problems, including system aborts, may occur because other modules of Transport will not be able to find NETCP. Also, additional errors will occur later when NETCP tries to delete the Dictionary entry (see error 614). If another instance of Transport was just shut down, it is possible a collision occurred. Stop and restart the network. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

CAUSE: During the early phases of initial NETCP startup, after successfully opening the configuration file, NETCP encountered an

error trying to add the name of the file into a CM Port Dictionary entry named "NMCONFIG" (PARM = 16-bit result code returned by the call to `dict_add`). The entry was used as a way to partially lock the file, so NMMGR could tell Transport was up and running. The CM Port Dictionary is an operating system lookup service used by, but not part of, Transport.

**ACTION:** This error was not fatal, and network startup continued. However, additional errors will occur later when NETCP tries to delete the Dictionary entry (see error 609). In addition, assumptions made by Transport and NMMGR about the partial lock on the file will not be valid; all NMMGR access to the NMCONFIG file during the time this instance of Transport is up should be avoided. Restart the network. If the problem persists, see Appendix A , "Submitting a CR," of this manual.

618 CLAS0002 **MESSAGE: INTERNAL ERROR; Data dictionary error**

**CAUSE:** While starting the X25 protocol module for an X25 network that was being started, NETCP encountered an error trying to add a linkname it created for one of the X25 devices, into a CM Port Dictionary entry (PARM = 16-bit result code returned by the call to `dict_add`). The CM Port Dictionary is an operating system lookup service used by, but not part of, Transport. There should be one entry per X25 device, named "X25.linkid", where "linkid" consists of 4 unprintable bytes defining the binary SDI link ID for that link, dynamically assigned by the Link Support Services subsystem.

**ACTION:** This error was not fatal, and network startup continued. However, additional errors will occur later when NETCP tries to delete the linkname (see error 660). In addition, certain X25 operations may not work correctly. Restart the network. If this problem continues, see Appendix A , "Submitting a CR," of this manual.

619 CLAS0002 **MESSAGE: INTERNAL ERROR; Device open**

**CAUSE:** While attempting to start a device on an existing NI type other than a ROUTER, NETCP encountered an error trying to create a frozen inbound buffer pool for that device's reads (PARM = 32-bit status returned by the call to `cp_get_read_pool`). Always preceded by another error indicating the original failure (see error 404).

**ACTION:** The device did not start. Check the packet size configured in the NMCONFIG file; for non LAPB links, pool creation parameters are computed from the base figures found in this file. Depending on the error, it is possible too much frozen memory is being used by the system, but this can change with time. Use GLANCEXL or a similar utility to check memory usage by the system. If these are not the causes and the problem persists even if retried after a suitable waiting period, see Appendix A , "Submitting a CR," of this manual.

- 620 CLAS0002     **MESSAGE: Bad status**
- CAUSE: While attempting to send a device start message to an existing NI in response to a :NETCONTROL command, NETCP encountered an error on the send (PARM = 32-bit status returned by the call to send\_msg).
- ACTION: The device was started at the NETCP and MAP layers, but not at the NI layer. As a result, no packets can be successfully sent or received over that device, and other errors, especially NI errors, may occur if attempted. Restart the network. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 621 CLAS0002     **MESSAGE: Bad status**
- CAUSE: After successfully starting an FDDI link and all its network specific protocols because a :NETCONTROL START command was issued, NETCP encountered an error trying to send a broadcast information message to the UDP protocol module (PARM = 32-bit status returned by the call to send\_msg).
- ACTION: This error in itself was not fatal, and NETCP startup continued. After this failure, most of Transport, with the exception of UDP, will probably run correctly. However, certain actions, such as Path Verifies, can indirectly result in more sends to UDP, which may cause more errors. When convenient, try stopping Transport using :NETCONTROL STOP, then restart it and bring up the FDDI link again. If the same problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 622 CLAS0002     **MESSAGE: Bad status**
- CAUSE: While attempting to send a DCN start message to IPU in response to an X25 automatic restart or a user’s :NETCONTROL START or :NETCONTROL ADDLINK command, NETCP encountered an error on the send (PARM = 32-bit status returned by the call to send\_msg). A DCN start message is required for a Directly Connected Network such as X25.
- ACTION: IPU did not receive the message, so it does not know the network is started. As a result, path resolution for the NI will fail. Restart the network. If this problem continues, see Appendix A , “Submitting a CR,” of this manual.
- 623 CLAS0002     **MESSAGE: Bad status**
- CAUSE: After completing construction of a GATEWAY update buffer in response to startup or shutdown of some network, NETCP encountered an error trying to send a message referencing that buffer to the IPU module of Transport (PARM = 32-bit status returned by the call to send\_msg).
- ACTION: IPU did not receive the message, so path resolution information for the network will not be up to date, and attempts to

establish connections with it may fail. Restart the network. If this problem persists, see Appendix A , “Submitting a CR,” of this manual.

624 CLAS0002 **MESSAGE: Bad status**

**CAUSE:** While attempting to send a device stop message to the DIAL module because protocols on an existing ROUTER network are being shut down, NETCP encountered an error on the send (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** The error in itself was not fatal, and shutdown of this network probably continued, ending with deletion of this instance of the DIAL module. However, DIAL was not notified the device has stopped, which may have caused more errors if it happened to run again before it was deleted. In addition, some versions of Transport may hang if this problem occurs, requiring a system restart to recover. On a non critical terminal, attempt a `:NETCONTROL STATUS` command; if results are reported, then try restarting the network. If the network restarts but the problem returns, see Appendix A , “Submitting a CR,” of this manual.

625 CLAS0002 **MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While deconfiguring an NI for a network that was being shut down and which also had IP Store and Forward enabled, after first deleting that Store and Forward buffer pool ID from the NS Registry, NETCP encountered an error trying to delete the buffer pool itself (PARM = 32-bit status returned by the call to `bmgr_delete_pool`).

**ACTION:** This error was not fatal, and network shutdown continued. However, the amount of system memory used by the pool may be inaccessible until the next system restart. Probably some buffers for the pool were lost, or are still outstanding in link drivers or in Transport modules which had previously encountered errors. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

626 CLAS0002 **MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While deconfiguring an NI for a network that was being shut down, after first deleting the outbound buffer pool ID from the NS Registry, NETCP encountered an error trying to delete the buffer pool itself (PARM = 32-bit status returned by the call to `bmgr_delete_pool`).

**ACTION:** This error was not fatal, and network shutdown continued. However, the amount of system memory used by the pool may be inaccessible until the next system restart. Probably some buffers for the pool were lost, or are still outstanding in link drivers or in Transport modules which had previously encountered errors. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

- 627 CLAS0002     **MESSAGE: INTERNAL ERROR; Internal resource error**
- CAUSE: While stopping an NI because a network was being shut down, NETCP encountered an error trying to delete a mapping table it had previously created for the NI (PARM = 32-bit status returned by the call to `map_create_table`).
- ACTION: This error in itself was not fatal, and shutdown continued. However, depending on the error, the amount of system memory used by the table and its secondary tables be inaccessible until the next system restart. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.
- 628 CLAS0002     **MESSAGE: Bad status**
- CAUSE: While attempting to stop one of the devices on an existing NI, NETCP disconnected the device at the MAP level, then encountered an error trying to send a device stop message to the NI (PARM = 32-bit status returned by the call to `send_msg`).
- ACTION: This error in itself was not fatal, and shutdown may continue. However, some versions of Transport may hang if this problem occurs, requiring a system restart to recover. On a non critical terminal, attempt a `:NETCONTROL STATUS` command; if results are reported, then try restarting the network. If the network restarts but the problem returns, see Appendix A , “Submitting a CR,” of this manual.
- 629 CLAS0002     **MESSAGE: PACKET DISCARD; Late reply**
- CAUSE: During processing of a Path Verify operation on behalf of some other Transport module because of a possible problem or change in state of a certain network, NETCP sent Path Verify request messages to all the general protocols, but failed to receive a reply from one of them within a 15-second timeout period (PARM = 32-bit port number of the general protocol module which failed to reply). One of these errors will appear for each module that fails to reply.
- ACTION: This error in itself was not fatal, and NETCP processing continued. This can mean either that a temporary Path Verify storm is occurring because a heavily used link has failed, or it can mean there is a problem with the general protocol module. In addition, if the reply ever does arrive, NETCP will probably discard it, but may instead get confused if it arrives while awaiting some other reply. If the problem persists, first look for previous errors 678 or 679. The PARM for these would contain the interface code from the reply, and should tell HP what module was sending to CP. If this does not help, you can still determine which module by restarting the network and taking note of all port numbers printed on the console when Transport starts up, and the modules which printed those ports. Then when the next error 629 occurs, match those port numbers with the PARM value printed for the error. Afterward see Appendix A , “Submitting a CR,” of this manual, to report a problem against the general protocol module which is failing to reply.



630 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While processing a Path Verify operation because NETCP detected a possible problem or change in state of a certain network, or because of a Path Verify message received from IPU in response to a redirect packet IPU received from a GATEWAY, NETCP encountered an error trying to send a Path Verify message to one of the general protocols (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error was not fatal; messages were sent to all the other general protocols, and NETCP will not expect a reply for the send that failed. However, the affected protocol module will not be aware there may be a problem with the path, and may continue to try to use it. If NETCP tracing was active, the tracefile will show the message which could not be sent, and the interface code in that message will indicate which module was not accessible. If the problem happens frequently, see Appendix A , “Submitting a CR,” of this manual.

631 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While processing a Path Verify operation because NETCP detected a possible problem or change in state of a certain network, or because of a Path Verify message received from IPU in response to a redirect packet IPU received from a GATEWAY, NETCP encountered an error trying to send a path verify message to the ICMP Server module of Transport (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error was not fatal; messages were sent to all the general protocols, and NETCP will not expect a reply to the send that failed. However, the ICMP Server module will not be aware there may be a problem with the path, and may continue to try to use it. In addition, PING commands from NETTOOL may report errors against the affected network. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

632 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While processing a `:NETCONTROL STOP` command or a system shutdown, NETCP encountered an error trying to send a DCN stop message to the IPU module of Transport (PARM = 32-bit status returned by the call to `send_msg`). A DCN stop message is required for a Directly Connected Network such as X25.

**ACTION:** This error in itself was not fatal, and shutdown may continue. However, some versions of Transport may hang if this problem occurs or if the IPU module initially failed to start (see error 654), requiring a system restart to recover. On a non critical terminal, attempt a `:NETCONTROL STATUS` command; if results are reported, then try restarting the network. If the network restarts but the problem returns, see Appendix A , “Submitting a CR,” of this manual.

633 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While attempting to send a device stop message to notify the DIAL module that an existing ROUTER network was being shut down, because of a `:NETCONTROL DELLINK` command or a previous asynchronous link error, NETCP encountered an error on the send (PARAM = 32-bit status returned by the call to `send_msg`).

**ACTION:** The error in itself was not fatal, and shutdown of this network probably continued, ending with deletion of this instance of the DIAL module. However, DIAL was not notified the device has stopped, which may have caused more errors if it happened to run again before it was deleted. In addition, some versions of Transport may hang if this problem occurs, requiring a system restart to recover. On a non critical terminal, attempt a `:NETCONTROL STATUS` command; if results are reported, then try restarting the network. If the network restarts but the problem returns, see Appendix A , “Submitting a CR,” of this manual.

634 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While processing an asynchronous event message from the DCLDM indicating that its LAPB PSI link either experienced a problem related to autodial, or else that an autodial succeeded, NETCP encountered an error trying to send a reply message back to DIAL telling the type of event that occurred (PARAM = 32-bit status returned by the call to `send_msg`).

**ACTION:** DIAL did not receive the reply message, and will be unaware of the results of the autodial operation. It may take up to 30 minutes for DIAL to time out and reset itself, and during this delay, new autodial connections cannot be established, and sessions which attempt it may hang. To clear this condition, first try a `:NETCONTROL DELLINK=linkname; NET=niname` command against the affected link, followed by a `:NETCONTROL ADDLINK=linkname; NET=niname`. If this does not help, a system restart will probably be required to clear the hang. If the problem occurs again, take a dump when the error is reported and before any attempts to recover, and see Appendix A , “Submitting a CR,” of this manual.

635 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** NETCP received an asynchronous exception event message from a link driver, but no device having the SDI link ID in that message was found in NETCP’s device tables (PARAM = 32-bit SDI device ID from the message).

**ACTION:** Either the driver or NETCP are confused. Though NETCP may continue working, the affected network will most likely hang, possibly requiring a system restart to recover. See Appendix A , “Submitting a CR,” of this manual.

- 636 CLAS0002      **MESSAGE: Bad status**
- CAUSE: While attempting to send a debug message to one of the Transport protocol modules in response to a `:NETCONTROL DIAG` command, NETCP encountered an error on the send (PARM = 32-bit status returned by the call to `send_msg`).
- ACTION: This error was not fatal, and NETCP continued running. However, the desired module did not receive its debug message, and will not respond as expected. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 637 CLAS0002      **MESSAGE: Bad status**
- CAUSE: While processing a `:NETCONTROL DELLINK` command, and trying to send a DCN stop message to the IPU module of Transport because at least one network link was active, NETCP encountered an error on the send (PARM = 32-bit status returned by the call to `send_msg`). A DCN stop message is required for a Directly Connected Network such as X25.
- ACTION: This error in itself was not fatal, and the operation may continue. However, some versions of Transport may hang if this problem occurs or if the IPU module initially failed to start (see error 654), requiring a system restart to recover. On a non critical terminal, attempt a `:NETCONTROL STATUS` command; if results are reported, then try restarting the network. If the network restarts but the problem returns, see Appendix A , “Submitting a CR,” of this manual.
- 638 CLAS0002      **MESSAGE: Bad status**
- CAUSE: While attempting to start all the general protocols because a `:NETCONTROL START` command was starting a new instance of Transport, NETCP successfully started some modules, then encountered an error trying to initialize the NETIPC Socket Timers module (PARM = 32-bit status returned by the call to `sk_ti_start`). May be preceded by another error from NETIPC, logging the reason for the original failure.
- ACTION: Newer versions of Transport treat this as a fatal error, and Transport startup will fail. For older versions of Transport this error was not fatal, and startup will continue, but NETIPC and Sockets will not work correctly. It is possible Socket Timers encountered an unreported error during its last shutdown, and exited early without finishing. Try stopping and restarting transport. If the error still happens, see Appendix A , “Submitting a CR,” of this manual.
- 639 CLAS0002      **MESSAGE: INTERNAL ERROR; Bad/unknown port message**
- CAUSE: While waiting for a reply message, NETCP received a message that was indeed a reply, but the function code in the message was not the expected value (PARM.(0:16) = the function code that was expected and PARM.(16:16) = interface code of received message).

**ACTION:** It is not possible to tell from the console logging what function code NETCP received, however if disc logging was enabled, the entire received message was logged, which may aid debugging. The flow of normal NETCP operations has been interrupted, and a network hang may be imminent, especially if new `:NETCONTROL` commands are issued. It may be necessary to restart the system to clear this problem. See Appendix A , “Submitting a CR,” of this manual.

640 CLAS0002

**MESSAGE: INTERNAL ERROR; Data dictionary error**

**CAUSE:** While attempting to send a reply message back to NETUI to complete the blocked `:NETCONTROL START` command that initially created NETCP, no entry named “NETUI” was found in the CM Port Dictionary to identify which session port number issued the command (PARM = 16-bit result code returned by the call to `dict_find`). Usually this means the user session which issued the command has somehow been aborted. The CM Port Dictionary is an operating system lookup service used by, but not part of, Transport.

**ACTION:** If a system shutdown was being done, ignore this message. The network startup or shutdown should run to completion, and other network operations should continue to work normally. Otherwise, if it still exists, the user session which issued the command (typically the system console) may be hung. Since it also owns resources, it cannot be aborted, and a system restart will be needed to recover. You may attempt a network stop on another terminal, then restart the system and restart the network. In some versions of Transport, if this error occurs NETCP will accidentally send the reply to a random port number, and the effects of this are indeterminate. If the same problem happens again, see Appendix A , “Submitting a CR,” of this manual.

641 CLAS0002

**MESSAGE: INTERNAL ERROR; Module Deconfig Failed**

**CAUSE:** While shutting down Transport due to a system shutdown or a `:NETCONTROL STOP` command, NETCP detected an error or warning while attempting to stop the Net Timers module (PARM = 32-bit status returned by the call to `nettmr_module_deconfig`). Always preceded by other errors from Net Timers, indicating the cause of the original failure.

**ACTION:** This error in itself was not fatal, and shutdown continued. However, some system resources may be lost until after the next system restart. One possible cause would be if a tool has already been used to stop Net Timers, in which case NETCP cannot stop it; in this case ignore the error. Inspect the previous error, and if necessary, or if this problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

642 CLAS0002

**MESSAGE: INTERNAL ERROR; Module Deconfig Failed**

**CAUSE:** While stopping an NI due to a system shutdown or a `:NETCONTROL STOP` command, NETCP detected an error trying to delete the NI (PARM = 32-bit escape code returned by the call to

ni\_module\_deconfig). Always preceded by another error from another entity (having a different Entity number, such as 151–160), indicating the cause of the original failure.

**ACTION:** This error in itself was not fatal, and shutdown continued. However, some system resources may be lost until after the next system restart. Inspect the previous error and if necessary, see Appendix A , “Submitting a CR,” of this manual.

643 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While stopping an NI because a network was being shut down, NETCP tried to free a NIB (Network Interface Block) it had previously allocated for the NI, but was unable to locate that NIB in other NETCP tables (PARM = 32-bit address of the missing NIB).

**ACTION:** This error in itself was not fatal, and shutdown continued. However, NETCP may be confused. If the problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

644 CLAS0002 **MESSAGE: INTERNAL ERROR; Configuration file error**

**CAUSE:** While initializing an NI for a network that was being started, NETCP was unable to read the global information record from the NETXPORT.NI.name path in the NMCONFIG file (PARM = 32-bit status returned by the call to nmconfgetdata).

**ACTION:** The NI did not start. Stop the network, run NMMGR, and check the NI configuration for the NI which did not start. Validate the file. Then restart the network. If the problem persists, the NMCONFIG file may be corrupt, or there may be a bug in the NMS subsystem, NMMGR, or NETCP; see Appendix A , “Submitting a CR,” of this manual.

645 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While stopping an NI because of a system shutdown or a :NETCONTROL STOP command, NETCP was unable to delete the port message pool it previously created for that NI and its attached protocols (PARM = 32-bit status returned by the call to purge\_pool).

**ACTION:** This error in itself was not fatal, and shutdown continued. However, some amount of system memory that had been used by the message pool may be inaccessible until after the next system restart. If this problem happens repeatedly, there may be an operating system problem or a bug in NETCP; see Appendix A , “Submitting a CR,” of this manual.

646 CLAS0003 **MESSAGE: INTERNAL ERROR; NM Entry**

**CAUSE:** While initializing a new NI for a network that was being started, NETCP successfully created a port message pool for use by that NI and its attached protocols, but was unable to put the pool ID into a new entity named “IP-NI” in the NS Registry (PARM = 32-bit status

returned by the call to `reg_add_entity`).

**ACTION:** This error was not fatal, and startup continued; use of the Registry here is not critical. However, creation of the NS Registry by NETCP may have failed (see error 285), or the Registry may be full. If the message occurs every time, see Appendix A , “Submitting a CR,” of this manual.

647 CLAS0003 **MESSAGE: INTERNAL ERROR; Module Deconfig Failed**

**CAUSE:** While shutting down an NI due to a system shutdown or a `:NETCONTROL STOP` command, NETCP encountered an error while trying to stop one of the NI specific protocols for that network (PARM = 32-bit escape code returned by the call to the module deconfigurator that failed). Always preceded by another error from another entity (having a different Entity number, such as 151–160), indicating the cause of the original failure.

**ACTION:** This error in itself was not fatal, and shutdown continued. However, some system resources may be lost until the next system restart. Inspect the previous error, and if necessary see Appendix A , “Submitting a CR,” of this manual.

648 CLAS0002 **MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While reading the home node’s path report during initial NETCP startup, or while starting some network specific protocols for a LAN, GATEHALF or ROUTER network because a `:NETCONTROL` command was issued, NETCP successfully read local node name data from the NMCONFIG file, then encountered an error trying to write that data into a buffer it obtained a short time earlier (PARM = 32-bit status returned by the call to `bmgr_write_buffer`).

**ACTION:** NETCP was unable to write all the required data, and attempted to recover and free the buffer. The network operation that was being performed will not work correctly. Because the buffer given to NETCP by the buffer manager should have been large enough to contain all data that was to be written, there may be a problem in either NETCP, the buffer manager, the NMS subsystem, or NMMGR, or the NMCONFIG file may be corrupt. Stop the network and retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

649 CLAS0002 **MESSAGE: Bad status**

**CAUSE:** After successfully building a buffer containing needed configuration data for an X25 network that was being started, NETCP encountered an error trying to send the buffer to the X25 protocol module (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** X25 did not receive its configuration data, though the rest of network startup continued. The X25 network will not operate correctly in this condition. In addition, the buffer may have been lost, which may result in error 613 when the network is stopped. Try stopping and

restarting the network. If the problem persists, see Appendix A ,  
“Submitting a CR,” of this manual.

650 CLAS0002

**MESSAGE: INTERNAL ERROR; Module Deconfig Failed**

CAUSE: During the final phases of shutdown because of a :NETCONTROL STOP command or a system shutdown, NETTCP encountered an error while attempting to stop the ICMP Server module it previously started (PARM = 32-bit status returned by the call to icmp\_server\_module\_deconfig).

ACTION: This error in itself was not fatal, and shutdown continued. However, any system resources owned by the ICMP Server may be lost until after the next system restart. If this problem occurs repeatedly, see Appendix A , “Submitting a CR,” of this manual.

651 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

CAUSE: While attempting to start all the general protocols because a :NETCONTROL command was starting a new instance of Transport, NETTCP encountered an error trying to start the TCP protocol module (PARM = 32-bit status returned by the call to tcp\_module\_config). Always preceded by another error from another entity (having a different Entity number, such as 151–160), logging the reason for the original failure.

ACTION: None of the general protocols were started, so Transport will not work. Older versions of Transport will improperly continue the startup after this error, and may also hang when stopped. Record the previous error and this error. Stop the network, if there is no hang, then try restarting the network. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

652 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

CAUSE: While attempting to start all the general protocols because a :NETCONTROL command was starting a new instance of Transport, NETTCP encountered an error trying to start the UDP protocol module (PARM = 32-bit status returned by the call to tcp\_module\_config). Always preceded by another error from another entity (having a different Entity number, such as 151–160), logging the reason for the original failure.

ACTION: Some of the general protocols were started, but Transport will not work. Older versions of Transport will improperly continue the startup after this error, and may also hang when stopped. Record the previous error and this error. Stop the network, if there is no hang, then try restarting the network. If this problem persists, see Appendix A , “Submitting a CR,” of this manual.

653 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

CAUSE: While attempting to start all the general protocols because a :NETCONTROL command was starting a new instance of Transport,

NETCP encountered an error trying to start the PXP protocol module (PARM = 32-bit status returned by the call to `tcp_module_config`). Always preceded by another error from a different entity (having a different Entity number, such as 151–160), the configurator, logging the reason for the original failure.

**ACTION:** This error in itself was not fatal, and general protocol startup continued. However, dynamic name resolution will fail. To clear the problem, stop then restart the network. If this problem persists, record the previous error and this error, then see Appendix A , “Submitting a CR,” of this manual.

654 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While attempting to start all the general protocols because a `:NETCONTROL` command was starting a new instance of Transport, NETCP encountered an error trying to start the IPU (IP Update) module (PARM = 32-bit status returned by the call to `tcp_module_config`). Always preceded by another error from another entity (having a different Entity number, such as 151–160), logging the reason for the original failure.

**ACTION:** The general protocols were started, but Transport will not work. Older versions of Transport will improperly continue the startup after this error, however path resolution will fail, and Transport may also hang when stopped. Record the previous error and this error. Stop the network. If there is no hang, then try restarting the network. If the error still occurs, a common cause is that NMMGR “Unguided Confide” mode was, at some time in the past, used to create the first NS configuration ever put into the NMCONFIG file, and that a bug in the Validation function of an earlier version of Transport then corrupted a hidden record in that file, which specifies IPU startup information.

If you suspect “Unguided Config” mode was used, you can try to repair the hidden record. First make a copy of the old NMCONFIG file. Then one way to fix it is to purge and recreate the entire file using “Guided Config” mode. If your file is complicated, you may first want to try another way, which is to create a new dummy file named, NMCONFGT, and using “Guided Config” mode, configure any network NI (for instance, a dummy LAN network). Then reopen the original NMCONFIG file and use the “Copy Subtree” utility function to copy the `NETXPORT.GPROT.IPU` path, out of the dummy NMCONFGT file and into NMCONFIG, overwriting the existing subtree. Then try restarting the network. If the error goes away, you can purge NMCONFGT. But if the same error still happens, there may be more corruption in the file than just that one record; try recreating the entire file, but using “Guided Config” mode wherever possible.

If, after recreating or attempting to repair the file, the problem still persists, there is most likely a bug in Transport; see Appendix A , “Submitting a CR,” of this manual.



655 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While attempting to start all the general protocols because a :NETCONTROL command was starting a new instance of Transport, NETTCP successfully started some modules, then encountered an error trying to start the ICMP (PING) Server module (PARM = 32-bit escape code returned by the call to `pxp_module_config`). Always preceded by another error from another entity (having a different Entity number, such as 151–160), logging the reason for the original failure.

**ACTION:** This error in itself was not fatal, and general protocol startup continued. However, the PING service will not be available, and pings from other nodes will go unanswered. To clear the problem, stop then restart the network. If this problem persists, record the previous error and this error, then see Appendix A , “Submitting a CR,” of this manual.

656 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While attempting to start all the general protocols because a :NETCONTROL command was starting a new instance of Transport, NETTCP successfully started some modules, then encountered an error trying to start the Net Timers module (PARM = 32-bit status returned by the call to `nettmr_module_config`). Always preceded by another error from Net Timers, logging the reason for the original failure.

**ACTION:** TCP and ARP will not work without timers. Some versions of Transport will erroneously continue the startup after this error. Record the previous error and this error. Stop the network. Then try restarting the network. If the problem still occurs, then depending on the error, it is possible too much frozen memory is being used by the system, but this can change with time. Use GLANCEXL or a similar utility to check memory usage by the system. If memory is not the cause and the problem persists even if retried after a suitable waiting period, see Appendix A , “Submitting a CR,” of this manual.

657 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While attempting to start all the general protocols because a :NETCONTROL command was starting a new instance of Transport, NETTCP successfully started some modules, then encountered an error trying to create the Socket Registry (PARM = 16-bit result code returned by the call to `sock_registry_create`). May be preceded by another error from NETIPC, logging the reason for the original failure.

**ACTION:** Newer versions of Transport treat this as a fatal error, and Transport startup will fail. For older versions of Transport this error was not fatal, and startup will continue, but NETIPC and Sockets will not work correctly. It is possible the Socket Registry encountered an unreported error during its last shutdown. Try stopping and restarting transport. If the error still happens, see Appendix A , “Submitting a CR,” of this manual.

658 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While attempting to start all network specific protocols, required for a given network, such as IP, because a `:NETCONTROL` command was issued, NETCP encountered an error, either from a protocol's module configurator, or while trying to rendezvous a protocol to the link driver. (PARM = 32-bit status returned by the call to a module configurator, or from `cp_rendezvous_protocol`). May be preceded by another error from another module, logging the reason for the original failure.

**ACTION:** The general protocols were started, but the specified network did not start, and NETCP attempted to stop the partially started network and any network specific protocols which did start. Retry the operation. If the problem still occurs, stop and restart Transport. If the problem still persists, see Appendix A , "Submitting a CR," of this manual.

659 CLAS0002

**MESSAGE: INTERNAL ERROR; Module Deconfig Failed**

**CAUSE:** After an error occurred while NETCP was attempting to start network specific protocols for a given network, NETCP attempted to clean up by stopping any of those protocols which did start, but then encountered another error when calling a protocol module deconfigurator (PARM = 32-bit status returned by the call to a module deconfigurator, or from `cp_rendezvous_protocol`). Should always be preceded by other errors, logging the reasons for the original failures.

**ACTION:** This secondary error is not the main concern, though it may indicate additional problems. The general protocols were started, but the specified network failed to start because of the first error. Retry the operation. If the problem persists, see Appendix A , "Submitting a CR," of this manual.

660 CLAS0002

**MESSAGE: INTERNAL ERROR; Data dictionary error**

**CAUSE:** While stopping an X25 network because of a system shutdown, or a `:NETCONTROL STOP` command for one or all networks, NETCP first stopped all devices before stopping any protocols, then encountered an error trying to delete a CM Port Dictionary entry it had previously added to keep track of one of the X25 device ports (PARM = 16-bit result code returned by the call to `dict_delete`). The CM Port Dictionary is an operating system lookup service used by, but not part of, Transport. There should be one entry per X25 device, named "X25.linkid", where "linkid" consists of 4 unprintable bytes defining the binary SDI link ID for that link, dynamically assigned by the Link Support Services subsystem.

**ACTION:** This error in itself was not fatal, and network shutdown continued. No resources were lost. If the problem happens every time, see Appendix A , "Submitting a CR," of this manual.

661 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** After successfully starting a LAN 802.3 or Ethernet link and all its network specific protocols because a `:NETCONTROL` command was issued, NETCP encountered an error trying to send a broadcast information message to the UDP protocol module (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error in itself was not fatal, and network startup continued. After this failure, most of Transport, with the exception of UDP, will probably run correctly. However, certain actions, such as Path Verifies, can indirectly result in more sends to UDP, which may cause more errors. When convenient, try stopping Transport using `:NETCONTROL STOP`, then restart it and bring up the LAN link again. If the same problem persists, see Appendix A , “Submitting a CR,” of this manual.

664 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While starting Transport’s first active X25 NI because a `:NETCONTROL` command was issued, NETCP encountered an error trying to start the X25 Flow Control Manager (PARM = 32-bit status returned by the call to `netfc_config`). NETCP keeps track of the number of X25 networks started, and only makes this call then starting the first one. The Flow Control Manager dynamically allocates the flow control buffer pools for X25.

**ACTION:** This error in itself was not fatal, and network startup continued. However, X25 may not operate correctly. If X25 connections are not working, stop then restart the network. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

665 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** After successfully starting a TOKEN link and all its network specific protocols because a `:NETCONTROL` command was issued, NETCP encountered an error trying to send a broadcast information message to the UDP protocol module (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error in itself was not fatal, and NETCP startup continued. After this failure, most of Transport, with the exception of UDP, will probably run correctly. However, certain actions, such as Path Verifies, can indirectly result in more sends to UDP, which may cause more errors. When convenient, try stopping Transport using `:NETCONTROL STOP`, then restart it and bring up the TOKEN link again. If the same problem persists, see Appendix A , “Submitting a CR,” of this manual.

666 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While processing a `:NETCONTROL STATUS` command, NETCP encountered an error trying to send a reply message back to the NETUI module (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** This error in itself was not fatal, and Transport should continue to run. However, if the session which issued the `:NETCONTROL STATUS` command still exists, that session will now be hung. If the session does not exist, this also indicates a bug since supported HP commands to abort the session should have been disabled by NETUI. A system restart will be required to clear the session's hang. If the session is on the system console, a `:CONSOLE` command may be attempted to temporarily move the logical console to another terminal until a system restart is convenient. If the problem persists, issue a `:NETCONTROL TRACEON=MHDSBN` command beforehand, to enable NETCP tracing which may capture the problem. When the problem occurs, issue a `:NETCONTROL TRACEOFF` command from another terminal, then take a system dump and send in the dump and the resulting trace file; see Appendix A , "Submitting a CR," of this manual.

668 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While processing a `:NETCONTROL STATUS` command which reported an error because a requested module was not active, or because no buffer was available to hold excess error information, NETCP then encountered another error while trying to send a reply message about the first error, back to the NETUI module (`PARM = 32-bit status` returned by the call to `send_msg`). The cause of the first error cannot be determined, except if NETCP message tracing was enabled, the message was traced.

**ACTION:** The second error in itself was not fatal, and Transport should continue to run. However, if the session which issued the `:NETCONTROL STATUS` command still exists, that session will now be hung. If the session does not exist, this also indicates a bug since supported HP commands to abort the session should have been disabled by NETUI. A system restart will be required to clear the session's hang. If the session is on the system console, a `:CONSOLE` command may be attempted to temporarily move the logical console to another terminal until a system restart is convenient. If the problem persists, issue a `:NETCONTROL TRACEON=MHDSBN` command beforehand, to enable NETCP tracing which may capture the problem. When the problem occurs, issue a `:NETCONTROL TRACEOFF` command from another terminal, then take a system dump and send in the dump and the resulting trace file; see Appendix A , "Submitting a CR," of this manual.

669 CLAS0002

**MESSAGE: Bad status**

**CAUSE:** While processing a request sent by the DIAL protocol module because a LAPB autodial link is being connected, NETCP encountered some kind of error (such as errors 315, 316, 322), then encountered a second error trying to send the bad reply message back to DIAL to report the first error (`PARM = 32-bit status` returned by the call to `send_msg`).

**ACTION:** Since DIAL never received its reply, it may take up to 30 minutes for DIAL to time out and reset itself, and during this delay,

new autodial connections cannot be established, and sessions which attempt it may hang. To clear this condition, first try a `:NETCONTROL DELLINK=linkname; NET=niname` command against the affected link, followed by a `:NETCONTROL ADDLINK=linkname; NET=niname`. If this does not help, a system restart will probably be required to clear the hang. If the problem occurs again, take a dump when the first error 669 is reported and before any attempts to recover, and see Appendix A , “Submitting a CR.”

670 CLAS0002 **MESSAGE: Bad status**

**CAUSE:** While bringing down a device because of a serious asynchronous error, powerfail, or a `:NETCONTROL DELLINK` command, NETCP encountered an error trying to send a Path Verify message to the UDP protocol module (PARM = 32-bit status returned by the call to `send_msg`). The message was to have told UDP to discard cached paths.

**ACTION:** In this case UDP will continue to function, but may be unable to reach some destinations. If you cannot reach needed UDP destinations then you will need to restart Transport. This is not generally a fatal error, however some versions of Transport may accidentally hang if this error appears. If the problem occurs repeatedly, see Appendix A , “Submitting a CR.”

671 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** During startup of the SNMP module, the configuration file was unlocked. But afterwards, NETCP tried for up to 2 minutes to lock the file again without success (PARM = status from `NMConflockfile`). The 2-minute timeout is not configurable.

**ACTION:** Network startup was incomplete. Stop the network. Use `:LISTF NMCONFIG.PUB.SYS,3` to verify the NMCONFIG file exists and is not opened. If any users are currently running NMMGR, ask them to exit. Then restart the network. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

673 CLAS0002 **MESSAGE: INTERNAL ERROR; Device close**

**CAUSE:** While bringing down a device because of a serious asynchronous error, powerfail, or a `:NETCONTROL DELLINK` command, NETCP encountered an error when attempting to separate one of the active protocols from the link driver (PARM = 32-bit status returned by the call to `ns_separate_from_driver`).

**ACTION:** This in itself was not a fatal error, and other device stop actions continued. However, either the DCLDM or the link driver may have failed, which indicates a problem. No additional NETCP logging or tracing information is available, though if problems continue, DCLDM tracing and link tracing can be used to either follow the separate request downward and locate the point where errors occur. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

674 CLAS0002 **MESSAGE: INTERNAL ERROR; Wrong autodial cable OUTBOUND; occupied**

**CAUSE:** NETCP received an asynchronous event message from the DCLDM indicating that its LAPB PSI's autodial operation was not completed, because the cable attached to the PSI card is not the proper cable required for autodial operations (PARM = 16-bit internal ldev number of the device). Older versions of Transport may print different messages for this error, such as "OUTBOUND; occupied" or "INTERNAL ERROR; Auto dial failure", though the actual problem is the cable.

**ACTION:** Install the correct cable and retry the operation. If the problem persists then see Appendix A , "Submitting a CR," of this manual.

677 CLAS0002 **MESSAGE: Bad status**

**CAUSE:** While awaiting Path Verify replies from all general protocols in response to requests sent previously, NETCP received a new message on the control or reply subqueues of its port, which was not one of the expected replies. NETCP then encountered an error while trying to requeue that request for later processing, by resending it to itself (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** The new request message has probably been lost, and depending on the purpose of message, whatever module sent it may be expecting a reply which will never come, so that module or session may now be hung. For debugging purposes the message content was logged in the NM logfile along with this error, which may aid in debugging any hung modules. Check for other errors, and also check for Path Verify storms by first enabling Class-5 Transport console logging in NMCONFIG, then restarting Transport and retrying the operations. Depending on the meaning of the error status PARM, the NETCP port may have run out of message frames, in which case a system failure may occur soon, though stopping and restarting Transport may be possible, and may clear the problem until next time. See Appendix A , "Submitting a CR," of this manual.

678 CLAS0002 **MESSAGE: INTERNAL ERROR; Bad/unknown port message**

**CAUSE:** While awaiting Path Verify replies from all general protocols in response to multiple requests it sent previously, NETCP received a new message on the reply subqueue of its port that either was not a reply or whose length was not right for a reply (PARM.(0:16) = function code and PARM.(16:16) = interface code of received message).

**ACTION:** This error may be followed by a timeout of up to 15 seconds, which is normal. Possibly some module on the system sent a message to the wrong place, and because whatever module sent it could be expecting a reply which will never come, that module may now be hung. Possibly one of NETCP's previous reply waits timed out, but the offending module has now decided to reply. For debugging purposes the

message content was logged in the NM logfile along with this error, which may aid in debugging any hung modules. If the received message looks like a Path Verify reply, there is a message length bug in the general protocol module which sent it; this is not serious though it may result in error 629 later. If the problem occurs repeatedly or a general protocol bug is suspected, update to the latest Transport patches, and if this does not solve the problem either, see Appendix A , “Submitting a CR,” of this manual.

679 CLAS0002 **MESSAGE: INTERNAL ERROR; Bad/unknown port message**

**CAUSE:** While awaiting Path Verify replies from all general protocols in response to multiple requests it sent previously, NETCP received a message that was indeed a reply, but the function code in the message was not the expected value (PARM.(0:16) = the function code that was expected and PARM.(16:16) = interface code of received message).

**ACTION:** This error may be followed by a timeout of up to 15 seconds, which is normal. Possibly some other module on the system sent a message to the wrong place, and because whatever module sent it could be expecting a reply which will never come, that module may now be hung. Possibly one of NETCP’s previous reply waits timed out, but the offending module has now decided to reply. For debugging purposes the message content was logged in the NM logfile along with this error, which may aid in debugging any hung modules. If the problem occurs repeatedly or a general protocol bug is suspected, see Appendix A , “Submitting a CR,” of this manual.

680 CLAS0002 **MESSAGE: INTERNAL ERROR; Configuration file error**

**CAUSE:** While reading the home node’s path report during initial NETCP startup, or while starting some network specific protocols for a LAN, GATEHALF or ROUTER network because a :NETCONTROL command was issued, NETCP encountered error when trying to compute the total length of some NMCONFIG file data, prior to getting a buffer large enough to hold all that data (PARM = 32-bit status returned by the call to nmconfdatalength).

**ACTION:** You may have attempted to configure a larger network than is currently supported by Transport; save a copy of your current NMCONFIG file, then reduce the size of your configuration and try the operation again. If your network is small and you therefore do not suspect size as the cause, there may be some problem with the NMS subsystem, NMMGR, or NETCP, so see Appendix A , “Submitting a CR,” of this manual.

681 CLAS0002 **MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While reading the home node’s path report during initial NETCP startup, or while starting some network specific protocols for a LAN, GATEHALF or ROUTER network because a :NETCONTROL command was issued, NETCP successfully read path report data from the NMCONFIG file, then encountered an error trying to write that

data into a buffer it obtained a short time earlier (PARM = 32-bit status returned by the call to `bmgr_write_buffer`).

**ACTION:** NETCP was unable to write all the required data, and attempted to recover and free the buffer. The network operation that was being performed will not work correctly. Because the buffer given to NETCP by the buffer manager should have been large enough to contain all data that was to be written, there may be a problem in either NETCP, the buffer manager, the NMS subsystem, or NMMGR, or the NMCONFIG file may be corrupt. Stop the network and retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

682 CLAS0002

**MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While reading X25 configuration data because a `:NETCONTROL` command was issued, NETCP successfully read X25 data from the NMCONFIG file, then encountered an error trying to write that data into a buffer it obtained a short time earlier (PARM = 32-bit status returned by the call to `bmgr_write_buffer`).

**ACTION:** NETCP stopped trying to load additional X25 data; some required data may not have been loaded, but startup of that network probably continued. Some or all X25 nodes may not be accessible. Because the buffer given to NETCP by the buffer manager should have been large enough to contain all data that was to be written, there may be a problem in either NETCP, the buffer manager, the NMS subsystem, NMMGR, or the NMCONFIG file may be corrupt. Use NMMGR to check the X25 configuration in the file. Stop the network and retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

683 CLAS0002

**MESSAGE: BUFFER MANAGER; Buffer manager error**

**CAUSE:** While reading X25 configuration data because a `:NETCONTROL` command was issued, NETCP successfully computed the size of all applicable X25 data in the NMCONFIG file, then encountered an error trying to write a small descriptive header onto the start of a a buffer it obtained a short time earlier to hold all the X25 configuration data (PARM = 32-bit status returned by the call to `bmgr_write_buffer`).

**ACTION:** No X25 data was actually buffered, and NETCP attempted to recover and free the buffer. Though startup of that X25 network probably continued, the network will not operate correctly. Because the buffer given to NETCP by the buffer manager should have been large enough to contain all data that was to be written, there may be a problem in either NETCP, the buffer manager, the NMS subsystem, NMMGR, or the NMCONFIG file may be corrupt. Stop the network and retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.



- 684 CLAS0002      **MESSAGE: BUFFER MANAGER; Buffer manager error**
- CAUSE:** After NETCP successfully wrote configuration data for an X25 network into a buffer it obtained earlier, because a :NETCONTROL command was issued, while trying to crossmatch the X25 mappings NETCP encountered an error trying to read a data entry out of that same buffer (PARM = 32-bit status returned by the call to `bmgr_read_buffer`).
- ACTION:** The current matching operation stopped, then more merging of X25 mappings may have continued, possibly causing more errors, then the bad configuration data was passed to the X25 protocol module. The X25 network will probably not operate correctly now. Because NETCP already wrote to the buffer, it should have also been able to read from it; probable causes are a bug in NETCP or in the buffer manager. Stop the network and retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 685 CLAS0002      **MESSAGE: BUFFER MANAGER; Buffer manager error**
- CAUSE:** After NETCP successfully wrote configuration data for an X25 network into a buffer it obtained earlier, because a :NETCONTROL command was issued, while trying to crossmatch the X25 mappings NETCP successfully read one data entry out of that buffer, then encountered an error trying to read other data entries to match up to the first one (PARM = 32-bit status returned by the call to `bmgr_read_buffer`).
- ACTION:** The current matching operation stopped, then more merging of X25 mappings may have continued, possibly causing more errors, then the bad configuration data was passed to the X25 protocol module. The X25 network will probably not operate correctly now. Because NETCP already wrote to the buffer, it should have also been able to read from it; since it already read once, this indicates a probable bug in NETCP. Stop the network and retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 686 CLAS0002      **MESSAGE: BUFFER MANAGER; Buffer manager error**
- CAUSE:** After successfully opening the NSDIR network directory file, while preparing to read X25 network directory information from the file, NETCP was unable to obtain a buffer from its own buffer pool large enough to hold the maximum possible number of X25 mapping entries (PARM = 32-bit status returned by the call to `bmgr_get_buffer`). The size of the buffer NETCP tried to obtain was based on the size of the mapping table, a value which was obtained from a hidden field in the NI record of the NMCONFIG file.
- ACTION:** No network directory data was read, and NETCP attempted to recover and close the opened file. Some versions of transport may then attempt to build X25 mappings, even though no buffer was obtained, and send a restart message to X25. After the error, network startup may continue to completion, but the resulting network will probably not

operate correctly. Verify you have all the required patches, especially a coherent set of patches required to support 2048 X25 SVC paths under NMMGR and NS Transport. Also verify that the number of X25 paths configured in the NMCONFIG file is within the supported limits. If the problem still cannot be found, see Appendix A , “Submitting a CR,” of this manual.

688 CLAS0002     **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** While starting or updating a ROUTER network, because a :NETCONTROL command was issued, NETCP successfully started a LAPB link device, then encountered an error trying to read information from the NMCONFIG file about the number of mappings in that NI, prior to actually loading the mappings (PARM = 32-bit status returned by the call to nmconf3soninfo).

**ACTION:** No mapping entries were read, and though network startup probably continued to completion without a command error, you will not be able to connect to any remote nodes configured in the mapping entries. Verify you have a coherent set of patches installed, especially between Transport and NMMGR, and especially if your NMCONFIG file contains a large number of ROUTER mappings. Try stopping and restarting the network. If the problem persists, you may have a software installation problem, a bug in the NMS subsystem, or a corrupt NMCONFIG file; if necessary, see Appendix A , “Submitting a CR,” of this manual.

689 CLAS0002     **MESSAGE: Module Deconfig Failed**

**CAUSE:** While shutting down Transport due to a system shutdown or a :NETCONTROL STOP command, NETCP encountered an error trying to delete the NETIPC Socket Registry module (PARM. (0:16) = error location within SOCKREG.NET.SYS and PARM. (16:16) = error status from SOCKREG).

**ACTION:** This error in itself was not fatal, and shutdown continued. However, depending on the error it may not be possible to restart Transport without first restarting the system. See Appendix A , “Submitting a CR,” of this manual.

690 CLAS0002     **MESSAGE: Data dictionary error**

**CAUSE:** While shutting down Transport due to a system shutdown or a :NETCONTROL STOP command, after attempting to delete the NETIPC Socket Registry module, NETCP discovered a CM Port Dictionary entry named "SOCKREGISTRY" had not been deleted (PARM = 32-bit port number of the SOCKREG.NET.SYS process which failed to delete the entry).

**ACTION:** This error in itself was not fatal, and shutdown continued. However, the entry should have been deleted, and now it will not be possible to restart Transport without first restarting the system. See Appendix A , “Submitting a CR,” of this manual.

- 691 CLAS0002     **MESSAGE: INTERNAL ERROR; No DEVS**
- CAUSE: While starting an X.25 network due to a :NETCONTROL START command, or while updating it due to a :NETCONTROL UPDATE command, NETTCP found that none of the X.25 address keys in the Network Directory file matched any keys in the NMCONFIG file's SVC or PVC configurations for that X.25 network (PARM = 0).
- ACTION: This error in itself was not fatal, and startup continued. However, outbound connections cannot be initiated using this X.25 network. Stop the network and use NMMGR to ensure the address keys in the "Additional Address" field of X.25 Network Directory entries match "X.25 Address Key" fields in the NETXPORT.NI.name.PROTOCOL.X25.SVCPATH (or PVCSPATH) screens of the NMCONFIG file. If this does not solve the problem, see Appendix A , "Submitting a CR," of this manual.
- 751 CLAS0003     **MESSAGE: INBOUND; Device connected.**
- CAUSE: NETTCP received a connect event and subsequently the LAPB device for which the connect event was received has been connected.
- ACTION: None. This is an informative message only.
- 758 CLAS0002     **MESSAGE: Bad status**
- CAUSE: NETTCP encountered an error while sending a disconnect message to LAPBMUX driver.
- ACTION: NETTCP will fail to properly stop the network and/or the driver. But this may not affect other networks on the system. Try to restart the network and if it fails, see Appendix A , "Submitting a CR."
- 759 CLAS0002     **MESSAGE: Receive mag failed**
- CAUSE: NETTCP had sent a disconnect request message but didn't get a reply message for more than 30 seconds from the LAPBMUX driver.
- ACTION: NETTCP may fail to properly stop the network and/or the driver. But this may not affect other networks on the system. Try to restart the network and if it fails, see Appendix A , "Submitting a CR."
- 760 CLAS0002     **MESSAGE: INTERNAL ERROR; Bad/unknown port message**
- CAUSE: NETTCP had sent a disconnect request and was expecting a disconnect reply message from the LAPBMUX link driver but received a message which was not a disconnect reply.
- ACTION: NETTCP may fail to properly stop the network and/or the driver. But this may not affect other networks on the system. Try to restart the network and if it fails, see Appendix A , "Submitting a CR."
- 761 CLAS0002     **MESSAGE: INTERNAL ERROR; Device disconnect failed**
- CAUSE: NETTCP had received a disconnect reply message for its previous disconnect request but LAPPMUX link driver has sent a bad

status in its reply.

**ACTION:** NETCP may fail to properly stop the network and/or the driver. But this may not affect other networks on the system. Try to restart the network and if it fails, see Appendix A , “Submitting a CR.”

762 CLAS0002 **MESSAGE: Bad status**

**CAUSE:** NETCP encountered an error while sending a connect message to LAPBMUX link driver.

**ACTION:** This link will not be completely started and no higher level (TCP) connections could be established over this link. Try to stop the network and restart it. If the problem persists, see Appendix A , “Submitting a CR.”

763 CLAS0002 **MESSAGE: Receive msg failed**

**CAUSE:** NETCP had sent a connect request message but didn't get a reply message from the driver within 10 seconds.

**ACTION:** The link will not be completely started and no higher level (TCP) connections could be established over this link. Try to stop the network and restart it. If the problem persists, see Appendix A , “Submitting a CR.”

764 CLAS0002 **MESSAGE: INTERNAL ERROR; Bad/unknown port message**

**CAUSE:** NETCP had sent a connect request and was expecting a connect reply message from the driver but received a message which was not a connect reply.

**ACTION:** NETCP goes back to wait for further messages. But the connect request initiated by NETCP may fail and this results in further network problems. If this occurs while trying to start a network, try restarting the network. If the problem persists, see Appendix A , “Submitting a CR.”

765 CLAS0002 **MESSAGE: INTERNAL ERROR; Device connect failed.**

**CAUSE:** NETCP encountered an error while sending a connect message to LAPBMUX link driver.

**ACTION:** The link will not be completely started and no higher level (TCP) connections could be established over this link. Try to stop the network and restart it. If the problem persists, see Appendix A , “Submitting a CR.”

768 CLAS0002 **MESSAGE: INTERNAL ERROR; Device connect failed**

**CAUSE:** NETCP had received a connect reply message for its previous connect request but the driver has sent a bad status in its reply.

**ACTION:** The link will not be completely started and no higher level (TCP) connections could be established over this link. Try to stop the network and restart it. If the problem persists, see Appendix A ,

“Submitting a CR.”

769 CLAS0002

**MESSAGE: INTERNAL ERROR; Async request from link**

CAUSE: NETCP received an asynchronous event message containing an error status, from the LAPBMUX driver.

ACTION: NETCP stopped the device associated with the link, also stopped any attached protocol and drivers. It may be possible to restart the device using :NETCONTROL ADDLINK=linkname; NET=niname. If the problem persists, see Appendix A , “Submitting a CR.”

770 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

CAUSE: NETCP received a connect event message from the LAPBMUX link driver for the LAPB device, which does not exist.

ACTION: This error is not fatal, however if the error occurs repeatedly, see Appendix A , “Submitting a CR.”

771 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

CAUSE: NETCP received a disconnect event message from the LAPBMUX link driver for the LAPB device, which does not exist.

ACTION: This error is not fatal, however if the error occurs repeatedly, see Appendix A , “Submitting a CR.”

772 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

CAUSE: NETCP received an Exception event message from the LAPBMUX link driver for the LAPB device, which does not exist.

ACTION: This error is not fatal, however if the error occurs repeatedly, see Appendix A , “Submitting a CR.”

## NS Configurator Logging Location Codes

Several NS Configurator modules are called by the NETCP process of Network Transport. Each of these is responsible for starting or stopping one Transport module, and performs only those module-specific actions which are needed.

Errors in this section apply to one or more of the following NS entities:

- 151 = **IP** Configurator and Deconfigurator
- 152 = **UDP** Configurator and Deconfigurator
- 153 = **ICMP Server** (PING) Configurator and Deconfigurator
- 154 = **L2Resolve** (NS over SNA) Configurator and Deconfigurator
- 155 = **X.25** Configurator and Deconfigurator
- 156 = **NI** Configurator and Deconfigurator (all link types)
- 157 = **PROBE** Configurator and Deconfigurator
- 158 = **IP Update** (IPU) Configurator and Deconfigurator
- 159 = **DIAL** Configurator and Deconfigurator
- 160 = **PXP** Configurator and Deconfigurator

2 CLAS0002

### **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, some specific data could not be read from the NMCONFIG file (PARM = 16-bit status returned by the call to nmconfgetdata).

**ACTION:** Use NMMGR to check and validate the NMCONFIG file. Then retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

3 CLAS0002

### **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new NI or a new protocol module for an existing NI, one of the following code routines was not found in the NL: the module itself, its Read Completer, or the FDDI Read Completer (PARM = 32-bit status returned by the call to hpgetsysplabel).

**ACTION:** Use NMMGR to check and validate the NMCONFIG file. Then retry the operation. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

4 CLAS0002

### **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new NI or a new protocol module for an existing NI, after successfully creating a Port Data Area and locating a server label, an error occurred while trying to create a

message port for the module (PARM = 32-bit status returned by the call to `create_port`).

**ACTION:** There may be a problem with the Ports subsystem of MPE, or the system may be low on memory. If necessary, see Appendix A , “Submitting a CR,” of this manual.

5 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, after successfully creating a Port Data Area, an error occurred while trying to create a message pool for the modules message port (PARM = 32-bit status returned by the call to `create_pool`).

**ACTION:** There may be a problem with the Ports subsystem of MPE, or the system may be low on memory. If necessary, see Appendix A , “Submitting a CR,” of this manual.

6 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, after successfully creating some data structure, an error occurred while trying to add that structure's ID into the NS Registry (PARM = 32-bit status returned by the call to `reg_add_entity`).

**ACTION:** The NS registry may be full. Try stopping and restarting Transport. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

7 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new NI or a new protocol module for an existing NI, after successfully creating a message port for the module, an error occurred while trying to send the first initialization message to it (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** There may be a problem with the Ports subsystem of MPE. See Appendix A , “Submitting a CR,” of this manual.

8 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, after successfully creating a message port for the module and sending other messages to it, an error occurred while trying to send a Protocol Start message (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** There may be a problem with the Ports subsystem of MPE or a bug in the Module Configurator. See Appendix A , “Submitting a CR,” of this manual.

9 CLAS0002 **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, after successfully creating a message port for the module

and sending other messages to it, an error occurred while trying to send an Information message (PARM = 32-bit status returned by the call to send\_msg).

**ACTION:** There may be a problem with the Ports subsystem of MPE or a bug in the Module Configurator. See Appendix A , “Submitting a CR,” of this manual.

11 CLAS0002      **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new NI or a new protocol module for an existing NI, an error occurred while trying to create a Port Data Area for the module (PARM = 32-bit status returned by the call to create\_object).

**ACTION:** There may be a problem with the Ports subsystem of MPE, or the system may be low on memory. It is also possible bad data in the NMCONFIG file has caused size calculations to overflow (see Control Process error 654). Check memory usage and the NMCONFIG file, and if necessary, see Appendix A , “Submitting a CR,” of this manual.

12 CLAS0002      **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a process for a general protocol module, an error occurred while trying to start the process (PARM = 32-bit status returned by the call to createprocess).

**ACTION:** The program file (i.e., ICMPSERV.NET.SYS) may be missing or inaccessible, or there may be a problem with the program or with the Process Management or Loader subsystems of MPE. Check that the file exists and if necessary, see Appendix A , “Submitting a CR,” of this manual.

15 CLAS0002      **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create an address resolution protocol module for an existing NI, an error occurred while trying to obtain the station address of the hardware interface card used by that NI (PARM = 32-bit status returned by the call to lan\_8023\_station\_address).

**ACTION:** There may be an I/O configuration problem, a Link Services problem, or a problem with the driver or its hardware. Check the configuration and the hardware and if necessary, see Appendix A , “Submitting a CR,” of this manual.

16 CLAS0002      **MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, an error occurred while trying to read the pool ID for that modules message port (PARM = 32-bit status returned by the call to xp\_get\_pool\_id).

**ACTION:** There may be a problem with the port\_info call into the Ports subsystem of MPE. See Appendix A , “Submitting a CR,” of this



manual.

17 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, after successfully creating a message port for the module, an error occurred while trying to release ownership of the port (PARM = 32-bit status returned by the call to `port_control`).

**ACTION:** There may be a problem with the Ports subsystem of MPE or a bug in the Module Configurator. See Appendix A , “Submitting a CR,” of this manual.

18 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, after successfully creating a message port for the module and sending other messages to it, an error occurred while trying to send a Bind message (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** There may be a problem with the Ports subsystem of MPE or a bug in the Module Configurator. See Appendix A , “Submitting a CR,” of this manual.

19 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to destroy a protocol module attached to an NI, or the NI itself, an error occurred while trying to send a termination message to the module (PARM = 32-bit status returned by the call to `send_msg`).

**ACTION:** Resources allocated to the module were not released. There may be a problem with the Ports subsystem of MPE, a bug in the Module Deconfigurator, or the modules port may be full. If this problem occurs every time, see Appendix A , “Submitting a CR,” of this manual.

20 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to unbind or destroy a protocol module attached to an NI, after successfully sending a termination message to the module and awaiting a reply message, the reply received was not a termination reply (PARM = 0).

**ACTION:** Resources allocated to the module were not released. Another module may have unexpectedly sent a message to the reply subqueue of NETCP’s Transport port, or the module which received the termination message may be confused. If this problem occurs every time, see Appendix A , “Submitting a CR,” of this manual.

21 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to destroy a protocol module attached to an NI, after successfully sending a termination message to the module and awaiting a reply message, a reply was received but the

function code in the reply was not for a termination message (PARM = 0).

**ACTION:** Resources allocated to the module were not released. Another module may have unexpectedly sent a message to the reply subqueue of NETCP's Transport port, or the module which received the termination message may be confused. If this problem occurs every time, see Appendix A , "Submitting a CR," of this manual.

22 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to create a new protocol module for an existing NI, after successfully creating a Compatibility Mode message port DST for the module, an error occurred while trying to form a Native Mode pointer into that DST (PARM = 32-bit status returned by the call to `convert_dst`).

**ACTION:** The DST may not have been built correctly. There may be a problem with the Ports subsystem of MPE, an addressing mismatch between the protocol module code and its Module Configurator, or a bug in the Module Configurator. See Appendix A , "Submitting a CR," of this manual.

24 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to destroy a protocol module attached to an NI, after a successful termination message exchange with the module and successful release of all other resources, an error occurred while trying to purge the modules message port (PARM = 32-bit status returned by the call to `purge_port`).

**ACTION:** The module may have been unexpectedly reinvoked by another processor, or there could be a problem with ownership of the port or a bug in the Ports subsystem of MPE. If this problem occurs every time, see Appendix A , "Submitting a CR," of this manual.

25 CLAS0002

**MESSAGE: INTERNAL ERROR; Internal resource error**

**CAUSE:** When NETCP attempted to destroy a protocol module attached to an NI, after a successful termination message exchange with the module and successful release of all other resources, an error occurred while trying to purge the modules Port Data Area (PARM = 32-bit status returned by the call to `release_object`).

**ACTION:** The object may have already been released by MPE when the port was purged, indicating a bug in the Module Deconfigurator. Otherwise there may be a problem with the Virtual Space Management subsystem of MPE. If this problem occurs every time, see Appendix A , "Submitting a CR," of this manual.

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## CX Logging Location Codes

- 1 CLAS0003     **MESSAGE: None**
- CAUSE: The NS keyword table was not allocated during system startup prior to an NS command execution.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0003     **MESSAGE: None**
- CAUSE: The NS global data segment was not allocated during system startup, or has been lost.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0003     **MESSAGE: None**
- CAUSE: Bad format in the ASCAT.NET.SYS catalog.
- ACTION: Check that the message sets of the ASCAT.NET.SYS catalog are correct. Run the MAKECAT utility to prepare the message catalog properly.
- 4 CLAS0003     **MESSAGE: None**
- CAUSE: The NS keyword table is not large enough to contain all keywords from the ASCAT.NET.SYS catalog.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0002     **MESSAGE: None**
- CAUSE: The NS keyword table extra data segment could not be allocated because of insufficient memory or free DSTs.
- ACTION: Contact your system manager to increase the number of configured DSTs or obtain more memory.
- 7 CLAS0003     **MESSAGE: None**
- CAUSE: The port used for communication between CI and the VT server could not be added to the MPE port dictionary.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 8 CLAS0003     **MESSAGE: None**
- CAUSE: The VT change request could not be sent to the DSDAD process port.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 9 CLAS0003     **MESSAGE: None**
- CAUSE: The start VT port message could not be sent to the VT server process.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 10 CLAS0003   **MESSAGE: None**
- CAUSE: A port for communication between the CI and CT server process could not be created.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0002   **MESSAGE: None**
- CAUSE: A port DST entry could not be allocated for the port between the CI and VT server.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS0003   **MESSAGE: None**
- CAUSE: The VT service could not be initiated.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 13 CLAS0003   **MESSAGE: None**
- CAUSE: A port message with an unexpected function code was received from the VT server process.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14 CLAS0002   **MESSAGE: None**
- CAUSE: The VT server process could not be created.
- ACTION: If the DSSERVER.NET.SYS program is missing, restore it from the NS product tape. If there are no DSSERVERs running, then try to run DSSERVER.NET.SYS to see if there are any loader errors. Wait for the number of DSSERVERs to decrease, or increase the maximum number of DSSERVERs by NSCONTROL SERVER = DSSERVER, ,wmax. (Only users with NM capability can use the NSCONTROL command.) See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS0002   **MESSAGE: None**
- CAUSE: The local VT sever (VTL) has not been started via an NSCONTROL command.
- ACTION: Issue NSCONTROL START or NSCONTROL START=VTL to start the local service, or wait until the service is started. (Only users with NM capability, who also have ALLOW capability, can use the NSCONTROL command.)
- 16 CLAS0003   **MESSAGE: None**
- CAUSE: An NSCONTROL ABORT has been issued.
- ACTION: Issue NSCONTROL START, or wait until the service is started. (Only users with NM capability, who also have ALLOW capability, can use the NSCONTROL command.)

- 18 CLAS0002      **MESSAGE: None**  
CAUSE: A port message with the remote command could not be sent from the CI to the VT server process.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 19 CLAS0003      **MESSAGE: None**  
CAUSE: A port message send to DSDAD failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 21 CLAS0003      **MESSAGE: None**  
CAUSE: The DSLINE JCW, set to the DSLINE number by the NS software, could not be found.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 22 CLAS0003      **MESSAGE: None**  
CAUSE: Not enough stack space to execute the NS command.  
ACTION: Prepare or link the program with more stack space.
- 23 CLAS0003      **MESSAGE: None**  
CAUSE: Internal resource problem. Could not get DST for NSCONTROL status command.  
ACTION: If this happens all the time then see Appendix A , “Submitting a CR,” of this manual.
- 24 CLAS0003      **MESSAGE: None**  
CAUSE: Internal resource error. Server terminated during VT\_START\_UP.  
ACTION: Reissue the command. If it happens again see Appendix A , “Submitting a CR,” of this manual.

## DC/LDM Logging Location Codes

DC/LDM (Data Comm Logical Device Manager) is a module between NS Transport and the LAP-B Driver, which helps provide NS over point-to-point Router networks.

2 CLAS0000

**MESSAGE: Send\_msg error**

CAUSE: While DC/LDM was attempting to send a message to another module, for some normal purpose (other than an error reply), the system routine `send_msg` reported an error.

ACTION: No message was sent. DC/LDM is now “sick” and cannot continue operating. An asynchronous error message was sent to all modules to which DC/LDM was bound. See Appendix A , “Submitting a CR,” of this manual.

4 CLAS0000

**MESSAGE: A connect event has been received from the lower manager**

CAUSE: This is not an error. DC/LDM received a connect-completion event message from one of the lower level drivers bound to it. This logs the fact the link is now connected.

ACTION: No action required. An asynchronous event message was sent to all modules to which DC/LDM was bound.

12 CLAS0000

**MESSAGE: Unable to obtain a message frame from target pool**

CAUSE: While DC/LDM was attempting to get a message frame from another port, for use as an event or reply message, the system routine `get_msg_frame` reported an error.

ACTION: DC/LDM is now “sick” and cannot continue operating. No message frame was obtained. See Appendix A , “Submitting a CR,” of this manual.

15 CLAS0000

**MESSAGE: Write request is invalid in current state**

CAUSE: A write event was invalid, or DC/LDM is sick, and a Compatibility mode write request was being worked on. Since that write cannot be completed, DC/LDM notifies the CM sender, and logs the original error.

ACTION: See Appendix A , “Submitting a CR,” of this manual.

16 CLAS0000

**MESSAGE: Send\_msg error while issuing CM reply**

CAUSE: During error processing of an invalid write event, DC/LDM encountered another error while trying to send the Compatibility mode error reply message back to the requester, when the system routine `send_msg` reported an error.

**ACTION:** No message was sent, so the CM module may not be aware any problem has occurred. This may affect other operations on the network. See Appendix A , “Submitting a CR,” of this manual.

17 CLAS0000 **MESSAGE: Invalid CM request received in current state**

**CAUSE:** During error processing of an invalid write event, DC/LDM discovered the message it was working on was not a write event message.

**ACTION:** The message should have been a write event, so this indicates an internal bug in DC/LDM. See Appendix A , “Submitting a CR,” of this manual.

18 CLAS0000 **MESSAGE: Send\_msg error while issuing NM reply**

**CAUSE:** While attempting to send an error reply message back to the sender of an earlier Native mode trace request or HLIO request, the system routine `send_msg` reported an error.

**ACTION:** No message was sent, so the sender may not be aware any problem has occurred. This may affect other operations on the network. DC/LDM is still operating. See Appendix A , “Submitting a CR,” of this manual.

19 CLAS0000 **MESSAGE: Invalid NM request received in current state**

**CAUSE:** In attempting to send an error reply message for an earlier HLIO request, DC/LDM hit a bug because that request was not understood by the code which sends the replies.

**ACTION:** The request should have been understood, so this indicates an internal bug in DC/LDM. No message was sent, so the sender may not be aware any problem has occurred. This may affect other operations on the network. DC/LDM is still operating. See Appendix A , “Submitting a CR,” of this manual.

20 CLAS0000 **MESSAGE: Invalid event received in current state**

**CAUSE:** An invalid event message was received by DC/LDM. Events cannot be replied to, but this logs the bad state DC/LDM was in at the time the event was received.

**ACTION:** If this was a read event, its buffer was freed; otherwise the event message was ignored. DC/LDM is still operating. See Appendix A , “Submitting a CR,” of this manual.

22 CLAS0000 **MESSAGE: Error in releasing CM request write buffer**

**CAUSE:** During error processing of an invalid write event, DC/LDM encountered another error while trying to free the `BMGR` buffer referenced by the bad write request message, but the system routine `bmgr_free_buffer` reported an error.

**ACTION:** DC/LDM will continue operating, but if this situation continues, the network may run out of buffers. In addition, any

subsequent network shutdown may hang. See Appendix A ,  
“Submitting a CR,” of this manual.

23 CLAS0000

**MESSAGE: Error in releasing write buffer in current state**

CAUSE: Upon entering into a “sick” state because of some other problem, DC/LDM attempted to clean up after the last message it received, in this case a read event message, but in trying to free the buffer in that message, the system routine `bmgr_free_buffer` reported an error.

ACTION: DC/LDM is in a “sick” state and cannot continue operating. In addition, one buffer may have been lost, so any subsequent network shutdown may hang. See Appendix A , “Submitting a CR,” of this manual.

24 CLAS0000

**MESSAGE: Internal error — invalid state**

CAUSE: After receiving a message instructing it to do something, and figuring out what that message was, DC/LDM discovered its current state was not a known state.

ACTION: DC/LDM is now “sick” and cannot continue operating; probably its context memory has somehow been overwritten. DC/LDM also attempted to send an asynchronous error message to all modules to which it was bound, but if the context was indeed corrupt, these may not have been sent. Immediately take a memory dump and see Appendix A , “Submitting a CR,” of this manual.

25 CLAS0000

**MESSAGE: Invalid message was received and discarded**

CAUSE: DC/LDM received an input message which it did not understand at all, and could not process.

ACTION: The input message was ignored, and DC/LDM is still operating. However, whichever module sent the bad message sent it to the wrong place, so there is a problem in that other module. See Appendix A , “Submitting a CR,” of this manual.

27 CLAS0000

**MESSAGE: Insufficient frames for inbound packets — packet discarded**

CAUSE: While processing a read event message from a lower level driver, DC/LDM attempted to get a message frame from the upper level NI port, but the system routine `get_msg_frame` reported there were no message frames available.

ACTION: No message frame was obtained. DC/LDM is still operating, but the system is probably under a very heavy load. The inbound packet was dropped by DC/LDM, and the remote will probably retransmit it later. No action is required.



- 33 CLAS0000      **MESSAGE: Asynchronous error event received from lower manager**
- CAUSE: DC/LDM received a fatal error notification event message from a lower level LAN or LAP-B driver. This logs the error status reported by that driver.
- ACTION: DC/LDM is still operating, but the driver is probably not. It has flushed (replied to) any pending requests for the link which reported the error. An asynchronous error message was sent to all modules to which DC/LDM was bound. See Appendix A , “Submitting a CR,” of this manual.
- 34 CLAS0000      **MESSAGE: Asynchronous warning event received from lower manager**
- CAUSE: DC/LDM received a nonfatal asynchronous warning event message from a lower level LAN or LAP-B driver. This logs the status reported by that driver.
- ACTION: An asynchronous event message was sent to all modules to which DC/LDM was bound. DC/LDM is still operating, but the driver may be having problems. No action required.
- 37 CLAS0000      **MESSAGE: Port error while obtaining message for inbound packet**
- CAUSE: While processing a read event message from a lower level driver, DC/LDM attempted to get a message frame from the upper level NI port, but the system routine `get_msg_frame` reported an error other than a lack of message frames.
- ACTION: No message frame was obtained. The inbound packet was dropped. DC/LDM is now “sick” and cannot continue operating. See Appendix A , “Submitting a CR,” of this manual.
- 38 CLAS0000      **MESSAGE: Write sap is invalid**
- CAUSE: While processing a write request message from NI, DC/LDM discovered the SAP to write to had not yet been opened, but there was no reply port in the message to notify about this situation.
- ACTION: DC/LDM is still operating. The buffer in the write message was freed, but since the reply port number was unknown, no reply message was sent. This may or may not affect operations on the network or the application. If this problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 39 CLAS0000      **MESSAGE: Error encountered during removal of DC/LDM**
- CAUSE: While stopping the DC/LDM, an error occurred when deleting a CM Port Dictionary entry or `HLIO` device, when releasing a device, or because of a bad DC/LDM state.
- ACTION: DC/LDM continued stopping, but this could indicate a more serious problem in the High Level I/O system or the DC/LDM. If the problem occurs every time, see Appendix A , “Submitting a CR,” of this

manual.

**CAUSE:** While flushing its port subqueues, DC/LDM found an I/O request message on its port having a nonzero buffer ID, but when trying to free the BMGR buffer referenced by that message, the system routine `bmgr_free_buffer` reported an error.

**ACTION:** DC/LDM will continue stopping, but if this situation continues, the network may run out of buffers. In addition, any subsequent network shutdown may hang. See Appendix A , “Submitting a CR,” of this manual.

40 CLAS0000

**MESSAGE: Error encountered in configurator module**

**CAUSE:** While starting the DC/LDM, an error occurred when adding a CM Port Dictionary entry, reading the LSS link table, loading a manager label, allocating an HLIO device, creating an LDM port, adding a device, sending a message, or changing a port subqueue.

**ACTION:** DC/LDM did not start. See Appendix A , “Submitting a CR,” of this manual.

**CAUSE:** While stopping the DC/LDM, an error occurred when deleting a CM Port Dictionary entry or HLIO device, when releasing a device, or because of a bad DC/LDM state.

**ACTION:** DC/LDM continued stopping, but this could indicate a more serious problem in the High Level I/O system or the DC/LDM. If the problem occurs every time, see Appendix A , “Submitting a CR,” of this manual.

**CAUSE:** While flushing its port subqueues, DC/LDM found a read event message on its port having a nonzero buffer ID, but when trying to free the BMGR buffer referenced by that message, the system routine `bmgr_free_buffer` reported an error.

**ACTION:** DC/LDM will continue operating, but if this situation continues, the network may run out of buffers. In addition, any subsequent network shutdown may hang. See Appendix A , “Submitting a CR,” of this manual.

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## Dial ID Logging Location Codes

- 1 CLAS0001     **MESSAGE: None**  
  
CAUSE: A port message was received containing an invalid function code (PARM = function code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0004     **MESSAGE: None**  
  
CAUSE: Dial ID protocol started.  
  
ACTION: Informational message.
- 3 CLAS0002     **MESSAGE: None**  
  
CAUSE: The room allocated for the node name and path report is too small (PARM = required number of bytes needed).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0002     **MESSAGE: None**  
  
CAUSE: The packet received was not a valid Dial ID message type. The packet is discarded (PARM = message type of received packet).  
  
ACTION: Enable data trace for the Dial ID protocol when this log message is generated. See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS0001     **MESSAGE: None**  
  
CAUSE: The sending of a “dial” message to the Control Process using DICTSEND failed (PARM = result code of DICTSEND call).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0004     **MESSAGE: None**  
  
CAUSE: Dial ID protocol stopped.  
  
ACTION: Informational message.
- 7 CLAS0004     **MESSAGE: None**  
  
CAUSE: A port timer message was received with no matching request (PARM = timer request ID).  
  
ACTION: Informational message.
- 8 CLAS0003     **MESSAGE: None**  
  
CAUSE: Retransmission has occurred (PARM = index of device over which retransmission has occurred).  
  
ACTION: Informational message.

- 9 CLAS0001      **MESSAGE: None**  
CAUSE: The sending of a link shut message to the Control Process using DICTSEND failed (PARM = result code of DICTSEND call).  
ACTION: Informational message.
- 10 CLAS0002      **MESSAGE: None**  
CAUSE: The status returned from the Control Process attempting to download the phone number to the device (PARM = result of NMLINKDIAL call).  
ACTION: Verify that the phone number is correct in the configuration file. See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0001      **MESSAGE: None**  
CAUSE: A port message was received on the timer subqueue but was not a timer message (PARM = function code of received message).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 16 CLAS0002      **MESSAGE: None**  
CAUSE: The maximum number of retransmissions has occurred over a link (PARM = index of the device that retransmission had occurred).  
ACTION: Verify why the remote node is not responding to the Dial ID packets. It is also possible that the remote node could be so congested that either the number of retransmissions or the retransmission interval configured for the Dial ID protocol is too short. Increase one of these values if the problem persists.
- 17 CLAS0005      **MESSAGE: None**  
CAUSE: A Dial ID transaction has been initiated over a device from the local node (PARM = index of the device).  
ACTION: Informational message.
- 18 CLAS0005      **MESSAGE: None**  
CAUSE: A Dial ID transaction has completed over a device (PARM = completion code and index of the device). The completion code is contained in the 4 upper bits of the PARM. (Completion codes are: (0) successful completion; (1) Retries exhausted; (3) PDX 'NAME' CACHE failed; (5) Request rejected by either the local or remote node; (6) internal error. The index of the device is contained in the lower 12 bits).  
ACTION: Informational message.
- 19 CLAS0002      **MESSAGE: None**  
CAUSE: A remote node is attempting connection and has failed because of one of the following reasons: (1) There is no mapping entry configured for the node attempting connection on a particular device; (2) There is a dial request outstanding to a node with a different IP

address than the one attempting connection. A reply rejecting the request is sent to the remote node.

**ACTION:** Verify that there is a valid mapping entry in the configuration file for the remote node.

20 CLAS0002 **MESSAGE: None**

**CAUSE:** A remote node is attempting connection and the network number of its IP address does not match the network number of the network interface over which the Dial ID protocol is active. A reply rejecting the request is sent to the remote node.

**ACTION:** Reconfigure either the remote node or local node so that the network number of their IP addresses match. It is also possible that the remote node is calling the wrong phone number, therefore getting routed to the wrong link and network interface.

21 CLAS0002 **MESSAGE: None**

**CAUSE:** A packet was received that did not contain a correct value for the version in the Dial ID header (PARM = version of received packet).

**ACTION:** Verify that the remote node has Dial ID configured for its link and is sending valid Dial ID packets. If the problem persists, enable data trace for the Dial ID protocol while this log message is generated. See Appendix A , “Submitting a CR,” of this manual.

22 CLAS0002 **MESSAGE: None**

**CAUSE:** Two nodes are initiating connection over a link simultaneously but the IP address of the remote is not what the local node expected. A reply rejecting the request is sent to the remote node.

**ACTION:** Initiate the connections either over separate links or at separate times.

23 CLAS0005 **MESSAGE: None**

**CAUSE:** A Dial ID transaction has been initiated over a device from a remote node (PARM = index of the device).

**ACTION:** Informational message.

27 CLAS0002 **MESSAGE: None**

**CAUSE:** The IP address of the remote node did not match the IP address that the local node intended to call (PARM = low word of IP address of the remote node). An acknowledgment rejecting the reply is sent to the remote node (PARM = result of BFMREADEBUF).

**ACTION:** Verify that the local node is using the correct link for the intended remote node and verify that the IP address in the mapping entry is correct.

- 33 CLAS0002      **MESSAGE: None**
- CAUSE: The sequence number of a reply packet sent from a remote node does not match sequence number sent in the request packet sent from the local node. Either the reply packet has been corrupted or the remote node is not responding correctly to the Dial ID request packet (PARM = sequence number received in the reply message).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 34 CLAS0002      **MESSAGE: None**
- CAUSE: A reply packet was received but the Dial ID protocol was not in the correct internal state to receive a reply (PARM = state of the Dial ID protocol).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 38 CLAS0002      **MESSAGE: None**
- CAUSE: A remote node is attempting connection and the network number of its IP address does not match the network number of the network interface over which the Dial ID protocol is active. An acknowledgment rejecting the reply is sent to the remote node.
- ACTION: Reconfigure either the remote node or local node so that the network number of their IP addresses match. It is also possible that the local node is calling the wrong phone number, therefore getting routed to the wrong link and network interface.
- 39 CLAS0002      **MESSAGE: None**
- CAUSE: The status field in a Dial ID reply packet was non-zero, meaning the remote node has rejected the local node’s request packet (IE. rejected the connection attempt). (PARM = reason for rejection: (1) The security string was invalid; (2) Format of the packet is bad; (3) The IP addresses contained in the Path Report was invalid; (4) Rejected for unknown reasons).
- ACTION: Based upon the PARM value, verify that the configuration is correct. It may be helpful to find the matching log message on the remote node that prompted the rejection.
- 40 CLAS0002      **MESSAGE: None**
- CAUSE: The status field of a Dial ID acknowledgment packet was non-zero, meaning the remote node has rejected the local node’s reply packet (i.e., rejected the connection attempt). (PARM = reason for rejection: (1) The security string was invalid; (2) Format of the packet is bad; (3) The IP address contained in the Path Report was invalid; (4) Rejected for unknown reasons).
- ACTION: Based upon the PARM value, verify that the configuration is correct. It may be helpful to find the matching log message on the remote node that prompted the rejection.

- 41 CLAS0002      **MESSAGE: None**  
  
CAUSE: An acknowledgment packet was received but the Dial ID protocol was not in the correct internal state to receive an ack (PARM = state of the Dial ID protocol)  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 42 CLAS0002      **MESSAGE: None**  
  
CAUSE: The sequence number of an acknowledgment packet does not match sequence number sent in the reply packet. Either the acknowledgment packet has been corrupted or the remote node is not responding correctly to the Dial ID reply packet (PARM = sequence number received in the ack message).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 43 CLAS0006      **MESSAGE: None**  
  
CAUSE: Dial ID is logging statistics prior to its port termination.  
  
ACTION: Informational message.
- 44 CLAS0002      **MESSAGE: None**  
  
CAUSE: There is no matching internal Dial ID queue element for the device in which an acknowledgment packet was just received (PARM = index of device).  
  
ACTION: It is possible that if the remote node is heavily congested the queue element can be deleted before the late packet arrives. This can be considered normal. If the problem does not appear to be related to this, then see Appendix A , “Submitting a CR,” of this manual.
- 45 CLAS0002      **MESSAGE: None**  
  
CAUSE: There is no matching internal Dial ID queue for the device in which a reply packet was just received (PARM = index of device).  
  
ACTION: It is possible that if the remote node is heavily congested the queue element can be deleted before the late packet arrives. This can be considered normal. If the problem does not appear to be related to this then see Appendix A , “Submitting a CR,” at the beginning of this manual.
- 46 CLAS0002      **MESSAGE: None**  
  
CAUSE: A call to the internal procedure PDX 'NAME' CACHE failed.  
  
ACTION: None.
- 47 CLAS0002      **MESSAGE: None**  
  
CAUSE: The security string contained in the remote node’s reply packet does not match any of the strings configured at the local node.  
  
ACTION: Verify that the security string configured under the Dial ID

protocol at the local node matches the one sent by the remote node.

48 CLAS0002

**MESSAGE: None**

**CAUSE:** The security string contained in the remote node's request packet does not match any of the strings configured at the local node.

**ACTION:** Verify that the security string sent by the remote node matches one in the list of security strings configured under the Dial ID protocol at the local node.

49 CLAS0002

**MESSAGE: None**

**CAUSE:** A duplicate (retransmitted) request packet has been received, but the sequence number of the packet does not match the sequence number of the previous request packet. The packet is discarded (PARM = sequence number contained in the duplicate packet).

**ACTION:** Either the packet was corrupted in transit or the remote node is not transmitting packets correctly. If thought to be the latter case see Appendix A , "Submitting a CR," of this manual.

50 CLAS0002

**MESSAGE: None**

**CAUSE:** The Dial ID protocol has detected that the configured link size is too small for the largest packet that may be sent by Dial ID (PARM = smallest link size acceptable to Dial ID in octal).

**ACTION:** Reconfigure so that the link is larger than the value contained in the PARM.

51 CLAS0002

**MESSAGE: None**

**CAUSE:** A duplicate (retransmitted) request packet has been received while two nodes are attempting connection simultaneously, but the sequence number of the packet does not match the sequence number of the previous request packet. The packet is discarded (PARM = sequence number contained in the duplicate packet).

**ACTION:** Either the packet was corrupted in transit or the remote node is not transmitting packets correctly. If thought to be the latter case see Appendix A , "Submitting a CR," of this manual.

52 CLAS0001

**MESSAGE: None**

**CAUSE:** A port message was received on the getbuf reply subqueue but was not a getbuf reply message (PARM = function code of received message).

**ACTION:** See Appendix A , "Submitting a CR," of this manual.

54 CLAS0002

**MESSAGE: None**

**CAUSE:** There is no matching internal Dial ID queue element for the device in which an ack-ack packet was just received (PARM = index of device).



**ACTION:** It is possible that if the remote node is heavily congested the queue element can be deleted before the late packet arrives. This can be considered normal. If the problem does not appear to be related to this then see Appendix A , “Submitting a CR,” of this manual.

55 CLAS0002

**MESSAGE: None**

**CAUSE:** The sequence number of an ack-ack packet does not match sequence number sent in the acknowledgment packet. Either the ack-ack packet has been corrupted or the remote node is not responding correctly to the Dial ID acknowledgment packet (PARM = sequence number received in the ack-ack message).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

56 CLAS0002

**MESSAGE: None**

**CAUSE:** An ack-ack packet was received but the Dial ID protocol was not in the correct internal state to receive an ack-ack (PARM = state of the Dial IP protocol).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

76 CLAS0002

**MESSAGE: None**

**CAUSE:** Dial attempted to start a retransmission timer while one was still pending.

**ACTION:** None.

82 CLAS0002

**MESSAGE: None**

**CAUSE:** A call to BFMSHAREBUF failed.

**ACTION:** None.

83 CLAS0003

**MESSAGE: None**

**CAUSE:** Dial is processing either a duplicate request (PARM = 0) or a simultaneous request (PARM = \$4000).

**ACTION:** None. Informational only.

84 CLAS0003

**MESSAGE: None**

**CAUSE:** Dial is processing a duplicate request, and no reply has been received from the original request.

**ACTION:** None. Informational only.

85 CLAS0002

**MESSAGE: None**

**CAUSE:** A call to BFMGETBUF failed when attempting to get an outbound buffer for a request packet (PARM = result of BFMGETBUF).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

- 86 CLAS0003     **MESSAGE: None**  
CAUSE: Dial is entering the TIME WAIT state after a normal ack-ack message.  
ACTION: None. Informational only.
- 87 CLAS0003     **MESSAGE: None**  
CAUSE: A link failure occurred, and Dial is cleaning up the resources (PARM = status).  
ACTION: None. Informational only.
- 88 CLAS0002     **MESSAGE: None**  
CAUSE: A call to BFMGETBUF failed when attempting to get an outbound buffer for a reply packet (PARM = result of BFMGETBUF).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 89 CLAS0002     **MESSAGE: None**  
CAUSE: A call to BFMGETBUF failed when attempting to get an outbound buffer for an acknowledgment packet (PARM = result of BFMGETBUF).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 90 CLAS0002     **MESSAGE: None**  
CAUSE: A call to BFMGETBUF failed when attempting to get an outbound buffer for an ack-ack packet (PARM = result of BFMGETBUF).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 91 CLAS0002     **MESSAGE: None**  
CAUSE: The Dial ID protocol has waited for approximately five minutes for transmission of a packet. The connection attempt is aborted.  
ACTION: If the link is a manual dial link, then the operator probably never dialed the phone or replied to the console request. If the link is an autodial link, then there could be failure with the autocal unit or the remote node is not answering the phone.
- 92 CLAS0002     **MESSAGE: None**  
CAUSE: Received an inbound dial request for a route that is already connected.  
ACTION: None.
- 93 CLAS0002     **MESSAGE: None**  
CAUSE: Timer expired but no matching queue element could be found.  
ACTION: None.

- 94 CLAS0002      **MESSAGE: None**  
  
CAUSE: Received a CP reply message after the start request timer has expired.  
  
ACTION: None.
- 95 CLAS0002      **MESSAGE: None**  
  
CAUSE: MAP\_CM\_DIAL\_INBOUND call failed with a MAP internal error. The MAP result code is in the parm field.  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 96 CLAS0002      **MESSAGE: None**  
  
CAUSE: MAP\_CM\_DIAL\_INBOUND call failed with an unknown error code. The error code is in the parm field.  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

## DSDAD Logging Location Codes

- 1 CLAS0003     **MESSAGE: None**  
CAUSE: Buffer space for DSDAD's global data structure could not be created.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 2 CLAS0003     **MESSAGE: None**  
CAUSE: Header for the DSDAD data structure could not be created.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 3 CLAS0003     **MESSAGE: None**  
CAUSE: DSDAD log buffer could not be created.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 4 CLAS0002     **MESSAGE: None**  
CAUSE: Entry for server type could not be created.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 5 CLAS0003     **MESSAGE: None**  
CAUSE: Server type number not found.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 6 CLAS0003     **MESSAGE: None**  
CAUSE: A port message buffer could not be allocated.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 7 CLAS0002     **MESSAGE: None**  
CAUSE: A port or socket wait entry could not be allocated.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 8 CLAS0005     **MESSAGE: None**  
CAUSE: IPCRECVCN on a socket failed.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 9 CLAS0005     **MESSAGE: None**  
CAUSE: Attempt to disable timeout on a socket failed.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 10 CLAS0005    **MESSAGE: None**  
CAUSE: Attempt to make socket nowait failed.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0005     **MESSAGE: None**  
CAUSE: Attempt to create a socket failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 22 CLAS0003     **MESSAGE: None**  
CAUSE: Request for a server initiation could not be satisfied because of an invalid port message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 23 CLAS0003     **MESSAGE: None**  
CAUSE: Server startup request contained an invalid server ID number.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 24 CLAS0003     **MESSAGE: None**  
CAUSE: Request to stop a server contained an invalid server ID number.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 25 CLAS0003     **MESSAGE: None**  
CAUSE: A ServerDead message contained an invalid server ID number.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 26 CLAS0003     **MESSAGE: None**  
CAUSE: DSDAD request function code is incorrect.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 27 CLAS0003     **MESSAGE: None**  
CAUSE: Control option number for processing NSCONTROL is bad.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 28 CLAS0005     **MESSAGE: None**  
CAUSE: Socket could not be shutdown.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 29 CLAS0005     **MESSAGE: None**  
CAUSE: Port name could not be deleted from the port dictionary.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 30 CLAS0005     **MESSAGE: None**  
CAUSE: Could not add the process ID for DSDAD to the NMMON process.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 31 CLAS0003     **MESSAGE: None**  
CAUSE: ServerInSession request could not be handled because server entry was not found.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 32 CLAS0003     **MESSAGE: None**  
CAUSE: Logoff entry could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 33 CLAS0003     **MESSAGE: None**  
CAUSE: Internal error — No Server entry found for PIN in CnctRecved msg.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 34 CLAS0003     **MESSAGE: None**  
CAUSE: IPCGET of a connection failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 35 CLAS0003     **MESSAGE: None**  
CAUSE: Resource error — Could not allocate buffer for the change group request message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 36 CLAS0003     **MESSAGE: None**  
CAUSE: Total number of existing servers reached the max limit. Could not create the new server.  
ACTION: Wait until some of the existing servers are released and reissue the command.
- 37 CLAS0003     **MESSAGE: None**  
CAUSE: Resource error — Could not allocate the buffer for Job logoff request.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

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## DSSERVER Logging Location Codes

- 1 CLAS0003     **MESSAGE: None**  
CAUSE: DSSERVER stack log buffer could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0003     **MESSAGE: None**  
CAUSE: DSSERVER header for data structures could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0003     **MESSAGE: None**  
CAUSE: Stack buffer space for DSSERVER data structures could not be created.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0002     **MESSAGE: None**  
CAUSE: Port message buffer could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS0002     **MESSAGE: None**  
CAUSE: Wait entry for a port could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0002     **MESSAGE: None**  
CAUSE: Could not get an AFT entry for a port.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS0002     **MESSAGE: None**  
CAUSE: Could not create a port.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 8 CLAS0002     **MESSAGE: None**  
CAUSE: Could not get a data segment entry to create a port.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 9 CLAS0003     **MESSAGE: None**  
CAUSE: Could not add a port to the port dictionary.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 10 CLAS0003    **MESSAGE: None**  
CAUSE: No I/O pending when a nowait I/O completed.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0003   **MESSAGE: None**  
CAUSE: Could not find a wait entry for nowait I/O which completed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS0003   **MESSAGE: None**  
CAUSE: The VT service reported an error.  
ACTION: Repair the VT error, if possible.
- 13 CLAS0003   **MESSAGE: None**  
CAUSE: RFA service reported an error.  
ACTION: Repair the error, if possible.
- 14 CLAS0003   **MESSAGE: None**  
CAUSE: PTOP service reported an error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS0005   **MESSAGE: None**  
CAUSE: Attempt to get an existing IPC connection failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 16 CLAS0003   **MESSAGE: None**  
CAUSE: Invalid server information number in the port message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 17 CLAS0003   **MESSAGE: None**  
CAUSE: Function number in port message is bad.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 18 CLAS0003   **MESSAGE: None**  
CAUSE: Number of service counter for a server is not 1.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 19 CLAS0003   **MESSAGE: None**  
CAUSE: Attempt to adopt server process under DSDAD failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 20 CLAS0003   **MESSAGE: None**  
CAUSE: RPM service reported an error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.



## DSUTIL Logging Location Codes

8 CLAS0002

**MESSAGE:** None

**CAUSE:** SYSTEM reached maximum allowable limit of NFT servers. Limit is set by the NSCONTROL command. Users request servers with the DSCOPY command or the DSCOPY intrinsic.

**ACTION:** Wait until fewer DSCOPY applications are running on the system. Try again. Or ask the system manager to raise the limit of allowable NFT servers (via NSCONTROL). If any other internal errors (CLAS0000) are logged for the DSUTIL module of the Network Services subsystem, see Appendix A , “Submitting a CR,” of this manual.

## ENV Logging Location Codes

- 1 CLAS0002     **MESSAGE: None**  
CAUSE: Buffer space for DSLINE table could not be created.  
ACTION: Increase the number of configured DSTs.
- 2 CLAS0003     **MESSAGE: None**  
CAUSE: Trace file for an NS service could not be opened.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0003     **MESSAGE: None**  
CAUSE: Trace file for an NS service could not be closed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0003     **MESSAGE: None**  
CAUSE: Item missing in call to get or set the environment table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS0003     **MESSAGE: None**  
CAUSE: Item number missing in call to get or set the environment table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0003     **MESSAGE: None**  
CAUSE: Use count for an environment is negative.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS0002     **MESSAGE: None**  
CAUSE: Not enough stack space to set critical while modifying the environment table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 8 CLAS0002     **MESSAGE: None**  
CAUSE: Important parameter missing in a call to get or set environment table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 9 CLAS0003     **MESSAGE: None**  
CAUSE: Non-zero session ID was not able to be created in 10 iterations of a random number generator.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 10 CLAS0002      **MESSAGE: None**  
CAUSE: Extra data segment not available to create the session ID table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0003      **MESSAGE: None**  
CAUSE: No NS global table could be found.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS0002      **MESSAGE: None**  
CAUSE: Unable to get an entry in the session ID table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 13 CLAS0003      **MESSAGE: None**  
CAUSE: Session ID table could not be found.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14 CLAS0003      **MESSAGE: None**  
CAUSE: Session count for a session ID table entry is negative.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS0003      **MESSAGE: None**  
CAUSE: Process terminates without unlocking the DSTABLE.  
ACTION: This is only a warning. But this has to be reported to the Lab.  
See Appendix A , “Submitting a CR,” of this manual.

## ICMP Type/Code Words

The following describes how to interpret the Parameter value (Parm Value) of a logging location that uses this value as the ICMP Type/Code Word. The Network Transport Entities PXP SIP and TCP SIP log the event that an ICMP message was received. The Parameter value, which is shown in hexadecimal, must be interpreted as a two byte value. The first byte indicates the ICMP message type and the second byte indicates the code. The second byte is only meaningful for two types of ICMP messages, Destination Unreachable and Time Exceeded.

The Parameter Value is in the left-hand column.

300

**MESSAGE: Destination Unreachable.**

**CAUSE:** A gateway or intermediate router node was unable to forward the IP datagram that originated from the node that logs this message. According to the gateway or router node routing tables, the destination network is unreachable.

**ACTION:** Verify that the routing information about the destination node in the configuration file of the source (local) node is correct. Verify that the destination node is operational. If the destination node is in a router network, verify that the routing information to the nodes along the datagram's path is correct and the links and NIs are started in those nodes. If the destination node is located in a network different than the source (local) node, verify that the routing information at the gateways along the datagram's path is correct and the links and NIs are started.

301

**MESSAGE: Destination Unreachable.**

**CAUSE:** A gateway or intermediate router node was unable to forward the IP datagram that originated from the node that logs this message. According to the gateway or router node routing tables, the destination node is unreachable.

**ACTION:** Verify that the routing information about the destination node in the configuration file of the source (local) node is correct. Verify that the destination node is operational. If the destination node is in a router network, verify that the routing information at the intermediate nodes along the datagram's path is correct and the links and NIs are started at those nodes. If the destination node is located in a network different than the source (local) node, verify that the routing information at the gateways along the datagram's path is correct and the links and NIs are started.

302

**MESSAGE: Destination Unreachable.**

**CAUSE:** The destination node was unable to deliver the IP datagram that originated from the node that logs this message. According to the

destination node, the IP module cannot deliver the datagram because the indicated protocol (TCP or PXP) is not active.

**ACTION:** This ICMP message should not occur in normal network operation between HP nodes. Contact your Hewlett-Packard representative for assistance.

303 **MESSAGE: Destination Unreachable.**

**CAUSE:** The destination node was unable to deliver the IP datagram that originated from the node that logs this message. According to the destination node, the IP module cannot deliver the datagram because the socket (port) is not open.

**ACTION:** This ICMP message should not occur in normal network operation between HP nodes. Contact your Hewlett-Packard representative for assistance.

304 **MESSAGE: Destination Unreachable.**

**CAUSE:** A gateway was unable to forward the IP datagram that originated from the node that logs this message. The datagram must be fragmented but the Don't Fragment Flag is on.

**ACTION:** This ICMP message should not occur in normal network operation between HP nodes. Contact your Hewlett-Packard representative for assistance.

305 **MESSAGE: Destination Unreachable.**

**CAUSE:** The gateway was unable to deliver the IP datagram that originated from the node that logs this message. According to the gateway, the IP module cannot deliver the datagram because of a source route failure. Source routes are configured in the Options field of the IP header.

**ACTION:** This ICMP message should not occur in normal network operation between HP nodes.

C00 **MESSAGE: Parameter Problem**

**CAUSE:** The destination node or gateway was unable to deliver the IP datagram that originated from the node that logs this message because of problems with the header parameters. One potential source of such a problem is incorrect arguments in the Options field of the IP header.

**ACTION:** This ICMP message should not occur in normal network operation between HP nodes. Contact your Hewlett-Packard representative for assistance.

400 **MESSAGE: Source Quench.**

**CAUSE:** Several things can trigger source quench messages: (1) A gateway, intermediate router node or destination node was unable to forward or deliver the IP datagram because of lack of resources (e.g., buffers). (2) A gateway, intermediate router node or destination node

was unable to forward or deliver the IP datagram because the capacity limit of resource (e.g., buffers) is being approached. In this case, the IP datagram is NOT discarded. On receipt of a source quench ICMP message, the source will cut back its rate of TCP traffic to the destination node specified in the ICMP message. Source quench messages are sent to the source of the traffic and therefore logged at the source. The source node will gradually increase the rate at which it sends traffic to the destination.

**ACTION:** Reception of this ICMP message can occur in normal network operation, but if this problem persists, it may be necessary to review the resource allocation at the node generating the ICMP message. It may require increasing the number of store and forward buffers configured in the IP Protocol screen or the number of inbound buffers configured in the appropriate network interface screen. Care should be taken in increasing these values since this increases the queuing at these nodes and may result in longer delays. It is recommended that you review the traffic patterns and perhaps alter the routing information so that a better path is chosen.

500

**MESSAGE: Redirect.**

**CAUSE:** A gateway has received an IP datagram that originated from the node (local node) that logs this message. It indicates that the local node's routing information is incorrect or out-of-date. The Redirect message will cause the local node to send its traffic for the destination network to the gateway specified in the Redirect message.

**ACTION:** Reception of this ICMP message can occur in normal network operation. Depending on the cause of the Redirect message different actions should be taken. If the networks are operating on the gateway that sent the Redirect then the local node's routing information conflicts with the gateway's routing information. The conflict occurs when the local node thinks that the gateway sending the Redirect (G1) is the best path to a given network (N1), whereas G1 thinks that another gateway (G2) is best. The Redirect will dynamically alter the routing information in the local node so that traffic for N1 will be sent to G2 instead of G1. This new routing information will be lost when the local node's network transport is shut. In this case reconfigure either the local node or gateway so the routing information to N1 is consistent. The Redirect may also be caused by a link failure or a network that is not operational on the gateway (G1) that sent the Redirect. In this case, it is possible that G1 may, depending on the topology, misroute packets through the network. Immediate action should be taken to correct the failure at the gateway or reconfigure the local node to route traffic for a given network through another gateway.

600

**MESSAGE: Time Exceeded.**

**CAUSE:** A gateway or intermediate router node found that the Time-To-Live (TTL) field in the datagram is zero. Either a link has failed, to cause a packet to become lost in the network or the

Time-To-Live is too short.

**ACTION:** If after verifying all links are operational, it may be necessary to increase the Reachable Hop Count in the Static Neighbor Gateway Reachable Network screen during configuration. If the destination node is on a router network it may be necessary to increase the Network Hop Count in its Router Network Interface screen.

601

**MESSAGE: Time Exceeded.**

**CAUSE:** The destination node cannot complete the reassembly of an IP datagram within its time limit due to missing fragments. The timer is set at 15 seconds. Missing fragments can be caused by fragments that are lost in the network, fragments that are delayed for a long time (perhaps by a congested gateway), or caused by a corrupt datagram.

**ACTION:** Reception of this ICMP message can occur occasionally in normal network operation, but if this problem is persistent, determine the cause of the reassembly failure at the destination node by verifying the routing of packets from the source (local) node. Intermediate nodes or gateways may be heavily congested or routing may be incorrect. If the problem still cannot be determined, then contact HP for assistance.

## IP Logging Location Codes

- 101 CLAS0003    **MESSAGE: None**  
CAUSE: Received a port message containing an invalid function code (PARM = complete function code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 102 CLAS0004    **MESSAGE: None**  
CAUSE: Log IP port initiation (PARM = PDA\_ptr).  
ACTION: Informative.
- 103 CLAS0002    **MESSAGE: None**  
CAUSE: The length of the IP address alias list passed in an INFO message exceeds the space allocated for the list in the IP port (PARM = # of entries in the alias list).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 104 CLAS0006    **MESSAGE: None**  
CAUSE: Log IP statistics prior to port terminate (PARM unused).  
ACTION: Informative.
- 105 CLAS0004    **MESSAGE: None**  
CAUSE: Log IP port termination when a TERMINATE message is received (PARM unused).  
ACTION: Informative.
- 106 CLAS0003    **MESSAGE: None**  
CAUSE: Received a Probe or Dial reply with an error status (PARM = Probe/Dial reply status code in upper 16 bits; Probe/Dial ID in lower 16 bits).  
ACTION: An occasional error may be tolerated. For persistent errors see Appendix A , “Submitting a CR,” of this manual.
- 107 CLAS0005    **MESSAGE: None**  
CAUSE: Probe reply ID does not match any probe ID on the IP Probe wait queue.  
ACTION: Informative.
- 109 CLAS0002    **MESSAGE: None**  
CAUSE: Received a buffer reply message on the wrong subqueue or not in a buffer reply wait state. This message indicates that this buffer was not allocated (PARM = buffer reply result code).



- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 111 CLAS0003   **MESSAGE: None**
- CAUSE: The packet length carried in the IP header is greater than the packet length supplied by the link device (PARM = upper 16 bits: header value; lower 16 bits: actual received).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 112 CLAS0003   **MESSAGE: None**
- CAUSE: Unable to deliver an inbound ICMP message to an upper layer protocol (TCP/PXP) (PARM = ULP SEND result code).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 113 CLAS0003   **MESSAGE: None**
- CAUSE: Discarded an inbound ICMP message because the ICMP checksum was bad (PARM = upper 16 bits = actual checksum; lower 16 bits = expected checksum).
- ACTION: Frequent occurrences probably indicate hardware or transmission line problems.
- 114 CLAS0003   **MESSAGE: None**
- CAUSE: Discarded an inbound ICMP message because the ICMP type code was unrecognized (PARM = ICMP type/code). To decode the PARM value, refer to the previous section, “ICMP Type/Code Words.”
- ACTION: Indicates that a non-HP e3000 node has implemented an ICMP type not prescribed by the ICMP RFC standard.
- 115 CLAS0002   **MESSAGE: None**
- CAUSE: Indicates that log calls were suppressed for performance reasons. The following log message is the one that was suppressed (PARM = upper 16 bits: location suppressed; lower 16 bits: number of times suppressed).
- ACTION: Informative.
- 116 CLAS0003   **MESSAGE: None**
- CAUSE: Received a GGP protocol message. This is an unsupported protocol (PARM unused).
- ACTION: Informative. A non-HP e3000 node which supports the GGP protocol is part of the network configuration.
- 118 CLAS0002   **MESSAGE: None**
- CAUSE: An inbound data packet was discarded as undeliverable (PARM = ULP SEND result code).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 121 CLAS0003     **MESSAGE: None**  
  
CAUSE: An inbound packet was discarded because it failed IP header validation tests (PARM not significant).  
  
ACTION: If this occurs frequently see Appendix A , “Submitting a CR,” of this manual.
- 122 CLAS0003     **MESSAGE: None**  
  
CAUSE: An inbound packet was discarded because the IP header checksum failed (PARM = upper 16 bits = actual checksum; lower 16 bits = expected checksum).  
  
ACTION: Frequent occurrences probably indicate hardware or transmission line problems.
- 123 CLAS0003     **MESSAGE: None**  
  
CAUSE: An inbound data packet was discarded because an error was detected in IP options (PARM = byte location in IP header of error).  
  
ACTION: Check to see that the source node correctly formats the options stream.
- 124 CLAS0002     **MESSAGE: None**  
  
CAUSE: An inbound packet was discarded because it was not addressed to this node and store and forward was not allowed from the inbound network interface (PARM unused).  
  
ACTION: Configure store and forward buffers for the IP protocol on the inbound network interface.
- 125 CLAS0002     **MESSAGE: None**  
  
CAUSE: An inbound message fragment was discarded because a reassembly data structure could not be allocated.  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 128 CLAS0002     **MESSAGE: None**  
  
CAUSE: An inbound message fragment was discarded because it is a retransmission of a previously received last fragment and is no longer the last fragment (PARM is not significant).  
  
ACTION: Indicates that someone is sending a duplicate message in error (that is, with the same message ID) but with a longer length.
- 130 CLAS0002     **MESSAGE: None**  
  
CAUSE: A message fragment was discarded because of an internal failure of `bmgr_append_buffer` (PARM = `bmgr_append_buffer` result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 133 CLAS0002     **MESSAGE: None**  
  
CAUSE: A message fragment was discarded because of an internal failure of `bmgr_append_buffer` (PARM = `bmgr_append_buffer` result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 137 CLAS0003     **MESSAGE: None**  
  
CAUSE: A partially assembled message was discarded because the fragment assembly timer expired (PARM is not significant).  
  
ACTION: This will happen occasionally when a fragment is lost or discarded. If it occurs often, it may indicate that a gateway is congested. Reconfigure to achieve a better load balance.
- 139 CLAS0003     **MESSAGE: None**  
  
CAUSE: A store and forward packet was discarded because there were no store and forward buffers for the outbound network interface.  
  
ACTION: This indicates that the gateway is congested. This can happen until congestion avoidance measures are applied at the sending source nodes. If this persistently occurs, there may be a runaway node on the network that is disregarding `SOURCE QUENCH` messages.
- 141 CLAS0003     **MESSAGE: None**  
  
CAUSE: After processing a store and forward packet, congestion control thresholds have been reached (that is, 75% or more internal resources have been used). A Source Quench packet will be sent to the source.  
  
ACTION: Informative.
- 142 CLAS0002     **MESSAGE: None**  
  
CAUSE: A store and forward packet was discarded because no buffers were available in the store and forward buffer pool (PARM = `bmgr_get_buffer` result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 144 CLAS0002     **MESSAGE: None**  
  
CAUSE: A store and forward packet was discarded because an internal error was encountered in `bmgr_write_buffer` (PARM = `bmgr_write_buffer` result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 145 CLAS0003     **MESSAGE: None**  
  
CAUSE: A store and forward packet was discarded because the IP time to live expired (PARM unused).  
  
ACTION: Informative.

- 147 CLAS0003     **MESSAGE: None**  
  
CAUSE: A store and forward packet was discarded because the next local destination address supplied from the routing tables was not in the strict source route list in the IP header (PARM unused).  
  
ACTION: Verify that the routing information about the destination node in the configuration file is correct. Verify that the links and NIs are started.
- 148 CLAS0003     **MESSAGE: None**  
  
CAUSE: A store and forward packet was discarded because fragmentation was necessary but the “Don’t Fragment” flag was set (PARM unused).  
  
ACTION: Informative.
- 149 CLAS0002     **MESSAGE: None**  
  
CAUSE: An store and forward packet was discarded because an outbound path could not be established (PARM = NS\_PATH\_RESOLVE result code).  
  
ACTION: Indicates that network reachability information was not properly configured.
- 151 CLAS0002     **MESSAGE: None**  
  
CAUSE: A packet was discarded because it had to wait for a probe reply and IP’s internal queue was at the limit (PARM = queue max).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 157 CLAS0002     **MESSAGE: None**  
  
CAUSE: Outbound packet discarded because of an internal error in the IP/ULP interface. Specifically, the length of the options data was out of the valid range (PARM = outbound options length).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 160 CLAS0002     **MESSAGE: None**  
  
CAUSE: An outbound data packet that required fragmenting was discarded because of an internal error in bmgr\_copy\_buffer (PARM = bmgr\_copy\_buffer result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 161 CLAS0002     **MESSAGE: None**  
  
CAUSE: An outbound data packet that required fragmenting was discarded because of an internal error in bmgr\_write\_buffer (PARM = bmgr\_write\_buffer result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 162 CLAS0002     **MESSAGE: None**  
  
CAUSE: An outbound data packet that required fragmenting was discarded because an error occurred in a get buffer call (PARM = bmgr\_get\_buffer result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 165 CLAS0002     **MESSAGE: None**  
  
CAUSE: A store and forward packet was discarded because an error occurred creating a fragment with bmgr\_copy\_buffer (PARM = bmgr\_copy\_buffer result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 176 CLAS0002     **MESSAGE: None**  
  
CAUSE: A buffer reply message was received while IP was waiting to terminate.  
  
ACTION: Informative.
- 177 CLAS0002     **MESSAGE: None**  
  
CAUSE: Probe or dial reply was received while IP was waiting to terminate.  
  
ACTION: Informative.
- 178 CLAS0002     **MESSAGE: None**  
  
CAUSE: Encountered an error while attempting to read the number of address in the alias list (PARM = bmgr\_read\_buffer result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 179 CLAS0002     **MESSAGE: None**  
  
CAUSE: Encountered an error while attempting to read an address from the alias list (PARM = bmgr\_read\_buffer result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 180 CLAS0002     **MESSAGE: None**  
  
CAUSE: Unable to free the buffer that held the alias list (PARM = bmgr\_free\_buffer result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 181 CLAS0002     **MESSAGE: None**  
  
CAUSE: An error was detected while trying to write the IP header to the outbound buffer (PARM = bmgr\_write\_buffer result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 182 CLAS0002     **MESSAGE: None**  
CAUSE: The send by IP to NI for normal outbound data was unsuccessful (PARM = send\_msg result).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 183 CLAS0002     **MESSAGE: None**  
CAUSE: Unable to read the IP header from the inbound buffer during normal inbound processing (PARM = bmgr\_read\_buffer result).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 184 CLAS0002     **MESSAGE: None**  
CAUSE: Unable to read additional header information if options were present during inbound processing (PARM = bmgr\_read\_buffer result).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 186 CLAS0002     **MESSAGE: None**  
CAUSE: Unable to get a table management object for expansion of IP memory space in case the context area overflows (PARM = new\_create\_table result).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 187 CLAS0002     **MESSAGE: None**  
CAUSE: An error was detected while IP was attempting to add itself to the intranet mapping table (PARM = map\_add\_entity result).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 188 CLAS0002     **MESSAGE: None**  
CAUSE: Unable to read the options from the outbound buffer during outbound fragmentation processing (PARM = bmgr\_read\_buffer result).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 189 CLAS0002     **MESSAGE: None**  
CAUSE: A failure was detected while attempting to send a message to NI during outbound fragmentation (PARM = send\_msg result).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 190 CLAS0002     **MESSAGE: None**  
CAUSE: An error was detected while attempting to read the IP header from the inbound buffer after fragment reassembly had completed (PARM = bmgr\_read\_buffer result).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 191 CLAS0002     **MESSAGE: None**  
  
CAUSE: An error was detected while attempting to start a timer for inbound reassembly (PARM = get\_timer result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 192 CLAS0002     **MESSAGE: None**  
  
CAUSE: An inbound buffer could not be freed while processing a partial datagram (reassembly) (PARM = bmgr\_free\_buffer result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 193 CLAS0002     **MESSAGE: None**  
  
CAUSE: An inbound buffer that was being held for reassembly could not be freed (PARM = bmgr\_free\_buffer result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 194 CLAS0002     **MESSAGE: None**  
  
CAUSE: An inbound buffer could not be freed while processing a partial datagram (reassembly) (PARM = bmgr\_free\_buffer result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 195 CLAS0002     **MESSAGE: None**  
  
CAUSE: An entry could not be allocated for managing a delayed reply from either probe or dial.  
  
ACTION: This may occasionally happen. However, if it is happening frequently, the number of probe/dial wait queue elements may have to be increased. The disadvantage of doing this is that additional buffers are held while path resolution is under way. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 196 CLAS0003     **MESSAGE: None**  
  
CAUSE: Path resolution failure reported from a delayed probe/dial request (PARM = ns\_path\_resolve result).  
  
ACTION: May indicate a misconfiguration of network or a failed link.
- 197 CLAS0002     **MESSAGE: None**  
  
CAUSE: A failure was detected while attempting to send NI a message during outbound store and forward processing (PARM = send\_msg result).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 198 CLAS0002     **MESSAGE: None**  
  
CAUSE: An error was detected while attempting to retrieve buffer pool information about a store and forward pool (PARM = bmgr\_pool\_info result).

ACTION: See Appendix A , “Submitting a CR,” of this manual.

199 CLAS0002

**MESSAGE: None**

CAUSE: IP was unable to add itself to the registry during initialization (PARM = reg\_add\_entity result).

ACTION: See Appendix A , “Submitting a CR,” of this manual.

200 CLAS0004

**MESSAGE: None**

CAUSE: IP was unable to terminate immediately because it has outstanding buffer or path resolution requests. When these complete IP will terminate.

ACTION: Informative.

201 CLAS0004

**MESSAGE: None**

CAUSE: A datagram was received that should be forwarded. However, the network portion of the destination address is a broadcast value. These datagrams will be discarded.

ACTION: Remote node is sending an illegal datagram.

202 CLAS0003

**MESSAGE: None**

CAUSE: A datagram was received that required forwarding, but the node that it was to be forwarded to was directly connected to the sending node. The datagram will be forwarded and a redirect message will also be sent to the source of the datagram.

ACTION: If this happens frequently the sending node should be reconfigured so that it does not send datagrams to this node to forward them to a node that it is directly connected to.

203 CLAS0002

**MESSAGE: None**

CAUSE: A failure was detected when IP sent a message to a peer IP during store and forwarding processing.

ACTION: See Appendix A , “Submitting a CR,” of this manual.

204 CLAS0002

**MESSAGE: None**

CAUSE: An error was detected while attempting to send a msg to IPU (PARM = send\_msg result code).

ACTION: See Appendix A , “Submitting a CR,” of this manual.

205 CLAS0003

**MESSAGE: None**

CAUSE: IP received a broadcast packet not addressed to the local node.

ACTION: If this occurs frequently, analyze the network traffic for the sender of the broadcast packets.



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## IPU Logging Location Codes

- 1 CLAS0002     **MESSAGE: None**
- CAUSE: Received a port message containing an invalid format code or an invalid function code (PARM = complete function code).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0004     **MESSAGE: None**
- CAUSE: Log port initiation.
- ACTION: Informative.
- 10 CLAS0002    **MESSAGE: None**
- CAUSE: Encountered a buffer manager failure attempting to read the address alias list from the buffer passed in a DCN Start message (PARM = READBUF result code).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0002    **MESSAGE: None**
- CAUSE: Encountered a buffer manager error attempting to return the buffer passed in a DCN Start message (PARM = FREEBUF result code).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS0002    **MESSAGE: None**
- CAUSE: There is not enough room for an entry in the DCN Table for the network started in a DCN Start message. Space is allocated based on the maximum number of directly connected networks (DCNs).
- ACTION: Shut down the transport (NETCONTROL STOP). Check the configuration file for a disparity between networks configured and maximum DCNs specified.
- 13 CLAS0002    **MESSAGE: None**
- CAUSE: Encountered a buffer manager error attempting to get the length of the buffer passed in a DCN Start message (PARM = BUFFER.INFO result code).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14 CLAS0002    **MESSAGE: None**
- CAUSE: The length of the address alias list passed in a DCN Start message exceeds the space allocated for the list in the IPC port DST. The space is allocated based on the maximum number of directly connected networks (DCNs).

**ACTION:** Shut down the transport (NETCONTROL STOP). Check the configuration file for a disparity between the number of networks configured and maximum networks specified.

15 CLAS0002

**MESSAGE: None**

**CAUSE:** Network number in a Stop Net message not found in the DCN table (never started).

**ACTION:** Error probably occurred when starting the network. See error 12.

16 CLAS0006

**MESSAGE: None**

**CAUSE:** Log statistics prior to port termination (PARM unused).

**ACTION:** Informative.

18 CLAS0002

**MESSAGE: None**

**CAUSE:** Encountered buffer manager error attempting to return the buffers on message queues before terminating the port (PARM = FREEBUF result code).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

19 CLAS0004

**MESSAGE: None**

**CAUSE:** Indicates termination of the IPU port.

**ACTION:** Informative message.

20 CLAS0002

**MESSAGE: None**

**CAUSE:** A routing update indicates that a network is now reachable but there is not enough room in the distance matrix table to record it (PARM unused).

**ACTION:** Reconfigure to increase maximum networks on the IP Update protocol screen.

25 CLAS0002

**MESSAGE: None**

**CAUSE:** Could not process a network shutdown routing update because gateway in the routing update could not be found in the distance matrix table (PARM unused).

**ACTION:** Should not happen normally. Probable cause is an inability to process a network start routing update (because of lack of table space) that would have put the gateway into the distance matrix.

27 CLAS0002

**MESSAGE: None**

**CAUSE:** Could not process a network routing update because there was not enough room in an internal gateway index table (PARM unused).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

- 28 CLAS0002      **MESSAGE: None**  
  
CAUSE: Could not process a network start routing update because there was not enough room in the distance matrix table (PARM unused).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 29 CLAS0002      **MESSAGE: None**  
  
CAUSE: Could not process a network start routing update because the count of networks in the routing update exceeded configured maximum networks.  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 30 CLAS0002      **MESSAGE: None**  
  
CAUSE: Encountered an internal error attempting to return a routing update buffer (PARM = BFMFREEBUF result code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 41 CLAS0002      **MESSAGE: None**  
  
CAUSE: IPU Port Initialization unsuccessful (PARM = Semaphore Initialization result or result code trying to add IPU to Registry).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 42 CLAS0002      **MESSAGE: None**  
  
CAUSE: Failure to lock IPU routing table.  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

## L2Resolve Logging Location Codes

L2Resolve is part of the process between NS Transport and SNA Transport which provides NS over SNA/XL functionality.

- 1 Log Class 2     **MESSAGE: None**  
CAUSE: Unable to send connect request.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 Log Class 2     **MESSAGE: None**  
CAUSE: Unable to send disconnect request.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 Log Class 2     **MESSAGE: None**  
CAUSE: Unable to send verify path message to NetCP.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 Log Class 2     **MESSAGE: None**  
CAUSE: Unable to send disconnect device message to NetCP.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 Log Class 2     **MESSAGE: None**  
CAUSE: Control Block data structure cannot be freed on a reset connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 9 Log Class 2     **MESSAGE: None**  
CAUSE: Connect reply not completed because MAP entry cannot be added.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 10 Log Class 2    **MESSAGE: None**  
CAUSE: Unable to update MAP table for rejection of connection request.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 Log Class 2    **MESSAGE: None**  
CAUSE: Unable to send connect request.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14 Log Class 2    **MESSAGE: None**  
CAUSE: Unable to update MAP table for a connection reset.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 15 Log Class 3     **MESSAGE: None**  
CAUSE: A connection request has been rejected.  
ACTION: Informative message. The network has been shut down, or a connection request has been refused by the other end.
- 17 Log Class 2     **MESSAGE: None**  
CAUSE: Invalid request from upper layers in current state.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 18 Log Class 2     **MESSAGE: None**  
CAUSE: Invalid request from lower layers in current state.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 19 Log Class 3     **MESSAGE: None**  
CAUSE: Reject of an incoming connection request because maximum number of connections active.  
ACTION: A maximum of 64 connections is allowed. Retry connection after one has been closed.
- 21 Log Class 3     **MESSAGE: None**  
CAUSE: Connect event message before L2Resolve is fully operational.  
ACTION: Wait for L2Resolve to finish initialization and try the connection again. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 22 Log Class 2     **MESSAGE: None**  
CAUSE: Incoming connect reply before L2Resolve is fully operational.  
ACTION: Wait for L2Resolve to finish initialization and try the connection again. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 23 Log Class 2     **MESSAGE: None**  
CAUSE: Incoming disconnect reply; maximum connections exceeded.  
ACTION: A maximum of 64 connections is allowed. Wait until one connection is closed and try again. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 24 Log Class 2     **MESSAGE: None**  
CAUSE: Incoming disconnect reply before L2Resolve is fully operational.  
ACTION: Wait for L2Resolve to finish initialization and try the connection again. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.

- 25 Log Class 2     **MESSAGE: None**  
CAUSE: Incoming disconnect before L2Resolve is fully operational.  
ACTION: Wait for L2Resolve to finish initialization and try the connection again. If the problem persists, see Appendix A , “Submitting a CR,” of this manual.
- 26 Log Class 2     **MESSAGE: None**  
CAUSE: Unknown event before L2Resolve is fully operational.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 27 Log Class 2     **MESSAGE: None**  
CAUSE: Outbound connect request would exceed maximum number of connections.  
ACTION: A maximum of 64 connections is allowed. Wait until a connection is closed and try again.
- 28 Log Class 2     **MESSAGE: None**  
CAUSE: Connect reply received for an unknown connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 29 Log Class 2     **MESSAGE: None**  
CAUSE: Disconnect reply message when maximum number of connections exceeded.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 30 Log Class 2     **MESSAGE: None**  
CAUSE: Disconnect reply received for an unknown connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 31 Log Class 2     **MESSAGE: None**  
CAUSE: Disconnect request received for an unknown connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 32 Log Class 2     **MESSAGE: None**  
CAUSE: Invalid connect/disconnect message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 33 Log Class 3     **MESSAGE: None**  
CAUSE: Outbound connection request during network shutdown.  
ACTION: Informative message. The network must be started for successful connection.

- 34 Log Class 2      **MESSAGE: None**  
CAUSE: Connection reply for an unknown connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 35 Log Class 2      **MESSAGE: None**  
CAUSE: Disconnect reply for an unknown connection and maximum number of connections exceeded.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 36 Log Class 2      **MESSAGE: None**  
CAUSE: Disconnect reply message received for an unknown connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 37 Log Class 2      **MESSAGE: None**  
CAUSE: Disconnect request received for an unknown connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 38 Log Class 2      **MESSAGE: None**  
CAUSE: Unknown connect/disconnect message during shutdown.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 39 Log Class 2      **MESSAGE: None**  
CAUSE: L2Resolve is terminating with outstanding requests.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 40 Log Class 2      **MESSAGE: None**  
CAUSE: Connection is active while L2Resolve is terminating.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 42 Log Class 4      **MESSAGE: None**  
CAUSE: L2Resolve is terminating.  
ACTION: Informative message.
- 43 Log Class 2      **MESSAGE: None**  
CAUSE: L2Resolve deletion from MAP is unsuccessful during a device disconnect.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 44 Log Class 2      **MESSAGE: None**  
CAUSE: L2Resolve cannot be bound into MAP table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 45 Log Class 4     **MESSAGE: None**  
CAUSE: L2Resolve is starting.  
ACTION: Informative message.
- 46 Log Class 2     **MESSAGE: None**  
CAUSE: Invalid message type for current L2Resolve state.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 47 Log Class 2     **MESSAGE: None**  
CAUSE: Error in starting or stopping L2Resolve.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 48 Log Class 2     **MESSAGE: None**  
CAUSE: Invalid message type received by L2Resolve.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.



**22****Logging Location Codes  
Continued**

Logging records events such as errors and console commands. You configure logging for each of the subsystems of NS 3000/iX. Within each subsystem, there are different classes of events (such as internal errors). You can record logging to a disk, the system console, and/or the logon device of a user account. If you configure a logging class to log to a user account, then that user will receive logged messages any time there is an active session for that user account.

## Mapping Table

- 1 CLAS0004     **MESSAGE: None**  
CAUSE: Mapping table was created (PARM = Pointer to mapping table control block).  
ACTION: None.
- 2 CLAS0004     **MESSAGE:**  
CAUSE: Mapping table was deleted (PARM = Pointer to mapping table control block).  
ACTION: None.
- 3 CLAS0002     **MESSAGE: None**  
CAUSE: Error trying to obtain an entry from the pool of free mapping table entries (PARM = Status code from `new_get_table_entry` call). In most cases, this will mean that there are no free entries remaining.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0002     **MESSAGE: None**  
CAUSE: Unable to locate the DIAL entity entry while trying to send a dial request message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0002     **MESSAGE: None**  
CAUSE: Unable to locate the X.25 entity while trying to send a connect request to Phobos.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS0002     **MESSAGE: None**  
CAUSE: Unable to locate the Layer 2 Resolve entity while trying to send a connect request to L2Resolve.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 8 CLAS0003     **MESSAGE: None**  
CAUSE: IEEE 802.3 or Ethernet address mapping to IP address has changed. Could be due to hardware change or could indicate possible IP address duplication on the network.  
ACTION: Review configuration of new nodes on the network.
- 10 CLAS0002    **MESSAGE: None**  
CAUSE: Send message to Probe failed trying to get station address mapping for an IP address.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0002     **MESSAGE: None**
- CAUSE: Send message to Probe failed trying to update an aged station address mapping for an IP address.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS0002     **MESSAGE: None**
- CAUSE: Send message to ARP failed trying to get station address mapping for an IP address.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 13 CLAS0002     **MESSAGE: None**
- CAUSE: Send message to ARP failed trying to update an aged station address mapping for an IP address.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS0002     **MESSAGE: None**
- CAUSE: Attempting to put a route on the connected route queue that is already on that queue.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 19 CLAS0002     **MESSAGE: None**
- CAUSE: Unable to locate NI entity trying to send a link shutdown message to CP.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.

## Net Timers Logging Location Codes

1020 CLAS0003 **MESSAGE: Out of resources**

**CAUSE:** A free-pool entry was needed for a timer-entry element, to hold information about a new net timer being obtained, but the pool was empty. A separate timer entry must exist for every net timer on the system.

**ACTION:** No new timer was obtained. The system is probably operating under a heavy load. Other processes on the system have used up all the free timer entries, or are starting timers with granularities so small as to use up all the pool entries for timer-intervals. Other processes on the system will probably start seeing this problem as well, though that should be a temporary condition. One possible workaround is to configure a higher value in NMMGR for the maximum number of TCP connections.

1040 CLAS0003 **MESSAGE: Out of resources**

**CAUSE:** A free-pool entry was needed for an interval head element, to link a net timer into a new interval, but the pool was empty. A new interval is required whenever there is no open interval positioned where a timer entry needs one.

**ACTION:** If the error occurred when getting a new timer, no new timer was obtained. If it occurred on a reset, the timer was not reset, and has been left stopped. The system is probably operating under a heavy load. Other processes on the system have used up all the free timer entries, or are starting timers with granularities so small as to use up all the pool entries for timer intervals. Other processes on the system will probably start seeing this problem as well, though that should be a temporary condition. One possible workaround is to configure a higher value in NMMGR for the maximum number of TCP connections.

1060 CLAS0002 **MESSAGE: Cannot free a systimer**

**CAUSE:** When releasing a system timer following a race-condition when that timer could not be cached, the system routine `Release_timer` reported an error. Timers must be released when the net timer cache is full or not configured (`PARM = status from Release_timer`).

**ACTION:** Unless there is corruption within system timers, this probably indicates a Net Timers bug. Another remote possibility is that the Net Timers port data has been corrupted from outside, so other, possibly serious problems may soon appear as well. In addition, one system timer may have been lost; if this continues, the system could eventually run out of system timers. Submit an CR.

- 1080 CLAS0002    **MESSAGE: Cannot reset a systimer**
- CAUSE: While attempting to stop, restart, or reschedule an existing system timer, the system routine `Reset_timer_in_heartbeats` failed or reported a status which was not expected given the current state of Net Timers. Resetting a system timer is a normal operation done whenever the first interval in a timer list changes (PARM = status from `Reset_timer_in_heartbeats`, PORT = address of timer list).
- ACTION: Unless there is corruption within system timers, this probably indicates a Net Timers bug. Another remote possibility is that the Net Timers port data has been corrupted from outside, so other, possibly serious problems may soon appear as well. All timers associated with the faulty system- timer are now stalled, and will probably never pop. Depending on your configuration, this may or may not affect all timers on that system's network. Submit an CR.
- 1120 CLAS0002    **MESSAGE: Cannot get a systimer**
- CAUSE: While attempting to obtain a new system timer, the system routine `Get_timer_in_heartbeats` failed. Getting a new system timer is done the first time each configured timer list is used, and also during normal processing of race conditions when no cached timer was available (PARM = status from `Get_timer_in_heartbeats`, PORT = address of timer list).
- ACTION: Unless there is corruption within system timers, the system has probably run out of timers; this might be indicated by a PARM value of FFFE006E: no entry available. If the error occurred when getting a new timer, no new timer was obtained. If it occurred on a reset, the timer was not reset and has been left stopped; all timers to be associated with that system timer are now stalled, and will probably never pop. Depending on your configuration, this may or may not affect all timers on that system's network. Submit an CR.
- 1160 CLAS0003    **MESSAGE: Cannot get interval head**
- CAUSE: This is supplemental logging to a previous Net Timers error. While attempting to start a new net timer or restart an existing one, as part of a higher level reset or get timer operation, it was determined that a new interval was needed, but the free pool was empty, preventing allocation of a new interval head element. A new interval is required whenever there is no open interval positioned where a timer entry needs one. (PORT = net timer ID).
- ACTION: Review information regarding the previous errors, for possible hints as to the cause. Other processes on the system have used up all the free entries in the pool.
- 1180 CLAS0002    **MESSAGE: Timer list is stalled**
- CAUSE: This is supplemental logging to a previous Net Timers error. While attempting to start a net timer as part of a higher level reset or get timer operation, there was a problem resetting the system timer

associated with that net timer and others. A timer list's system timer is normally reset whenever insertion of the new net timer changed the first interval in the list. (PORT = net timer ID).

**ACTION:** Review information regarding the previous errors, for possible hints as to the cause. If necessary, submit an CR, noting this and previous Net Timers errors.

1220 CLAS0002 **MESSAGE: Cannot start a timeout**

**CAUSE:** This is supplemental logging to a previous Net Timers error. While attempting to reschedule a running net timer, the timer was successfully removed from the old interval it was running in, but there was a problem restarting it. To get the net timer running again, all steps necessary to attach it to a new interval must succeed. (PORT = net timer ID).

**ACTION:** Review information regarding the previous errors, for possible hints as to the cause. If necessary, submit an CR, noting this and previous Net Timers errors.

2020 CLAS0002 **MESSAGE: Not up for processing**

**CAUSE:** An attempt was made to free a net timer before or during Net Timers startup, or during or after shutdown. Timers cannot be freed unless Net Timers is completely up. (PORT = net timer ID).

**ACTION:** If this occurs during network shutdown, it can probably be ignored. If it occurs at any other time, submit an CR. Whether the net timer ID being freed was valid or not is not known.

2030 CLAS0002 **MESSAGE: Bad timer ID specified**

**CAUSE:** An attempt was made to free a net timer having an ID of zero (PARM = 0).

**ACTION:** There is a bug in the calling module. Probably that module previously attempted to get a timer, but ignored an error reported by Net Timers and saved the returned ID of zero for later use. It is now attempting to free that nonexistent timer. This may lead to other errors or hangs in the calling module. Submit an CR.

2040 CLAS0002 **MESSAGE: Accessed a freed timer**

**CAUSE:** An attempt was made to free a net timer for which a deferred release has already been posted. Deferred release is used only during the pop of a timer, since it cannot be freed until the trap routine exits, completing the pop. Since freed net timers can be immediately reallocated to anyone, they cannot be safely freed twice. (PORT = net timer ID).

**ACTION:** This probably means a Transport timer trap routine has accidentally re-freed a timer it already freed. Another possibility is that a second processor has attempted to free the same timer while that trap routine was still executing; this might be unlikely due to timing

constraints. If necessary, submit an CR.

2080 CLAS0002 **MESSAGE: Accessed a freed timer**

**CAUSE:** An attempt was made to free a net timer which had already been freed, or a timer which was in some sort of bad state. Since freed net timers can be immediately reallocated to anyone, they cannot be safely freed twice. (PORT = net timer ID).

**ACTION:** If you suspect the timer has not been freed, another remote possibility is data corruption of the timer entry. If necessary, submit an CR.

2100 CLAS0002 **MESSAGE: Not up for processing**

**CAUSE:** An attempt was made to get a net timer before or during Net Timers startup, or during or after shutdown. Timers cannot be obtained unless Net Timers is completely up. (PORT = net timer ID).

**ACTION:** If this occurs during network shutdown, it can probably be ignored. If it occurs at any other time, submit an CR.

2105 CLAS0002 **MESSAGE: Bad timer interval**

**CAUSE:** An attempt was made to set a new net timer to a negative time interval.

**ACTION:** No new timer was obtained. Negative intervals are not allowed. There is a bug in the calling module. Probably that module is doing its own timing by subtracting timestamps over a period of time, and has made an incorrect calculation. See Appendix A , "Submitting a CR."

2120 CLAS0003 **MESSAGE: Cannot get timer entry**

**CAUSE:** This is supplemental logging to a previous Net Timers error. While attempting to get a new net timer, it was discovered that the free pool was empty, preventing allocation of a new timer entry element. A separate timer entry must exist for every net timer on the system.

**ACTION:** Review information regarding the previous errors, for possible hints as to the cause. Other processes on the system have used up all the free entries in the pool.

2140 CLAS0002 **MESSAGE: Cannot start a timeout**

**CAUSE:** This is supplemental logging to a previous Net Timers error. While attempting to start a new running net timer, there was a problem getting it into a running timer list. For the new net timer to run, it must be successfully attached to an interval in a timer list having a running system timer.

**ACTION:** No new timer was obtained. Review information regarding the previous errors, for possible hints as to the cause. If necessary, submit an CR, noting this and previous Net Timers errors.

- 2160 CLAS0002 **MESSAGE: Not up for processing**
- CAUSE: An attempt was made to reset a net timer before or during Net Timers startup, or during or after shutdown. Timers cannot be reset unless Net Timers is completely up. (PORT = net timer ID).
- ACTION: If this occurs during network shutdown, it can probably be ignored. If it occurs at any other time, submit an CR. Whether the net timer ID being freed was valid or not is not known.
- 2170 CLAS0002 **MESSAGE: Bad timer ID specified**
- CAUSE: An attempt was made to reset a net timer having an ID of zero (PARM = 0).
- ACTION: There is a bug in the calling module. Probably that module previously attempted to get a timer, but ignored an error reported by Net Timers and saved the returned ID of zero for later use. It is now attempting to reset that nonexistent timer. This may lead to other errors or hangs in the calling module. Submit an CR.
- 2175 CLAS0002 **MESSAGE: Bad timer interval**
- CAUSE: An attempt was made to reset an existing net timer to a negative time interval (PORT = net timer ID).
- ACTION: The timer was not reset from its current condition, running or stopped. Negative intervals are not allowed. There is a bug in the calling module. Probably that module is doing its own timing by subtracting timestamps over a period of time, and has made an incorrect calculation. See Appendix A , "Submitting a CR," of this manual.
- 2180 CLAS0002 **MESSAGE: Accessed a freed timer**
- CAUSE: An attempt was made to reset a net timer for which a deferred release has been posted. Deferred release is used only during the pop of a timer, since it cannot be freed until the trap routine exits, completing the pop. Since freed net timers can be immediately reallocated to anyone, they cannot be safely reset after freeing. (PORT = net timer ID).
- ACTION: This probably means a Transport timer trap- routine has accidentally reset a timer it already freed. Another possibility is that a second processor has attempted to reset the freed timer while that trap routine was still executing; this might be unlikely due to timing constraints. If necessary, submit an CR.
- 2200 CLAS0002 **MESSAGE: Cannot reset a timeout**
- CAUSE: This is supplemental logging to a previous Net Timers error. While attempting to reschedule a running net timer, there was a problem removing the timer from the old interval it was running in, or a problem restarting it. Both steps must succeed for the rescheduling to work. (PORT = net timer ID).



**ACTION:** The timer has been left in an indeterminate state. Review information regarding the previous errors, for possible hints as to the cause. If necessary, submit an CR, noting this and previous Net Timers errors.

2220 CLAS0002 **MESSAGE: Cannot start a timeout**

**CAUSE:** This is supplemental logging to a previous Net Timers error. A problem occurred while attempting to restart a stopped net timer. To run a previously stopped net timer, the timer must be successfully attached to an interval in a timer list having a running system timer. (PORT = net timer ID).

**ACTION:** The timer has been left in an indeterminate state. Review information regarding the previous errors, for possible hints as to the cause. If necessary, submit an CR, noting this and previous Net Timers errors.

2240 CLAS0002 **MESSAGE: Cannot start a timeout**

**CAUSE:** This is supplemental logging to a previous Net Timers error. A problem occurred while attempting to reschedule a popping net timer. By definition a popping net timer is already stopped, so to get it running again it needs to be successfully attached to an interval in a timer list having a running system timer. (PORT = net timer ID).

**ACTION:** The timer has been left in an indeterminate state. Probably a Transport timer trap routine was attempting to reset the timer. Review information regarding the previous errors, for possible hints as to the cause. If necessary, submit an CR, noting this and previous Net Timers errors.

2260 CLAS0002 **MESSAGE: Accessed a freed timer**

**CAUSE:** An attempt was made to restart a net timer which had already been freed, or a timer which was in some sort of bad state. Since freed net timers can be immediately reallocated to anyone, they cannot be safely restarted after freeing. (PORT = net timer ID).

**ACTION:** If you suspect the timer has not been freed, another remote possibility is data corruption of the timer entry. If necessary, submit an CR.

2260 CLAS0002 **MESSAGE: Accessed a freed timer**

**CAUSE:** An attempt was made to restart a net timer which had already been freed, or a timer which was in some sort of bad state. Since freed net timers can be immediately reallocated to anyone, they cannot be safely restarted after freeing. (PORT = net timer ID).

**ACTION:** If you suspect the timer has not been freed, another remote possibility is data corruption of the timer entry. If necessary, submit an CR.

- 2300 CLAS0002    **MESSAGE: Accessed a freed timer**
- CAUSE: An attempt was made to stop a net timer which had already been freed, or a timer which was in some sort of bad state. Since freed net timers can be immediately reallocated to anyone, they cannot be safely stopped after freeing. (PORT = net timer ID).
- ACTION: If you suspect the timer has not been freed, another remote possibility is data corruption of the timer entry. If necessary, submit an CR.
- 3080 CLAS0002    **MESSAGE: Timer list is stalled**
- CAUSE: This is supplemental logging to a previous Net Timers error. While getting ready to pop one or more net timers, there was a problem restarting the system timer associated with the timer list those net timers came from. Unless the list's system timer is restarted, no other net timers on that list will pop from now on.
- ACTION: Review information regarding the previous errors, for possible hints as to the cause. If necessary, submit an CR, noting this and previous Net Timers errors.
- 3100 CLAS0003    **MESSAGE: Bad trap call frees timer**
- CAUSE: While popping a net timer, a Transport timer trap- routine reported a nonzero status. In response, Net Timers has freed the timer entry which popped (PARM = status from trap routine, PORT = net timer ID).
- ACTION: A part of the normal operation of Net Timers, this information is provided for Transport debugging purposes only. Any CR filed or action taken should address the problem of the failing trap routine, whose error status was reported in PARM. Operation of Net Timers should be unaffected.
- 3120 CLAS0003    **MESSAGE: Bad/unknown message type**
- CAUSE: Instead of a timeout or other supported message, the Net Timers port received a message which was not recognized or supported. Illegal messages cannot be acted upon; they are dropped and their message frames returned to the system (PORT = address of message frame, PARM = message descriptor).
- ACTION: The operation of Net Timers should be unaffected. However, some other module on the system seems to be sending the wrong messages to the wrong places. Submit an CR, specifying the PARM value which was logged.
- 3140 CLAS0002    **MESSAGE: Failed reset-timer test**
- CAUSE: Reported by Hewlett-Packard internal tests only. This indicates resetting of a popping net timer yielded a status other than one indicating the timer was currently popping.

**ACTION:** This should never been seen outside the factory; submit an CR.

3160 CLAS0002 **MESSAGE: Failed trap-call test**

**CAUSE:** Reported by Hewlett-Packard internal tests only. This indicates a net timer trap- routine reported a false error, leading to release of the popped timer.

**ACTION:** This should never been seen outside the factory; submit an CR.

3180 CLAS0002 **MESSAGE: Failed free-timer test**

**CAUSE:** Reported by Hewlett-Packard internal tests only. This indicates freeing of a popping net timer yielded a status other than one indicating the timer was currently popping.

**ACTION:** This should never been seen outside the factory; submit an CR.

3200 CLAS0002 **MESSAGE: Failed free-timer test**

**CAUSE:** Reported by Hewlett-Packard internal tests only. This indicates freeing of a popping net timer, already previously freed, yielded a status other than one indicating the timer was not in use.

**ACTION:** This should never been seen outside the factory; submit an CR.

3220 CLAS0002 **MESSAGE: Failed reset timer test**

**CAUSE:** Reported by Hewlett-Packard internal tests only. This indicates resetting of a popping net timer, previously freed, yielded a status other than one indicating the timer was not in use.

**ACTION:** This should never been seen outside the factory; submit an CR.

3240 CLAS0002 **MESSAGE: Cannot freeze memory**

**CAUSE:** While attempting to freeze a caller- specified statistics buffer into memory, the system routine Freeze reported an error. Freezing is required, to avoid page faults while Net Timers data structures are locked for the statistics report (PARM = status from Freeze).

**ACTION:** Net Timers will continue to run as normal, though no statistics data was obtained. Whichever utility was trying to read Net Timers information did not get it. Submit an CR.

3280 CLAS0003 **MESSAGE: Data truncated**

**CAUSE:** A caller-specified statistics buffer was too small to hold the entire statistics block. Partial statistics- reads are not supported; to read statistics only, the caller must specify the exact length of the Net Timers statistics block.

**ACTION:** No statistics were returned. If this error was reported by a Hewlett-Packard-supplied program, submit an CR against that program.

3300 CLAS0003 **MESSAGE: Data truncated**

**CAUSE:** A caller specified statistics buffer was large enough to hold statistics, but not large enough to hold all the timer map data. Net Timers ran out of room trying to record a timer list head. Partial reads of timer map data are not recommended.

**ACTION:** Statistics were returned, but the timer map data returned is incomplete; caller should have specified a larger buffer. If this error was reported by a Hewlett-Packard supplied program, submit an CR against that program.

3320 CLAS0003 **MESSAGE: Data truncated**

**CAUSE:** A caller-specified statistics buffer was large enough to hold statistics, but not large enough to hold all the timer map data. Net Timers ran out of room trying to record a timer interval. Partial reads of timer- map data are not recommended.

**ACTION:** Statistics were returned, but the timer map data returned is incomplete; caller should have specified a larger buffer. If this error was reported by a Hewlett-Packard supplied program, submit an CR against that program.

3340 CLAS0003 **MESSAGE: Data truncated**

**CAUSE:** A caller specified statistics buffer was large enough to hold statistics, but not large enough to hold all the timer map data. Net Timers ran out of room trying to record a timer entry. Partial reads of timer map data are not recommended.

**ACTION:** Statistics were returned, but the timer map data returned is incomplete; caller should have specified a larger buffer. If this error was reported by a Hewlett-Packard supplied program, submit an CR against that program.

3360 CLAS0002 **MESSAGE: Cannot unfreeze memory**

**CAUSE:** While attempting to unfreeze a caller- specified statistics buffer previously frozen into memory, the system routine Unfreeze reported an error. Unfreezing is necessary to avoid memory fragmentation over time (PARM = status from Unfreeze).

**ACTION:** Net Timers will continue to run as normal, though no statistics data was obtained, and some memory space may be lost until the next system startup. Submit an CR.

3380 CLAS0002 **MESSAGE: Not up for processing**

**CAUSE:** An attempt was made to perform a Net Timers control operation during Net Timers startup, or during or after shutdown.

Control operations cannot be performed unless Net Timers is completely up.

**ACTION:** No control operation was performed. If this occurs during network shutdown, it can probably be ignored. If it occurs at any other time, submit an CR.

3400 CLAS0003 **MESSAGE: Bad/unknown function code**

**CAUSE:** An unrecognized or unsupported function code was passed in a call to `NETTMR_CONTROL`. Only supported control functions can be acted on.

**ACTION:** The call was ignored; the operation of Net Timers should be unaffected. However, some other module on the system seems to be passing bad function codes. If necessary, submit an CR.

4020 CLAS0004 **MESSAGE: Not up, stop ignored**

**CAUSE:** An attempt was made to shut Net Timers down before a successful startup, or during or after a shutdown. Multiple shutdowns are not allowed.

**ACTION:** No harm was done, however some other module on the system, possibly CP, seems to be confused. If necessary, submit an CR.

4040 CLAS0004 **MESSAGE: Stopping**

**CAUSE:** Net Timers is being shut down (`PARM` = Net Timers port data address).

**ACTION:** No action is required.

4060 CLAS0002 **MESSAGE: Unfreed systimers remain**

**CAUSE:** While releasing in use system timers during shutdown, the system routine `Release_timer` reported an error. All in use timers are normally deallocated during any shutdown of Net Timers (`PORT` = unfreed system timer ID, `PARM` = status from `Release_timer`).

**ACTION:** Net Timers will report the failure as a warning and continue with the shutdown. Unless there is corruption within system timers, this probably indicates a Net Timers bug. Another remote possibility is that the Net Timers port data has been corrupted from outside, so other, possibly serious problems may soon appear as well. In addition, one system timer may have been lost; if this continues, the system could eventually run out of system timers. Submit an CR.

4100 CLAS0002 **MESSAGE: Unfreed ports remain**

**CAUSE:** While Net Timers was attempting to release its message port during shutdown, the system routine `Purge_port` reported an error. Purging the port is a normal part of resource cleanup during any Net Timers shutdown. Releasing port ownership during startup should have insured the port could be purged later, even if by a different process (`PORT` = Net Timers port ID, `PARM` = status from `Purge_port`).

**ACTION:** Net Timers will report the failure as a warning and continue with the shutdown. One message port may have been lost, but probably not any message frames; if this continues, the system could eventually run out of ports. Submit an CR.

4120 CLAS0002 **MESSAGE: Frozen memory remains**

**CAUSE:** During shutdown, while Net Timers was attempting to unfreeze its previously frozen context memory (port data area or PDA), the system routine Unfreeze reported an error. Unfreezing the PDA is normally done during any Net Timers shutdown, in preparation for freeing the PDA object (PORT = port data address, PARM = status from Unfreeze).

**ACTION:** Net Timers will report the failure as a warning and continue with the shutdown. Some memory space may be lost until the next system startup, but unless this happens repeatedly, the system should continue to run. Submit an CR.

4140 CLAS0002 **MESSAGE: Unfreed objects remain**

**CAUSE:** During shutdown, while Net Timers was attempting to release its context memory (port data area or PDA), the system routine Release\_object reported an error. Freeing of the PDA is the final stage of resource cleanup by Net Timers during any shutdown (PORT = port data address, PARM = status from Release\_object).

**ACTION:** Net Timers will report the failure as a warning and continue with the shutdown. Some memory space may be lost until the next system startup, but unless this happens repeatedly, the system should continue to run. Submit an CR.

4280 CLAS0004 **MESSAGE: NMMGR fail, defaults used**

**CAUSE:** While attempting to compute its configuration limits from the NETXPORT. GPROT. TCP node of the NMCONFIG. PUB. SYS file, the system routine Nmconfgetdata reported an error. Unable to read config data, a default configuration was selected as a backup just to get the network going (PARM = status from Nmconfgetdata).

**ACTION:** This failure was reported as a warning and Net Timers then continued with the startup, using a large default configuration. It is unlikely the default configuration will match your needs as well as a computed one, however your network may still run correctly. Check to make sure you have configured the TCP protocol into your network, specifying some maximum number of connections. Also check to make sure the NMCONFIG file is available and not being accessed at the current time. If necessary, submit an CR, specifying the PARM value from the logging message.

4300 CLAS0004 **MESSAGE: Already up, start ignored**

**CAUSE:** An attempt was made to start Net Timers up during or after a successful startup, but before a complete shutdown. Multiple startups

are not allowed.

**ACTION:** No harm was done, however some other module on the system, possibly CP, seems to be confused. If necessary, submit an CR.

4320 CLAS0002 **MESSAGE: Create Object Failed**

**CAUSE:** After Net Timers computed its configuration during startup, an attempt to allocate context memory (port data area or PDA) using the system routine `Create_object`, failed. The PDA is where all data structures needed to operate Net Timers must reside (PARM = status from `Create_object`).

**ACTION:** Depending on the PARM value, your system load, and your current configuration, it is possible not enough free memory exists on your system to support the number of timers required by maximum the number of TCP connections currently configured in NMMGR. If this seems likely, you might try starting your network sooner after system startup, or possibly reducing the number of TCP connections configured. If necessary, submit an CR.

4340 CLAS0002 **MESSAGE: Cannot freeze memory**

**CAUSE:** After Net Timers successfully allocated an object for its context memory (port data area or PDA), the system routine `Freeze` reported an error trying to make the entire PDA present in physical memory. The entire PDA must be frozen so it can be accessed from the Interrupt Control Stack by Transport, and during timer pops (PARM = status from `Freeze`).

**ACTION:** Depending on the PARM value, your system load, and your current configuration, it is possible too much resident memory is already in use on your system to support the number of timers required by maximum the number of TCP connections currently configured in NMMGR, and thus the required PDA size. If this seems likely, you might try starting your network sooner after system startup, or possibly reducing the number of TCP connections configured. If necessary, submit an CR.

4360 CLAS0002 **MESSAGE: Find Procedure Failed**

**CAUSE:** During startup, when attempting to load the address of an `NL.PUB.SYS` procedure to service the Net Timers port, the system routine `Hpgetsysplabel` reported an error trying to locate the system routine `nettmr_ics_server`. This procedure is required so the system will know who to call to process timeout messages arriving at the port (PARM = status from `Hpgetsysplabel`).

**ACTION:** Net Timers failed to start; instead it cleaned up after itself and reported an error. If you just installed a new release of the Transport subsystem, possibly the installation was incorrect, incomplete, or corrupted. There is also a remote possibility the system has run out of room for dynamically loaded procedures. If necessary, submit an CR.

4380 CLAS0002 **MESSAGE: Create Port Failed**

CAUSE: During startup, while attempting to create a message port to receive system-timer timeout messages, the system routine `Create_port` failed. The port is needed as a destination for timeout messages for the system timers which drive Net Timers (PARM = status from `Create_port`).

ACTION: Net Timers failed to start; instead it cleaned up after itself and reported an error. If your system is heavily loaded, it is possible the system has run out of ports; if you think this is the case, you might try reducing system load, however a significant reduction would be needed to allow all of Transport to start up. If necessary, submit an CR.

4400 CLAS0002 **MESSAGE: Cannot disown port**

CAUSE: During startup, after successful creation of a port for Net Timers, the system routine `Port_control` reported an error trying to release CP's ownership of the port. Port ownership must be released in case a different process deletes the Net Timers port later (PARM = status from `Port_control`).

ACTION: Net Timers failed to start; instead it cleaned up after itself and reported an error. Submit an CR.

4420 CLAS0002 **MESSAGE: Semaphore setup error**

CAUSE: During startup initialization of the Net Timers context memory (port data area or PDA), the system routine `Cb_init` reported an error trying to clear the Net Timers semaphore. The semaphore is required because multiple callers can access the same timer list, and that list can pop at any time (PARM = status from `Cb_init`).

ACTION: Net Timers failed to start; instead it cleaned up after itself and reported an error. Submit an CR.

4440 CLAS0004 **MESSAGE: Starting**

CAUSE: Net Timers is being started up (PARM = Net Timers port data address).

ACTION: This logging is provided for information purposes only. No action is required.



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## NETIPC Logging Location Codes

- 0 CLAS0000     **MESSAGE: None**  
CAUSE: Invalid port message.  
ACTION: Examine “Info” section of log record. See Appendix A ,  
“Submitting a CR,” of this manual.
- 1 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Unable to create port in data segment table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Unable to locate known entry in the name registry.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Received unsolicited PXP reply message.  
ACTION: Examine “Info” section of log record. See Appendix A ,  
“Submitting a CR,” of this manual.
- 4 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Buffer Manager error.  
ACTION: Examine “Info” section of log record. See Appendix A ,  
“Submitting a CR,” of this manual.
- 5 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Trace error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Socket registry process reported a socket error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Socket registry was unable to build a socket path report from  
the node's path report.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0000    **MESSAGE: Internal error.**  
CAUSE: Unable to send or insert a port message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 14 CLAS0000     **MESSAGE: Internal**  
                  CAUSE: Unable to release timer.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 16 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Unable to create port message pool.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 17 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Call hpgetsysplabel failed.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 18 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Call to convert\_dst failed.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 19 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Unable to alter port subqueue state.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 20 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Failure in the call to NWTM procedure.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 21 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Unable to get the pointer to file system data structure.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 22 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Unable to set timer interval.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 23 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Error in creating LSI.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 24 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Unable to allocate a LSI.  
                  ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 25 CLAS0000     **MESSAGE: Internal error.**  
                  CAUSE: Unable to allocate socket record.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 26 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Error in call to dict\_find.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 27 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Unable to create socket record.  
ACTION: This is typically not an error condition. A total of at least 8000 socket records can be opened simultaneously on your system. If you do believe that there are not that many sockets opened then submit an CR. Otherwise run your application when there are fewer NETIPC applications active on your system.
- 30 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Error in call to dict\_find.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 32 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Failed to allocate an address.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 33 CLAS0000     **MESSAGE: None**  
CAUSE: Protocol module error.  
ACTION: Verify the protocol module is active. See Appendix A , “Submitting a CR,” of this manual.
- 34 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Table Manager error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 35 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Failure in freezing the GSXDS. The GSXDS is a data structure internal to the NETIPC Subsystem.  
ACTION: Check the memory allocation on your system and see Appendix A , “Submitting a CR,” of this manual if a CR is needed.
- 36 CLAS0000     **MESSAGE: Internal error.**  
CAUSE: Failure in creating new process.  
ACTION: Check the files in NET.SYS to ensure that all networking programs are installed. For example, make sure that PT2PNSTN.NET.SYS exists. If files are ok, then see Appendix A , “Submitting a CR,” of this manual to submit a CR.

- 0 CLAS0001     **MESSAGE: None**  
                  CAUSE: Socket name registry full.  
                  ACTION: Call IPCNAMERASE to open slots in the socket name registry.
- 1 CLAS0001     **MESSAGE: None**  
                  CAUSE: Socket Give table full.  
                  ACTION: Call IPCGET to open slots in the socket give table.
- 2 CLAS0001     **MESSAGE: Port DST table full.**  
                  CAUSE: The Port DST table is a data structure internal to the NETIPC  
                  subsystem, not to be confused with MPE DST entries.  
                  ACTION: Wait until fewer NetIPC applications are running on your  
                  system. Try again.

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## NFT Logging Location Codes

1 CLAS0002

**MESSAGE: None**

**CAUSE:** Attempt to open file `NFCAT2` failed. Logging entry will also contain a file system error.

**ACTION:** Act according to the file system error. For example, if the error is “non-existent permanent file”, then the system manager should place a copy of `NFCAT2` in `NET.SYS`.

10 CLAS0002

**MESSAGE: None**

**CAUSE:** Attempt to open file `NFTCAT2` failed. Logging entry will also contain a file system error.

**ACTION:** Act according to the file system error. For example, if the error is “non-existent permanent file”, then the system manager should place a copy of `NFTCAT2` in `NET.SYS`.

6 CLAS0003

**MESSAGE: None**

**CAUSE:** `NFTCAT2` contains invalid configuration values.

**ACTION:** System manager should obtain a version of `NFTCAT2` that has valid configuration values and install it in `NET.SYS`. Another resource is to change the configuration values in the existing `NFTCAT2` file. However, Hewlett-Packard does not recommend this procedure. If any other internal errors (`CLAS0000`) are logged for the NFT module of the Network Services subsystem, see Appendix A , “Submitting a CR,” of this manual.

10 CLAS0003

**MESSAGE: None**

**CAUSE:** Incompatible version of `NFTCAT2` installed.

**ACTION:** System manager should obtain correct version of `NFTCAT2` and install it in `NET.SYS`.

## NI Logging Location Codes

- 1 CLAS0005     **MESSAGE: None**  
**CAUSE:** Device was idle for configured Idle Timeout and timer was enabled for this device. Device will be disconnected (PARM = device ldev).  
**ACTION:** None.
- 4 CLAS0002     **MESSAGE: None**  
**CAUSE:** Protocol ID in Protocol Stop message was not found in NI's PID table (PARM = Protocol ID).  
**ACTION:** See Appendix A , "Submitting a CR," of this manual.
- 5 CLAS0002     **MESSAGE: None**  
**CAUSE:** PID table is too small for the number of protocols being started for this NI (PARM = Protocol ID which could not be started).  
**ACTION:** See Appendix A , "Submitting a CR," of this manual.
- 6 CLAS0002     **MESSAGE: None**  
**CAUSE:** CP asked NI to stop a device which NI could not locate in its device tables (PARM = device ID).  
**ACTION:** See Appendix A , "Submitting a CR," of this manual.
- 7 CLAS0002     **MESSAGE: None**  
**CAUSE:** Device table is too small for the number of devices being started for this NI, or a device was started twice by CP (PARM = Device ID).  
**ACTION:** See Appendix A , "Submitting a CR," of this manual.
- 11 CLAS0002    **MESSAGE: None**  
**CAUSE:** NI received data on a Protocol ID which has no match in PID table (PARM = Protocol ID).  
**ACTION:** See Appendix A , "Submitting a CR," of this manual.
- 13 CLAS0002    **MESSAGE: None**  
**CAUSE:** Dial Protocol owns the device, but another protocol was sent data from the remote node (PARM = Violating Protocol ID).  
**ACTION:** If this happens frequently, carefully check the configurations on both the local and remote systems. See Appendix A , "Submitting a CR," of this manual.

- 14 CLAS0002      **MESSAGE: None**  
CAUSE: On arrival of inbound data, a `send_msg` to the upper layer protocol failed (PARM = status from `send_msg`).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS0002      **MESSAGE: None**  
CAUSE: The NI received an inbound data message from a device that is not in the device table for this NI (PARM = LDEV).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 18 CLAS0002      **MESSAGE: None**  
CAUSE: A bad or unexpected message was received by the NI (PARM = Message Function Code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 19 CLAS0002      **MESSAGE: None**  
CAUSE: While trying to send outbound loopback data back, a `send_msg` failed (PARM = status from `send_msg`).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 21 CLAS0002      **MESSAGE: None**  
CAUSE: While trying to send outbound data to a router driver via DC/LDM, a `send_msg` failed (PARM = status from `send_msg`).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 22 CLAS0002      **MESSAGE: None**  
CAUSE: Transport sent outbound data to NI for a Protocol ID which has no match in the PID table for this NI (PARM = Protocol ID).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 23 CLAS0003      **MESSAGE: None**  
CAUSE: While attempting to send outbound data, NI discovered the route ID in the message was out of date, so the outbound packet was discarded (PARM = route ID from route table).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 24 CLAS0002      **MESSAGE: None**  
CAUSE: A protocol other than PROBE attempted to send a multicast packet, disallowed by the NI (PARM = Protocol ID).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 25 CLAS0002     **MESSAGE: None**  
CAUSE: The protocol attempted to send data when no devices were active (PARM = Protocol ID).  
ACTION: Error should be preceded by other errors or a DELLINK message. If not, see Appendix A , “Submitting a CR,” of this manual.
- 28 CLAS0004     **MESSAGE: None**  
CAUSE: Network Interface Started (PARM = NI port data address).  
ACTION: None.
- 29 CLAS0004     **MESSAGE: None**  
CAUSE: Network Interface Stopped (PARM = NI port data address).  
ACTION: None.
- 30 CLAS0002     **MESSAGE: None**  
CAUSE: Trouble starting the idle device timer of the NI (PARM = status from `get_timer`).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 44 CLAS0002     **MESSAGE: None**  
CAUSE: While trying to send a connect request to a driver, a `send_msg` failed (PARM = status from `send_msg`).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 46 CLAS0002     **MESSAGE: None**  
CAUSE: CP asked NI to disconnect a device which NI could not find in its device table (PARM = connect ID).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 48 CLAS0002     **MESSAGE: None**  
CAUSE: While trying to send a disconnect request to a driver, a `send_msg` failed (PARM = status from `send_msg`).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 49 CLAS0002     **MESSAGE: None**  
CAUSE: CP asked NI to connect a device which NI could not find in its device table (PARM = link ID).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 51 CLAS0002     **MESSAGE: None**  
CAUSE: After receiving a connect confirmation event from a driver, NI could not find the protocol for that device type, either X.25 or SNA, in its PID table.



- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 52 CLAS0002     **MESSAGE: None**
- CAUSE: After receiving a connect confirmation event from a driver, `send_msg` failed trying to forward a similar message to the protocol (PARM = status from `send_msg`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 53 CLAS0002     **MESSAGE: None**
- CAUSE: A driver acknowledged disconnection of a link which NI could not find in its tables (PARM = Protocol ID).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 55 CLAS0002     **MESSAGE: None**
- CAUSE: After receiving a disconnect confirmation event from a driver, NI could not find the protocol for that device type, either X.25 or SNA, in its PID table.
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 56 CLAS0002     **MESSAGE: None**
- CAUSE: After receiving a disconnect confirmation event from a driver, `send_msg` failed trying to forward a similar message to the protocol (PARM = status from `send_msg`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 58 CLAS0002     **MESSAGE: None**
- CAUSE: After receiving a connect reply from a driver, `send_msg` failed trying to forward a similar message to the sender of the original connect (PARM = status from `send_msg`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 59 CLAS0002     **MESSAGE: None**
- CAUSE: After receiving a disconnect reply from a driver, NI could not locate information about the original request in its tables (PARM = message ID).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 60 CLAS0002     **MESSAGE: None**
- CAUSE: After receiving a disconnect reply from a driver, `send_msg` failed trying to forward a similar message to the sender of the original disconnect (PARM = status from `send_msg`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 63 CLAS0002      **MESSAGE: None**  
**CAUSE:** While trying to send outbound data to a driver, `send_msg` failed (PARM = status from `send_msg`).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 64 CLAS0002      **MESSAGE: None**  
**CAUSE:** NI received inbound data from a driver, for a link which NI could not find in its tables (PARM = link ID).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 67 CLAS0002      **MESSAGE: None**  
**CAUSE:** While processing inbound data from a driver, `send_msg` failed trying to forward the data to the protocol (PARM = status from `send_msg`).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 68 CLAS0002      **MESSAGE: None**  
**CAUSE:** CP asked NI to connect a device which NI could not find in its device table (PARM = device ID).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 71 CLAS0002      **MESSAGE: None**  
**CAUSE:** When attempting to create a free pool of device and protocol entries, `new_create_table` failed (PARM = status from `new_create_table`).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 72 CLAS0002      **MESSAGE: None**  
**CAUSE:** When attempting to create a table to hold information about outstanding X.25 requests, `new_create_table` failed (PARM = status from `new_create_table`).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 73 CLAS0002      **MESSAGE: None**  
**CAUSE:** While processing inbound data from a driver, NI was able to locate the input device in its device table, but then could not locate the corresponding protocol in the protocol table.  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 75 CLAS0002      **MESSAGE: None**  
**CAUSE:** Bad or unexpected function code received by NI port in a control reply message from driver (PARM = function code).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

- 76 CLAS0002      **MESSAGE: None**
- CAUSE: NI request table is too small to hold information for the number of outstanding connect requests being attempted (PARM = request ID which was not connected).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 77 CLAS0002      **MESSAGE: None**
- CAUSE: NI request table is too small to hold information for the number of outstanding disconnect requests being attempted (PARM = request ID which was not disconnected).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 78 CLAS0002      **MESSAGE: None**
- CAUSE: While trying to delete one of NI’s tables during shutdown, delete\_table failed (PARM = status from delete\_table).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 79 CLAS0002      **MESSAGE: None**
- CAUSE: After receiving a connect reply from a driver, NI could not locate information about the original request in its tables (PARM = message ID).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 80 CLAS0002      **MESSAGE: None**
- CAUSE: Bad or unexpected function code received by NI port in a async event message from driver (PARM = function code).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 81 CLAS0002      **MESSAGE: None**
- CAUSE: Bad or unknown message received by NI port on inbound data subqueues (PARM = message descriptor).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 82 CLAS0002      **MESSAGE: None**
- CAUSE: During error recovery processing of a failed disconnect request, send\_msg failed trying to report the problem back to the sender of the original disconnect (PARM = status from send\_msg).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 83 CLAS0002      **MESSAGE: None**
- CAUSE: During error recovery processing of a failed connect request, send\_msg failed trying to report the problem back to the sender of the original connect (PARM = status from send\_msg).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 84 CLAS0002     **MESSAGE: None**
- CAUSE: While stopping a protocol or device, or after completing an outstanding request, NI attempted to free a request block, device or protocol table entry, but `new_release_table_entry` failed (PARM = status from `new_release_table_entry`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 85 CLAS0002     **MESSAGE: None**
- CAUSE: During error recovery following a failure during transmission of outbound X.25 data, `netfc_release` failed (PARM = status from `netfc_release`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 86 CLAS0002     **MESSAGE: None**
- CAUSE: During error recovery following a failure during reception of inbound X.25 data, `netfc_release` failed (PARM = status from `netfc_release`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 101 CLAS0002    **MESSAGE: None**
- CAUSE: When attempting to create a table to hold information about outstanding SNA requests, `new_create_table` failed (PARM = status from `new_create_table`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 102 CLAS0002    **MESSAGE: None**
- CAUSE: While starting an FDDI device, NI was unable to read the FDDI station address.
- ACTION: The station address should be available any time the FDDI driver has been started. See Appendix A , “Submitting a CR,” of this manual.
- 103 CLAS0002    **MESSAGE: None**
- CAUSE: An attempt was made to send a packet over a LAPB link which did not have extended addressing specified in the packet.
- ACTION: Extended addressing is always required for LAPB links. See Appendix A , “Submitting a CR,” of this manual.
- 104 CLAS0002    **MESSAGE: None**
- CAUSE: After forming the extended address for an outbound LAPB packet, NI encountered an error trying to write that address into the packet.
- ACTION: Something is wrong with the outbound buffer. See Appendix A , “Submitting a CR,” of this manual.

105 CLAS0002

**MESSAGE: None**

**CAUSE:** After building a header for an outbound FDDI or Token Ring packet, NI encountered an error trying to write that header into the packet.

**ACTION:** Something is wrong with the outbound buffer. See Appendix A , “Submitting a CR.”

106 CLAS0002

**MESSAGE: None**

**CAUSE:** When NI attempted to send an outbound LAN, FDDI, or Token Ring packet by calling the driver’s outbound write initiator routine, that routine reported an error.

**ACTION:** Something is wrong with the driver or the SDI address passed with the packet. See Appendix A , “Submitting a CR,” of this manual.

## Path Result Code Table

0	<b>MESSAGE: None</b> CAUSE: Path resolved, path descriptor returned. ACTION: None. Informative message.
2	<b>MESSAGE: None</b> CAUSE: Path was verified path descriptor returned. ACTION: None. Informative message.
3	<b>MESSAGE: None</b> CAUSE: Path resolution has been deferred. ACTION: Wait for reply message on reply port.
5	<b>MESSAGE: None</b> CAUSE: Internal resource error. ACTION: See Appendix A , "Submitting a CR," of this manual.
6	<b>MESSAGE: None</b> CAUSE: Internal error encountered. ACTION: See Appendix A , "Submitting a CR," of this manual.
9	<b>MESSAGE: None</b> Cause: Mapping table entry not found. ACTION: See Map Result Code Table.
11	<b>MESSAGE: None</b> Cause: Destination network not in routing table. ACTION: See Appendix A , "Submitting a CR," of this manual.
12	<b>MESSAGE: None</b> Cause: Not directly connected to network. Network not started or IP address is incorrect. ACTION: Check destination IP address is correct and that the network is started.
13	<b>MESSAGE: None</b> Cause: Format error in path report. ACTION: See Appendix A , "Submitting a CR," of this manual.

- 14           **MESSAGE: None**  
Cause: No suitable path reports.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 16           **MESSAGE: None**  
Cause: Bad mapping table sequence number.  
ACTION: See Map Result Code Table.
- 17           **MESSAGE: None**  
Cause: Mapping table entry has aged.  
ACTION: See Map Result Code Table.
- 18           **MESSAGE: None**  
Cause: Path is in disconnecting state.  
ACTION: See Map Result Code Table.
- 19           **MESSAGE: None**  
Cause: Mapping Table is in a bad state.  
ACTION: See Map Result Code Table.

## Probe Logging Location Codes

- 7 CLAS0001     **MESSAGE: None**  
**CAUSE:** Bad or unexpected message received by PROBE Port (PARM = Message Function Code).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 14 CLAS0003     **MESSAGE: None**  
**CAUSE:** Retransmission timeout is faster than packet can be sent out to the node. This can happen if the node is congested. PARM indicates probe (%1) or proxy (%2) timer.  
**ACTION:** Increase the retransmission time in the configuration file (@NETXPORT.NI.lanNI.protocol.PROBE). See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS0003     **MESSAGE: None**  
**CAUSE:** Reply received after request has timed out (PARM = Sequence number from PROBE Address Reply Packet).  
**ACTION:** Can happen from time to time. If excessive, then increase retransmission timeout or retry count in Probe Protocol Configuration screen in NMMGR and see Appendix A , “Submitting a CR,” of this manual.
- 16 CLAS0003     **MESSAGE: None**  
**CAUSE:** Reply received after request has timed out (PARM = Sequence number from PROBE Name Reply Packet).  
**ACTION:** Can happen from time to time. If excessive, then increase retransmission timeout or retry count in the Probe Protocol Configuration screen and see Appendix A , “Submitting a CR,” of this manual.
- 17 CLAS0002     **MESSAGE: None**  
**CAUSE:** DictSend to name server port failed on Proxy Name Request (PARM = DictSend result code).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 20 CLAS0002     **MESSAGE: None**  
**CAUSE:** Reply received after request has timed out (PARM = Request ID).  
**ACTION:** Can happen from time to time. If excessive, then increase retransmission timeout or retry count in the Probe Protocol Configuration screen and see Appendix A , “Submitting a CR,” of this manual.



- 21 CLAS0002      **MESSAGE: None**  
CAUSE: Room allocated for node name and path report is too small (PARM = number of bytes short).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 22 CLAS0002      **MESSAGE: None**  
CAUSE: Timer popped which has no request outstanding (PARM = Time request ID).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 23 CLAS0002      **MESSAGE: None**  
CAUSE: Received Gateway Reply message, which is not supported (PARM = Probe message type).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 24 CLAS0003      **MESSAGE: None**  
CAUSE: Late reply came in when cleaning up Proxy (PARM = request ID).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 27 CLAS0002      **MESSAGE: None**  
CAUSE: Message type in incoming packet is invalid.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 28 CLAS0005      **MESSAGE: None**  
CAUSE: Retransmission has occurred (PARM = Retries until exhausted).  
ACTION: Informative message.
- 29 CLAS0002      **MESSAGE: None**  
CAUSE: Attempt to cache node name failed (PARM = Length of Name).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 30 CLAS0002      **MESSAGE: None**  
CAUSE: Attempt to cache node name failed (PARM = Length of Name).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 32 CLAS0002      **MESSAGE: None**  
CAUSE: Attempt to map addresses failed (PARM = Path resolve error code).  
ACTION: Increase the Maximum Number of Nodes in the LAN 802.3 Network Interface screen in NMMGR. If error recurs then see Appendix A , “Submitting a CR,” of this manual.

- 33 CLAS0002     **MESSAGE: None**  
CAUSE: Attempt to map addresses failed (PARM = Path resolve error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 35 CLAS0004     **MESSAGE: None**  
CAUSE: PROBE Protocol Started.  
ACTION: Informative message.
- 36 CLAS0004     **MESSAGE: None**  
CAUSE: PROBE Protocol Stopped.  
ACTION: Informative message.
- 37 CLAS0004     **MESSAGE: None**  
CAUSE: PROBE Protocol Stopped (Delayed with Proxy).  
ACTION: None.
- 38 CLAS0005     **MESSAGE: None**  
CAUSE: Probe Unsolicited Request made (PARM = Sequence number allocated for request).  
ACTION: Informative message.
- 39 CLAS0005     **MESSAGE: None**  
CAUSE: Probe Name Request made (PARM = Sequence number allocated for request).  
ACTION: Informative message.
- 40 CLAS0005     **MESSAGE: None**  
CAUSE: Probe Address Request made (PARM = Sequence number allocated for request).  
ACTION: Informative message.
- 46 CLAS0005     **MESSAGE: None**  
CAUSE: Probe Node Down Request made (PARM = Sequence number allocated from request).  
ACTION: None.
- 47 CLAS0002     **MESSAGE: None**  
CAUSE: Error in trying to delete node name from path cache after receiving a Probe Node Down message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 48 CLAS0002      **MESSAGE: None**  
  
CAUSE: Attempt to add PROBE to the mapping table during INIT message failed (PARM = mapping error code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 49 CLAS0002      **MESSAGE: None**  
  
CAUSE: Could not delete the PROBE entity from the mapping table in a terminate sequence (PARM = mapping error code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 52 CLAS0002      **MESSAGE: None**  
  
CAUSE: Invalid device information in Probe’s data area.  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 53 CLAS0002      **MESSAGE: None**  
  
CAUSE: Invalid device information in Probe’s data area.  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 55 CLAS0002      **MESSAGE: None**  
  
CAUSE: Attempt to add MAP address failed.  
  
ACTION: Increase the maximum number of nodes in the LAN 802.3 NI screen in NMMGR. If error recurs, then see Appendix A , “Submitting a CR,” of this manual.

## PTOP Logging Location Codes

1 CLAS0003

**MESSAGE:** None

**CAUSE:** Port Creation failed in response to a POPEN intrinsic.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

2 CLAS0003

**MESSAGE:** Internal error.

**CAUSE:** Buffer Manager error. Port not allocated.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

3 CLAS0003

**MESSAGE:** None

**CAUSE:** Socket connection failure.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

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## PXP PM Logging Location Codes

The PXP header is contained in the message frame logged on inbound packets. The header begins at word 18 of the message frame.

- 0 CLAS0001    **MESSAGE: None**  
CAUSE: Received an invalid NS format message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 1 CLAS0001    **MESSAGE: None**  
CAUSE: Received a port message before receiving the CP initialization message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0001    **MESSAGE: None**  
CAUSE: Received an invalid SIP message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0001    **MESSAGE: None**  
CAUSE: Received an invalid BFM message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0001    **MESSAGE: None**  
CAUSE: Received an invalid NetIPC message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS0001    **MESSAGE: None**  
CAUSE: Received an invalid message of unknown format (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0005    **MESSAGE: None**  
CAUSE: A PXP PM has been activated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS0002    **MESSAGE: None**  
CAUSE: An error result was returned on an NS 'DICT' Add call. The PXP PM was therefore not started (PARM = NS 'DICT' Add error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 9 CLAS0001      **MESSAGE: None**  
CAUSE: A PXP internal resource error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 10 CLAS0001      **MESSAGE: None**  
CAUSE: A PXP internal error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0001      **MESSAGE: None**  
CAUSE: A PXP internal resource error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS0001      **MESSAGE: None**  
CAUSE: A PXP internal error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 13 CLAS0002      **MESSAGE: None**  
CAUSE: An error result was returned on an `NMclosetrace` call for NetIPC tracing (PARM = NM error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14 CLAS0003      **MESSAGE: None**  
CAUSE: An inbound packet has been discarded due to a checksum error.  
ACTION: Repeated checksum errors indicate a possible link problem. Refer to the *NS 3000/iX Operations and Maintenance Manual*.
- 15 CLAS0003      **MESSAGE: None**  
CAUSE: An inbound packet was discarded due to a protocol header violation.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 16 CLAS0003      **MESSAGE: None**  
CAUSE: An error packet could not be generated due to pending I/O.  
ACTION: Informative message.
- 17 CLAS0003      **MESSAGE: None**  
CAUSE: An inbound packet was discarded due to a protocol header violation.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 18 CLAS0003      **MESSAGE: None**  
CAUSE: A PXP request packet has been retransmitted (PARM = number of retransmissions performed).

**ACTION:** Repeated retransmissions suggest possible link or configuration problems. See PXP error code explanations.

19 CLAS0003

**MESSAGE: None**

**CAUSE:** PXP request failed. Retransmission-retry maximum exceeded. Possible link or configuration problems.

**ACTION:** See error 10 in the Chapter 10 , “Network Transport Protocol (PMERR) Error Messages.”

33 CLAS0003

**MESSAGE: None**

**CAUSE:** An inbound request packet was discarded due to a lack of receive resources.

**ACTION:** None.

34 CLAS0002

**MESSAGE: None**

**CAUSE:** An inbound request packet was discarded due to a Path error.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

35 CLAS0003

**MESSAGE: None**

**CAUSE:** A PXP error packet was received.

**ACTION:** Informative message.

37 CLAS0001

**MESSAGE: None**

**CAUSE:** A PXP internal resource error has been encountered.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

38 CLAS0001

**MESSAGE: None**

**CAUSE:** A PXP internal resource error has been encountered.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

39 CLAS0003

**MESSAGE: None**

**CAUSE:** A duplicate reply has been discarded.

**ACTION:** Informative message.

44 CLAS0001

**MESSAGE: None**

**CAUSE:** An error result was returned on a BFMbufgranted message (PARM = BFM error code).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

46 CLAS0001

**MESSAGE: None**

**CAUSE:** A PXP internal resource error has been encountered.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

- 48 CLAS0001     **MESSAGE: None**  
CAUSE: A PXP internal resource error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 50 CLAS0003     **MESSAGE: None**  
CAUSE: An inbound packet was discarded as part of the shutdown sequence.  
ACTION: Informative message.
- 53 CLAS0002     **MESSAGE: None**  
CAUSE: An error result was returned on an N-McIosetrace call for NetIPC tracing (PARM = NM error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 54 CLAS0005     **MESSAGE: None**  
CAUSE: A PXP PM has been deactivated.  
ACTION: Informative message.
- 55 CLAS0006     **MESSAGE: None**  
CAUSE: Statistical summary for a deactivated PXP PM.  
ACTION: Statistical information.
- 56 CLAS0002     **MESSAGE: None**  
CAUSE: A PXP error packet could not be generated due to a PATH error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 59 CLAS0003     **MESSAGE: None**  
CAUSE: An error result was returned on a PATH'get call (PARM = PATH error code).  
ACTION: See PATH error explanations listed elsewhere in this section.
- 60 CLAS0003     **MESSAGE: None**  
CAUSE: An error result was returned on a PATH'get call (PARM = PATH error code).  
ACTION: See PATH error explanations listed elsewhere in this section.
- 69 CLAS0001     **MESSAGE: None**  
CAUSE: An error was returned on an NS'DICT'Delete call (PARM = error result returned).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.



70 CLAS0003

**MESSAGE: None**

CAUSE: Adding a PXP PM to the registry failed (PARM = error result returned by Reg'CM'Entity).

ACTION: This is only a warning, but submit an CR anyway. See Appendix A , "Submitting a CR."

## PXP SIP Logging Location Codes

- 0 CLAS0001     **MESSAGE: None**  
CAUSE: Received a port message before receiving the initialization message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 1 CLAS0001     **MESSAGE: None**  
CAUSE: Received an invalid CP message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0001     **MESSAGE: None**  
CAUSE: Received an invalid SIP message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0001     **MESSAGE: None**  
CAUSE: Received an invalid NS format message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0001     **MESSAGE: None**  
CAUSE: Received an invalid NetIPC message (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS0001     **MESSAGE: None**  
CAUSE: Received an invalid message of unknown format (PARM = message function).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0002     **MESSAGE: None**  
CAUSE: An error result was returned on a DICTadd call. The PXP PM was therefore not started (PARM = error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS0001     **MESSAGE: None**  
CAUSE: An error result was returned on a DICTadd call. The PXP SIP was therefore not started (PARM = DICT error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 8 CLAS0004      **MESSAGE: None**  
CAUSE: The PXP PM has been started.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 9 CLAS0002      **MESSAGE: None**  
CAUSE: A socket could not be opened due to a port dst problem (PARM = error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 10 CLAS0002     **MESSAGE: None**  
CAUSE: A socket could not be opened due to a CREATEPORT' failure (PARM = PORT error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0001     **MESSAGE: None**  
CAUSE: A PXP internal error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS0001     **MESSAGE: None**  
CAUSE: A PXP internal resource error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 13 CLAS0001     **MESSAGE: None**  
CAUSE: A PXP internal error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14 CLAS0001     **MESSAGE: None**  
CAUSE: A PXP internal resource error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS0001     **MESSAGE: None**  
CAUSE: A PXP internal resource error has been encountered.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 16 CLAS0001     **MESSAGE: None**  
CAUSE: An error was returned on a DICTdelete call (PARM = DICT error code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 17 CLAS0003     **MESSAGE: None**  
CAUSE: An inbound packet was discarded as part of SIP shutdown clean-up.

- ACTION: None. Informational message.
- 20 CLAS0006     **MESSAGE: None**  
CAUSE: Statistical summary for the deactivated PXP SIP.  
ACTION: None. Statistical information.
- 21 CLAS0004     **MESSAGE: None**  
CAUSE: The PXP SIP has been deactivated.  
ACTION: None. Nodal information.
- 22 CLAS0003     **MESSAGE: None**  
CAUSE: An inbound packet has been discarded because the destination PXP socket is not open.  
ACTION: None.
- 23 CLAS0003     **MESSAGE: None**  
CAUSE: A PXP error packet was not generated because the inbound packet was a reply or error packet.  
ACTION: None.
- 24 CLAS0002     **MESSAGE: None**  
CAUSE: A PXP error packet was not generated due to a PATH failure.  
ACTION: See Appendix A , “Submitting a CR.”
- 25 CLAS0003     **MESSAGE: None**  
CAUSE: Error encountered adding PXP SIP to the registry (PARM = result code returned by Reg 'CM' Add 'Entity').  
ACTION: This is only a warning, but submit an CR anyway. See Appendix A , “Submitting a CR.”
- 26 CLAS0003     **MESSAGE: None**  
CAUSE: A PXP error packet was not generated due to a PATH failure (PARM = PATH error code).  
ACTION: See PATH error explanations.
- 30 CLAS0003     **MESSAGE: None**  
CAUSE: A Probe error result was returned (PARM = PROBE error code).  
ACTION: See Probe error explanations.
- 32 CLAS0003     **MESSAGE: None**  
CAUSE: An error result was returned on a PATH 'get call (PARM = error code).

ACTION: See PATH error explanations.

34 CLAS0003

**MESSAGE: None**

CAUSE: A PXP socket could not be opened because the maximum number configured has been reached.

ACTION: Increase the number of PXP sockets configured. Use the PXP Data screen.

35 CLAS0002  
CLAS0003

**MESSAGE: None**

CAUSE: The PXP SIP received an ICMP message from the IP module (PARM = ICMP type word).

ACTION: None.

## RASERVER Logging Location Codes

There is an RASERVER created for each use of the RFA services. This process receives and processes protocol messages for the service and accesses files and terminals for the service.

- 1 CLAS003     **MESSAGE: None**  
CAUSE: RASERVER stack log buffer could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS003     **MESSAGE: None**  
CAUSE: RASERVER header for data structures could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS003     **MESSAGE: None**  
CAUSE: Buffer space for RASERVER data structures could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS002     **MESSAGE: None**  
CAUSE: Port message buffer could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS002     **MESSAGE: None**  
CAUSE: Wait entry for a port could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS002     **MESSAGE: None**  
CAUSE: Could not get an AFT entry for a port.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS002     **MESSAGE: None**  
CAUSE: Could not create a port.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 8 CLAS003     **MESSAGE: None**  
CAUSE: Buffer space for RFMA data structure could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 9 CLAS003     **MESSAGE: None**  
CAUSE: Could not add a port to the port dictionary.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 10 CLAS003      **MESSAGE: None**  
CAUSE: Could not find a wait entry for nowait I/O which completed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS003      **MESSAGE: None**  
CAUSE: No I/O pending when a nowait I/O completed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS003      **MESSAGE: None**  
CAUSE: RFA services reported an error.  
ACTION: Repair the RFA error, if possible.
- 13 CLAS005      **MESSAGE: None**  
CAUSE: Attempt to get an existing IPC connection failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14 CLAS003      **MESSAGE: None**  
CAUSE: Invalid server info number in the port message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS003      **MESSAGE: None**  
CAUSE: Function number in port message request is bad.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 16 CLAS003      **MESSAGE: None**  
CAUSE: Attempt to adopt server failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 17 CLAS005      **MESSAGE: None**  
CAUSE: Nowait IPCRECV failed. Possible Unanticipated connection abort.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 18 CLAS005      **MESSAGE: None**  
CAUSE: IPCSEND failed. Possible unanticipated connection abort.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 19 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER connection buffer could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 20 CLAS005      **MESSAGE: None**  
CAUSE: Could not make connection nowait.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 21 CLAS005      **MESSAGE: None**  
CAUSE: Could not disable connection timeouts.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 22 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER connection buffer could not be deallocated.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 23 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER RFMA buffer could not be deallocated.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 24 CLAS002      **MESSAGE: None**  
CAUSE: Could not shutdown connection.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 27 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER wait entry could not be deallocated.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 28 CLAS003      **MESSAGE: None**  
CAUSE: RASERVER could not send a message to DSDAD.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 29 CLAS002      **MESSAGE: None**  
CAUSE: Could not get an AFT entry for a port.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 30 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER could not allocate a file control block.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 31 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER could not deallocate a file control block.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 32 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER failed to successfully close a database.



- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 33 CLAS002     **MESSAGE: None**  
CAUSE: RASERVER failed to increase the size of its connection buffer.  
User requested more than 30000 bytes of data.  
ACTION: Decrease the request size below 30000 bytes.
- 34 CLAS002     **MESSAGE: None**  
CAUSE: RASERVER failed to find a file control block.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 35 CLAS002     **MESSAGE: None**  
CAUSE: RASERVER could not allocate the RFCB table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 36 CLAS003     **MESSAGE: None**  
CAUSE: RASERVER received an invalid remote file request.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 37 CLAS003     **MESSAGE: None**  
CAUSE: RASERVER received a bad status from the NSSTATUS  
intrinsic.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 38 CLAS002     **MESSAGE: None**  
CAUSE: RASERVER failed to obtain a null terminal for logon purposes.  
ACTION: Increase the number of virtual terminals configured on the  
system.
- 39 CLAS002     **MESSAGE: None**  
CAUSE: RASERVER failed to create a remote session.  
ACTION: Check logon string and session limits. If problem still occurs,  
see Appendix A , “Submitting a CR,” of this manual.
- 40 CLAS003     **MESSAGE: None**  
CAUSE: RASERVER failed to set bit in the process table extension.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 41 CLAS003     **MESSAGE: None**  
CAUSE: RASERVER received a bad status while attempting to qualify  
a node name.  
ACTION: Check correctness of node name. If problem still occurs, see  
Appendix A , “Submitting a CR,” of this manual.

- 42 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER could not allocate a compression buffer.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 43 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER could not deallocate a compression buffer  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 44 CLAS003      **MESSAGE: None**  
CAUSE: RASERVER detected an error while compressing data.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 45 CLAS002      **MESSAGE: None**  
CAUSE: RASERVER detected that the compressed/decompressed data  
will be greater than 30000 bytes.  
ACTION: Decrease the amount of data being compressed/decompressed.
- 46 CLAS003      **MESSAGE: None**  
CAUSE: RASERVER detected an error while decompressing data.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

## Remote Link Manager Logging Location Codes

- 1 CLAS0001     **MESSAGE: None**  
CAUSE: RLM's data structures are corrupted.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 3 CLAS0002     **MESSAGE: None**  
CAUSE: Send\_msg procedure returned a bad status to the RLM.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 4 CLAS0002     **MESSAGE: None**  
CAUSE: Link Error occurred in unexpected state.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 5 CLAS0002     **MESSAGE: None**  
CAUSE: RLM could not rendezvous ("bind") with the MCM.  
ACTION: Check the LAN hardware on the HP e3000. If no problem is found, see Appendix A , "Submitting a CR," of this manual.
- 6 CLAS0001     **MESSAGE: None**  
CAUSE: Internal state mismatch within the RLM module.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 7 CLAS0003     **MESSAGE: None**  
CAUSE: RLM is out of internal resources.  
ACTION: The operator may be attempting to bring up more than the maximum supported DTC links. If not, then see Appendix A , "Submitting a CR," of this manual.
- 8 CLAS0002     **MESSAGE: None**  
CAUSE: Either the RLM or code that it invoked encountered an unexpected trap.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 9 CLAS0002     **MESSAGE: None**  
CAUSE: RLM could not get a buffer to send an outbound packet (PARM = Status returned by "bmgr\_get\_buffer").  
ACTION: See Appendix A , "Submitting a CR," of this manual.

- 10 CLAS0003      **MESSAGE: None**  
CAUSE: RLM could not release some internal resources (PARM = Status returned by "new\_release\_table\_entry").  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 11 CLAS0001      **MESSAGE: None**  
CAUSE: RLM attempted to release a resource that had already been released.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 12 CLAS0002      **MESSAGE: None**  
CAUSE: RLM received a connect reply message from the link that it did not recognize.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 13 CLAS0003      **MESSAGE: None**  
CAUSE: The DTC is not responding to the HP e3000's connection attempts. (i.e., The HP e3000 could not establish an AFCP link control connection with the DTC.)  
ACTION: Check state of DTC and LAN hardware. If no problem can be found, see Appendix A , "Submitting a CR," of this manual.
- 14 CLAS0001      **MESSAGE: None**  
CAUSE: RLM's data structures are corrupted.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 15 CLAS0002      **MESSAGE: None**  
CAUSE: RLM could not release internal resources.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 16 CLAS0002      **MESSAGE: None**  
CAUSE: RLM received disconnect reply that did not match any transaction in progress.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 17 CLAS0001      **MESSAGE: None**  
CAUSE: State mismatch within RLM's data structures.  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 18 CLAS0002      **MESSAGE: None**  
CAUSE: RLM received an inbound data packet over a connection that is down.  
ACTION: See Appendix A , "Submitting a CR," of this manual.

- 19 CLAS0002      **MESSAGE: None**  
CAUSE: RLM could not write outbound packet to buffer.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 20 CLAS0002      **MESSAGE: None**  
CAUSE: RLM could not read buffer containing inbound packet.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 21 CLAS0001      **MESSAGE: None**  
CAUSE: Mismatch in states between the DTC and the HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 22 CLAS0002      **MESSAGE: None**  
CAUSE: Mismatch in states between DTC and HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 23 CLAS0001      **MESSAGE: None**  
CAUSE: Mismatch in states between the DTC and the HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 24 CLAS0001      **MESSAGE: None**  
CAUSE: Mismatch in states between the DTC and the HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 25 CLAS0003      **MESSAGE: None**  
CAUSE: DTC returned bad status during link shutdown (PARM = status returned by DTC).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 26 CLAS0002      **MESSAGE: None**  
CAUSE: Subsystem (NS Transport) specified invalid link.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 27 CLAS0003      **MESSAGE: None**  
CAUSE: Subsystem (NS Transport) attempted to connect X.25 card that was in a bad state.  
ACTION: Check status of X.25 protocol on DTC. Possible causes include bad/disconnected cable between DTC and switch/X.25 network, or the switch/X.25 network is down. When problem is corrected, HP e3000 will

display additional logging messages.

- 28 CLAS0002    **MESSAGE: None**  
CAUSE: Disconnect reply received from linkn contained bad status.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 29 CLAS0002    **MESSAGE: None**  
CAUSE: Subsystem specified a bad parameter in a connect or disconnect request.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 30 CLAS0001    **MESSAGE: None**  
CAUSE: Control mismatch between DTC and HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 31 CLAS0002    **MESSAGE: None**  
CAUSE: DTC sent bad packet to HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 32 CLAS0002    **MESSAGE: None**  
CAUSE: Could not separate (“unbind”) with link.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 33 CLAS0002    **MESSAGE: None**  
CAUSE: RLM attempted to send on a connection that was down.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 34 CLAS0003    **MESSAGE: None**  
CAUSE: Close request received while resources were outstanding.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 35 CLAS0002    **MESSAGE: None**  
CAUSE: Received packet from link on unknown connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 36 CLAS0002    **MESSAGE: None**  
CAUSE: RLM could not free a buffer.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 38 CLAS0002      **MESSAGE: None**  
CAUSE: RLM could not free a buffer.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 39 CLAS0002      **MESSAGE: None**  
CAUSE: State mismatch between DTC and Host.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 40 CLAS0002      **MESSAGE: None**  
CAUSE: DTC sent unknown packet to HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual. (Make sure a dump is taken of both the DTC and the HP e3000.)
- 41 CLAS0001      **MESSAGE: None**  
CAUSE: Data Structure state mismatches detected while processing a link failure.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 42 CLAS0001      **MESSAGE: None**  
CAUSE: RLM’s data structures are corrupted.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 43 CLAS0001      **MESSAGE: None**  
CAUSE: RLM’s data structures are corrupted.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 44 CLAS0003      **MESSAGE: None**  
CAUSE: A shutdown occurred with resources outstanding.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 45 CLAS0002      **MESSAGE: None**  
CAUSE: RLM could not release a semaphore.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 46 CLAS0002      **MESSAGE: None**  
CAUSE: RLM data structures are in an invalid state for the event.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 47 CLAS0003      **MESSAGE: None**  
CAUSE: Unexpected status sent by DTC.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 48 CLAS0001     **MESSAGE: None**  
CAUSE: Interface problem between DTC and HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 49 CLAS0002     **MESSAGE: None**  
CAUSE: Link sent a disconnect event for an unknown connection.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 50 CLAS0001     **MESSAGE: None**  
CAUSE: AFCP connection is in an invalid state for the event.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 51 CLAS0002     **MESSAGE: None**  
CAUSE: DTC sent an invalid packet to the HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 52 CLAS0002     **MESSAGE: None**  
CAUSE: The DTC sent an invalid packet to the HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 53 CLAS0003     **MESSAGE: None**  
CAUSE: The DTC sent bad status to HP e3000.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 54 CLAS0002     **MESSAGE: None**  
CAUSE: RLM could not find the expected timer message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 55 CLAS0002     **MESSAGE: None**  
CAUSE: RLM could not release timer resource.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 56 CLAS0002     **MESSAGE: None**  
CAUSE: RLM could not set a timer.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 58 CLAS0002     **MESSAGE: None**  
CAUSE: State mismatch within RLM.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 59 CLAS0002     **MESSAGE: None**  
CAUSE: Could not release timer.



- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 60 CLAS0002     **MESSAGE: None**  
CAUSE: Invalid message received for current state.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 61 CLAS0003     **MESSAGE: None**  
CAUSE: Link has gone down.  
ACTION: Run appropriate diagnostics. If no error is found, see Appendix A , “Submitting a CR,” of this manual.
- 62 CLAS0001     **MESSAGE: None**  
CAUSE: Internal State Error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 63 CLAS0002     **MESSAGE: None**  
CAUSE: Link State Error.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 64 CLAS0002     **MESSAGE: None**  
CAUSE: Subsystem (NS Transport) specified an invalid link.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 65 CLAS0005     **MESSAGE: None**  
CAUSE: DTC link was closed successfully.  
ACTION: None. (This is just an informative log.)
- 66 CLAS0005     **MESSAGE: None**  
CAUSE: DTC link was closed while it was in a bad state.  
ACTION: Check status of X.25 card on DTC.
- 67 CLAS0005     **MESSAGE: None**  
CAUSE: DTC link was opened successfully.  
ACTION: None.
- 68 CLAS0005     **MESSAGE: None**  
CAUSE: HP e3000 link failure occurred while attempting to shut down the DTC link.  
ACTION: Check status of LAN hardware.
- 69 CLAS0005     **MESSAGE: None**  
CAUSE: Contact with DTC was lost while attempting to shut down the DTC link.

- ACTION: Check status of DTC.
- 70 CLAS0005   **MESSAGE: None**  
CAUSE: Link went down abnormally during shutdown.  
ACTION: Check status of X.25 card on DTC.
- 71 CLAS0002   **MESSAGE: None**  
CAUSE: RLM could not release a semaphore.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 73 CLAS0002   **MESSAGE: None**  
CAUSE: RLM’s port is out of message frames.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 74 CLAS0002   **MESSAGE: None**  
CAUSE: RLM could not release message frame.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 76 CLAS0002   **MESSAGE: None**  
CAUSE: RLM could not get a semaphore (PARM = “netfc\_get” status).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 77 CLAS0001   **MESSAGE: None**  
CAUSE: Internal error within RLM.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 78 CLAS0001   **MESSAGE: None**  
CAUSE: Internal error within RLM.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 80 CLAS0001   **MESSAGE: None**  
CAUSE: HP e3000 could open link on DTC.  
ACTION: Check error messages on console to determine problem.
- 82 CLAS0002   **MESSAGE: None**  
CAUSE: RLM could not release semaphore pool.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 83 CLAS0002   **MESSAGE: None**  
CAUSE: RLM could not release semaphore pool.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 84 CLAS0002      **MESSAGE: None**  
CAUSE: RLM could not free buffer.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 85 CLAS0002      **MESSAGE: None**  
CAUSE: RLM could not delete semaphore pool.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 88 CLAS0004      **MESSAGE: None**  
CAUSE: Link went down in an error condition.  
ACTION: Check the status of the DTC.
- 90 CLAS0002      **MESSAGE: None**  
CAUSE: RLM could not release semaphore.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 92 CLAS0005      **MESSAGE: None**  
CAUSE: DTC Link has gone down.  
ACTION: Check the DTC X.25 card status.
- 93 CLAS0005      **MESSAGE: None**  
CAUSE: X.25 Level3 Protocol on DTC is ready.  
ACTION: None.
- 94 CLAS0003      **MESSAGE: None**  
CAUSE: X.25 Level3 Protocol on DTC is not ready.  
ACTION: Check the status of the DTC.
- 95 CLAS0003      **MESSAGE: None**  
CAUSE: Host has lost contact with DTC.  
ACTION: Check status of DTC.
- 96 CLAS0003      **MESSAGE: None**  
CAUSE: Host has successfully communicated with DTC, but X.25 level 3 protocol on DTC is not ready.  
ACTION: Check status of X.25 protocol on DTC. Possible causes include bad/disconnected cable between DTC and switch/X.25 network, or the switch/X.25 network is down. When problem is corrected, HP e3000 will display additional logging messages and the network will be usable.
- 100 CLAS0002      **MESSAGE: None**  
CAUSE: Could not create the RLM’s Port Data Area (PARM = “create\_object” status). Available virtual space may have been

exhausted.

ACTION: Contact your Hewlett-Packard representative and/or see Appendix A , "Submitting a CR," of this manual.

101 CLAS0002

**MESSAGE: None**

CAUSE: Could not obtain plabel for NL.PUB.SYS procedure "remote\_link\_manager." Possible software installation problem (PARM = status returned by "hpgetsysplabel").

ACTION: Check the status of the DTC.

102 CLAS0002

**MESSAGE: None**

CAUSE: Could not create the port for the RLM server (PARM = status returned from "create\_port").

ACTION: See Appendix A , "Submitting a CR," of this manual.

103 CLAS0002

**MESSAGE: None**

CAUSE: Could not create the port for the RLM server (PARM = status returned from "create\_port").

ACTION: See Appendix A , "Submitting a CR," of this manual.

104 CLAS0003

**MESSAGE: None**

CAUSE: Could not open AFCP protocol module (PARM = status returned from "mcm\_module\_config").

ACTION: Check X.25 and DTS Link configuration. If no problem is found, see Appendix A , "Submitting a CR," of this manual.

105 CLAS0001

**MESSAGE: None**

CAUSE: Could not send message to the RLM server. (PARM = status returned from "send\_msg").

ACTION: See Appendix A , "Submitting a CR," of this manual.

106 CLAS0002

**MESSAGE: None**

CAUSE: Could not obtain information on per process port (PARM = status returned from "port\_info").

ACTION: See Appendix A , "Submitting a CR," of this manual.

107 CLAS0001

**MESSAGE: None**

CAUSE: Error encountered while receiving information from RLM Server (PARM = status returned by "extend\_receive").

ACTION: See Appendix A , "Submitting a CR," of this manual.

108 CLAS0001

**MESSAGE: None**

CAUSE: Message received on process port if not the expected type.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 109 CLAS0002   **MESSAGE: None**  
CAUSE: Link buffer size is too small.  
ACTION: Check X.25 and DTC Link configuration. If no problems are found, see Appendix A , “Submitting a CR,” of this manual.
- 110 CLAS0003   **MESSAGE: None**  
CAUSE: Could not open the file NMCONFIG.PUB.SYS (PARM = status returned by “nmconfopen”).  
ACTION: Check the nmconfig.pub.sys with the program “FSCHECK”. If no obvious problem is found, see Appendix A , “Submitting a CR,” of this manual.
- 111 CLAS0003   **MESSAGE: None**  
CAUSE: Could not read the Node Name from NMCONFIG.PUB.SYS (PARM = status returned by “nmconfgetdata”).  
ACTION: Add nodename to configuration.
- 112 CLAS0003   **MESSAGE: None**  
CAUSE: RLM could not close NMCONFIG.PUB.SYS (PARM = status returned by “nmconfclose”).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 113 CLAS0002   **MESSAGE: None**  
CAUSE: Could not create the RLM’s inbound buffer pool (PARM = status returned from “bmgr\_create\_pool”).  
ACTION: Check configuration file for excessive buffer configuration. Reduce the number of buffers if possible. If no problems are found, see Appendix A , “Submitting a CR,” of this manual.
- 114 CLAS0002   **MESSAGE: None**  
CAUSE: Could not release the RLM’s inbound buffer pool (PARM = status returned by “bmgr\_delete\_pool”).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 115 CLAS0003   **MESSAGE: None**  
CAUSE: RLM could not deconfigure AFCP protocol module (PARM = status returned by “mcm\_module\_config”).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 116 CLAS0003   **MESSAGE: None**  
CAUSE: RLM could not release plabel for “remote\_link\_manager” (PARM = status returned by “hprelsysplabel”).

- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 117 CLAS0003   **MESSAGE: None**  
CAUSE: RLM could not delete the RLM's entry from the CM port dictionary (PARM = status returned by "dict\_delete").  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 118 CLAS0002   **MESSAGE: None**  
CAUSE: RLM could not create the outbound buffer pool (PARM = status returned by "bmgr\_create\_pool").  
ACTION: Check configuration file for excessive buffer configuration. Reduce the number of buffers if possible. If no problems are found, see Appendix A , "Submitting a CR," of this manual.
- 119 CLAS0003   **MESSAGE: None**  
CAUSE: RLM could not reset subqueue mask (PARM = status returned by "change\_subqueue").  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 120 CLAS0001   **MESSAGE: None**  
CAUSE: RLM could not update port dictionary (PARM = status returned by "dict\_update").  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 121 CLAS0001   **MESSAGE: None**  
CAUSE: RLM could not update port dictionary (PARM = status returned by "dict\_update").  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 122 CLAS0003   **MESSAGE: None**  
CAUSE: RLM could not delete the outbound buffer pool (PARM = status returned by "bmgr\_delete\_pool").  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 123 CLAS0003   **MESSAGE: None**  
CAUSE: RLM could purge its port (PARM = status returned by "purge\_port").  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 124 CLAS0003   **MESSAGE: None**  
CAUSE: RLM could not release its port data area object (PARM = status returned by "release\_object").  
ACTION: See Appendix A , "Submitting a CR," of this manual.

125 CLAS0004    **MESSAGE: None**  
                  CAUSE: RLM has been created (PARM = RLM's port ID).  
                  ACTION: None.

126 CLAS0004    **MESSAGE: None**  
                  CAUSE: RLM has been shutdown.  
                  ACTION: None.

## RFA Logging Location Codes

- 1 CLAS0003     **MESSAGE: None**  
CAUSE: RFA was unable to obtain a free DST for its buffers.  
ACTION: If system is overloaded, wait till resources free up; otherwise, see Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0003     **MESSAGE: None**  
CAUSE: RFA was unable to deallocate one of its internal buffers.  
ACTION: If program a has opened too many NOWAIT RFA files, or if it is attempting to read large blocks of data for each FREAD (16000 bytes per FREAD), then the program has reached RFA’s resource limits. If the program does neither then see Appendix A , “Submitting a CR.”
- 3 CLAS0003     **MESSAGE: None**  
CAUSE: RFA was unable to obtain enough memory to create an internal buffer entry.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0003     **MESSAGE: None**  
CAUSE: RFA encountered an unexpected error from one of its buffer management routines.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS0003     **MESSAGE: None**  
CAUSE: RFA could not delete a DST it allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS0003     **MESSAGE: None**  
CAUSE: RFA could not create a socket connection for NOWAIT IO.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 8 CLAS0003     **MESSAGE: None**  
CAUSE: RFA failed to create a connection to the remote machine.  
ACTION: Verify if the network transport has not been shutdown by the system operator on the local or remote system. If not see Appendix A , “Submitting a CR,” of this manual.
- 9 CLAS0003     **MESSAGE: None**  
CAUSE: RFA was unable to complete a connection with the remote machine.  
ACTION: Verify if the network transport has not been shutdown by the



system operator on the local or remote system. If not see Appendix A ,  
“Submitting a CR.”

10 CLAS0003

**MESSAGE: None**

**CAUSE:** RFA encountered a NetIPC error while sending an RFA request to the remote system.

**ACTION:** If the user attempted to FREAD or FWRITE more than 29980 bytes of data in one FREAD or FWRITE call, then the user has reached the resource limits of RFA. If user has enabled data compression for RFA transfers, this limit is 29000 bytes. This error will also occur if the system operator has brought down the network transport on the local or remote system. If not, see Appendix A , “Submitting a CR.”

11 CLAS0003

**MESSAGE: None**

**CAUSE:** An unexpected error occurred while receiving data from the remote system.

**ACTION:** This error will occur if the system operator has brought down the network transport on the local or remote system. It can also occur if the version of NS on the remote system is older than this system and the user attempted to use a newly supported file system intrinsic that is not supported by RFA on the remote system. If neither is the case then see Appendix A , “Submitting a CR,” of this manual.

12 CLAS0003

**MESSAGE: None**

**CAUSE:** RFA was unable to completely receive all the data from a NOWAIT FWRITE.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

13 CLAS0003

**MESSAGE: None**

**CAUSE:** While attempting to adjust a NetIPC socket, RFA encountered an unexpected error.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

14 CLAS0003

**MESSAGE: None**

**CAUSE:** RFA could not shutdown a NetIPC socket it created.

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

15 CLAS0003

**MESSAGE: None**

**CAUSE:** RFA could not connect with the RFA server on the remote system.

**ACTION:** Verify that the network transport has been started on the remote system. Verify that the remote system supports NS 3000/iX RFA. Also verify that the remote system has started the RFA service. If RFA is started then see Appendix A , “Submitting a CR,” of this manual.

- 16 CLAS0003     **MESSAGE: None**  
CAUSE: RFA could not turn on NetIPC socket data tracing.  
ACTION: If the local system is not out of disk space then see Appendix A , “Submitting a CR,” of this manual.
- 17 CLAS0003     **MESSAGE: None**  
CAUSE: RFA could not update information in the NS DSLINE table.  
ACTION: RFA may have run out of stack space. Run the program with an additional 2000 words of stack space. If this is not the problem then see Appendix A , “Submitting a CR,” of this manual.
- 18 CLAS0003     **MESSAGE: None**  
CAUSE: RFA could not get information from the NS DSLINE table.  
ACTION: RFA may have run out of stack space. Run the program with an additional 2000 words of stack space. If this is not the problem then see Appendix A , “Submitting a CR,” of this manual.
- 19 CLAS0003     **MESSAGE: None**  
CAUSE: RFA could not add a new process entry into the NS DSLINE table.  
ACTION: RFA may have run out of stack space or the DSLINE table may be full. If there are more than 100 programs in the same session using NS, the user has reached NS resource limits. Otherwise run the program with an additional 2000 words of stack space. If this is not the problem then see Appendix A , “Submitting a CR,” of this manual.
- 20 CLAS0003     **MESSAGE: None**  
CAUSE: NS has lost track of how many programs are using the DSLINE table.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 21 CLAS0003     **MESSAGE: None**  
CAUSE: RFA could not find an entry it created in the DSLINE table.  
ACTION: RFA may have run out of stack space. Run the program with an additional 2000 words of stack space. If this is not the problem then see Appendix A , “Submitting a CR,” of this manual.
- 22 CLAS0003     **MESSAGE: None**  
CAUSE: Insufficient memory in the port DST to create a new port for NOWAIT IO.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 23 CLAS0003     **MESSAGE: None**  
CAUSE: Unexpected error while creating an IOWAIT port for NOWAIT IO.

NOWAIT IO is not currently supported on XL. See Appendix A ,  
“Submitting a CR,” of this manual.

ACTION: See Appendix A , “Submitting a CR,” of this manual.

24 CLAS0003

**MESSAGE: None**

CAUSE: Unexpected error while creating an IOWAIT port for NOWAIT IO.

ACTION: See Appendix A , “Submitting a CR,” of this manual.

25 CLAS0003

**MESSAGE: None**

CAUSE: RFA was unable to create or delete an entry in the  
DSSERVER’s stack.

ACTION: If the remote user has opened many message files and/or their  
program FREADs or FWRITEs large amounts of data per request  
(16000 bytes) then the user has reached the resource limits of RFA. If  
not see Appendix A , “Submitting a CR,” of this manual.

27 CLAS0003

**MESSAGE: None**

CAUSE: The RFA Server received a request it could not execute.

ACTION: If the version of NS on this system is older than the version of  
NS on the RFA user’s host system and the user attempted to execute a  
new file system intrinsic or TurboIMAGE intrinsic that is not supported  
by the older revision of NS, this error will occur. This system must be  
updated. If not, it is possible that this system has a duplicate IP  
address as another system on this network. If this is not the case, then  
an RFA message has been corrupted, see Appendix A , “Submitting a  
CR,” of this manual.

28 CLAS0003

**MESSAGE: None**

CAUSE: RFA was unable to setup its data area or NetIPC connection for  
NOWAIT IO.

ACTION: See Appendix A , “Submitting a CR,” of this manual.

29 CLAS0003

**MESSAGE: None**

CAUSE: RFA was unable to setup parameters for the TCP connection.

ACTION: See Appendix A , “Submitting a CR,” of this manual.

30 CLAS0003

**MESSAGE: None**

CAUSE: While the RFA server was adopting in the remote session, it  
could not update information in the AS process table.

ACTION: See Appendix A , “Submitting a CR,” of this manual.

31 CLAS0003

**MESSAGE: None**

CAUSE: RFA was unable to allocate a buffer large enough to handle the  
user’s FREAD or FWRITE request.

**ACTION:** If the user's program has opened too many `NOWAIT` RFA files or if it is attempting to read large blocks of data for each `FREAD` (16000 bytes per `FREAD`) then the program has reached RFA's resource limits. If the program does neither then see Appendix A , "Submitting a CR," of this manual.

32 CLAS0003     **MESSAGE: None**

**CAUSE:** The RFA Server's state tables indicate it is in an expected state.

**ACTION:** See Appendix A , "Submitting a CR," of this manual.

33 CLAS0003     **MESSAGE: None**

**CAUSE:** An unexpected error was returned from `DBCLOSE`.

**ACTION:** See Appendix A , "Submitting a CR," of this manual.

35 CLAS0003     **MESSAGE: None**

**CAUSE:** The user attempted to open a reverse RFA file using the `$BACK` environment. RFA was unable to make contact with the originating system.

**ACTION:** This problem can occur if the domain and/or organization of the originating node is different than this node. If this is the case, add the remote node name to the NS directory file on this system using the same domain and organization as this node. If this is not the problem then see Appendix A , "Submitting a CR," of this manual.

36 CLAS0003     **MESSAGE: None**

**CAUSE:** RFA was unable to obtain an NM memory object for the RFA data compression buffer.

**ACTION:** See Appendix A , "Submitting a CR," of this manual.

37 CLAS0003     **MESSAGE: None**

**CAUSE:** RFA failed to delete an NM memory object it created.

**ACTION:** See Appendix A , "Submitting a CR," of this manual.

38 CLAS0003     **MESSAGE: None**

**CAUSE:** RFA could not call one of its Native Mode procedures.

**ACTION:** The NS product has been installed improperly. See Appendix A , "Submitting a CR," of this manual.

39 CLAS0003     **MESSAGE: None**

**CAUSE:** One of many possible errors encountered in Native Mode RFA.

**ACTION:** See Appendix A , "Submitting a CR," of this manual.

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## RPM Logging Location Codes

- 1 CLAS0002     **MESSAGE: None**  
CAUSE: Data segment for RPM table could not be allocated.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0002     **MESSAGE: None**  
CAUSE: Insufficient stack space to set critical.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0003     **MESSAGE: None**  
CAUSE: NS global data segment does not exist.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0002     **MESSAGE: None**  
CAUSE: RPM table is full.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS0003     **MESSAGE: None**  
CAUSE: RPM table does not exist.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0002     **MESSAGE: None**  
CAUSE: An RPM table entry could not be allocated.  
ACTION: Decrease the number of active RPM processes.
- 7 CLAS0003     **MESSAGE: None**  
CAUSE: A port message could not be sent to the server process.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 8 CLAS0003     **MESSAGE: None**  
CAUSE: RPM buffers could not be allocated in the server's stack.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 9 CLAS0002     **MESSAGE: None**  
CAUSE: A buffer for an RPM string could not be allocated.  
ACTION: Decrease the number of RPM strings waiting to be transferred.
- 10 CLAS0003    **MESSAGE: None**  
CAUSE: An invalid RPM message has been received.

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 11 CLAS0002   **MESSAGE: None**  
CAUSE: An invalid RPM message has been received.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 12 CLAS0005   **MESSAGE: None**  
CAUSE: Receive of an RPM Length Reply message failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 13 CLAS0005   **MESSAGE: None**  
CAUSE: Send of an RPM Create Request message failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 14 CLAS0005   **MESSAGE: None**  
CAUSE: Receive of an RPM Create Reply message failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 15 CLAS0005   **MESSAGE: None**  
CAUSE: Connection could not be opened during an RPMCREATE.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 16 CLAS0005   **MESSAGE: None**  
CAUSE: Send of an RPM Kill Request failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 17 CLAS0005   **MESSAGE: None**  
CAUSE: Send of an RPM Kill Reply failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 18 CLAS0002   **MESSAGE: None**  
CAUSE: Connection could not be opened during an RPMKILL.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 19 CLAS0005   **MESSAGE: None**  
CAUSE: Initial receive for an RPM message in a server failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 20 CLAS0005   **MESSAGE: None**  
CAUSE: Send of an RPM Create Reply message failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 21 CLAS0005      **MESSAGE: None**  
CAUSE: Receive of an RPM Kill Request message failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 22 CLAS0005      **MESSAGE: None**  
CAUSE: Send of an RPM Kill Reply message failed. Invalid port message.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 23 CLAS0005      **MESSAGE: None**  
CAUSE: Send of an RPM Length Reply message failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 24 CLAS0005      **MESSAGE: None**  
CAUSE: Receive of an RPM Create Request failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 25 CLAS0005      **MESSAGE: None**  
CAUSE: Maximum send size could not be set.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 26 CLAS0005      **MESSAGE: None**  
CAUSE: Maximum receive size could not be set.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 27 CLAS0005      **MESSAGE: None**  
CAUSE: Connection between RPM father and RPM server was lost.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 28 CLAS0003      **MESSAGE: None**  
CAUSE: Session created by RPM could not be aborted.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 31 CLAS0005      **MESSAGE: None**  
CAUSE: Receive of an RPM Control Reply failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 34 CLAS0005      **MESSAGE: None**  
CAUSE: Receive of an RPM Control Request failed.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 35 CLAS0003     **MESSAGE: None**  
CAUSE: RPMDAD adoption under DSDAD failed during a session shutdown.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 36 CLAS0003     **MESSAGE: None**  
CAUSE: RPMDAD was unable to adopt into the user’s session.  
ACTION: If the RPM session was not aborted by the system operator, then see Appendix A , “Submitting a CR,” of this manual.
- 37 CLAS0003     **MESSAGE: None**  
CAUSE: JSMAIN locking mechanism failed during an adopt.  
ACTION: If the RPM session was not aborted by the system operator, then see Appendix A , “Submitting a CR,” of this manual.
- 38 CLAS0003     **MESSAGE: None**  
CAUSE: JSMAIN unlocking mechanism failed during an adopt.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.



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## TCP Logging Locations

The following is an explanation of the general format of TCP logging locations. An explanation of the individual TCP logging messages follows.

Logging Location is a 5-digit decimal field with the following sub-fields:

NMMMM where N is the transport module number and MMMM is defined by the logging module.

TCP designates MMMM as follows:

TTLL where TT is the type of error which occurred and LL is a unique location tag used to differentiate between multiple occurrences of the same error.

Module numbers (N)

1- TCP

Types (TT)

00-09 External errors — An error result was returned from a procedure call to a module outside of TCP.

00- NWTM Error

01- NM Ports Error/CM dictionary

02- Table Management Error

03- Object Management Error

04- Path Error

05- NET Timers Error

06- Semaphores and HPGETSYSPLABEL

07- Memory Manager (Freeze, Unfreeze) Error

08- NMlog/NMtrace/NMmon/Registry

09- Dynamic call to driver (or driver) /  
 HPGETSYSPLABEL failed

10-19 Implementation Errors — These indicate a coding or data state error somewhere within TCP or the interfaces to TCP.

10- Attempted to delete from empty rtxq

11- Internal IPC State incorrect

12- Bad timer state

13- Data requested greater than buffer contents

14-	Bad status from <code>tcp_read_completor</code>
15-	Unmatched buffer pool in buffer reply
16-	Unexpected Buffer reply
17-	Bad buffer reply state
18-	Resegmentation failure
20–29	Remote protocol errors — These errors indicate that the remote TCP to which this implementation is conversing has apparently generated a packet which is in error or which violated the protocol or had to be ignored due to the local state. (Note: Some of these errors are minor — e.g., Local SAP not open).
20-	Inbound Checksum Error
21-	Inbound Precedence/Security
22-	Unexpected Syn in window
23-	No ACK
24-	Invalid Ack
25-	Data after Fin
26-	Bad Max TPDU option length
27-	Half Open Connection (SIP sent reset)
28-	Local SAP Not Open
30–39	IPC/TCP synchronization errors — IPC has called TCP with unexpected parameters or in an unexpected state
30-	IPC Receive Reply w/o data pending
31-	IPC Receive Reply while not in data accepting state
32-	TCP not started
33-	Network not started
34-	Bad (Unknown) IPCcontrol
40–49	standard connection lost/shutdown errors
40-	RTX Timeout (# of retries)
41-	RTX Threshold exceeded
42-	Remote abort
43-	Connection Assurance Timeout
50–59	More External Errors — An error result was returned from a procedure call to a module outside of TCP.

50-	Buffer Manager
59-	Unexpected escape
60–79	standard informative errors (etc.)
60-	Duplicate Packet received
61-	Packet tossed
62-	Retransmission suppressed
63-	Packet Retransmitted
64-	Negative Advice Passed
65-	Late timer
66-	Source Quench Received
70–79	Miscellaneous Errors
70-	Duplicate connection name
71-	Passive Connection Request rejected (or an error occurred)
72-	PM Deactivated w/Error
73-	Duplicate socket name
74-	Protocol start failed
75-	Bad Message Type/Function Code
76-	Max connections exceeded
77-	Wrong Father Pin (Not NMMON)
78-	Max sockets exceeded
80–89	standard informative messages — Nodal and connection events
80-	PM activated
81-	PM Graceful released
82-	PM Deactivated
83-	Socket Created
84-	Socket Deactivated
85-	Protocol started
86-	Protocol stopped
87-	Network stopped
88-	Driver Down Notification Complete
89-	Path Verify Complete

98–99 Statistical Logging

98- SIP statistics

99- PM Statistics

10001 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to send the inbound connection shut request (remote fin received indication) to IPC.

ACTION: PARM is NWTM error returned. Submit an CR.

10002 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to send the inbound connection shut request (remote fin received indication) to IPC.

ACTION: PARM is NWTM error returned. Submit an CR.

10003 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to send an irrecoverable error message to IPC.

ACTION: PARM is NWTM error returned. Submit an CR.

10004 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SET\_FILE\_EVENT returned a bad status while trying to set the exception bit due to received urgent data.

ACTION: PARM is NWTM error returned. Submit an CR.

10005 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to notify IPC of received inbound data.

ACTION: PARM is NWTM error returned. Submit an CR.

10006 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_RESET\_FILE\_EVENT returned a bad status while trying to reset the exception bit due to coming to the end of inbound urgent data.

ACTION: PARM is NWTM error returned. Submit an CR.

10007 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to send the inbound connection shutdown request (remote FIN received) to IPC.

ACTION: PARM is NWTM error returned. Submit an CR.

10008 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_RESET\_FILE\_EVENT returned a bad status while trying to reset the write bit for a socket due to coming to the end of inbound connection requests.

ACTION: PARM is NWTM error returned. Submit an CR.

10009 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_RESET\_FILE\_EVENT returned a bad status while trying to reset the write bit for a connection due to becoming unwritable.

ACTION: PARM is NWTM error returned. Submit an CR.

10010 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SET\_FILE\_EVENT returned a bad status while trying to set the write bit for a connection due to becoming writable.

ACTION: PARM is NWTM error returned. Submit an CR.

10011 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to send a send completion notification to IPC.

ACTION: PARM is NWTM error returned. Submit an CR.

10012 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to send an irrecoverable error message to a call socket.

ACTION: PARM is NWTM error returned. Submit an CR.

10013 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to send a connection request message to IPC. The inbound syn may not be able to establish a connection.

ACTION: PARM is NWTM error returned. Submit an CR.

10014 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_RESET\_FILE\_EVENT returned a bad status while trying to reset the readable bit during connection cleanup.

ACTION: PARM is NWTM error returned. Submit an CR.

10015 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_RESET\_FILE\_EVENT returned a bad status while trying to reset the readable bit due to coming to the end of the currently deliverable inbound data.

ACTION: PARM is NWTM error returned. Submit an CR.

10016 CLAS0002 **MESSAGE: None**

CAUSE: NWTM\_SEND\_MSG returned a bad status while trying to send a connect reply message to IPC.

ACTION: PARM is NWTM error returned. Submit an CR.

- 10017 CLAS0002 **MESSAGE: None**  
CAUSE: NWTM\_SET\_FILE\_EVENT returned a bad status while trying to set the readable and writable bits due to a connection shutting down.  
ACTION: PARM is NWTM error returned. Submit an CR.
- 10101 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from send\_msg while sending a negative advice message to the TCP SIP.  
ACTION: PARM is ports error returned. Submit an CR.
- 10103 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from send\_msg while forwarding an inbound packet for an unknown connection to the SIP.  
ACTION: PARM is ports error returned. Submit an CR.
- 10104 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from send\_msg while trying to send a cleanup request to the SIP.  
ACTION: PARM is ports error returned. Submit an CR.
- 10105 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from send\_msg while trying to send a timer popped message to the SIP due to semaphore contention. The timer may be dropped, the connection may hang indefinitely.  
ACTION: PARM is ports error returned. Submit an CR.
- 10106 CLAS0003 **MESSAGE: None**  
CAUSE: Bad status returned from a send\_msg call while trying to send an outbound data message to an NI or X.25 port.  
ACTION: PARM is ports error returned. Submit an CR.
- 10109 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from extend\_receive while waiting for a message from the TCP SIP indicating that it has started successfully. This would occur during network startup.  
ACTION: Check for other logging indicating the reason that the SIP was unable to start. PARM is ports error returned. Submit an CR.
- 10110 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from purge\_pool while trying to delete the TCP SIP message pool. This was during a system shutdown.  
ACTION: PARM is ports error returned. Submit an CR.

- 10111 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from `purge_port` while trying to delete the TCP SIP port. This was during a system shutdown.  
ACTION: PARM is ports error returned. Submit an CR.
- 10112 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from `create_pool` while trying to create a message pool for the TCP SIP. This was during protocol start.  
ACTION: PARM is ports error returned. Submit an CR.
- 10113 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from `create_port` while trying to create a port for the TCP SIP. This was during protocol start.  
ACTION: PARM is ports error returned. Submit an CR.
- 10114 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from `change_subqueue` while trying to enable a subset of subqueues for TCP SIP's port.  
ACTION: PARM is ports error returned. Submit an CR.
- 10115 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from `purge_pool` while trying to delete a message pool for the TCP SIP. The reason for deleting the message pool was that an error occurred while bringing up the TCP SIP, so TCP was cleaning up its resources.  
ACTION: PARM is ports error returned. Submit an CR.
- 10116 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from `purge_port` while trying to delete a port for the TCP SIP. The reason for deleting the port was an error occurred while bringing up the TCP SIP, so TCP was cleaning up its resources.  
ACTION: PARM is ports error returned. Submit an CR.
- 10117 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from `send_msg` while trying to send a port message to NETCP, which is waiting for reply from the TCP SIP indicating that has successfully completed initialization. NETCP is in "TCP\_MODULE\_CONFIG" and may be hung.  
ACTION: PARM is ports error returned. Submit an CR.
- 10118 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status returned from `send_msg` while trying to send a `path_verify` reply to NETCP. NETCP may be in a hung state, if so

further `NETCONTROL` commands will also hang.

**ACTION:** `PARM` is ports error returned. Submit an CR. Reboot if necessary to restart transport.

10119 CLAS0002 **MESSAGE: None**

**CAUSE:** Bad status returned from `send_msg` while trying to send a `traceoff_reply` message to `NETCP`. `NETCP` may be in a hung state, if so further `NETCONTROL` commands will also hang.

**ACTION:** `PARM` is ports error returned. Submit an CR. Reboot if necessary to restart transport.

10120 CLAS0002 **MESSAGE: None**

**CAUSE:** Bad status returned from `send_msg` while trying to send an outbound data message to the IP port.

**ACTION:** `PARM` is ports error returned. Submit an CR.

10121 CLAS0002 **MESSAGE: None**

**CAUSE:** Bad status returned from `send_msg` while trying to send a terminate reply message to `NETCP`. `NETCP` may be in a hung state.

**ACTION:** `PARM` is ports error returned. Submit an CR.

10122 CLAS0002 **MESSAGE: None**

**CAUSE:** Bad status returned from `receive_msg` while waiting for a message on the TCP SIP port.

**ACTION:** `PARM` is ports error returned. Submit an CR.

10123 CLAS0002 **MESSAGE: None**

**CAUSE:** Bad status returned from `send_msg` while trying to forward an inbound packet to the SIP. Packet is being forwarded tracing is active.

**ACTION:** `PARM` is ports error returned. Submit an CR.

10124 CLAS0002 **MESSAGE: None**

**CAUSE:** Bad status returned from `send_msg` while trying to send a cleanup request message to the SIP.

**ACTION:** `PARM` is ports error returned. Submit an CR.

10201 CLAS0002 **MESSAGE: None**

**CAUSE:** `New_get_table_entry` returned a bad status while we were trying to allocate a connection entry. This occurred while trying to process an inbound syn. The connection attempt will fail.

**ACTION:** `PARM` is table management error returned. Submit an CR.



- 10202 CLAS0002 **MESSAGE: None**  
CAUSE: New\_release\_table\_entry returned a bad status while we were trying to deallocate a connection entry.  
ACTION: PARM is table management error returned. Submit an CR.
- 10203 CLAS0002 **MESSAGE: None**  
CAUSE: New\_release\_table\_entry returned a bad status while we were trying to deallocate a socket entry.  
ACTION: PARM is table management error returned. Submit an CR.
- 10204 CLAS0002 **MESSAGE: None**  
CAUSE: New\_get\_table\_entry returned a bad status while we were trying to allocate a socket entry.  
ACTION: PARM is table management error returned. Submit an CR.
- 10205 CLAS0002 **MESSAGE: None**  
CAUSE: New\_get\_table\_entry returned a bad status while we were trying to allocate a vector queue entry.  
ACTION: PARM is table management error returned. Submit an CR.
- 10206 CLAS0002 **MESSAGE: None**  
CAUSE: New\_release\_table\_entry returned a bad status while we were trying to deallocate a vector queue entry.  
ACTION: PARM is table management error returned. Submit an CR.
- 10207 CLAS0002 **MESSAGE: None**  
CAUSE: There was a bad status returned from new\_create\_table while creating the TCP connection table. This would occur during network startup.  
ACTION: PARM is table management error returned. Submit an CR.
- 10208 CLAS0002 **MESSAGE: None**  
CAUSE: There was a bad status returned from new\_create\_table while creating the TCP socket table. This would occur during network startup.  
ACTION: PARM is table management error returned. Submit an CR.
- 10209 CLAS0002 **MESSAGE: None**  
CAUSE: There was a bad status returned from new\_create\_table while creating the TCP vector table. This would occur during network startup.  
ACTION: PARM is table management error returned. Submit an CR.

10210 CLAS0002 **MESSAGE: None**

CAUSE: There was a bad status returned from `delete_table` while releasing the TCP connection table. This would happen after network or system shutdown.

ACTION: PARM is table management error returned. Submit an CR.

10211 CLAS0002 **MESSAGE: None**

CAUSE: There was a bad status returned from `delete_table` while releasing the TCP socket table. This would happen after network or system shutdown.

ACTION: PARM is table management error returned. Submit an CR.

10212 CLAS0002 **MESSAGE: None**

CAUSE: There was a bad status returned from `delete_table` while releasing the TCP vector table. This would happen after network or system shutdown.

ACTION: PARM is table management error returned. Submit an CR.

10213 CLAS0002 **MESSAGE: None**

CAUSE: `New_get_table_entry` returned a bad status while we were trying to allocate a connection entry. This occurred while trying to process an inbound syn. The connection attempt will fail.

ACTION: PARM is table management error returned. Submit an CR.

10214 CLAS0002 **MESSAGE: None**

CAUSE: `New_release_table_entry` returned a bad status while we were trying to deallocate a connection entry. The connection entry is being deallocated because a duplicate connection already exists.

ACTION: PARM is table management error returned. Submit an CR.

10301 CLAS0002 **MESSAGE: None**

CAUSE: There was a bad status received from `create_object`. `Create_object` was called during network startup in order to create the global TCP data area.

ACTION: PARM is memory management error returned. Submit an CR.

10302 CLAS0002 **MESSAGE: None**

CAUSE: There was a bad status received from `release_object`. `Release_object` was called because we had a problem bringing up TCP during network startup, so we were cleaning up its resources.

ACTION: PARM is table management error returned. Submit an CR.

10401 CLAS0005 **MESSAGE: None**

CAUSE: PATHs failed to resolve a path to the requested destination. The connection request has failed.

ACTION: PARM is path resolution status. Possible nodal/media failure or misconfiguration. Diagnose path resolution failure. Submit an CR if necessary.

10402 CLAS0005 **MESSAGE: None**

CAUSE: PATHs failed to resolve a path to the requested destination. The passive connection attempt has failed.

ACTION: PARM is path resolution status. Possible nodal/media failure or misconfiguration. Diagnose path resolution failure. Submit an CR if necessary.

10403 CLAS0005 **MESSAGE: None**

CAUSE: The Path reply came back with a bad status. We can't get a route to establish connection.

ACTION: PARM is path reply error returned. Possible nodal/media failure or misconfiguration. Diagnose path resolution failure. Submit an CR if necessary.

10404 CLAS0005 **MESSAGE: None**

CAUSE: We have received numerous consecutive path replies, but we still haven't received a good route to establish the connection. We assume that the path resolution mechanism has entered a sick state for this route and is unable to resolve our destination.

ACTION: Possible nodal/media failure or misconfiguration. Diagnose path resolution failure. Submit an CR if necessary.

10405 CLAS0005 **MESSAGE: None**

CAUSE: The TCP SIP couldn't get a route to send an outbound reset.

ACTION: Informative message. No action required. Try to determine why route to remote host has failed. Possibilities include node/media failure and misconfiguration.

10406 CLAS0005 **MESSAGE: None**

CAUSE: The TCP SIP couldn't get a route to send an outbound reset after waiting for reply from paths.

ACTION: Informative message. No action required. Try to determine why route to remote host has failed. Possibilities include node/media failure and misconfiguration.

10407 CLAS0005 **MESSAGE: None**

CAUSE: We verified a connection's route due to negative advice, and found that there is no longer a route to the remote host. The connection

will abort.

**ACTION:** Informative message. No action required. Try to determine why route to remote host has failed. Possibilities include node/media failure and misconfiguration.

10501 CLAS0002 **MESSAGE: None**

**CAUSE:** `Nettmr_reset_timer` call returned an error.

**ACTION:** PARM is `nettmr` error returned. Submit an CR.

10502 CLAS0002 **MESSAGE: None**

**CAUSE:** `Nettmr_free_timer` call returned an error.

**ACTION:** PARM is `nettmr` error returned. Submit an CR.

10503 CLAS0002 **MESSAGE: None**

**CAUSE:** `Nettmr_get_timer` call returned an error.

**ACTION:** PARM is `nettmr` error returned. Submit an CR.

10504 CLAS0002 **MESSAGE: None**

**CAUSE:** `Nettmr_reset_timer` call returned an error.

**ACTION:** PARM is `nettmr` error returned. Submit an CR.

10601 CLAS0002 **MESSAGE: None**

**CAUSE:** `CB_INIT` returned a bad status while initializing the hash table semaphore. `CB_INIT` was called during network startup.

**ACTION:** PARM is `semaphores` error returned. Submit an CR.

10602 CLAS0002 **MESSAGE: None**

**CAUSE:** `CB_INIT` returned a bad status while initializing the global TCP semaphore. `CB_INIT` was called during network startup.

**ACTION:** PARM is `semaphores` error returned. Submit an CR.

10604 CLAS0002 **MESSAGE: None**

**CAUSE:** `CB_INIT` returned a bad status while initializing a connection semaphore. `CB_INIT` was called during TCP connection establishment.

**ACTION:** PARM is `semaphores` error returned. Submit an CR.

10702 CLAS0002 **MESSAGE: None**

**CAUSE:** Attempt to unfreeze user data vector failed.

**ACTION:** PARM is memory manager error returned. Submit an CR.

10703 CLAS0002 **MESSAGE: None**

**CAUSE:** Attempt to freeze user data vector failed.

**ACTION:** PARM is memory manager error returned. Submit an CR.

- 10704 CLAS0002 **MESSAGE: None**  
CAUSE: Attempt to unfreeze user data vector failed.  
ACTION: PARM is memory manager error returned. Submit an CR.
- 10801 CLAS0002 **MESSAGE: None**  
CAUSE: NMCLOSETRACE returned a bad status during an IPCCONTROL traceoff call.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10802 CLAS0002 **MESSAGE: None**  
CAUSE: NMOPENLOG returned a bad status during network startup.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10803 CLAS0002 **MESSAGE: None**  
CAUSE: NMMONSTARTREQ call returned a bad status during network startup.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10804 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status was returned in a message from the TCP SIP during network startup. The TCP SIP initialization has failed.  
ACTION: PARM is TCP SIP initialization error. Look for a logging indication explaining TCP SIP initialization failure. Submit an CR.
- 10805 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status was returned from NMCLOSELOG. This was called during system shutdown.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10806 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status was returned from NMMONDELETEID. This was called during system shutdown.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10807 CLAS0002 **MESSAGE: None**  
CAUSE: Bad status was returned from NMCLOSELOG during network shutdown.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10808 CLAS0002 **MESSAGE: None**  
CAUSE: NMWRITETRACE call returned a bad status while tracing a data packet  
ACTION: PARM is the NMS error returned. Submit an CR.

- 10809 CLAS0002 **MESSAGE: None**  
CAUSE: NMWRITETRACE call returned a bad status while tracing a reset packet being sent out by the TCP SIP.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10810 CLAS0002 **MESSAGE: None**  
CAUSE: NMWRITETRACE call returned a bad status while tracing an ICMP message.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10811 CLAS0002 **MESSAGE: None**  
CAUSE: NMWRITETRACE call returned a bad status while tracing a resource interface.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10812 CLAS0002 **MESSAGE: None**  
CAUSE: NMWRITETRACE call returned a bad status while tracing a resource interface.  
ACTION: PARM is the NMS error returned. Submit an CR.
- 10813 CLAS0002 **MESSAGE: None**  
CAUSE: REG\_DEL\_ENTITY returned a bad status. It was called during network shutdown.  
ACTION: PARM is the registry error returned. Submit an CR.
- 10814 CLAS0002 **MESSAGE: None**  
CAUSE: REG\_ADD\_ENTITY returned a bad status. It was called during network startup.  
ACTION: PARM is the registry error returned. Submit an CR.
- 10815 CLAS0002 **MESSAGE: None**  
CAUSE: NWRITETRACE returned a bad status while attempting to write a state trace record for a connection.  
ACTION: PARM is NWS error returned. Submit an CR.
- 10816 CLAS0002 **MESSAGE: None**  
CAUSE: NWRITETRACE returned a bad status while attempting to write a state trace record for the TCP SIP.  
ACTION: PARM is NWS error returned. Submit an CR.
- 10817 CLAS0002 **MESSAGE: None**  
CAUSE: NWRITETRACE returned a bad status while attempting to write a message or procedure call trace record for a connection.

ACTION: PARM is NWS error returned. Submit an CR.

10818 CLAS0002 **MESSAGE: None**

CAUSE: NWRITETRACE returned a bad status while attempting to write a message or procedure call trace record for the TCP SIP.

ACTION: PARM is NWS error returned. Submit an CR.

10819 CLAS0002 **MESSAGE: None**

CAUSE: DICT\_DELETE returned a bad status while attempting to remove the TCP SIP from the cm port dictionary during shutdown.

ACTION: PARM is the returned error. Submit an CR.

10901 CLAS0003 **MESSAGE: None**

CAUSE: A call to an SDI driver failed.

ACTION: PARM is the call result status. Submit an CR.

10902 CLAS0002 **MESSAGE: None**

CAUSE: TCP accepted a new ack, but no outstanding data was found on the retransmission queue. The connection is in an inconsistent state.

ACTION: Submit an CR.

11001 CLAS0003 **MESSAGE: None**

CAUSE: HPGETSYSPLABEL call failed to get plabel of TCP's timer trap routine. This would occur during network startup.

ACTION: Network Transport installation looks suspicious. Verify Transport installed correctly. Submit an CR.

11101 CLAS0002 **MESSAGE: None**

CAUSE: TCP received a packet in the syn\_received state, but found that the internal IPC state was not consistent with this state.

ACTION: Submit an CR.

11102 CLAS0002 **MESSAGE: None**

CAUSE: TCP received a packet in the syn\_sent state, but found that the internal IPC state was not consistent with this state.

ACTION: Submit an CR.

11103 CLAS0002 **MESSAGE: None**

CAUSE: TCP has entered a state (processing an inbound fin) which inconsistent with its internal IPC state. This is a software error.

ACTION: Submit an CR.

- 11201 CLAS0002 **MESSAGE: None**  
CAUSE: TCP internal timer state was inconsistent with actual timer activity.  
ACTION: Submit an CR.
- 11301 CLAS0003 **MESSAGE: None**  
CAUSE: TCP wanted to adjust the length of data of a composite buffer beyond the end of the last buffer in the chain.  
ACTION: Submit an CR.
- 11401 CLAS0003 **MESSAGE: None**  
CAUSE: Bad status returned from a call to the `tcp_read_completor` in the loopback send path.  
ACTION: Submit an CR.
- 11402 CLAS0003 **MESSAGE: None**  
CAUSE: Bad status returned from a call to the `tcp_read_completor` in the loopback retransmissive send path.  
ACTION: Submit an CR.
- 11501 CLAS0005 **MESSAGE: None**  
CAUSE: We received a reply from buffer manager containing a buffer that is not part of our buffer pool.  
ACTION: Informative message. No action required. This may indicate a procedural error within TCP.
- 11601 CLAS0002 **MESSAGE: None**  
CAUSE: We received a reply from buffer manager when we weren't expecting one. This is a software error in TCP.  
ACTION: This is a dangerous circumstance, as we are not keeping proper track of our resources. Submit an CR.
- 11701 CLAS0002 **MESSAGE: None**  
CAUSE: We received a reply from buffer manager but our buffer state indicated that we were not expecting one.  
ACTION: This is a dangerous circumstance, as we are not keeping proper track of our resources. Submit an CR.
- 11801 CLAS0002 **MESSAGE: None**  
CAUSE: We had a problem resegmenting the retransmission queue.  
ACTION: Submit an CR.



- 11901 CLAS0002 **MESSAGE: None**  
CAUSE: Attempt to add a network to TCP's IP list table when the table is full. Connection is added to temporary list.  
ACTION: PARM is source IP address of connection. Check configuration for number of configured networks. If OK, then submit an CR.
- 11902 CLAS0002 **MESSAGE: None**  
CAUSE: Connection could not be found in TCP's IP list table when it is shutting down.  
ACTION: PARM is source IP address of connection. Submit an CR.
- 11903 CLAS0002 **MESSAGE: None**  
CAUSE: Connection was removed from TCP's temporary IP list table. See location 11901.  
ACTION: PARM is source IP address of connection. Check configuration for number of configured networks. If OK, then submit an CR.
- 12001 CLAS0003 **MESSAGE: None**  
CAUSE: A connection received a packet with a bad checksum.  
ACTION: Informative message. No action required. Bad checksums usually indicate poor transmission quality.
- 12002 CLAS0003 **MESSAGE: None**  
CAUSE: A connection received a packet with a bad checksum.  
ACTION: Informative message. No action required. Bad checksums usually indicate poor transmission quality.
- 12003 CLAS0003 **MESSAGE: None**  
CAUSE: A connection received a packet with a bad checksum.  
ACTION: Informative message. No action required. Bad checksums usually indicate poor transmission quality.
- 12004 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP tossed an inbound packet due to a bad checksum.  
ACTION: Informative message. No action required. Bad checksums usually indicate poor transmission quality.
- 12101 CLAS0003 **MESSAGE: None**  
CAUSE: A TCP connection received a packet with precedence or security options which do not match those of the connection. The connection will abort.  
ACTION: Remote protocol error indication. Use tracing or line analysis to capture connection dialog. If precedence or security option of inbound packet changes report an error against the remote implementation.

Otherwise, submit an CR.

12102 CLAS0003 **MESSAGE: None**

**CAUSE:** A TCP connection received a packet with precedence or security options which do not match those of the connection. The connection will abort.

**ACTION:** Remote protocol error indication. Use tracing or line analysis to capture connection dialog. If precedence or security option of inbound packet changes report an error against the remote implementation. Otherwise, submit an CR.

12103 CLAS0003 **MESSAGE: None**

**CAUSE:** A TCP connection received a packet with precedence or security options which do not match those of the connection. The connection will abort.

**ACTION:** Remote protocol error indication. Use tracing or line analysis to capture connection dialog. If precedence or security option of inbound packet changes report an error against the remote implementation. Otherwise, submit an CR.

12104 CLAS0005 **MESSAGE: None**

**CAUSE:** The TCP SIP tossed an inbound packet due to unmatched precedence or security to the intended socket.

**ACTION:** Informative message. No action required.

12201 CLAS0003 **MESSAGE: None**

**CAUSE:** A packet was received by a connection which had the `syn` flag set and was within window. This is a remote protocol violation. The connection will abort.

**ACTION:** Remote protocol error indication. Use tracing or line analysis to capture connection dialog. Report an error against remote implementation.

12202 CLAS0003 **MESSAGE: None**

**CAUSE:** A packet was received by a connection which had the `syn` flag set and was within window. This is a remote protocol violation. The connection will abort.

**ACTION:** Remote protocol error indication. Use tracing or line analysis to capture connection dialog. Report an error against remote implementation.

12301 CLAS0003 **MESSAGE: None**

**CAUSE:** A packet was received without the `ACK` flag set by a connection in a state in which such a packet is not acceptable. The packet will be ignored. This is a remote protocol violation.

**ACTION:** Remote protocol error indication. Use tracing or line analysis to capture connection dialog. Report an error against remote implementation.

12302 CLAS0003 **MESSAGE: None**

**CAUSE:** A packet was received without the ACK flag set by a connection in a state in which such a packet is not acceptable. The packet will be ignored. This is a remote protocol violation.

**ACTION:** Remote protocol error indication. Use tracing or line analysis to capture connection dialog. Report an error against remote implementation.

12303 CLAS0003 **MESSAGE: None**

**CAUSE:** A packet was received without the ACK flag set by a connection in a state in which such a packet is not acceptable. The packet will be ignored. This is a remote protocol violation.

**ACTION:** Remote protocol error indication. Use tracing or line analysis to capture connection dialog. Report an error against remote implementation.

12401 CLAS0003 **MESSAGE: None**

**CAUSE:** A packet was received with an invalid ACK status. The packet will be ignored.

**ACTION:** Remote protocol error indication. Occasional occurrences are acceptable. Excessive occurrences indicate an error with either the remote or local connection half's tracking of current sequence number statuses. Submit an CR; report an error against the remote implementation.

12402 CLAS0003 **MESSAGE: None**

**CAUSE:** A packet was received with an invalid ACK status. The packet will be ignored.

**ACTION:** Remote protocol error indication. Occasional occurrences are acceptable. Excessive occurrences indicate an error with either the remote or local connection half's tracking of current sequence number statuses. Submit an CR; report an error against the remote implementation.

12403 CLAS0003 **MESSAGE: None**

**CAUSE:** A packet was received with an invalid ACK status. The packet will be ignored.

**ACTION:** Remote protocol error indication. Occasional occurrences are acceptable. Excessive occurrences indicate an error with either the remote or local connection half's tracking of current sequence number statuses. Submit an CR; report an error against the remote implementation.

12501 CLAS0003 **MESSAGE: None**

**CAUSE:** The remote connection half has sent data with a sequence number which exceeds the fin sequence number which the remote sent previously. This is a remote protocol violation.

**ACTION:** Capture data traffic including offending fin and following data packet using tracing or a line analyzer. Report an error against the remote implementation.

12502 CLAS0003 **MESSAGE: None**

**CAUSE:** The remote connection half has sent data with a sequence number which exceeds the fin sequence number which the remote sent previously. This is a remote protocol violation.

**ACTION:** Capture data traffic including offending fin and following data packet using tracing or a line analyzer. Report an error against the remote implementation.

12503 CLAS0003 **MESSAGE: None**

**CAUSE:** The remote connection half has sent data with a sequence number which exceeds the fin sequence number which the remote sent previously. This is a remote protocol violation.

**ACTION:** Capture data traffic including offending fin and following data packet using tracing or a line analyzer. Report an error against the remote implementation.

12504 CLAS0003 **MESSAGE: None**

**CAUSE:** The remote connection half has sent data with a sequence number which exceeds the fin sequence number which the remote sent previously. This is a remote protocol violation.

**ACTION:** Capture data traffic including offending fin and following data packet using tracing or a line analyzer. Report an error against the remote implementation.

12505 CLAS0003 **MESSAGE: None**

**CAUSE:** The remote connection half has sent data with a sequence number which exceeds the fin sequence number which the remote sent previously. This is a remote protocol violation.

**ACTION:** Capture data traffic including offending fin and following data packet using tracing or a line analyzer. Report an error against the remote implementation.

12506 CLAS0003 **MESSAGE: None**

**CAUSE:** The remote connection half has sent data with a sequence number which exceeds the fin sequence number which the remote sent previously. This is a remote protocol violation.

**ACTION:** Capture data traffic including offending fin and following data

packet using tracing or a line analyzer. Report an error against the remote implementation.

12507 CLAS0003 **MESSAGE: None**

CAUSE: The remote connection half has sent data with a sequence number which exceeds the fin sequence number which the remote sent previously. This is a remote protocol violation.

ACTION: Capture data traffic including offending fin and following data packet using tracing or a line analyzer. Report an error against the remote implementation.

12601 CLAS0003 **MESSAGE: None**

CAUSE: A packet was received which contained a TCP header with a max tpdu option which had an incorrect option length in the option length field.

ACTION: Capture data traffic including offending data packet using tracing or a line analyzer. Report an error against the remote implementation.

12701 CLAS0005 **MESSAGE: None**

CAUSE: TCP SIP sent out a reset for a packet with the ack flag set that was received on a socket in listen state.

ACTION: Informative message. No action required.

12702 CLAS0005 **MESSAGE: None**

CAUSE: TCP SIP tossed a packet with the ack and syn flags set that was received for a socket in the listen state.

ACTION: Informative message. No action required.

12801 CLAS0005 **MESSAGE: None**

CAUSE: Inbound packet received for a closed (not opened) sap, so the TCP SIP will send a reset.

ACTION: Informative message. No action required. Start service or open correct SAP if necessary. PARM is SAP for which packet is bound.

13001 CLAS0003 **MESSAGE: None**

CAUSE: IPC called tcp\_receive\_reply, but TCP did not have any record of data outstanding to IPC.

ACTION: Submit an CR.

13101 CLAS0003 **MESSAGE: None**

CAUSE: IPC called tcp\_receive\_reply, but TCP data indicates that IPC should not be in data receptive state.

ACTION: Submit an CR.

- 13201 CLAS0005 **MESSAGE: None**  
CAUSE: An attempt was made to start a TCP connection; however, the protocol was not active (i.e., was stopped).  
ACTION: Informative message. Start the network if needed.
- 13202 CLAS0003 **MESSAGE: None**  
CAUSE: An attempt was made to open a TCP socket; however, the protocol was not active (i.e., was stopped).  
ACTION: Informative message. Start the network if needed.
- 13203 CLAS0003 **MESSAGE: None**  
CAUSE: We received an inbound `syn` packet we will not process because the transport is not up.  
ACTION: Informative message. Start the transport if needed.
- 13204 CLAS000x **MESSAGE: None**  
CAUSE: The value in the KSO table for the TCP SIP data structure is nil when `TCP_MODULE_DECONFIG` is called.  
ACTION: Look for startup errors. Submit an CR.
- 13301 CLAS0003 **MESSAGE: None**  
CAUSE: An attempt to create a TCP socket was made before the transport had been started.  
ACTION: Informative message. Start the transport if needed.
- 13302 CLAS0003 **MESSAGE: None**  
CAUSE: An attempt to listen on a TCP socket was made before the transport had been started.  
ACTION: Informative message. Start the transport if needed.
- 13303 CLAS0003 **MESSAGE: None**  
CAUSE: An attempt to shut down a TCP socket was made before the transport had been started.  
ACTION: Informative message. Start the transport if needed.
- 13304 CLAS0003 **MESSAGE: None**  
CAUSE: An attempt to establish a TCP connection was made before the transport had been started.  
ACTION: Informative message. Start the transport if needed.
- 13401 CLAS0005 **MESSAGE: None**  
CAUSE: User passed bad TCP control parameter through `IPCCONTROL`.

**ACTION:** PARM is value of offending control parameter. Fix offending program/service.

14001 CLAS0003 **MESSAGE: None**

**CAUSE:** Number of configured retransmission retries exceeded. Connection will abort.

**ACTION:** Excessive retransmissions indicate a possible route/gate failure or possible end node failure or possible misconfiguration. Extreme network bottlenecks may also cause this type of problem although TCP should be able to adjust to most network conditions. A temporary work around may be to increase the configured number of maximum retransmissions. If a direct cause is not found consider further diagnosis with a line analyzer or submitting an CR.

14101 CLAS0003 **MESSAGE: None**

**CAUSE:** The total retransmission time for a packet has exceeded the configured MAXIMUM TIME TO WAIT FOR REMOTE RESPONSE. Connection will abort.

**ACTION:** Excessive retransmission time indicates a possible route/gate/end node failure or possible misconfiguration. Extreme network bottlenecks may also cause this type of problem although TCP should be able to adjust to most network conditions. A temporary work around may be to increase the MAXIMUM TIME TO WAIT FOR REMOTE RESPONSE. If a direct cause is not found consider further diagnosis with a line analyzer or submitting an CR.

14201 CLAS0005 **MESSAGE: None**

**CAUSE:** A valid reset packet was received on a connection. The connection will abort.

**ACTION:** Informative message. No action required. This message normally appears because the remote connection half was terminated abruptly by the user through an abortive IPC shutdown. Many services use this type of shutdown. Remote abortions also occur when errors are encountered on the remote system. In unexpected abortion situations inspection of the remote system for indications of error is suggested.

14202 CLAS0005 **MESSAGE: None**

**CAUSE:** A valid reset packet was received on a connection. The connection will abort.

**ACTION:** Informative message. No action required. This message normally appears because the remote connection half was terminated abruptly by the user through an abortive IPC shutdown. Many services use this type of shutdown. Remote abortions also occur when errors are encountered on the remote system. In unexpected abortion situations inspection of the remote system for indications of error is suggested.

14203 CLAS0005 **MESSAGE: None**

CAUSE: A valid reset packet was received on a connection. The connection will abort.

ACTION: Informative message. No action required. This message normally appears because the remote connection half was terminated abruptly by the user through an abortive IPC shutdown. Many services use this type of shutdown. Remote abortions also occur when errors are encountered on the remote system. In unexpected abortion situations inspection of the remote system for indications of error is suggested.

14301 CLAS0003 **MESSAGE: None**

CAUSE: Connection Assurance timeout occurred for this connection. The remote node did not respond within the configured number of CA retries.

ACTION: Suspect remote node failure, or possible network failure.

15001 CLAS0002 **MESSAGE: None**

CAUSE: BMGR\_CREATE\_POOL returned a bad status while trying to create the TCP control buffer pool. This would occur during network startup.

ACTION: PARM is BMGR error returned. Submit an CR.

15002 CLAS0002 **MESSAGE: None**

CAUSE: BMGR\_DELETE\_POOL returned a bad status while trying to delete the TCP control buffer pool.

ACTION: PARM is BMGR error returned. Submit an CR.

15901 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_process_inbound` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15902 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_read_completor` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15903 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_active_open` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15904 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_active_open` or some procedural unit called by it.



**ACTION:** PARM is escape code of escape. Submit an CR.

15905 CLAS0002 **MESSAGE: None**

**CAUSE:** An unexpected escape occurred within the procedure `tcp_passive_open_reply` or some procedural unit called by it.

**ACTION:** PARM is escape code of escape. Submit an CR.

15906 CLAS0002 **MESSAGE: None**

**CAUSE:** An unexpected escape occurred within the procedure `tcp_connection_shutdown` or some procedural unit called by it.

**ACTION:** PARM is escape code of escape. Submit an CR.

15906 CLAS0002 **MESSAGE: None**

**CAUSE:** An unexpected escape occurred within the procedure `tcp_connection_shutdown` or some procedural unit called by it.

**ACTION:** PARM is escape code of escape. Submit an CR.

15907 CLAS0002 **MESSAGE: None**

**CAUSE:** An unexpected escape occurred within the procedure `tcp_control` or some procedural unit called by it.

**ACTION:** PARM is escape code of escape. Submit an CR.

15908 CLAS0002 **MESSAGE: None**

**CAUSE:** An unexpected escape occurred within the procedure `tcp_listen` or some procedural unit called by it.

**ACTION:** PARM is escape code of escape. Submit an CR.

15909 CLAS0002 **MESSAGE: None**

**CAUSE:** An unexpected escape occurred within the procedure `tcp_socket_shutdown` or some procedural unit called by it.

**ACTION:** PARM is escape code of escape. Submit an CR.

15910 CLAS0002 **MESSAGE: None**

**CAUSE:** An unexpected escape occurred within the procedure `tcp_create_socket` or some procedural unit called by it.

**ACTION:** PARM is escape code of escape. Submit an CR.

15911 CLAS0002 **MESSAGE: None**

**CAUSE:** An unexpected escape occurred within the procedure `tcp_send` or some procedural unit called by it.

**ACTION:** PARM is escape code of escape. Submit an CR.

- 15912 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `tcp_receive_reply` or some procedural unit called by it.  
ACTION: PARM is escape code of escape. Submit an CR.
- 15913 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `tcp_is_inbound_urgent` or some procedural unit called by it.  
ACTION: PARM is escape code of escape. Submit an CR.
- 15914 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `tcp_module_config` or some procedural unit called by it.  
ACTION: PARM is escape code of escape. Submit an CR.
- 15915 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `tcp_sip_main_loop` or some procedural unit called by it.  
ACTION: PARM is escape code of escape. Submit an CR.
- 15916 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `decipher_msg` or some procedural unit called by it.  
ACTION: PARM is escape code of escape. Submit an CR.
- 15917 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `decipher_ds_msg` or some procedural unit called by it.  
ACTION: PARM is escape code of escape. Submit an CR.
- 15918 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `decipher_ds_msg` or some procedural unit called by it.  
ACTION: PARM is escape code of escape. Submit an CR.
- 15919 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `tcp_sip_process_inbound` or some procedural unit called by it.  
ACTION: PARM is escape code of escape. Submit an CR.
- 15920 CLAS0002 **MESSAGE: None**  
CAUSE: An unexpected escape occurred within the procedure `tcp_negative_advice` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15921 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure tcp\_sip\_icmp\_req or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15922 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure tcp\_sip\_traceon or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15923 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure tcp\_sip\_traceoff or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15924 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure tcp\_sip\_net\_stop or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15925 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure tcp\_sip\_route\_valid or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15926 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure tcp\_path\_reply or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15928 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure tcp\_pm\_buffer\_reply or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15929 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure tcp\_passive\_open or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15930 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_module_deconfig` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15931 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_driver_down` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15932 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_flush_sends` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15933 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_get_option` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

15934 CLAS0002 **MESSAGE: None**

CAUSE: An unexpected escape occurred within the procedure `tcp_set_option` or some procedural unit called by it.

ACTION: PARM is escape code of escape. Submit an CR.

16001 CLAS0005 **MESSAGE: None**

CAUSE: A TCP connection tossed a packet because it contained data which only duplicated data already received. This usually indicates an inbound retransmission for which the original has already been received.

ACTION: Informative message. No action required. Excessive retransmissions indicate either a faulty sending implementation or a noisy line.

16101 CLAS0005 **MESSAGE: None**

CAUSE: A connection tossed a packet because of an invalid sequence number. May be caused by inbound retransmissions, connection assurance packets, or window probes.

ACTION: Informative message. No action required. Occasional occurrences normal. Excessive occurrences indicate abnormal software operation.

16102 CLAS0005 **MESSAGE: None**

CAUSE: A connection tossed a packet because of an invalid sequence number. May be caused by inbound retransmissions, connection assurance packets, or window probes.

ACTION: Informative message. No action required. Occasional occurrences normal. Excessive occurrences indicate abnormal software operation.

16103 CLAS0005 **MESSAGE: None**

CAUSE: A connection tossed a packet because of an invalid sequence number. May be caused by inbound retransmissions, connection assurance packets, or window probes.

ACTION: Informative message. No action required. Occasional occurrences normal. Excessive occurrences indicate abnormal software operation.

16104 CLAS0005 **MESSAGE: None**

CAUSE: A connection tossed a packet because of an invalid sequence number. May be caused by inbound retransmissions, connection assurance packets, or window probes.

ACTION: Informative message. No action required. Occasional occurrences normal. Excessive occurrences indicate abnormal software operation.

16105 CLAS0005 **MESSAGE: None**

CAUSE: A connection tossed a packet because of an invalid sequence number. May be caused by inbound retransmissions, connection assurance packets, or window probes.

ACTION: Informative message. No action required. Occasional occurrences normal. Excessive occurrences indicate abnormal software operation.

16106 CLAS0005 **MESSAGE: None**

CAUSE: A packet was tossed because the connection it was destined for is no longer active.

ACTION: Informative message. No action required.

16107 CLAS0005 **MESSAGE: None**

CAUSE: A TCP connection tossed a packet because it contained only out of window data. This may indicate strange behavior on the part of the sender or confusion on the part of the receiver.

ACTION: Informative message. No action required.

- 16108 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP tossed a packet from a half open connection because the TCP SIP was already processing another such packet.  
ACTION: Informative message. No action required.
- 16109 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP tossed a packet from a half open connection because the TCP SIP was already processing another such packet.  
ACTION: Informative message. No action required.
- 16110 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP tossed a packet from a half open connection because it couldn't get a route to send an outbound reset.  
ACTION: Informative message. No action required. Possibly diagnose route resolution failure. Likely link/gate/nodal failure or configuration error.
- 16111 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP tossed a packet from a half open connection because it couldn't get a route, after waiting for a reply from paths, to send an outbound reset.  
ACTION: Informative message. No action required. Possibly diagnose route resolution failure. Likely link/gate/nodal failure or configuration error.
- 16112 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP tossed a packet from a half open connection because it had the reset flag set.  
ACTION: Informative message. No action required.
- 16113 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP tossed a packet because it had the reset flag set and destination socket was in the listen state.  
ACTION: Informative message. No action required.
- 16201 CLAS0005 **MESSAGE: None**  
CAUSE: The retransmission interval for a packet has expired; however, a previous transmission of this packet has not yet left the node (or in loopback has not been released by the receiver).  
ACTION: This indicates congestion within the node itself (e.g., the host running faster than the card can allow). Occasional occurrences are considered normal. Excessive occurrences (in other than loopback) indicate a more serious software problem.

16202 CLAS0005 **MESSAGE: None**

CAUSE: An attempt was made to retransmit a packet in loopback.

ACTION: Repeated occurrences indicated a software problem.

16301 CLAS0005 **MESSAGE: None**

CAUSE: The retransmission interval for a packet has expired without receipt of an acknowledgment from the remote connection half.

ACTION: This indicates network congestion, or a noisy or loss prone network. Occasional occurrences are considered normal. Excessive occurrences resulting in connection disconnects may indicate nodal/media failure, misconfiguration, severe network bottlenecks, or software failure.

16401 CLAS0005 **MESSAGE: None**

CAUSE: An excessive number of retransmissions has caused a negative advice indication has been sent to the TCP SIP. The SIP will verify that our route to our destination is still correct.

ACTION: Informative message. No action required. This logging indicates that TCP has proactively detected potential route/link/gate/ring failure. If route validation fails and no new route to the remote host is found, diagnose route failure. Possibilities include node/media failure and misconfiguration.

16501 CLAS0003 **MESSAGE: None**

CAUSE: A timer popped after it had already been released.

ACTION: Informative message. No action required. Occasional occurrences are normal. Excessive occurrences indicate the possibility of a software error.

16601 CLAS0005 **MESSAGE: None**

CAUSE: An ICMP source quench packet has been processed for this TCP connection. The connection will treat the event as a Van Jacobson retransmission event.

ACTION: Informative message. No action required. Source quench indicates that some gateway in the path (or the receiving node) is running low on buffer space. Possibly increase gateway store and forward buffer pool size or receiving node's buffer pool size if configurable.

17001 CLAS0003 **MESSAGE: None**

CAUSE: The user attempted to open a connection which already exists.

ACTION: User error. Isolate and correct offending program or service. Submit an CR if necessary.

17002 CLAS0005 **MESSAGE: None**

CAUSE: We received an inbound `syn` for a connection that has already been established (same local and destination SAPS and IP addresses). We will ignore this SYN packet.

ACTION: Informative message. No action required.

17101 CLAS0005 **MESSAGE: None**

CAUSE: The user or service (through IPC) has rejected the passive connection attempt, or an error has occurred on the connection since the passive open request was received.

ACTION: Informative message. PARM is rejection reason. If PARM is 0, user/service rejected the connection. Otherwise, an error condition has been detected by TCP. Look for logging indication of other error on same connection. (Remember that other logging classes may or may not be enabled.) Network/nodal shutdown processing may cause this error. If error is unexplainable, submit an CR.

17201 CLAS0005 **MESSAGE: None**

CAUSE: TCP connection deactivated due to an error.

ACTION: Informative message. No action required. Error type may be normal or serious. Find matching error indication for connection and follow action text. (Remember that all classes of logging may not be enabled.)

17301 CLAS0003 **MESSAGE: None**

CAUSE: User or service attempted to create TCP socket which already exists.

ACTION: Correct program/service in error or close previous socket incarnation.

17401 CLAS0002 **MESSAGE: None**

CAUSE: TCP protocol start failed.

ACTION: Submit an CR.

17402 CLAS0002 **MESSAGE: None**

CAUSE: Bad status returned in message from TCP SIP during a network startup. The TCP SIP wasn't created.

ACTION: PARM indicates status from message. Look for logging indication explaining TCP SIP initialization failure. Submit an CR.

17403 CLAS0002 **MESSAGE: None**

CAUSE: TCP SIP `portid` was not found.

ACTION: Suspect error in protocol startup or protocol initialization. Look for logging indication explaining TCP SIP initialization failure.



Submit an CR.

17404 CLAS0002 **MESSAGE: None**

CAUSE: Error in protocol initialization.

ACTION: Look for logging indication explaining TCP SIP initialization failure. Submit an CR.

17405 CLAS0002 **MESSAGE: None**

CAUSE: TCP KSO pointer value was NIL.

ACTION: Suspect error in protocol startup. Look for logging indication explaining TCP protocol startup failure. Submit an CR.

17501 CLAS0002 **MESSAGE: None**

CAUSE: Bad port message of "DS" type came to the TCP SIP.

ACTION: Submit an CR.

17502 CLAS0002 **MESSAGE: None**

CAUSE: Bad port message of unknown type came to the TCP SIP.

ACTION: Submit an CR.

17601 CLAS0003 **MESSAGE: None**

CAUSE: Inbound `syn` packet will not be processed because we will go over the TCP maximum connection limit if we do.

ACTION: Informative message. No action required. Increase configured TCP connection maximum if required and restart network.

17701 CLAS0005 **MESSAGE: None**

CAUSE: The program `TCPSIP.NET.SYS` was invoked by a father process other than `NMMON`. The program will exit gracefully.

ACTION: Informative message. No action required.

17801 CLAS0003 **MESSAGE: None**

CAUSE: An attempt was made to open more sockets than the maximum allowed on the system.

ACTION: Informative message. The maximum allowed sockets varies directly with the configured number of connections. Increase the configured number of connections and restart the network.

18001 CLAS0005 **MESSAGE: None**

CAUSE: TCP connection (PM) activated.

ACTION: Informational message. No action required.

18101 CLAS0005 **MESSAGE: None**

CAUSE: Graceful connection shutdown complete.

- ACTION: Informational message. No action required.
- 18201 CLAS0005 **MESSAGE: None**  
CAUSE: TCP connection deactivated without error.  
ACTION: Informational message. No action required.
- 18301 CLAS0005 **MESSAGE: None**  
CAUSE: TCP socket opened.  
ACTION: Informational message. No action required.
- 18401 CLAS0005 **MESSAGE: None**  
CAUSE: TCP socket closed.  
ACTION: Informational message. No action required.
- 18501 CLAS0004 **MESSAGE: None**  
CAUSE: TCP protocol started.  
ACTION: Informational message. No action required.
- 18502 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP has been started.  
ACTION: Informational message. No action required.
- 18601 CLAS0004 **MESSAGE: None**  
CAUSE: TCP protocol stopped.  
ACTION: Informational message. No action required.
- 18602 CLAS0005 **MESSAGE: None**  
CAUSE: The TCP SIP has been started.  
ACTION: Informational message. No action required.
- 18603 CLAS0004 **MESSAGE: None**  
CAUSE: TCP protocol stopped.  
ACTION: Informational message. No action required.
- 18701 CLAS0005 **MESSAGE: None**  
CAUSE: Network shut message processed for parm> ip\_addr.  
ACTION: Informational message. No action required.
- 18801 CLAS0005 **MESSAGE: None**  
CAUSE: Asynchronous driver error occurred for parm> ip\_addr.  
ACTION: Informational message. No action required.

18901 CLAS0005 **MESSAGE: None**

CAUSE: Path\_verify message from NETCP processed for parm>  
ip\_addr.

ACTION: Informational message. No action required.

19801 CLAS0006 **MESSAGE: None**

CAUSE: The global TCP statistics are being recorded.

ACTION: Statistical message. No action required.

19802 CLAS0006 **MESSAGE: None**

CAUSE: Specific statistics related to the efficiency of the hash table are  
being recorded.

ACTION: Statistical message. No action required.

19901 CLAS0006 **MESSAGE: None**

CAUSE: A TCP connection is shutting down and recording its statistics.

ACTION: Statistical message. No action required.

## UDP Logging Locations

- 1 CLAS0002     **MESSAGE: None**  
**CAUSE:** Unable to free the buffer passed to NetIPC associated with the inbound datagram received (PARM = Result returned from `bmgr_free_buffer`).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 2 CLAS0002     **MESSAGE: None**  
**CAUSE:** The send of the datagram open reply message to NetIPC failed (PARM = Result code returned from `send_msg`).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 3 CLAS0003     **MESSAGE: None**  
**CAUSE:** Attempt to add UDP to the registry failed (PARM = Result code from registry module).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 4 CLAS0002     **MESSAGE: None**  
**CAUSE:** Error in trying to free a buffer (PARM = Result code from `bmgr_free_buffer` call).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 5 CLAS0003     **MESSAGE: None**  
**CAUSE:** Received an invalid request code from an `IPCCONTROL` intrinsic call (PARM = request code received from NetIPC).  
**ACTION:** Check the `IPCCONTROL` call for correctness. If it is okay, see Appendix A , “Submitting a CR,” of this manual.
- 6 CLAS0002     **MESSAGE: None**  
**CAUSE:** Send to NetIPC for the datagram close reply failed (PARM = Result code returned by `send_msg`).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 7 CLAS0002     **MESSAGE: None**  
**CAUSE:** Call to virtual space management to obtain an object for socket entries failed (PARM = Result code from `create_object` call).  
**ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 9 CLAS0002     **MESSAGE: None**  
**CAUSE:** Attempting to open a socket with a SAP (address) that is already in use (PARM = Address, which is already open, for this open

request).

**ACTION:** Check to ensure that unique or well-known SAPs are being used. If OK, then see Appendix A , “Submitting a CR,” of this manual.

10 CLAS0002

**MESSAGE: None**

**CAUSE:** Attempt to free an object to virtual space management failed (PARM = Result code from `release_object` call).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

11 CLAS0002

**MESSAGE: None**

**CAUSE:** Send of irrecoverable error acknowledgment to NetIPC failed (PARM = Result code returned by `send_msg`).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

12 CLAS0002

**MESSAGE: None**

**CAUSE:** Send of irrecoverable error request to NetIPC failed (PARM = Result code returned by `send_msg`).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

13 CLAS0002

**MESSAGE: None**

**CAUSE:** Unable to obtain a buffer to send a datagram and complete the request (PARM = Result code returned from `bmgr_get_buffer` call).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

15 CLAS0002

**MESSAGE: None**

**CAUSE:** Attempt to send the datagram send reply message to NetIPC failed (PARM = Result code returned by `send_msg`).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

16 CLAS0002

**MESSAGE: None**

**CAUSE:** Send of datagram receive request to NetIPC failed (PARM = Result code returned by `send_msg`).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

17 CLAS0002

**MESSAGE: None**

**CAUSE:** Attempt to send the datagram (outbound message) to IP failed (PARM = Result code returned by `send_msg`).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

18 CLAS0002

**MESSAGE: None**

**CAUSE:** Attempt to write the UDP header into a buffer on an outbound datagram failed (PARM = Status returned by `bmgr_write_buffer`).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

- 19 CLAS0004     **MESSAGE: None**  
CAUSE: Logging the start of the UDP module (PARM = UDP's port ID).  
ACTION: Informative message.
- 20 CLAS0002     **MESSAGE: None**  
CAUSE: Attempt to add UDP to the ports data dictionary failed (PARM = Result code from the `dict_add` call).  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 21 CLAS0002     **MESSAGE: None**  
CAUSE: Attempt to delete UDP from the ports MPE CM dictionary failed (PARM = Result code returned by `dict_delete` call).  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 22 CLAS0002     **MESSAGE: None**  
CAUSE: Attempt to delete UDP from the ports MPE CM dictionary failed (Attempt to send the ICMP destination unreachable message to IP failed (PARM = Result code returned by `send_msg`)).  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 23 CLAS0002     **MESSAGE: None**  
CAUSE: Attempt to free an inbound buffer due to a shutdown pending failed (PARM = Status returned by `bmgr_free_buffer`).  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 24 CLAS0002     **MESSAGE: None**  
CAUSE: Attempt to free an inbound buffer, because there is no more room in the IPC buffer array, failed (PARM = Result code from `bmgr_free_buffer`).  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 25 CLAS0004     **MESSAGE: None**  
CAUSE: UDP module stopped.  
ACTION: Informative message
- 26 CLAS0002     **MESSAGE: None**  
CAUSE: Send of `IPControl` reply message to NetIPC failed (PARM = Result code from `send_msg`).  
ACTION: See Appendix A , "Submitting a CR," of this manual.
- 27 CLAS0002     **MESSAGE: None**  
CAUSE: Received unknown message type (PARM = Message function code).

- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 28 CLAS0002     **MESSAGE: None**
- CAUSE: Conversion of IPU dst to a native mode pointer failed (PARM = Result code returned by `convert_dst`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 30 CLAS0002     **MESSAGE: None**
- CAUSE: Attempt to write user data into the buffer for the outbound datagram failed (PARM = Result code returned by `bmgr_write_buffer`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 31 CLAS0003     **MESSAGE: None**
- CAUSE: Invalid request type for statistics (PARM = Request type).
- ACTION: Check the request type in the call. If OK then see Appendix A , “Submitting a CR,” of this manual.
- 32 CLAS0003     **MESSAGE: None**
- CAUSE: A datagram was received and discarded due to a checksum error (PARM = The SAP for the destined datagram).
- ACTION: Check the sending node for checksum correctness. See Appendix A , “Submitting a CR,” of this manual.
- 33 CLAS0002     **MESSAGE: None**
- CAUSE: Attempt to free a buffer on an inbound datagram with a checksum error failed (PARM = Status returned by `bmgr_free_buffer`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 34 CLAS0006     **MESSAGE: None**
- CAUSE: Logging of statistics for either a specific socket or UDP globals if the transport is being stopped (PARM = SAP of socket being logged and stopped).
- ACTION: None. Statistics.
- 35 CLAS0002     **MESSAGE: None**
- CAUSE: Attempt to write user’s data to outbound buffer failed (PARM = Result code returned by `bmgr_write_buffer`).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 36 CLAS0002     **MESSAGE: None**
- CAUSE: Attempt to write user’s data to outbound buffer failed (PARM = Result code returned by `bmgr_write_buffer`).

- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 37 CLAS0002    **MESSAGE: None**
- CAUSE: Attempt to write the IP options into the outbound buffer failed (PARM = Result code returned by `bmgr_write_buffer`).
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 38 CLAS0002    **MESSAGE: None**
- CAUSE: Attempt to free a buffer when closing associated socket failed (PARM = Result code returned by `bmgr_write_buffer`).
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 39 CLAS0002    **MESSAGE: None**
- CAUSE: Attempt to close the trace file for NetIPC tracing failed on the `IPCControl` request (PARM = Status returned by `nmclosestrace`).
- ACTION: Check the `IPCControl` intrinsic call. If OK, then see Appendix A , "Submitting a CR," of this manual.
- 40 CLAS0002    **MESSAGE: None**
- CAUSE: Attempt to close the trace file for NetIPC tracing failed when closing the socket (PARM = Status returned by `nmclosestrace`).
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 41 CLAS0002    **MESSAGE: None**
- CAUSE: Attempt to initialize the semaphore lock for the statistics failed (PARM = Status returned from `cb_init`).
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 42 CLAS0002    **MESSAGE: None**
- CAUSE: Attempted to delete a socket that was not open (PARM = Attempted SAP).
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 44 CLAS0002    **MESSAGE: None**
- CAUSE: Send of the received ICMP message up to NetIPC failed (PARM = Status returned by `send_msg`).
- ACTION: See Appendix A , "Submitting a CR," of this manual.
- 45 CLAS0003    **MESSAGE: None**
- CAUSE: Failed in attempting to re-obtain a path descriptor on verification for a socket (PARM = Status returned by `ns_path_resolve`).
- ACTION: Check the IP address and the network being used. If OK then see Appendix A , "Submitting a CR," of this manual.



- 46 CLAS0003      **MESSAGE: None**
- CAUSE: Attempt to get a path descriptor for the destination in the datagram send request failed (PARM = Result code returned by ns\_path\_resolve).
- ACTION: Check the IP address of the destination specified in the IPCSENDTO call. Also make sure the necessary networks are started. If problems persist then see Appendix A , “Submitting a CR,” of this manual.
- 47 CLAS0003      **MESSAGE: None**
- CAUSE: The attempt to resolve a path failed, most likely due to timeout during address resolution (PARM = Result code returned by MAP in the path reply).
- ACTION: Check the IP address of the destination given in the IPCSENDTO call. Also make sure the necessary networks are started. If OK then see Appendix A , “Submitting a CR,” of this manual.
- 48 CLAS0002      **MESSAGE: None**
- CAUSE: Attempt to send the reply to CP for a traceoff message failed (PARM = Result code returned by send\_msg).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 49 CLAS0002      **MESSAGE: None**
- CAUSE: Attempt to send a reply to CP for a path verify message failed (PARM = Status returned by send\_msg).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 50 CLAS0003      **MESSAGE: None**
- CAUSE: Received an inbound ICMP message from IP to be passed to an application (PARM = ICMP error type and code).
- ACTION: Check if application needs to handle this message (i.e., source quench or destination unreachable).
- 51 CLAS0002      **MESSAGE: None**
- CAUSE: Failure in attempt to free the inbound buffer on a datagram for which no SAP is open and no ICMP is sent since it is a broadcast IP address (PARM = Status returned by bmgr\_free\_buffer).
- ACTION: See Appendix A , “Submitting a CR,” of this manual.

## X.25 Logging Location Codes

X.25 logging falls under the transport subsystem (SUB0006). It logs 4 different classes of errors. They are:

Class 2 — Internal Errors. This usually means a bug somewhere.

Class 3 — Resource Errors. These should be recoverable, but a configuration adjustment may be a good idea.

Class 4 — Nodal information. This is just information about Phobos being started and stopped. Links going up and down etc.

Class 5 — Informative. Usually just a commentary on good things happening. If problems are occurring it is good to examine these to help.

In several of the CLAS0005 informative messages, the PARM contains the Device ID, VC number, cause, and diagnostic. The Device ID is in the first 4 bits. This number differentiates between different cards when multiple cards per network are used. If only one card is configured for the network, the Device ID is 0. The VC number is in the next 12 bits, the cause is in the third byte, and the diagnostic is in the fourth byte.

- 1-70 CLAS0002   **MESSAGE: None**  
  
CAUSE: X.25 tried to send a message, but the `send_msg` call failed (PARM = status from `send_msg`).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 100 CLAS0002   **MESSAGE: None**  
  
CAUSE: A packet smaller than the minimum packet length (4 bytes) was received from the DTC (PARM = length of packet).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 101 CLAS0002   **MESSAGE: None**  
  
CAUSE: An unrecognized packet was received from the DTC (PARM = ALCP packet type).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 102 CLAS0002   **MESSAGE: None**  
  
CAUSE: Internal Error. `Map_X25_Update` failed (PARM = status from `Map_X25_Update`).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 103 CLAS0002   **MESSAGE: None**  
  
CAUSE: Internal Error. `Map_X25_Update` failed (PARM = status from `Map_X25_Update`).

- ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 104 CLAS0005    **MESSAGE: None**
- CAUSE:** X.25 received an outbound data packet from IP, but the connection is not in the correct state to send the message. This can occur when a connection is closing. If this happens consistently, it means that the X.25 and TCP tables are inconsistent (PARM = connection points).
- ACTION:** Issue a NETCONTROL STOP followed by a NETCONTROL START to clear this condition. If this happens frequently, see Appendix A , “Submitting a CR,” of this manual.
- 105 CLAS0002    **MESSAGE: None**
- CAUSE:** An ALCP packet was received with an incorrect trailer byte. The trailer should be 1 or 3 (PARM = trailer).
- ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 106 CLAS0002    **MESSAGE: None**
- CAUSE:** Internal Error. Netfc\_delete\_pool failed. A resource was lost. If this happens frequently, the transport will not be able to open new connections (PARM = status from Netfc\_delete\_pool).
- ACTION:** If this happens frequently, see Appendix A , “Submitting a CR,” of this manual.
- 107 CLAS0002    **MESSAGE: None**
- CAUSE:** Internal Error. IPC sent zero bytes of data to X.25 for transmission.
- ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 108 CLAS0002    **MESSAGE: None**
- CAUSE:** Internal Error. IPC sent zero bytes of data to X.25 for transmission.
- ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 109 CLAS0002    **MESSAGE: None**
- CAUSE:** Internal Error. Netfc\_delete\_pool failed. A resource was lost. If this happens frequently, the transport will not be able to open new connections (PARM = status from Netfc\_delete\_pool).
- ACTION:** See Appendix A , “Submitting a CR,” of this manual.
- 110 CLAS0002    **MESSAGE: None**
- CAUSE:** X.25 received an unexpected event for a particular connection’s state (PARM = state and event)
- ACTION:** See Appendix A , “Submitting a CR,” of this manual.

- 111 CLAS0002     **MESSAGE: None**  
CAUSE: X.25 received a message for an unknown connection (PARM = connection points).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 112 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Map\_Add\_Rout failed (PARM = status from Map\_add\_rout).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 113 CLAS0002     **MESSAGE: None**  
CAUSE: An incoming connection request was rejected because the local facility does not have a Closed User Group number configured, but the connection request contains a Closed User Group number.  
ACTION: Informative message. If you want the system to accept connection requests from members of the Closed User Group, modify the facility set to contain the CUG number.
- 114 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Bmgr\_Read\_Buffer failed (PARM = status from Bmgr\_read\_buffer).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 115 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Convert\_dst failed (PARM = status from Convert\_dst).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 116 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Get\_timer failed (PARM = status from Get\_timer).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 117 CLAS0002     **MESSAGE: None**  
CAUSE: Received an IPC port ID of zero in an IPCCreate call.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 118 CLAS0002     **MESSAGE: None**  
CAUSE: A bad socket pointer was sent by IPC after an IPShutdown intrinsic was called (PARM = socket pointer).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 119 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Map\_X25\_Update failed (PARM = status from Map\_X25\_update).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 125 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Convert\_dst failed (PARM = status from Convert\_dst).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 126 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. IPC sent zero bytes of data to X.25 for transmission.  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 127 CLAS0002     **MESSAGE: None**  
CAUSE: X.25 received an unexpected event for the socket server (PARM = state and event).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 128 CLAS0005     **MESSAGE: None**  
CAUSE: An inactivity timer expired for the specified VC number.  
ACTION: None. This is an informative message.
- 129 CLAS0005     **MESSAGE: None**  
CAUSE: X.25 module has finished.  
ACTION: None. This is an informative message.
- 130 CLAS0002     **MESSAGE: None**  
CAUSE: A failure occurred during a read from the configuration buffer (PARM = status and length).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 131 CLAS0002     **MESSAGE: None**  
CAUSE: The configuration file contains more than the allowed number of facility sets (PARM = number of facility sets).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 132 CLAS0002     **MESSAGE: None**  
CAUSE: An error occurred while reading a facility set from the configuration file (PARM = length).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 133 CLAS0002     **MESSAGE: None**  
CAUSE: The configuration file contains more than the allowed number of SVC paths (PARM = number of SVC paths).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 134 CLAS0002     **MESSAGE: None**  
CAUSE: An error occurred while reading an SVC path from the configuration file (PARM = length).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 135 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Convert\_dst failed (PARM = status from Convert\_dst).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 136 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Dict\_Add failed (PARM = status from Dict\_Add).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 137 CLAS0004     **MESSAGE: None**  
CAUSE: Link brought down with open connections. This is a result of either the user doing a NETCONTROL DELLINK, or the link failed (PARM = Connections in use on this link).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 138 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Map\_Add\_Entity failed (PARM = status from Map\_Add\_Entity).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 139 CLAS0002     **MESSAGE: None**  
CAUSE: Could not create the Control buffer pool for this network (PARM = status from Bmgr\_create\_pool).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 140 CLAS0002     **MESSAGE: None**  
CAUSE: Internal Error. Dict\_Delete failed (PARM = status from Dict\_Delete).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.

- 141 CLAS0004     **MESSAGE: None**  
  
CAUSE: Maximum number of link entries already in use. Cannot add another link entry.  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 142 CLAS0002     **MESSAGE: None**  
  
CAUSE: Internal Error. Map\_Del\_Entity failed (PARM = Map\_Del\_Entity).  
  
ACTION: See of this manual.
- 143 CLAS0002     **MESSAGE: None**  
  
CAUSE: Internal Error. Bmgr\_Delete\_Pool failed (PARM = Bmgr\_delete\_pool).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 144 CLAS0002     **MESSAGE: None**  
  
CAUSE: X.25 received an unexpected event for the control server (PARM = state and event).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 145 CLAS0002     **MESSAGE: None**  
  
CAUSE: X.25 received an unknown type of Information message from the Control Process (PARM = information message type).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 146 CLAS0002     **MESSAGE: None**  
  
CAUSE: X.25 received an unknown type of Restart message from the Control Process (PARM = restart message type).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 147 CLAS0002     **MESSAGE: None**  
  
CAUSE: X.25 received an unknown type of transport message (PARM = transport message function code).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 148 CLAS0002     **MESSAGE: None**  
  
CAUSE: X.25 received an unknown type of IPC Control request message (PARM = IPC Control request type).  
  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 149 CLAS0002     **MESSAGE: None**  
  
CAUSE: X.25 received an unknown message type from IPC (PARM = IPC message function code).

ACTION: See Appendix A , “Submitting a CR,” of this manual.

150 CLAS0002

**MESSAGE: None**

CAUSE: X.25 received an unknown message format (PARM = message format).

ACTION: See Appendix A , “Submitting a CR,” of this manual.

151 CLAS0002

**MESSAGE: None**

CAUSE: X.25 received an initialization message from the Control Process when its port data area was non zero (PARM = control server state).

ACTION: See Appendix A , “Submitting a CR,” of this manual.

153 CLAS0003

**MESSAGE: None**

CAUSE: An attempt to open a new socket has failed because the socket table is full (PARM = number of sockets in use).

ACTION: Close some of the sockets which are no longer useful and try again.

154 CLAS0005

**MESSAGE: None**

CAUSE: A socket was opened (PARM = socket’s address).

ACTION: None. This is an informative message.

155 CLAS0005

**MESSAGE: None**

CAUSE: A socket was closed (PARM = socket’s address).

ACTION: None. This is an informative message.

156 CLAS0004

**MESSAGE: None**

CAUSE: An operator issued a NETCONTROL STOP command, but there are sockets or connections currently in use. These sockets are aborted before X.25 terminates (PARM = number of sockets and connections in use).

ACTION: None. This is an informative message.

157 CLAS0005

**MESSAGE: None**

CAUSE: An outbound IPC connection was opened (PARM = Device ID, VC number).

ACTION: None. This is an informative message.

158 CLAS0005

**MESSAGE: None**

CAUSE: An inbound TCP/IP connection was opened (PARM = Device ID, VC number).

ACTION: None. This is an informative message.



- 159 CLAS0005     **MESSAGE: None**  
CAUSE: An inbound IPC connection was opened (PARM = Device ID, VC number).  
ACTION: None. This is an informative message.
- 160 CLAS0005     **MESSAGE: None**  
CAUSE: A connection was closed (PARM = Device ID, VC number).  
ACTION: None. This is an informative message.
- 161 CLAS0003     **MESSAGE: None**  
CAUSE: A connection cannot be opened as X.25 has reached its limit for the number of connections (PARM = number of connections in use).  
ACTION: Close the connections which are no longer being used and try again.
- 162 CLAS0003     **MESSAGE: None**  
CAUSE: X.25 is out of outbound buffers.  
ACTION: The transport will still work but at a reduced speed and increased CPU overhead. You might want to increase the number of outbound buffers configured.
- 163 CLAS0005     **MESSAGE: None**  
CAUSE: An incoming connection request was rejected because it has requested reverse charging, and this facility set does not accept reverse charge calls (PARM = Device ID, VC number, cause, diagnostic).  
ACTION: None. This is an informative message. If you want to accept reverse charge calls, modify the facility set.
- 164 CLAS0005     **MESSAGE: None**  
CAUSE: An incoming connection request was rejected because it requested packet size negotiation, and this facility set does not negotiate packet size (PARM = Device ID, VC number, cause, diagnostic).  
ACTION: None. This is an informative message. If you want to negotiate packet size, modify the facility set.
- 165 CLAS0005     **MESSAGE: None**  
CAUSE: An incoming connection request was rejected because it requested window size negotiation, and this facility set does not negotiate window size (PARM = Device ID, VC number, cause, diagnostic).  
ACTION: None. This is an informative message. If you want to negotiate window size, modify the facility set.

- 166 CLAS0005     **MESSAGE: None**
- CAUSE: An incoming connection request was rejected because it requested throughput class negotiation, and this facility set does not negotiate throughput class (PARM = Device ID, VC number, cause, diagnostic).
- ACTION: None. This is an informative message. If you want to negotiate throughput class, modify the facility set.
- 167 CLAS0005     **MESSAGE: None**
- CAUSE: An incoming connection request was rejected because the address of the calling node was not in the SVC path table and the address key POOL was not configured (PARM = Device ID, VC number, cause, diagnostic).
- ACTION: None. This is an informative message. If you want to accept this call, either enter this node's X.25 address in the SVC path screen, or enter "POOL" as the address key.
- 168 CLAS0005     **MESSAGE: None**
- CAUSE: An incoming connection request was rejected because the security flag in the SVC path table specified that inbound calls from this address are not allowed (PARM = Device ID, VC number, cause, diagnostic).
- ACTION: This is an informative message. If you want to accept this call, set the security flag to IN for this the SVC path.
- 169 CLAS0005     **MESSAGE: None**
- CAUSE: An incoming connection request was rejected because the facility set associated with this address does not exist (PARM = Device ID, VC number, cause, diagnostic).
- ACTION: None. This is an informative message.
- 170 CLAS0005     **MESSAGE: None**
- CAUSE: An incoming connection request was rejected because the Closed User Group number in the packet does not match the number in the facility set (PARM = Device ID, VC number, cause, diagnostic).
- ACTION: None. This is an informative message. If you want the system in the Closed User Group, modify the facility set.
- 171 CLAS0005     **MESSAGE: None**
- CAUSE: An incoming connection request was rejected because the TCP/IP protocol was requested but the call packet contained the fast select with restriction facility (PARM = Device ID, VC number, cause, diagnostic).
- ACTION: None. This is an informative message. To accept this call, modify the remote machine so that fast select restriction is not set.

- 172 CLAS0005     **MESSAGE: None**  
  
CAUSE: An incoming connection request was rejected because the IPC socket with the protocol relative address specified in the call has not been created (PARM = Device ID, VC number, cause, diagnostic).  
  
ACTION: None. This is an informative message. Check that the program with this socket address is running.
- 173 CLAS0005     **MESSAGE: None**  
  
CAUSE: An incoming connection request was rejected by the IPC user or application program (PARM = Device ID, VC number, cause, diagnostic).  
  
ACTION: None. This is an informative message.
- 174 CLAS0003     **MESSAGE: None**  
  
CAUSE: An incoming connection request was rejected because there are no outbound buffers available.  
  
ACTION: Try again later. Or increase the number of buffers configured and try again.
- 175 CLAS0005     **MESSAGE: None**  
  
CAUSE: An outgoing IPC connection request was rejected because the path report did not contain an IP address that is in the same IP network as this node.  
  
ACTION: Check the IP addresses of the local and remote nodes. The network portion of the IP addresses should be the same.
- 176 CLAS0003     **MESSAGE: None**  
  
CAUSE: An AFCP connection could not be opened to the DTC. The DTC card could be fully utilized by another MPE/iX host (PARM = status from MCM).  
  
ACTION: Try again later.
- 177 CLAS0005     **MESSAGE: None**  
  
CAUSE: An outgoing IPC connection request was rejected. The rejection may have come from the local DTC, the network, or the remote node (PARM = Device ID, VC number, cause, diagnostic).  
  
ACTION: Check the diagnostic code returned. Verify that all components are operational.
- 178 CLAS0005     **MESSAGE: None**  
  
CAUSE: An outgoing TCP/IP connection request was rejected. The rejection may have come from the local DTC, the network, or the remote node (PARM = Device ID, VC number, cause, diagnostic).

**ACTION:** Check the diagnostic code returned. Verify that all components are operational.

179 CLAS0005 **MESSAGE: None**

**CAUSE:** An outgoing connection request was rejected because the AFCP connection was closed.

**ACTION:** Check that the DTC is operational. Try again later.

180 CLAS0005 **MESSAGE: None**

**CAUSE:** An incoming IPC connection request was rejected by the DTC (PARM = Device ID, VC number, cause, diagnostic).

**ACTION:** Check that the DTC is still operational.

181 CLAS0005 **MESSAGE: None**

**CAUSE:** An incoming IPC connection request was rejected by the local IPC user or application program (PARM = Device ID, VC number, cause, diagnostic).

**ACTION:** None. This is an informative message.

182 CLAS0005 **MESSAGE: None**

**CAUSE:** An outgoing connection request was rejected because the security field in the SVC path table specifies that outgoing calls to this address are not allowed.

**ACTION:** If outgoing calls to this address are desired, the security field of the SVC path must be set to OU.

183 CLAS0005 **MESSAGE: None**

**CAUSE:** An outgoing connection request was rejected because the specified facility set for this address key could not be found.

**ACTION:** Define a new facility set for this configuration, or assign an existing facility set to the configuration.

184 CLAS0005 **MESSAGE: None**

**CAUSE:** An outgoing TCP/IP connection request was rejected because the connection was requested over a PVC.

**ACTION:** Modify the configuration to use an SVC.

185 CLAS0003 **MESSAGE: None**

**CAUSE:** An outgoing TCP/IP connection request was rejected because there are no outbound buffers currently available.

**ACTION:** Try again later, or increase the number of buffers configured.

186 CLAS0005 **MESSAGE: None**

**CAUSE:** An outgoing IPC connection request was rejected because the specified facility set does not exist.

**ACTION:** Define a new facility set for this configuration, or assign an existing facility set.

187 CLAS0005

**MESSAGE: None**

**CAUSE:** An outgoing IPC connection request was rejected because the specified Call User Data field is too long.

**ACTION:** Either decrease the size of the call user data field or use the fast select facility, or use the “no address” flag.

188 CLAS0005

**MESSAGE: None**

**CAUSE:** An outgoing IPC connection request was rejected because the specified destination node does not have an X.25 address in the configuration file.

**ACTION:** Make sure that the SVC path for the destination node in the configuration file matches the Network Directory. The address keys must be the same.

189 CLAS0003

**MESSAGE: None**

**CAUSE:** An outgoing IPC connection request was rejected because no outbound buffers are currently available.

**ACTION:** Try again later, or increase the number of outbound buffers configured.

190 CLAS0003

**MESSAGE: None**

**CAUSE:** A connection cannot be opened because no free semaphore resources are available to create an expedited semaphore pool. Either the system is at its limit of 1024 connections, or semaphores were steadily lost and the supply is exhausted (PARM = status from Netfc\_create\_pool).

**ACTION:** Try again later. If the maximum number of VCs are not open, submit and CR. Appendix A , “Submitting a CR,” of this manual.

191 CLAS0003

**MESSAGE: None**

**CAUSE:** A connection cannot be opened because no free semaphore resources are available to create a regular semaphore pool. Either the system is at its limit of 1024 connections, or semaphores were steadily lost and the supply is exhausted (PARM = status from Netfc\_create\_pool).

**ACTION:** Try again later.

192 CLAS0002

**MESSAGE: Internal Error.**

**CAUSE:** Netfc\_Delete\_Pool failed on expedited semaphore pool (PARM = status from Netfc\_delete\_pool).

**ACTION:** A resource was lost. If this happens frequently, the transport will not be able to open new connections. See Appendix A , “Submitting

a CR,” of this manual.

- 193 CLAS0002    **MESSAGE: Internal Error.**  
CAUSE: Netfc\_Delete\_Pool failed on regular semaphore pool (PARM = status from Netfc\_delete\_pool).  
ACTION: If this happens frequently, the transport will not be able to open new connections. See Appendix A , “Submitting a CR,” of this manual.
- 194 CLAS0002    **MESSAGE: Internal Error.**  
CAUSE: Netfc\_Create\_Pool failed right after a Netfc\_Delete\_Pool (PARM = status from Netfc\_create\_pool).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 195 CLAS0004    **MESSAGE: None**  
CAUSE: The link for the X.25 network was started.  
ACTION: None. This is an informative message.
- 197 CLAS0005    **MESSAGE: None**  
CAUSE: An N-Connect indication packet was received (PARM = Device ID, VC number).  
ACTION: None. This is an informative message.
- 198 CLAS0005    **MESSAGE: None**  
CAUSE: An N-Connect confirmation packet was received (PARM = Device ID, VC number).  
ACTION: None. This is an informative message.
- 199 CLAS0005    **MESSAGE: None**  
CAUSE: An N-Disconnect packet was received (PARM = Device ID, VC number, cause, diagnostic).  
ACTION: None. This is an informative message.
- 200 CLAS0005    **MESSAGE: None**  
CAUSE: An N-Disconnect packet was sent because an IP connection’s inactivity timer expired (PARM = Device ID, VC number, cause, diagnostic).  
ACTION: None. This is an informative message.
- 201 CLAS0005    **MESSAGE: None**  
CAUSE: An N-Disconnect packet was sent because an incoming connection request was rejected (PARM = Device ID, VC number, cause, diagnostic).  
ACTION: None. This is an informative message.

- 202 CLAS0005     **MESSAGE: None**  
  
CAUSE: An N-Disconnect packet was sent because an IPC user or application program called an IPCShutdown intrinsic (PARM = Device ID, VC number, cause, diagnostic).  
  
ACTION: None. This is an informative message.
- 203 CLAS0005     **MESSAGE: None**  
  
CAUSE: An N-Disconnect packet was sent because an IPC user or application rejected an incoming connection request (PARM = Device ID, VC number, cause, diagnostic).  
  
ACTION: None. This is an informative message.
- 204 CLAS0005     **MESSAGE: None**  
  
CAUSE: An N-Disconnect packet was sent because an IPC user or application has terminated with an incoming connection request pending (PARM = Device ID, VC number, cause, diagnostic).  
  
ACTION: None. This is an informative message.
- 205 CLAS0005     **MESSAGE: None**  
  
CAUSE: An N-Disconnect packet was sent because an IPC connection's inactivity timer expired (PARM = Device ID, VC number, cause, diagnostic).  
  
ACTION: None. This is an informative message.
- 206 CLAS0005     **MESSAGE: None**  
  
CAUSE: An N-Connect request packet was sent.  
  
ACTION: None. This is an informative message.
- 207 CLAS0005     **MESSAGE: None**  
  
CAUSE: An N-Connect confirmation packet was sent (PARM = Device ID, VC number).  
  
ACTION: None. This is an informative message.
- 208 CLAS0005     **MESSAGE: None**  
  
CAUSE: An N-Connect confirmation packet was sent (PARM = Device ID, VC number).  
  
ACTION: None. This is an informative message.
- 209 CLAS0002     **MESSAGE: Internal Error.**  
  
CAUSE: A Buffer could not be obtained from the control buffer pool (PARM = status from Bmgr\_get\_buffer).  
  
ACTION: See Appendix A , "Submitting a CR," of this manual.

- 210 CLAS0002     **MESSAGE: None**  
CAUSE: Reading the configuration buffer failed on a Netcontrol Update (PARM = status and length).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 211 CLAS0002     **MESSAGE: None**  
CAUSE: There are more facility sets in the configuration file than allowed (PARM = number of facility sets).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 212 CLAS0002     **MESSAGE: None**  
CAUSE: An error occurred while reading a facility set from the configuration file (PARM = length).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 213 CLAS0002     **MESSAGE: Internal Error.**  
CAUSE: An escape occurred inside X.25 (PARM = escape code).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 214 CLAS0005     **MESSAGE: None**  
CAUSE: An N-Disconnect packet was sent because a message arrived that was greater than 30 kilobytes (PARM = Device ID, VC number, cause, diagnostic).  
ACTION: Change the remote application to send less than 30 kilobytes of data at a time.
- 215 CLAS0002     **MESSAGE: Internal Error.**  
CAUSE: Netfc\_create\_pool failed right after a Netfc\_delete\_pool (PARM = status from Netfc\_create\_pool).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 216 CLAS0002     **MESSAGE: Internal Error.**  
CAUSE: Netfc\_delete\_pool failed on expedited semaphore pool (PARM = status from Netfc\_delete\_pool).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 217 CLAS0002     **MESSAGE: Internal Error.**  
CAUSE: Netfc\_delete\_pool failed on regular semaphore pool (PARM = status from Netfc\_delete\_pool).  
ACTION: See Appendix A , “Submitting a CR,” of this manual.
- 218 CLAS0005     **MESSAGE: None**  
CAUSE: An incoming connection request was rejected because it



requests Fast Select and the facility does not allow Fast Select (PARM = Device ID, VC number, cause, diagnostic).

ACTION: None. This is an informative message. If you want Fast Select, modify the facility set.

219 CLAS0005 **MESSAGE: None**

CAUSE: An incoming connection request was rejected because the local facility set has a Closed User Group number configured, but the packet does not contain a Closed User Group number (PARM = status from map\_get\_device\_info).

ACTION: None. This is an informative message. If you want the remote system to be able to establish a connection with this system, modify the remote system's facility set to contain the Closed User Group number.

221 CLAS0003 **MESSAGE: None**

CAUSE: An inbound connection request has been rejected because the device entry in Map has been deleted. Occasionally, this can be a normal event indicating that the link between the system and the DTC went down just after a connection request was received by the system (PARM = Status from map\_get\_device\_info).

ACTION: Verify that the link between the system and the DTC is up: From the system, check for a non-zero LDEV in the NETCONTROL STATUS;NI=x25niname> display. From OpenView DTC Manager, check the host entries at the end of the X.25 level 3 status display. If the link is up, try the connection again. If this message is logged consistently, see Appendix A , "Submitting a CR," of this manual.

222 CLAS0003 **MESSAGE: None**

CAUSE: An inbound connection request has been rejected because the device state in Map is disconnected. Occasionally, this can be a normal event indicating that the link between the system and the DTC went down just after a connection request was received by the system.

ACTION: Verify that level 3 on the DTC\X.25 Network Access card is up. From OpenView DTC Manager, check the level 3 status display. If level 3 is up, try the connection again. If this message is logged consistently, see Appendix A , "Submitting a CR," of this manual.

223 CLAS0002 **MESSAGE: Internal Error.**

CAUSE: Map\_X25\_Update failed on inbound connection establishment (PARM = Status from Map\_X25\_Update).

ACTION: See Appendix A , "Submitting a CR," of this manual.

224 CLAS0005 **MESSAGE: None**

CAUSE: Map\_find\_best\_device failed on outbound level 3 connection establishment Occasionally, this can be a normal event indicating that the link between the system and the DTC went down just after a

connection request was received by the system. (PARM = Status from Map\_find\_best\_device).

**ACTION:** Verify that the link between the system and the DTC is up: From the system, check for a non-zero LDEV in the NETCONTROL STATUS;NI=x25niname> display. From OpenView DTC Manager, check the host entries at the end of the X.25 level 3 status display. If the link is up, try the connection again. If this message is logged consistently, see Appendix A , “Submitting a CR,” of this manual.

225 CLAS0002 **MESSAGE: None**

**CAUSE:** X.25 tried to send a message to X25STAT but the call failed. (PARM = status from send\_msg).

**ACTION:** Try running X25STAT again. If this logging message is logged consistently, see Appendix A , “Submitting a CR,” of this manual.

226 CLAS0004 **MESSAGE: None**

**CAUSE:** Link brought down with open connections. This is a result of a Netcontrol Stop on this X.25 network. (PARM = Connections in use on this link).

**ACTION:** None. This is an informative message.

228 CLAS0002 **MESSAGE: Internal Error.**

**CAUSE:** Link\_ptr is nil. (PARM = link ID).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

229 CLAS0002 **MESSAGE: Internal Error.**

**CAUSE:** BMGR\_DELETE\_POOL call failed while start sequence was aborting. (PARM = status from call).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

230 CLAS0002 **MESSAGE: Internal Error.**

**CAUSE:** Unknown link for disconnect reply. (PARM = link ID).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

231 CLAS0002 **MESSAGE: Internal Error.**

**CAUSE:** Unknown link while DELLINKing. (PARM = link ID).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

232 CLAS0002 **MESSAGE: Internal Error.**

**CAUSE:** Unknown link. (PARM = link ID).

**ACTION:** See Appendix A , “Submitting a CR,” of this manual.

# A Submitting a CR

For further assistance from Hewlett-Packard, document the problem as a CR (Change Request) and forward it to your Hewlett-Packard Service Representative. Include the following information:

- A characterization of the problem. Describe the events and symptoms leading up to and including the problem. Attempt to describe the source of the problem.

Your characterization should include:

- MPE/iX commands
- Communication subsystem commands
- Job streams
- Result codes and messages
- Data that can reproduce the problem

Illustrate as clearly as possible the context of any messages. Prepare copies of information displayed at the system console and user terminal(s).

- Obtain the version, update, and fix information for all software using `NMMAINT.PUB.SYS`. This allows Hewlett-Packard to determine if the problem is already known, and if the correct software is installed at your site.
  - Record all error messages and numbers that appear at the user terminal(s) and the system console.
  - Run `NMDUMP.PUB.SYS` to format the NM log file that was active when the problem occurred (`NMLGnnnn.PUB.SYS`). You may need to issue the MPE/iX command `SWITCHNMLOG` to free the NM log file.

Using `NMDUMP`, format the log file for NETXPORT (3), DC/LDM (4), NETIPC (5), Network Services (6), and Link Manager (8) information. Prepare the formatted output and a copy of the log file for your Hewlett-Packard Service Representative to further analyze.

- Prepare a listing of the configuration file and the MPE/iX I/O configuration you are using for your Hewlett-Packard Service Representative to further analyze. Inspect the output and try to locate errors.
- Try to determine the general area within the software where you think the problem exists. Refer to the appropriate reference manual and follow the guidelines on gathering information for problems.

- *Using NS 3000/iX Network Services* for NS 3000/iX.
- *Online Diagnostic Subsystems Utilities Manual* for the IEEE 802.3 links.
- *HP 36923 Central Bus Programmable Serial Interface Installation and Reference Guide* for point-to-point links.
- Issue the `LINKCONTROL linkname; STATUS = command` for each link. Retain the output for your Hewlett-Packard Service Representative to further analyze.
- Document your interim, or “workaround” solution. The cause of the problem can sometimes be found by comparing the interim environment with the environment in which the error occurred.
- Create copies of any NS 3000/iX or NetIPC user trace (`SOCK####.grp.acct`), Network Transport trace (`NMTC####.PUB.SYS`), and communication link trace files that were active when the problem occurred for your Hewlett-Packard Service Representative to further analyze.
- If the problem involves NMMGR, give a copy of `NMMGRF.PUB.SYS` to your Hewlett-Packard Service Representative.
- In the event of a system failure, a full memory dump must be taken. Always send the unformatted memory dump, a listing of the configuration file, a copy of the file `LOADMAP.PUB.SYS`, and the I/O configuration.
- If the problem involves a link failure, create copies of any link dump files (`NETDMP##.PUB.SYS`) for your Hewlett-Packard Service Representative to further analyze.

# B Subsystem Identifiers

This appendix contains the MPE/iX subsystem identifiers. These identifiers can be used to determine which MPE/iX subsystem returned an error. This helps you to determine which course of action is best for troubleshooting the error.

**Table B-1 Subsystem Identifiers**

8	Hardware Interrupt Handler
9	PSI Adapter Manager
10	LAL Adapter Manager
11	CS80 Disk Manager
12	CM file system errors
13	CM loader errors
14	CREATE intrinsic errors
98	ACTIVATE intrinsic errors
99	SUSPEND intrinsic errors
100	MYCOMMAND intrinsic errors
101	LOOKGLORIN intrinsic errors
102	System abort error messages
103	Errors from ported MPE part of MPE/iX
104	Switch
105	Memory Manager
106	Process Manager
107	Special routine for stack unwind (CLL)
108	NM Loader
109	Network Dump Manager
110	Disk Media/Controller Management
111	Virtual Space Management
112	Table Management
113	Trap Handler
114	Clock. Timers Management
115	High level I/O

**Table B-1 Subsystem Identifiers**

116	NM Linker
117	Low level I/O
118	HPIO Channel Manager
119	Disk System Label Management
120	HPIB Adapter Management
121	MUX Adapter Manager
122	Port (IPC) Facility
123	Dispatcher
124	Diagnostics
125	CM Stack Size Management
126	CM System Primitives
127	CIPER Device Manager
128	Terminal I/O
129	7978 Tape Device Manager
130	Page Printer Device Manager
131	I/O Configurator
132	NS transport identifiers (IND)
133	Measurement Interface
134	Terminal Device Manager
135	Serial Printer Logical Device Manager
136	I/O Tool
138	Buffer Manager for Data Communication
139	Multipoint Intelligent Device Manager
141	Symbol Table
142	CM object management (CSTs and DSTs)
143	MPE/iX file system
144	SOM file access
145	Secondary Storage Management
146	Genesis
147	System startup
148	System Disk Load

**Table B-1 Subsystem Identifiers**

149	System Memory Dump
150	PROGEN process
151	Transaction Management
153	Files system label management
154	CM Support Routines
155	Job &Session
156	Scanner/Parser
157	Sysmain Process
158	Break Handling
159	Reply Information Table
160	User Defined Commands
161	Command Interpreter
163	Volume Management
164	Alink Device Adapter Manager
165	Debug
166	CI Variable Management
167	CI string substitution
168	CI Help Subsystem
169	CM Debugger
170	IEEE 802 CSMA/CD Adapter Manager
171	System primitives
172	Avesta Flow Control Manager
173	SNA Transport
174	CM buffer management
175	Data com link
176	Alink host-to-host Device Manager
177	Virtual Terminal Logical Device Manager
178	Virtual Terminal Server
179	Programmatic creation of sessions
180	Data com Configuration intrinsics
181	Data com Trace/Log Facility

**Table B-1 Subsystem Identifiers**

182	Data com Network Management Services
183	Data com Version Control
184	Data com I/O Trace Facility
185	Disk Storage Management
186	Avesta Management Down/Upload Services
187	MPE/iX Error Management
188	CM Emulator, Translator, etc.
189	CM I/O Configurator
190	Terminal I/O Diagnostics Utility
191	Data com Nodal Manager
192	MODCAL compiler
193	Floating Point convert
195	HP Sort
196	HP Merge
197	Tape Volume ID
198	Eagle A-Mux Device Manager
199	Data com Configurator
200	Ucode trap handler
201	MPE/iX Data com Buffer Manager
202	CM Ports
203	Distributed Terminal Controller Manager
204	System Generation Utility
205	Terminal Logical Device Manager
206	System Logging
207	Disk Volume Utility
208	Directory Management
209	Store/Restore look-aside table Utility
210	Store/Restore program
211	Asynchronous FIFO Interface Manager
212	Data com Remote Job Entry
213	I/O Services



**Table B-1 Subsystem Identifiers**

214	NM to CM intrinsic stubs
215	RJE Bisync PSI Driver (IND)
216	SDLC PSI Driver (IND)
217	LAPB PSI Driver (IND)
218	PSI Diagnostic Driver (IND)
219	Data com Link Support Services
220	Working set logging
221	Intrinsic aborts
222	Intrinsic Manes
223	External interrupt handler
224	Support Process for Memory Management and VSM
225	Mapped File Windowing
226	SEL QA Testing
227	IND Reverse pass through
228	IND SNA/IMF
229	WAN PSI Driver Module Configurator (IND)
230	TurboIMAGE
231	Native mode device file
232	Workstation configurator (IND)
233	Virtual disk mgr (mirrored disk)
234	Distributed terminal system mgr (IND)
235	Avesta link control protocol handler
236	New commercial spooler base/FOS
237	Extended spooler product of NCS
238	Remote debugger device manager
239	Printer storage managers
300	TIO DTC Address Probe
500	NS Transport Internet Protocol (IND)
501	NS Transport Network Interface (IND)
502	NS Transport Mapping Table (IND)
503	NS Transport Transmission Control Protocol (IND)

**Table B-1 Subsystem Identifiers**

504	HPUX Symbolic Debugger (CLL)
505	FORTRAN run time library
506	Compiler library (CLL)
507	Scientific library (CLL)
508	Defines error codes returned by stubs in MPE V/E ports
509	XLDCP:MPEXL performance data collection program
510	NS/SNA (IND)
511	Multiple connection manager Avesta flow control protocol (IND)
512	Remote link manger (IND)
513	Mirrored disk, mirrored mount server
514	Mirrored disk, SPU failure override
515	Network systems company (3rd party) hardware controller number 716
516	Architected interface
600	LAN Network Interface
601	Gateway Half Network Interface
602	MAP Network Interface
603	Router Network Interface
606	X.25 Network Interface
609	Loopback Network Interface
650	NS TCP PM and SIP
700	Unknown Entity
702	CM Control Process
703	CM TCP PM
704	CM MAPA PM
705	CM PXP PM
706	CM PXP SIP Module
707	CM MAPALR Module
708	CM MAPA Module
709	CM IP Module
710	CM IP Update Module

**Table B-1 Subsystem Identifiers**

711	CM Probe Module
712	CM Dial Module
713	CM Paths Module
714	CM General Protocol Module
715	CM General NI Module
716	CM IPC Module
717	CM X.25 Module
718	CM TCP SIP Module
719	CM DS MONS Module
720	CM SMS Module
721	CM PAP Module
722	CM MAP Table Module
723	CM Kitel Module
725	NetBIOS Module
726	LAN Manager
727	SNA DHCF/iX
728	NM Mapping Tables
729	General Buffer Pools
730	Inbound Buffer Pools
731	Outbound Buffer Pools
732	Subsys ID/error message
733	NS Transport
734	SNA X.25
735	Link Access
736	NM Level2 Resolve Module
737	AXLE
738	SNA Distributed Services
739	SNMP
740	NIO/CIO 802.3 LAN Driver
741	Token Ring LAN driver
742	LAN Module Configurator

**Table B-1 Subsystem Identifiers**

743	Net Sockets
744	Central Configurator Manager
745	NS Control Process
746	NS ARP
747	NS Net Timers
748	Streams/iX
749	TIO Trace Manager
750	FDDI LAN Driver
751	DLPI Provider
752	NWIX
1111	NS Mapping Table

# C Native Mode and Compatibility Mode Buffer Manager Error Codes

These tables contain all of the error codes returned by the native mode and compatibility mode buffer manager interfaces. Table C-1 contains the native mode buffer error codes.

**Table C-1 Native Mode NS 3000/iX Buffer Error Codes**

<b>Error Code</b>	<b>Meaning</b>
13;	bfm_request_queued
12;	bfm_partial_allocation
11;	bfm_EM_limit_warning
10;	bfm_cm_limit_warning
9;	bfm_store_link_warning
8;	bfm_same_user_warning
7;	bfm_not_frozen_warning
6;	bfm_buf_frozen_warning
5;	bfm_multi_buf_warning
4;	bfm_not_compact_warning
3;	bfm_zero_length_warning
2;	bfm_data_overlaid_warning
1;	bfm_interdata_gap_warning
0;	bfm_OK
-1;	bfm_invalid_pool_id
-2;	bfm_invalid_user_id
-3;	bfm_invalid_buffer_id
-4;	bfm_invalid_buf_2_id
-5;	bfm_illegal_pool_desc
-6;	bfm_illegal_pool_size
-7;	bfm_illegal_init_size
-8;	bfm_illegal_incr_value

**Table C-1 Native Mode NS 3000/iX Buffer Error Codes**

<b>Error Code</b>	<b>Meaning</b>
-9;	bfm_illegal_max_users
-10;	bfm_illegal_buf_size
-11;	bfm_illegal_option
-12;	bfm_illegal_user_alloc
-13;	bfm_illegal_offset
-14;	bfm_illegal_2_offset
-15;	bfm_illegal_data_length
-16;	bfm_illegal_address
-17;	bfm_illegal_wait_opt
-18;	bfm_illegal_compact_opt
-19;	bfm_illegal_freeze_opt
-20;	bfm_illegal_thaw_opt
-21;	bfm_illegal_priority
-22;	bfm_illegal_info_type
-23;	bfm_pool_size_exceeded
-24;	bfm_max_users_exceeded
-25;	bfm_users_alloc_exceeded
-26;	bfm_share_count_exceeded
-27;	bfm_diff_buf_pool
-28;	bfm_diff_user_id
-29;	bfm_buf_shared
-30;	bfm_buf_2_shared
-31;	bfm_buf_frozen
-32;	bfm_buf_not_empty
-33;	bfm_users_open
-34;	bfm_buffers_in_use
-35;	bfm_log_buf_chain
-36;	bfm_log_buf_2_chain
-37;	bfm_no_buf_avail

**Table C-1 Native Mode NS 3000/iX Buffer Error Codes**

<b>Error Code</b>	<b>Meaning</b>
-38;	bfm_no_next_buf
-39;	bfm_illegal_append_offset
-40;	bfm_offset_left_data
-41;	bfm_offset_right_data
-42;	bfm_illegal_set_length
-43;	bfm_illegal_trf_userid
-44;	bfm_buf_empty
-45;	bfm_pool_var_size
-46;	bfm_object_overflow
-47;	bfm_insuff_v_memory
-48;	bfm_insuff_ports
-49;	bfm_insuff_queue_space
-50;	bfm_illegal_dest_buffer
-51;	bfm_freeze_error
-52;	bfm_thaw_error
-53;	bfm_unsupported_function
-54;	bfm_internal_error
-55;	bfm_invalid_v_block_ptr
-56;	bfm_transfer_exceeded
-57;	bfm_user_res_exceeded
-58;	bfm_illegal_pb_size

Table C-2 contains the compatibility mode buffer error codes.

**Table C-2 Compatibility Mode Buffer Error Codes**

<b>NS 3000/iX Native Mode Buffer Err Code</b>	<b>Corresponding NS 3000/iX Compatibility Mode Buffer Err Code</b>
-58	1, { createbufpool bad buffer size }
-57	8, { users max. reserved exceeded; }
-56	10, { transferbuf allocation error; }
-55	255, { invalid virtual blocks }
-54	2000, { internal_error }
-53	255, { unsupported_function }
-52	255, { thaw_error }
-51	255, { freeze_error }
-50	3, { illegal copy_buf dest. bufferid }
-49	255, { insuff_queue_space }
-48	10, { insuff_ports }
-47	11, { insuff_v_memory, out of memory }
-46	9, { object_overflow }
-45	1, { pool_var_size, invalid user id }
-44	2, { buf_empty, illegal offset }
-43	2, { illegal transfer_buf userid }
-42	3, { illegal set_buf buffer length }
-41	15, { offset_right_data, rt gap intro. }
-40	14, { offset_left_data, lt gap intro. }
-39	3, { illegal append offset }
-38	255, { no_next_buf }
-37	9, { no_buf_avail, amt in pool exc. }
-36	255, { log_buf_2_chain }
-35	10, { log_buf_chain, more than 1 p.b. }
-34	10, { buffers_in_use, unfreed buffers }
-33	11, { users_open, users not closed }
-32	255, { buf_not_empty }
-31	255, { buf_frozen }



**Table C-2 Compatibility Mode Buffer Error Codes**

<b>NS 3000/iX Native Mode Buffer Err Code</b>	<b>Corresponding NS 3000/iX Compatibility Mode Buffer Err Code</b>
-30	12, { buf_2_shared, 2nd buffer shared }
-29	11, { buf_shared, 1st buffer shared }
-28	10, { diff_user_id, not same user }
-27	13, { diff_buf_pool, not same pool }
-26	2, { share_count_exceeded }
-25	8, { users_alloc_exceeded }
-24	10, { max_users_exceeded, ditto }
-23	8, { pool_size_exceeded }
-22	2, { illegal_info_type, illegal code }
-21	3, { illegal_priority, ditto }
-20	255, { illegal_thaw_option }
-19	255, { illegal_freeze_option }
-18	255, { illegal_compact_option }
-17	255, { illegal_wait_option }
-16	3, { illegal_address, illegal DST }
-15	5, { illegal_data_length, ditto }
-14	4, { illegal_target/src_offset }
-13	2, { illegal_source/buff_offset }
-12	8, { illegal_NumBuffers_specified }
-11	2, { illegal_option_selected }
-10	2, { illegal_buf_size, log_buf_size }
-09	4, { illegal_max_users, ditto }
-08	255, { illegal_incr_value }
-07	2, { illegal_init_size, illegal amt }
-06	2, { illegal_pool_size, }
-05	255, { illegal_pool_desc }
-04	2, { invalid_second_buffer_id }
-03	1, { invalid_buf_id, first buffer id }
-02	1, { invalid_user_id, ditto }

**Table C-2 Compatibility Mode Buffer Error Codes**

<b>NS 3000/iX Native Mode Buffer Err Code</b>	<b>Corresponding NS 3000/iX Compatibility Mode Buffer Err Code</b>
-01	1, { invalid_pool_id, ditto }
0	0, { bfm_OK, ditto }
1	-11, { interdata_gap_warning, ditto }
2	-10, { data_overlaid_warning, ditto }
3	-5, { zero_length_warning }
4	255, { not_compact_warning }
5	-1, { multi_buf_warning }
6	0, { buf_frozen_warning }
7	255, { not_frozen_warning }
8	0, { same_user_warning }
9	255, { store_link_warning }
10	255, { cm_limit_warning }
11	255, { EM_limit_warning }
12	255, { read pool exceeded warning }
13	-10 { message queued warning }

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