

READER COMMENT SHEET

HP AdvanceNet

NS3000/V

Error Message and Recovery Manual

32344-90005 MAY 1986

We welcome your evaluation of this manual. Your comments and suggestions help us to improve our publications. Please explain your answers under Comments, below, and use additional pages if necessary.

Is this manual technically accurate?

Yes No

Are the concepts and wording easy to understand?

Yes No

Is the format of this manual convenient in size, arrangement, and readability?

Yes No

Comments:

This form requires no postage stamp if mailed in the U.S. For locations outside the U.S., your local HP representative will ensure that your comments are forwarded.

FROM:

Date _____

Name _____

Company _____

Address _____

FOLD

FOLD



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 1070 CUPERTINO, CA.

POSTAGE WILL BE PAID BY ADDRESSEE

Publications Manager
Hewlett-Packard Company
Information Networks Division
19420 Homestead Road
Cupertino, CA. 95014

FOLD

FOLD

HP AdvanceNet

NS3000/V

Error Message and Recovery Manual



1942 HOMESTEAD ROAD, CUPERTINO, CA 95104

Part No. 32344-90005
E0587

Printed in U.S.A. MAY 87
Edition 2, MAY 1987

NOTICE

The information contained in this document is subject to change without notice.

HEWLETT-PACKARD MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Hewlett-Packard shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

Hewlett-Packard assumes no responsibility for the use or reliability of its software on equipment that is not furnished by Hewlett-Packard.

This document contains proprietary information which is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced or translated to another language without the prior written consent of Hewlett-Packard Company.

Copyright © 1987 by HEWLETT-PACKARD COMPANY

PRINTING HISTORY

New editions are complete revisions of the manual. Update packages, which are issued between editions, contain additional and replacement pages to be merged into the manual by the customer. The dates on the title page change only when a new edition or a new update is published. No information is incorporated into a reprinting unless it appears as a prior update; the edition does not change when an update is incorporated.

The software code printed alongside the date indicates the version level of the software product at the time the manual or update was issued. Many product updates and fixes do not require manual changes and, conversely, manual corrections may be done without accompanying product changes. Therefore, do not expect a one to one correspondence between product updates and manual updates.

First edition.	JUN 1985.	32344A.00.00
Update 1.	NOV 1985.	32344A.00.00
Update 2.	JUL 1986.	32344A.00.00
Second Edition.	MAY 1987.	32344A.00.00

LIST OF EFFECTIVE PAGES

The List of Effective Pages gives the date of the current edition and of any pages changed in updates to that edition. Within the manual, any page changed since the last edition is indicated by printing the date the changes were made on the bottom of the page. Changes are marked with a vertical bar in the margin. If an update is incorporated when an edition is reprinted, these bars are removed but the dates remain. No information is incorporated into a reprinting unless it appears as a prior update. To verify that your manual contains the most current information, check that the date printed at the bottom of the page matches the date listed below for that page.

Effective Pages	Date
All.	MAY 1987

PREFACE

Hewlett-Packard AdvanceNet is a combination of hardware and software products that make it possible for Hewlett-Packard computer systems to communicate with one another and with IBM mainframes as well. The system to system or system to network connections can be made over the coaxial cable of a local area network, over hardwired lines, over the public telephone facility, or across X.21 or X.25 compatible Packet Switching Networks (PSNs), in any mixture. This capability, coupled with remote-entry capability to IBM computer systems, provides a total solution to large-company electronic data processing (EDP) needs.

HP AdvanceNet allows a large multidivisional corporation to have a truly coordinated world-wide network of computer systems. They are coordinated in the sense that the various commercial and industrial functions within each division and factory are tied together; they are also coordinated in the larger sense of tying together the various divisions and factories at the corporate level.

For example, imagine a large corporation which has factories in the United States, Canada, France, and West Germany. Within each factory there are HP 3000 computer systems performing such functions as inventory control, factory data collection, and operations management. With Hewlett-Packard AdvanceNet data communications products, these manufacturing information systems can be tied into an HP 3000 system which handles the factory's administrative functions (such as finance and accounting). The administrative systems of each factory can, in turn, be connected not only to one another (via a local area network) but also (via remote job entry) to a large computer facility at corporate headquarters. This overall networking capability makes it possible to perform financial analysis and control at a group and corporate level as well as at the individual factories.

This manual covers troubleshooting and the errors generated by the HP AdvanceNet Network Service and Network Link products used for HP 3000-to-HP 3000 and HP 3000 to personal computer communications over a local area network. The Network Service product is the HP Network Service for the HP 3000 (NS3000/V). This product provides the user services. Error descriptions include brief error-recovery suggestions where applicable. You should use this manual in conjunction with the *NS3000/V Network Manager Reference Manual*, the *NS3000/V User/Programmer Reference Manual*, and the *NetIPC3000/V Programmer's Reference Manual*.

Intended Audience

This manual is intended for users responsible for maintaining the NS Services and links at their installation. It is assumed that the user has system supervisor level experience with the MPE operating system.

PREFACE (continued)

Related Publications

The following HP publications contain additional information about Network Services (NS3000/V), the MPE operating system, and the link products used with NS3000/V.

- *NS3000/V Network Manager Reference Manual, Volume I* (32344-90002)
- *NS3000/V Network Manager Reference Manual, Volume II* (32344-90012)
- *NetIPC3000/V Programmer's Reference Manual* (5958-8581)
- *NS Message Formats Reference Manual* (5958-8523)

Network Services Manuals:

- *NS3000/V User/Programmer Reference Manual* (32344-90001)
- *NS Cross-System NFT Reference Manual* (5958-8563)
- *NS Cross-System Network Manager Reference Manual* (5958-8564)

HP ThickLAN Manuals:

- *Local Area Network (LAN) Cabling and Installation Guide* (30242-90003) For use with LAN3000/V Link, product number 30242A)
- *LAN Cable and Accessories Installation Manual* (5955-7680) (For use with OfficeShare LAN3000/V Link, product number 30240A)
- *LAN/3000 Diagnostic and Troubleshooting Guide* (30242-90003)

HP StarLAN Manuals:

- *HP StarLAN PC to HP 3000 Network Configuration Guide* (50906-90000)
- *HP StarLAN Planning Guide for PCs* (50906-90020)
- *HP StarLAN Hardware Installation Manual for PCs* (5959-2222)
- *HP StarLAN PC Server Installation, Configuration, and Operation Guide* (50904-90000)
- *HP StarLAN PC Workstation Installation and Configuration Guide* (50906-90040)

PREFACE (continued)

- *HP StarLAN User's Guide for PCs (50905-90000)*
- *HP StarLAN Diagnostics and Troubleshooting Manual for PCs (50906-90060)*
- *HP 28647A Bridge Installation and Reference Manual (28647-90001)*
- *HP 30265A StarLAN/3000 Link Installation and Reference Manual (30265-90001)*

HP ThinLAN Manuals:

- *HP30240A ThinLAN/3000 Local Area Network Interface Controller (LANIC) Installation and Service Manual (30240-90001) (For Series 37/MICRO3000 systems, part number 30240-90100).*
- *PC to HP 3000 Network Configuration Guide (50909-90000)*
- *HP ThinLAN Planning and Hardware Guide for PCs (50909-90020)*
- *HP ThinLAN PC Server Installation, Configuration, and Operation Guide (50907-90000)*
- *HP ThinLAN Workstation Installation and Configuration Guide for PCs (50909-90040)*
- *HP ThinLAN User's Guide for PCs (50908-90000)*
- *HP ThinLAN Diagnostics and Troubleshooting Manual for PCs (50909-90060)*
- *HP28645A ThinLAN Hub Installation Manual (28645-90001)*

HP SERIAL Manuals:

- *HP SERIAL Network PC to HP 3000 Network Configuration Guide (50911-90000)*
- *HP SERIAL Network Planning and Hardware Guide (50911-90020)*
- *HP SERIAL Network PC Workstation Installation and Configuration Guide (50911-90040)*
- *HP SERIAL Network User's Guide (50910-90000)*
- *HP SERIAL Network Troubleshooting Guide (50911-90060)*

PREFACE (continued)

Resource Sharing Manuals:

- *Resource Sharing: System Management* (32597-90001)
- *Resource Sharing: Utilities* (32597-90002)
- *Resource Sharing: Host Diagnostics* (32597-90003)
- *Resource Sharing: Tape Backup User's Guide* (35460-90902)
- *Resource Sharing: Tape Backup Administration* (35460-90903)

You may also wish to consult the following DS and DS-related reference manuals:

- *DS/3000 HP 3000 to HP 3000 User/Programmer Reference Manual* (32185-90001)
- *DS/3000 HP 3000 to HP 1000 Reference Manual for HP 3000 Users* (32185-90005)
- *DS/3000 HP 3000 to HP 3000 Network Administrator Manual* (32185-90002)
- *X.25 Link for the HP 3000 Reference Manual* (32187-90001)
- *DS/1000-IV User's Manual* (91750-90002)

These additional reference manuals provide documentation for the MPE operating system and several subsystems available on the HP 3000:

- *Fundamental Data Communications Handbook* (5957-4634)
- *HP 3000 Computer Systems, MPE V Commands Reference Manual* (32033-90006)
- *HP 3000 Computer Systems, MPE V Intrinsic Reference Manual* (32033-90007)
- *HP 3000 Computer Systems, MPE V System Operation and Resource Management Reference Manual* (32033-90005)
- *IMAGE/3000 Reference Manual* (32215-90003)
- *QUERY/3000 Reference Manual* (30000-90042)
- *KSAM/3000 Reference Manual* (30000-90079)
- *HP 30020A INP Installation and Service Manual* (30010-90001)

PREFACE (continued)

INP Manuals:

- *V/3000 Reference Manual* (32209-90001)
- *MPE File System Reference Manual* (30000-90236)
- *Workstation Configurator Reference Manual* (30239-90001)
- *HP 30020B INP Installation and Service Manual* (30020-90005)
- *HP 30244M INP Series 37 Installation and Service Manual* (30244-90002)

ATP Manuals:

- *Point-To-Point Workstation I/O Reference Manual* (30000-90250)
- *Terminal (TERMDSM) On-Line Diagnostic/Support Monitor Reference Manual* (For MPE V/E: 30144-90013)
- *HP 3000 Distributed Systems Network/Advanced Terminal Processor Off-line Diagnostic Procedures Manual* (30144-90003)
- *Asynchronous Data Communications Channel-Main and Asynchronous Data Communications Channel-Extended Diagnostic Manual* (30070-90037)
- *Advanced Terminal Processor (ATP) Installation Manual* (30144-90002)

Organization of the Manual

Section 1, "Troubleshooting" describes how to troubleshoot problems with the NS3000/V services and links.

Section 2, "Network Services Error Messages" describes the error codes and messages generated by NS3000/V.

Section 3, "Node Management Error Messages" describes the error codes and messages generated by Node Management Services (NMS).

Section 4, "Logging Location Codes" describes the logging location codes generated when you configure logging for the subsystems of the NS3000/V services and links.

Section 5, "Software Line Test Errors" describes errors generated by line tests used to troubleshoot the transport.

Appendix A, "NS3000/V and DS/3000 Error Code Mapping" describes the differences between error messages generated by NS3000/V and DS/3000 for CI and DS errors, and also for DS to NS NFT errors.

PREFACE (continued)

How to Locate Error Messages

Table i is an alphabetic list of the error messages by label and where they are located in this manual. Table ii provides a list of error messages not categorized by an error label.

TABLE I. LOCATION OF LABELED ERRORS

Error Label	Description	Location (starting page)
CIERR CIWARN	Command Interpreter errors and warnings	2-1
DSERR	1. Network Services environment errors. 2. NSCONTROL errors.	1. 2-17 2. 3-135
NDIERR	Network directory errors	3-117
NETXPORT NETXPORTERR NETXPORTWARN	NETCONTROL messages, errors and warnings	3-2
NFTWARN	Network Services file transfer errors	2-30
NFT/3000 ERR NFT/3000 WARN	Network file transfer (HP 3000 specific) errors	2-41
NS/NFTERR	Network Services file transfer errors	2-30
NMCNERR	NMMON and NMLOGMON process errors	3-9
NMDUMPERR NMDUMPWARN	NMDUMP errors and warnings	3-15
NMERR	Node management services errors	3-28

PREFACE (continued)

TABLE I. LOCATION OF LABELED ERRORS (cont'd)

Error Label	Description	Location (starting page)
NMFSERR NMFSWARN	NMFS errors and warnings	3-71
NMGRERR NMGRWARN	NMMGR errors and warnings	3-77
NMMGRVER NMMGRVERWARN	NMMGRVER errors and warnings	3-130
SOCKERR	Network Interprocess Communication (NetIPC) errors	2-50
VALERR	Configuration validation errors	3-138
VT ERROR VT WARNING	Virtual terminal errors and warnings	2-63

PREFACE (continued)

TABLE II. LOCATION OF MISCELLANEOUS ERRORS

Error Label	Description	Location (starting page)
:DSLIN	Environment errors (500s)	2-73
FPARSE	Errors returned in the result parameter of the FPARSE intrinsic	2-93
Remote File Access (RFA)	Network Service Remote File Access errors (200s)	2-76
Remote Process Management (RPM)	Errors returned in the result parameter of the intrinsics: RPMCREATE, RPMKILL, RPMGETSTRING	2-78
TCP/PXP	Errors returned by Transmission Control Protocol (TCP) or Packet Exchange Protocol) in the PMERR parameter of IPCHECK calls.	2-87

CONVENTIONS USED IN THIS MANUAL

NOTATION	DESCRIPTION
nonitalics	Words in syntax statements which are not in italics must be entered exactly as shown. Punctuation characters other than brackets, braces and ellipses must also be entered exactly as shown. For example: EXIT;
<i>italics</i>	Words in syntax statements which are in italics denote a parameter which must be replaced by a user-supplied variable. For example: CLOSE <i>filename</i>
[]	An element inside brackets in a syntax statement is optional. Several elements stacked inside brackets means the user may select any one or none of these elements. For example: $\left[\begin{array}{c} A \\ B \end{array} \right]$ User <i>may</i> select A or B or neither.
{ }	When several elements are stacked within braces in a syntax statement, the user must select one of those elements. For example: $\left\{ \begin{array}{c} A \\ B \\ C \end{array} \right\}$ User <i>must</i> select A or B or C.
...	A horizontal ellipsis in a syntax statement indicates that a previous element may be repeated. For example: [, <i>itemname</i>]...; In addition, vertical and horizontal ellipses may be used in examples to indicate that portions of the example have been omitted.
▣	A shaded delimiter preceding a parameter in a syntax statement indicates that the delimiter <i>must</i> be supplied whenever (a) that parameter is included or (b) that parameter is omitted and any <i>other</i> parameter which follows is included. For example: <i>itema</i> [▣ <i>itemb</i>] [▣ <i>itemc</i>] means that the following are allowed: <i>itema</i> <i>itema, itemb</i> <i>itema, itemb, itemc</i> <i>itema, , itemc</i>

CONVENTIONS (continued)

Δ When necessary for clarity, the symbol Δ may be used in a syntax statement to indicate a required blank or an exact number of blanks. For example:

```
SET[(modifier)] $\Delta$ (variable);
```

underlining When necessary for clarity in an example, user input may be underlined. For example:

```
NEW NAME? ALPHA
```

Brackets, braces or ellipses appearing in syntax or format statements which must be entered as shown will be underlined. For example:

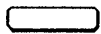
```
LET var[[subscript]] = value
```



Output and input/output parameters are underlined. A notation in the description of each parameter distinguishes input/output from output parameters. For example:

```
CREATE (parm1,parm2,flags,error)
```



shading

Shading represents inverse video on the terminal's screen. In addition, it is used to emphasize key portions of an example.



The symbol  may be used to indicate a key on the terminal's keyboard. For example,  indicates the carriage return key.

char

Control characters are indicated by  followed by the character. For example, Y means the user presses the control key and the character Y simultaneously.

CONTENTS

Section 1

TROUBLESHOOTING

Problem Resolution	1-2
How to Resolve Problems	1-3
Characterize the Problem	1-3
Identify the Possible Causes	1-4
Interactive or Programmatic Problems	1-6
Program Errors	1-6
Command Errors	1-6
Line Opening Errors	1-7
Line Closing Errors	1-8
NMS Utility Errors	1-9
Nodal Problems	1-10
Recent Changes	1-10
No Changes	1-13
Investigate the Link	1-14
IEEE 802.3 Link Problems	1-14
NS Point-to-Point 3000/V Link Problems	1-15
Asynchronous 3000/V Link Problems	1-15
DS-Compatible Link Problems	1-16
Investigate the Software	1-17
Determine the Action	1-18
Invalid Software Installation	1-18
MPE Configuration Incorrect	1-19
Insufficient MPE Resources	1-19
Corrupt Configuration File	1-19
Corrupt Network Directory File	1-19
Incompatible Configuration File Version	1-19
Insufficient Configuration File Values	1-19
Retransmission Timeout Errors	1-20
NetIPC Shutdown Errors	1-21
Network Transport Shutdown	1-22
Submitting an SR	1-23

Section 2

NETWORK SERVICES ERROR MESSAGES

Network Services CI Errors (CIERRs)	2-1
DS-Compatible CI Errors	2-2
CI Errors and Messages (CIERRS)	2-4
Miscellaneous DS-Compatible Errors (DSERRs)	2-17
Program-to-Program Communication Errors (DSERRs)	2-21
Network Services Environment Error Messages (DSERRs)	2-24
Network File Transfer Errors	2-28
DS-Compatible NFT Errors (NFTErrs)	2-28
NS/NFT Errors	2-30
NFT/3000 Errors	2-40

CONTENTS (continued)

Network InterProcess Communication Errors (SOCKERRs)	2-50
Virtual Terminal Errors (VT ERRORS)	2-63
Network Services Information Messages	2-71
Remote File Access Errors	2-74
Remote Process Management Errors	2-76
Network Transport Protocol Errors	2-85
FPARSE Error messages	2-89

Section 3

NODE MANAGEMENT ERROR MESSAGES

NETCONTROL Errors (NETXPORERRs)	3-2
NMCNERR Errors	3-9
NMDUMP Error Messages	3-15
The Error Information Screen	3-26
NMERR Messages	3-28
Procedural Errors	3-28
Version Control	3-49
Link Manager	3-53
Link Executor	3-60
Messages Catalogue Access	3-61
Procedural Errors (cont'd)	3-65
PC Link Manager	3-66
NMFS Error Messages	3-71
NMMGR Errors	3-77
Network Directory (NDIERR) Error Messages	3-117
NMMGRVER Error Messages	3-130
NSCONTROL Errors	3-135
Configuration Validation Messages (VALERRs)	3-138

Section 4

LOGGING LOCATION CODES

Overview	4-1
Logging Formats	4-1
Logging Subsystems	4-2
Network Transport Subsystem Logging	4-3
Parameters	4-4
Network Services Subsystem Logging	4-6
Network IPC Subsystem Logging	4-8
NMS Link Manager Subsystem Logging	4-8
PC Link Manager	4-8
Using Log Files	4-9
Internal Errors	4-9
Informative and Non-Critical Errors	4-9
Statistics Logging Example	4-10

CONTENTS (continued)

Network Transport Logging Locations	4-13
Control Process Logging Location Codes	4-14
IP Logging Location Codes	4-23
IPU Logging Location codes	4-40
NI Logging Location Codes	4-43
Path Result Codes	4-50
Probe Logging Location Codes	4-53
PXP PM Logging Location Codes	4-57
PXP SIP Logging Location codes	4-64
SEMAPHORE Result Codes	4-68
TCP PM Logging Location Codes	4-70
TCP SIP Logging Location Codes	4-86
Dial ID Logging Location Codes	4-92
ICPM Type/Code Words	4-105
Network Services Logging Messages	4-109
CX Logging Errors	4-109
DSDAD Logging Errors	4-112
DSSERVER Logging Errors	4-115
DSUTIL Logging Errors	4-117
ENV Logging Errors	4-118
NFT Logging Errors	4-120
PTOP Logging Errors	4-121
RFA Logging Errors	4-122
RPM Logging Errors	4-123
Network IPC Logging Errors	4-126
Network IPC Logging Errors	4-126

Section 5

SOFTWARE LINE TEST ERRORS

Overview	5-1
IPC and XPT Line Test Error Messages	5-1
Line Test Error Categories	5-1
RPM Errors	5-2
Packet Verification Errors	5-4
Send and Receive Failures	5-5
Socket Creation Failures	5-5
Checksum Errors	5-6
Miscellaneous Test Errors	5-6
General Test Suggestions	5-7

Appendix A

NS3000/V and DS/3000 Error Code Mapping

CS Error Mapping	A-1
DS Error Mapping	A-4
NFT Error Mapping	A-7

HP Network Services for MPE/V Based Systems (NS3000/V) is the HP data communications product that enables your HP 3000 to communicate with other HP computer systems as part of a distributed network. There are several network link products for NS3000/V.

The following link products connect computers on a local area network using the IEEE 802.3 networking standard:

- ThinLAN/3000 Link (includes ThickLAN option for thick coaxial cable)
- StarLAN/3000 Link

Two other link products enable you to establish remote connections to HP3000s, as well as local connections, using point-to-point networking technology:

- Asynchronous SERIAL Network Link for MPE/V based systems (Asynchronous 3000/V Link)
- NS Point-to-Point Network Link for MPE/V based systems (NS Point-to-Point 3000/V Link).

The term IEEE 802.3 links is used to designate information that applies to all the IEEE 802.3 links (ThinLAN/3000 Link, StarLAN/3000 Link). ThinLAN/3000 Link connections are usually made with thin (.18 inch) coaxial cable; however, you can also use thicker (.4 inch diameter) coaxial cable, available by ordering the ThickLAN option of ThinLAN/3000.

The optional DS-Compatible links are the DS Point-to-Point Hardwired or Modem link for connections between systems, the DS X.25 Link for connections to a packet switched network, and the DS Satellite Communication Link.

Although most error messages are easily understood by the customer, some error messages refer to internal procedures comprehensible only to qualified Hewlett-Packard representatives. Users are not expected to understand these explanations, however, they should take the actions listed in the section under "Problem Resolution." Section 2 lists errors for NS3000/V Network Services covering the Virtual Terminal, Remote File Access, Network File Transfer, Remote Process Management, and Program-to-Program Communication services. NetIPC, a programmatic interface provided with the NS links, is also covered in this section. Certain services list errors which may be encountered over both "DS-Compatible" links (point-to-point or X.25 links) and the NS links.

PROBLEM RESOLUTION

Troubleshooting data communications problems can be a very involved process since there are many hardware and software components to be investigated. Some problems can be quickly identified and resolved. These include invalid software installation, version incompatibilities, insufficient MPE resources, corrupt configuration files, programming or command errors, and file system errors. Some problems require more investigation. The strategy and tools to use while investigating the software and hardware components of NS3000/V and associated links are provided in this section.

Once identified, these problems can usually be resolved by the programmer, user or network manager, using the suggestions in this section or the detailed instructions provided in the following sections of this manual. However, there may be problems that require you to contact your Hewlett-Packard representative. The form used to enable HP to solve your problem in an efficient and timely manner is called a Service Request (SR).

This section contains the following subsections:

- **How to Resolve Problems**
 - **Characterize the Problem**
 - **Identify the Possible Causes**
- **Interactive or Programmatic Problems**
 - **Program Errors**
 - **Command Errors**
 - **Line Opening Errors**
 - **Line Closing Errors**
 - **NMS Utility Errors**
- **Nodal Problems**
 - **Recent Changes**
 - **No Changes**
- **Investigate the Link**
- **Investigate the Software**
- **Determine the Action**
- **Submitting a Service Request (SR)**

This section describes how to identify the problems you may encounter and the action to take to resolve these problems. It also provides the guidelines to follow when submitting an SR.

HOW TO RESOLVE PROBLEMS

The usual method for resolving problems is to characterize the situation in which the problem occurs and then investigate which of the possible causes have actually caused the problem. Finding the actual cause is often sufficient to suggest the resolution. For example, assume that the problem is characterized as "the user is unable to open a line with the DSLINE command." A possible cause of the problem is that the syntax of the command was incorrect. If so, you resolve the problem by correcting the command and reissuing it. However, if the syntax was correct, you would have to look for another possible cause, such as the line was not initialized or the remote node was not responding. Thus, in most cases you start with the characterization of the problem and investigate the possible causes. The difficult part of troubleshooting is to identify the actual cause of the problem. Once you know the actual cause, you can take the appropriate action to resolve the problem.

Characterize the Problem

It is important to ask questions when you are trying to characterize a problem. Start with global questions and gradually get more specific. Depending on the response, you ask another series of questions, until you have enough information to understand exactly what happened. Key questions to ask are shown in Figure 1-1.

1. Does the problem seem isolated to one user or program? Can the problem be reproduced?
Did the problem occur under any of the following circumstances?
 - When running a program?
 - When issuing a command?
 - When using an NMS utility?
 - When opening the line?
 - When transmitting data?
 - When closing the line?

2. Does the problem affect all users? the entire node?
Has anything changed recently? The possibilities are:
 - New software and hardware installation?
 - Same hardware but changes to the software. Has the configuration file been modified?
Has the MPE configuration been changed?
 - Same software but changes to the hardware.

Do you suspect hardware or software?

Figure 1-1. The Problem Characterization Questions

Troubleshooting

It is often difficult to determine whether the problem is hardware or software related. Symptoms that mean you should suspect the hardware are:

- Bad LANIC or INP Dumps
- Link level errors, either returned to the user or logged to the console. This includes CS/3000 errors, CI errors, NMERR errors, power fails, and link shutdowns.
- Lost Data - data is sent but not received at the link destination. (This could also be caused by a software problem.)

Symptoms that mean you should suspect the software are:

- Logging messages at the console.
- Network Services errors returned to users or programs.
- MPE File System (FSERR) or Command Interface (CIERR) errors (except "Remote Not Responding" errors).
- Data corruption.
- Terminal Hangs.
- Intermittent Errors
- Network-Wide problems.

Knowing what has changed recently may also indicate whether the problem is software or hardware related. Refer to Recent Changes later in this section.

Identify the Possible Causes

The type of investigation that you use to identify the possible causes of a problem depends on whether the problem affects one user or individual situation, or if the problem is node-wide. Once you have the answers to the questions in Figure 1-1, use the flowchart in Figure 1-2 as a guide to the rest of this section.

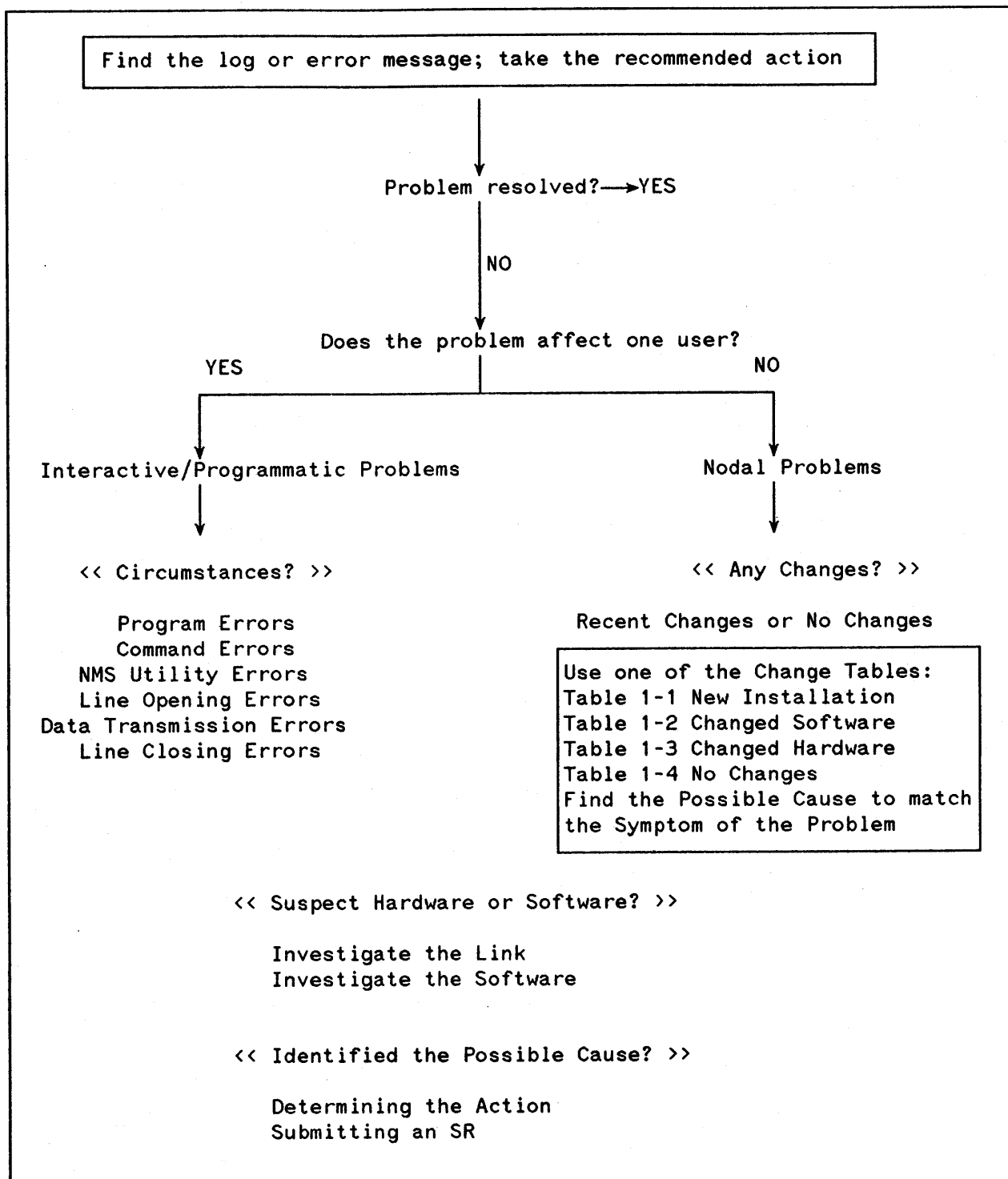


Figure 1-2. Using the Problem Characterization Answers

The most important problem solving tool is this manual. Only if the explanation and action under the specific log or error message is not sufficient to resolve the problem do you need to proceed with more detailed investigation.

INTERACTIVE OR PROGRAMMATIC PROBLEMS

The first step in investigating interactive or programmatic problems is to examine any error message returned. The following sections in this manual list the error messages returned by NS3000/V and associated links, along with their meaning and recommended recovery action. If you have received a specific error message, find it in this manual and take the action recommended. Most error messages are easily understood by the user or programmer, although some of the explanations refer to internal procedures comprehensible only to qualified HP representatives. Users are not expected to understand these explanations, but they should take the actions listed. The discussion below provides additional information about the possible causes of these problems and the actions which may be required to resolve them.

Program Errors

If the user is using any of the programmatic capabilities of NS3000/V and an intrinsic completes with an error, the recovery procedure depends upon the intrinsic. How you check for the error code depends on which service you are using.

- If a NetIPC intrinsic was issued that received a condition code indicating an error, use the IPCHECK intrinsic to obtain additional details. Always check for the PM error code; this is essential to identify the cause if the Network Transport is unable to complete a request.
- If a file system intrinsic was issued that received a condition code indicating an I/O error occurred, use the FCHECK intrinsic to obtain additional details.
- If a PTOP intrinsic received a condition code indicating an error, use the PCHECK intrinsic.

If the condition code indicates an error, refer to Section 2, "NS3000/V Network Services Error Messages" section of this manual for an explanation and recovery for the error. You may also refer to the *IMAGE/3000 Reference Manual* for RDBA, and the *MPE File System Reference Manual* for RFA.

Command Errors

If the user is using the interactive capabilities of NS3000/V and associated links and receives an error, refer to the "NS3000/V Network Services Error Messages" (Section 2) section of this manual. The command errors fit into four categories:

- Syntax errors or invalid options. These errors result from user errors when issuing the command. They are readily corrected by checking for the correct syntax and reissuing the command.
- 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. 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 network manager may need to investigate further.

- **Internal Errors.** These errors indicate that the software is malfunctioning. If they ever occur, notify your HP representative. The network manager should follow the steps outlined in "Submitting an SR" at the end of this section.

For syntax errors and warnings, consult the reference pages on that command for the correct syntax and options. Refer to the *NS3000/V Network Manager Reference Manual* or to the *NS3000/V User/Programmer Reference Manual*. The network manager needs to take the appropriate action if users receive resource or internal errors when issuing commands.

Line Opening Errors

There are several reasons why a DSLINE command for opening a communications line might be rejected. Some line-opening errors actually occur when a REMOTE HELLO (or DSCOPY, or programmatic RPMCREATE, FOPEN, POPEN, or DOPEN) is executed, not when the DSLINE is done. The following list summarizes the likely causes of line opening failures:

- The user made a syntax error in the DSLINE command.
- The user specified an erroneous *nodename* or *envid* in the DSLINE command. The node name must match the one configured with NMMGR both in the Network Directory and the Configuration file. Make sure that all users know the correct node names. You may want to post a map with the configured node names for all the nodes on the network. The connect node names can be checked in the Network Director (if one is being used).

For DS-Compatible Links, the user specified an erroneous line or DS X.25 nodename for the *dsdevice* parameter. These must match the device class name for the IODS0 or IODSX entry configured with SYSDUMP. The X.25 nodename must match one configured in the database configured with NETCONF. Make sure that all users know the correct device class and X.25 nodenames. You may want to include these configured items on the network map.

- The line was not opened by the local console operator, the remote console operator or any intermediate nodes. Check that all required commands have been issued on the local, remote and intermediate nodes. The network interfaces, the LAN802.3 NI, the Loopback NI, Router NI, and Gateway Half NI must be initialized with NETCONTROL START commands. The Network Services must be initialized with the NSCONTROL START command. Some links may also need to be started by NETCONTROL ADDLINK commands. Links can be configured not to be started when a NETCONTROL START command is executed and be started via NETCONTROL ADDLINK. Links may have been closed by NETCONTROL DELLINK or may have been closed because an irrecoverable error was detected on the line. Any DS-Compatible Links must be initialized with DSCONTROL commands.
- The remote node may not be operational.
- The remote operator may have lowered the session limit. This would cause a failure in a REMOTE HELLO or a DSCOPY or RPMCREATE that tried to automatically log on to a session.
- The local console operator may have used the service list of the NSCONTROL command to limit the Network Services to incoming users only. On the remote node, the operator may have limited the Network Services to outgoing only. This would cause a REMOTE HELLO, DSCOPY, remote FOPEN or DOPEN, POPEN, or RPMCREATE to fail, depending on which services were not started.

For the DS-Compatible Links, the operator may have used the SLAVE option on the DSCONTROL command to limit access to incoming users only, or the MASTER option to prohibit access to the node.

Troubleshooting

- If the line is a dial up line a failure in a REMOTE HELLO, DSCOPY or RPMCREATE can be caused by the following:
 - If manual dial, the console operator never dialed the number or rejected the dial request by replying "no" to the request.
 - If auto dial, the number was busy, wrong, or was never answered at the remote computer.
 - The security strings did not match at either the local or remote node (if security was enabled).
 - The IP address of the remote node was not configured in the NSCONF file as a candidate for use of this link.
 - If the link is a shared dialup link, a failure will occur if the link is connected to a node different than the one issued in the DSLINE command.
 - When a REMOTE HELLO is issued which causes the phone to be dialed, there is a window in which subsequent REMOTE HELLOs from other users will be rejected. The window is from the time the auto dial starts (or dial request) to when the connection is established.
- A REMOTE HELLO, DSCOPY or RPMCREATE will fail if the IP address of the remote node configured in the Network Directory does not match the IP address of the remote node configured in the NS Configuration file.
- All virtual terminals on the remote node are already in use, which means there are no remote resources available to establish a remote session. This would cause a failure in a REMOTE HELLO or a DSCOPY or RPMCREATE that tried to automatically log on to a session.
- Someone has exclusive access to the specified line or the user requested exclusive access to a line that is already in use.
- Someone is exclusively accessing a server program. For example, someone is executing the STORE command or a SYSDUMP system backup on DSSERVER.NET.SYS.
- There is a hardware problem - the communications device is not responding correctly.

Line Closing Errors

There are several reasons why a DSLINE command for closing a communications line might be rejected. The following list summarizes the likely causes of line closing failures:

- The user made a syntax error in the DSLINE command.
- The user specified an erroneous *nodename* or *envid* in the DSLINE command. The nodename must match the one configured with NMMGR. Make sure that all users know the correct nodenames. You may want to post a map with the configured nodenames for all the nodes on the network.

For DS-Compatible Links, the user specified an erroneous line or X.25 nodename for the *dsdevice* parameter. These must match the device class name for the IODS0 or IODSX entry

configured with SYSDUMP. The X.25 nodename must match one configured in the database configured with NETCONF. Make sure that all users know the correct device class and X.25 nodenames. You may want to include these configured items as well on the network map.

- The remote node may not be operational.
- There is a hardware problem -- the communications device is not responding correctly.

NMS Utility Errors

A File System error (FSERR) may have occurred while attempting to access the configuration file. Try to access the configuration file under the same *user id* using NMMGR. Use the NMMGR Error screen to find out what the underlying FSERR is. Correct the problem and retry.

NODAL PROBLEMS

The first step in investigating nodal problems is to examine any error message returned. Error messages returned by NS3000/V and associated links are listed in the follow sections of this manual, along with their meaning and recommended recovery action. If you have received a specific error message, find it in the manual and take the action recommended. Only if there is no clear error or the recommended action does not correct the problem is it necessary to investigate further. Follow the strategy shown in Figure 1-2.

Recent Changes

If you begin experiencing problems immediately following either a new installation or changes to the software or hardware, often you can easily identify what is causing the problem. Tables 1-1, 1-2, and 1-3 show the symptoms and possible causes for a new installation, for changed software, and for changed hardware, respectively. Once you have identified the possible cause, you may need to isolate the actual cause. Proceed to Investigate the Software or Investigate the Link, depending on the nature of the possible cause. For more information on some of the possible causes, including what to do when you have isolated the actual cause, proceed to Determine the Action. If the recommended action is to contact an HP representative, use the guidelines in Submitting an SR.

TABLE 1-1. SYMPTOMS FOR A NEW INSTALLATION

Product	Symptom	Possible Causes
All NS links	Console locked or hung, System Failures. System Failure 969/970	Software installation invalid. Configuration incorrect, serious internal error.
DS Compatible Links	Console locked or hung, System Failures DSCONTROL command hangs. CSERR 161 (X.25 Link)	Software installation invalid. Configuration incorrect. Cable problems, PDN or remote in hardwired connection not responding.

TABLE 1-2. SYMPTOMS FOR CHANGED SOFTWARE

Product	Symptom	Possible Causes
All NS services and links	<p>System Failure 969/970.</p> <p>DSCOPY command aborts.</p>	<p>Configuration file invalid; serious internal error.</p> <p>NFTCAT2.NET.SYS is bad (incompatible version or MAKECAT was not done).</p>
CS/3000	<p>CSERR 6-7, 8-10, 14-19</p> <p>CSERR 11-13, 57-58, 153, 158, 201, 205-207</p> <p>CSERR 153, 157-159, 203-204, 207-217</p> <p>CSERR 154, 207-209, 212-214, 217</p> <p>CSERR 6-7, 156</p>	<p>Configuration incorrect.</p> <p>Operator procedure wrong.</p> <p>Remote device problem.</p> <p>Hardware problem.</p> <p>Software problem.</p>
DS Services and DS Compatible Links	<p>DSCONTROL command fails with CIERR 4152 or 4153.</p> <p>DSCONTROL hangs.</p> <p>Line closes or poor response.</p> <p>Sessions hang.</p> <p>System Failures.</p>	<p>Software installation invalid.</p> <p>MPE or NETCONF (X.25) configuration incorrect.</p> <p>Configuration incorrect.</p> <p>DSMON bad, programs not compatible with new, or MPE version incorrect.</p> <p>Software installation invalid.</p>

TABLE 1-3. SYMPTOMS FOR CHANGED HARDWARE

Product	Symptom	Possible Causes
All NS services and links	<p>CSERR 121 (recoverable); unable to use NS over LAN.</p> <p>CSERR 161</p>	<p>INP, ATP or LANIC not properly connected to coax, or coax not properly installed (missing or bad terminators).</p> <p>Cable problems, remote not responding.</p>
CS/3000	<p>CSERR 84-109, 117, 154, 207-209, 212-214, 217</p>	<p>Hardware problem.</p>
DS Services and DS Compatible Links	<p>Line closes.</p> <p>Poor response.</p> <p>REMOTE HELLO fails or remote system shuts line.</p> <p>System Failures.</p> <p>CSERR 161 (X.25 Link)</p>	<p>Modem or line problems.</p> <p>Configuration not updated.</p> <p>Line problems.</p> <p>Configuration incorrect.</p> <p>Cable problems, PDN or remote not responding.</p>

No Changes

If you begin experiencing problems and nothing has been changed, you can use Table 1-4 to identify what is causing the problem. Table 1-4 shows the symptoms and possible causes for an installation with no changes. Once you have identified the possible cause, you may need to isolate the actual cause. Proceed to "Investigate the Software" or "Investigate the Link", depending on the nature of the possible cause. For more information on some of the possible causes, including what to do when you have isolated the actual cause, proceed to "Determine the Action". If the recommended action is to contact HP, use the guidelines in Submitting an SR.

TABLE 1-4. SYMPTOMS FOR NO CHANGES

Product	Symptom	Possible Causes
All NS services and links	<p>Unable to use services or a warning that old services are being used.</p> <p>Can't connect to remote system.</p>	<p>NSCONTROL has not been done or network has been shut down, or NSCONTROL has been executed limiting the number of active servers.</p> <p>See "Line Opening Errors."</p>
DS Services and DS Compatible Links	<p>Console locked or hung.</p> <p>DSLIN command fails.</p> <p>DSCOPY aborts.</p> <p>DSCOPY fails.</p> <p>Hung session, cannot abort.</p> <p>Line closes.</p> <p>NFT errors 101-110.</p> <p>Poor response.</p> <p>REMOTE command fails.</p> <p>Remote system shuts line.</p> <p>System failures.</p> <p>Transfer only one-way.</p>	<p>Terminal or MPE problems (not DS).</p> <p>Line not open or open one-way.</p> <p>Line errors.</p> <p>User errors, wrong file type, or copy in wrong direction.</p> <p>User error, PTOP program logic, subsystem or application program problem.</p> <p>Line errors.</p> <p>Resource or internal software errors.</p> <p>Line errors.</p> <p>User error, MPE problem, or lack of virtual terminals.</p> <p>Line problems or hardware failures.</p> <p>Software problems or missing patches or fixes. Take a memory dump.</p> <p>Remote configuration problem.</p>

INVESTIGATE THE LINK

The following is a strategy to use to identify and solve link problems. You should use this strategy if you are not sure what is causing the problem because many times errors in the upper level software are due to hardware problems. You can also use this strategy if you have identified a hardware-related possible cause and need to isolate the actual cause.

IEEE 802.3 Link Problems

For problems that involve an IEEE 802.3 link, use the following strategy where applicable:

- Issue the SHOWCOM *ldev*; ERROR command. Inspect the output and attempt to identify the problem. Refer to Section 9 and to the *LAN/3000 Diagnostic and Troubleshooting Guide* for a detailed analysis of the fields displayed. Retain a copy of the output from this command for your Hewlett-Packard representative.
- For links that involve connections to personal computers (PCs) refer to the StarLAN or ThinLAN manuals under "Related Publications" in the Preface of this manual.
- Use the LAN Node Diagnostic (LANDIAG). LANDIAG is an on-line diagnostic tool. It verifies the LANIC components by running the LANIC self-test, then a series of tests that test the MAU and AUI as well. LANDIAG extends the testing as far into the LAN as possible, depending on which equipment is connected to the LANIC. It includes the Remote Node Test (#17) that sends test frames between nodes. Refer to the *LAN/3000 Diagnostic and Troubleshooting Guide* for instructions.
- If a LANIC failure has taken place, give the file LANLOGxxx.PUB.SYS to your Hewlett-Packard representative for additional analysis.

If the problem is easily reproducible, and link level tracing was inactive when the problem took place, turn on trace using the MPE command LINKCONTROL. When the problem has been reproduced, turn off trace and give this trace file to your Hewlett-Packard representative for additional analysis. If a LANIC failure takes place while trace is active, give the file LANLOGxxx.PUB.SYS to your HP representative as well.

- If any Link Manager log messages, configured as SUB0008, CLAS0000 (for the LAN Link), or CLAS0001 (for the PC Link Manager), appear on the console, issue the MPE command SWITCHNMLOG and save the log file. You can use NMDUMP to format the file. The log message contains an error code, such as a CSERR or NMERR. Information on the cause and recovery of these errors can be found in the *Fundamental Data Communications Handbook* for CS errors and the NMERR message table in Section 3 ("Node Management Errors") of this manual. Keep a copy of the log file and the output for your Hewlett-Packard representative to study if it is necessary to submit an SR.
- If link level logging is not enabled, enable it through NMMGR so that the information will be available if this problem can be repeated.

NS Point-to-Point 3000/V Link Problems

The NS Point-to-Point 3000/V link is connected with an Intelligent Network Processor (INP). For problems that involve the INP, use the following strategy where applicable:

- Issue the `SHOWCOM ldev; ERRORS` command. Inspect the output and attempt to identify the problem. Refer to the *NS3000/V Network Manager Reference Manual* for a detailed analysis of the fields displayed. Retain a copy of the output from this command for your Hewlett-Packard representative.
- Use the INP Diagnostic/Support Monitor (DSM). DSM is an on-line diagnostic tool. It verifies the INP components by running the INP self-test, then extends the testing as far into the communications network as possible, depending on which equipment is connected to the INP. Refer to the *INP Diagnostic Procedures Manual* for instructions.
- If an INP failure has taken place, give the file `INPLOGxx.PUB.SYS` to your Hewlett-Packard representative for additional analysis.
- If the problem is easily reproducible, and link level tracing was inactive when the problem took place, turn on trace using the MPE command `LINKCONTROL`. When the problem has been reproduced, turn off trace. Use the `CSDUMP` or `DSDUMP` utilities to format the file. Refer to the *DSN/DS Network Administrator Reference Manual* for instructions on formatting and analyzing the output. Save both the raw trace file and the formatted output for your Hewlett-Packard representative for analysis. It is important to save any INP dump file (`INPLOGnnn.PUB.SYS`) that is created while link level tracing was enabled. Send both the INP dump file and the link trace file to your Hewlett-Packard representative for additional analysis.
- If any Link Manager log messages, configured as `SUB0008`, `CLAS0000`, appear on the console, issue the MPE command `SWITCHNMLOG` and save the log file. You can use `NMDUMP` to format the file. The log message contains an error code, such as a `CSERR` or `NMERR`. Information on the cause and recovery of these errors can be found in the *Fundamental Data Communications Handbook* for CS errors and `NMERR` message table in Section 3 ("Node Management Errors") of this manual. Keep a copy of the log file and the output for your Hewlett-Packard representative to study if it is necessary to submit an SR.
- Check the MPE log file for I/O error logging. Use `LISTLOG5` to format the log file. Keep a copy of the file and the output for your Hewlett-Packard representative to study.

Asynchronous 3000/V Link Problems

The Asynchronous 3000/V Link is connected with an Advanced Terminal Processor (ATP). For problems with the link or ATP, use the following strategy where applicable:

- Issue the `SHOWCOM ldev; ERROR` command. Inspect the output and attempt to identify the problem. (Refer to *NS3000/V Network Manager Reference Manual* for a description of the fields displayed). Retain a copy of the output from this command for your Hewlett-Packard representative.
- Use the diagnostic tool `TERMDSM` to list port state information in order to analyze the nature of port failures. These failures will cause an "ATP Failure on ldev nnn" message on the console. Refer to the *Terminal TERMDSM on-line Diagnostic/Support Monitor Reference Manual* for a description of the commands to run the diagnostic tests.

Troubleshooting

- If a link failure has taken place, give the file LINKTxx.PUB.SYS to your Hewlett-Packard representative for additional analysis.
- If the problem is easily reproducible, and link level tracing was inactive when the problem took place, turn on trace using the MPE command LINKCONTROL. When the problem has been reproduced, turn off trace and give this trace file to your Hewlett-Packard representative for additional analysis. If a link failure takes place while trace is active, give the file LINKTxx.PUB.SYS to your HP representative as well.
- If any Link Manager log messages, configured as SUB0008, CLAS0001 (PC Link Manager) appear on the console, issue the MPE command SWITCHNMLOG and save the log file. You can use NMDUMP to format the file. Refer to *NS3000/V Network Manager Reference Manual* for information on using NMDUMP, and information on MPE commands mentioned here. The log message contains an error code, such as a CSERR or NMERR. Information on the cause and recovery of these errors can be found in the *Fundamental Data Communications Handbook* for CS errors and the NMERR message table in Section 3 ("Node Management Errors") of this manual. Keep a copy of the log file and the output for your Hewlett-Packard representative to study if it is necessary to submit an SR.
- If link level logging is not enabled, enable it through NMMGR so that the information will be available if this problem can be repeated.

DS-Compatible Link Problems

For DS-compatible link problems that involve the Intelligent Network Processor (INP), use the following strategy where applicable:

- Issue the SHOWCOM *ldev*, ERRORS command. Inspect the output and attempt to identify the problem. Refer to the *NS3000/V Network Manager Reference Manual* for a detailed analysis of the fields displayed. Retain a copy of the output from this command for your Hewlett-Packard representative.
- Use the INP Diagnostic/Support Monitor (DSM). DSM is an on-line diagnostic tool. It verifies the INP components by running the INP self-test, then extends the testing as far into the communications network as possible, depending on which equipment is connected to the INP. Refer to the *INP Diagnostic Procedures Manual* for instructions.
- If an INP failure has taken place, give the file INPLOGxx.PUB.SYS to your Hewlett-Packard representative for additional analysis.
- If the problem is easily reproducible, and link level tracing was inactive when the problem took place, turn on trace using the MPE command DSCONTROL. When the problem has been reproduced, turn off trace. Use the CSDUMP or DSDUMP utilities to format the file. Refer to the *DSN/DS Network Administrator Reference Manual* for instructions on formatting and analyzing the output. Save both the raw trace file and the formatted output for your Hewlett-Packard representative for analysis. It is important to save any INP dump file (INPLOGnnn.PUB.SYS) that is created while link level tracing was enabled. Send both the INP dump file and the link file to your Hewlett-Packard representative for additional analysis.
- Check the MPE log file for I/O error logging. Use LISTLOG5 to format the log file. Keep a copy of the file and the output for your Hewlett-Packard representative to study.

INVESTIGATE THE SOFTWARE

Follow the strategy described below to identify and solve any problems that might involve software.

- There may be version incompatibilities between different software subsystems. This is essential to check if new software has recently been installed on your node. Use the software verification utilities, NMMAINT, DSLIST and CSLIST, described in the *NS3000/V Network Manager Reference Manual* to display the version identification numbers of the software modules. Compare the first five characters of these version IDs with those listed as compatible with each other in the *SYSTEM STATUS BULLETIN*, Software Release Bulletin, NOON files or other HP source. If a discrepancy is found, locate a known set of compatible software and install it.
- Issue the SHOWCOM; ERRORS command. Inspect the output and attempt to identify the problem. Refer to the *NS3000/V Network Manager Reference Manual* and to the *LAN/3000 Diagnostic and Troubleshooting Guide* for a detailed analysis of the fields displayed. Retain a copy of the output from this command for your Hewlett-Packard representative.
- Check the configuration file. Use NMMGR to print the data screens. Inspect the output and attempt to identify the problem. Follow the suggestions provided in the section "Corrupt Configuration Files" later in this section. Retain a copy of the output for your Hewlett-Packard representative.
- In general, the log files are the best source of information. They should be checked for *any* problem encountered. Use the command SWITCHNMLLOG to isolate the specific log file immediately after the problem occurs. Use the time range option of NMDUMP whenever possible to further narrow the focus on when the problem occurred. Inspect the formatted output and attempt to identify the problem. Retain a copy of the output from the log file for your HP representative.
- If the cause of the problem cannot be isolated with any other means, or if the recommended action has not resolved a problem, then use the line tests described in the *NS3000/V Network Manager Reference Manual*. The intent is to verify each component of the hardware and software individually in hopes of isolating the faulty component. Inspect the output and attempt to identify the problem. Retain a copy of the output from these tests for your HP representative.
- If the problem is easily repeated and NMS tracing was inactive when the problem took place, turn on trace using the MPE command NETCONTROL TRACE. When the problem has been reproduced, turn off trace and give this trace file to your HP representative for additional analysis.
- If the problem causes a system failure, take a full memory dump of the system that includes the monitor. Use the NSDPAN utility to format the dump. This utility is customized to save virtual memory and to format the data structures used by the Network Transport. The memory dump must be accompanied by a copy of the file LOADMAP.PUB.SYS and the I/O configuration.

DETERMINE THE ACTION

Once you have identified the cause of a problem, whether from the error descriptions in the following sections of this manual, from the Change Tables of Nodal Problems, or from investigating the software or the link, you need to resolve the problem. In some cases you may need to investigate further to determine exactly what is needed. The possible causes and their associated actions are described for:

- Invalid Software Installation
- MPE Configuration Incorrect
- Insufficient MPE Resources
- Corrupt Configuration File
- Corrupt Network Directory File
- Incompatible Configuration File Version
- Insufficient Configuration File Values
- Retransmission Timeout Errors
- Shutdown Errors

Invalid Software Installation

A software installation may be invalid. Use the following three programs to get a listing of all software modules and their version IDs.

- Run `NMMAINT.PUB.SYS` to obtain a listing of version IDs for NMS and for all of the NMS dependent subsystems. Locate the overall version IDs for each subsystem. Check that these subsystems are the correct version for operation with the associated link.
- `CSLIST`. Check that the CS/3000 subsystem is the correct version for operation with the associated link. Check the download files (`CSDLAN1.PUB.SYS` for the LANIC, `CSDLAPB2.PUB.SYS` (DS X.25) and `CSDBSC2.PUB.SYS` (Bisync) for the INP).
- `DSLIS`. Check for correct versions and no error messages.

Check that all required modules are present. Check the version IDs with the *SYSTEM STATUS BULLETIN* or other HP source to be sure the versions of software you have are supported with the version of MPE you have. If there is a problem found with any of these checks, you have an incorrect software version installed. Locate a known valid version of the suspect software (perhaps from one of your system backup tapes) and install correctly.

MPE Configuration Incorrect

Refer to the "System Configuration" section of the *NS3000/V Network Manager Reference Manual*; obtain an I/O listing of the system; check that the drivers are correctly configured.

Insufficient MPE Resources

There may be insufficient MPE resources, such as configured table sizes. Refer to the recommendations for system tables provided in the *NS3000/V Network Manager Reference Manual*. Check if the MPE configuration has enough virtual memory and enough CST, DST and PCB table entries configured. (If possible, run OPT.PUB.SYS in the "#T" or MPE tables context to check MPE table utilization). Reconfigure MPE to fix any problems found and restart the system.

Corrupt Configuration File

The configuration file is possibly corrupt. If the error persists, use NMMGR to manually check the configuration file (if possible). Compare the configuration file to the sample files provided with the NS links. Investigate any discrepancies. Check to see that all data records have been created. If bad records seem to be localized to a particular item, delete that item and reconfigure it. If necessary, RESTORE a known good backup copy of the file.

Corrupt Network Directory File

If the network directory file is open in NMMGR during a system failure, starting the network transport with :NETCONTROL START does not recover the network directory file. Run NMMGR in maintenance mode as follows:

```
:FILE NMMGRCMD=$STDINX
:RUN NMMGR.PUB.SYS
```

```
NM Configuration Manager 32098-20012 A.02.00 (C) Hewlett Packard Co. 1986
NMMGR>OPENDIR NSDIR.NET.SYS
NETWORK DIRECTORY: Recovering file NSDIR.NET.SYS
NMMGR>EXIT
```

After recovering the file, stop and restart the network transport as described in Commands, section 1, Volume II, of the *NS3000/V Network Manager Reference Manual*.

Incompatible Configuration File Version

Run the NMMGRVER program to convert the old configuration file to the new format. See Appendix C in Volume I of the *NS3000/V Network Manager Reference Manual* for instructions in using the NMMGRVER program.

Insufficient Configuration File Values

Only change the configured values in the configuration file for a persistent or widespread problem. The configured values apply to communication over all the connections and with all the remote nodes in the catenet. The default values are calculated to provide good performance in a variety of situations.

Changes to these values may improve one situation but affect other situations adversely. If the recommended action for a particular error or log message is to change the configured value, do so only for a extremely high number of log messages or for repeated error messages. Consult your HP representative for more information.

Retransmission Timeout Errors

The Network Transport provides reliable end-to-end communication. As part of ensuring reliable receipt of packets, the transport protocol TCP keeps track of the packets transmitted. If TCP does not receive an acknowledgment within the configured time period, TCP retransmits the packet. If the packet is retransmitted the maximum number of times configured and is still unacknowledged, then TCP logs a retransmission timeout error and aborts the connection. The transport protocol PXP may also log a retransmission timeout error. This occurs in much the same way as described for TCP, although PXP retransmits requests, not packets, and waits for replies, not acknowledgments. PXP is only used whenever an IPCLOOKUP is issued as part of a NetIPC application, and only communicates with the Socket Registry.

Retransmission timeouts can occur for the following reasons:

- Packets were transmitted to a remote node which was not active or which terminated before the packet arrived.
- Excessive node loads during connection establishment.
- Congestion or lack of buffers on the remote node.
- Possible link or configuration problems.

If a retransmission error is returned in a log message or in an IPCCHECK error code for NetIPC applications, first check that the remote node is up and that its transport has been started. If so, check if the retransmission timeout error is an isolated event or an ongoing problem. Examine a formatted log file for the period up to and including the error - check the Network Transport log class 6 for Statistics and log class 3 for non-critical errors.

If the problem is ongoing, then take the appropriate action:

- If the log messages show initial TCP connection failures due to a heavily loaded remote node, configure a longer Initial Retransmission Interval for the Transmission Control Protocol (TCP) Configuration Screen. This is in the NETXPORT branch of the NMMGR network configuration.
- If there are IPCLOOKUP failures, and the log messages show PXP timeouts due to a heavily loaded remote node, configure a longer Default Retransmission Interval for the PXP data screen. This is also in the NETXPORT branch.
- If unable to detect a problem on the local node, then check the remote node for log messages that IP is Unable to Deliver Packet. If so, *on the remote node* -- configure a higher Number of Buffers for the link data screen corresponding to the protocol used. (Section 7, Volume I, of the *NS3000/V Network Manager Reference Manual* describes the link data screens.) This is in the LINKCONF branch of the NMMGR network configuration.
- If none of the above are identified as causing the problem, then the remote node may not have enough buffers. Execute the `SHOWCOM ldev;ERROR` command and examine the `BUFF OVERFLOWS` field. A large number here probably means that not enough inbound buffers

were configured. If this is the case, configure more buffers or reads with the IEEE 802.3 Link Data Screen, using the Initial Buffers or Maximum Reads Outstanding fields.

A large number in the BUFF OVERFLOWS field could also mean that the node is A) too busy or B) does not have enough real memory.

- If the problem affects established connections and none of the above conditions apply, then configure a longer Retransmission Interval Upper Bound or a higher number of Maximum Retransmissions Per Packet for the Transmission Control Protocol (TCP) Configuration Screen.

NetIPC Shutdown Errors

The NetIPC call IPCSHUTDOWN releases a descriptor and any resources associated with it. Since system resources are used as long as call sockets and destination sockets exist, it is important to release the sockets whenever they are no longer needed. Before a process terminates, it should terminate its connection with IPCSHUTDOWN. Because this termination takes effect very quickly, *all of the data that is in transit on the connection is lost when the connection is shut down*. As a result, the processes that share a connection must cooperate to ensure that no data is lost.

Indications of a faulty shutdown procedure on an individual or application level are:

- If you receive log messages or NetIPC error codes where the recommended action for some of the log messages is to increase the number of TCP connections, and the connections are not currently active.
- If the TCP PM log message is location code 55, class 3, which indicates that a packet was received after the IPCSHUTDOWN call but before the TCP connection was fully deleted.

Indication of a faulty shutdown procedure on a nodal level is an incomplete shutdown of the Network Transport.

Network Transport Shutdown

Shutting down the Network Transport via the NETCONTROL STOP command requires that all NetIPC call sockets, all TCP connections, and all PXP sockets are closed. An error (Transport Shutting) is returned to all open sockets. Until this error is received by the user and the reply sent to TCP/PXP by NetIPC, the Network Transport does not terminate. The Network Services shut down completely even if an NSCONTROL ABORT has not been issued. However, it is important that user applications always have a send or receive posted on any open socket so that the shutdown error is delivered to them.

The only way to tell if the Network Transport has completely shut down is check the log file for the Control Process; Transport Stopped and the TCP SIP; General Protocol Stop (location code 43, class 4) nodal log messages. If these messages have not been logged, the Network Transport is waiting for an open socket and cannot completely terminate.

The Network Transport may be reinitialized even though the "old" transport has not completely terminated. The two versions do not interfere with each other and the old one goes away when its last open socket is finally closed. This old transport does not use any CPU and does not retain "ownership" of the IEEE 802.3 NI, but the data structures that wait on the open connection do use virtual memory.

If you find any of these indications, check any NetIPC applications for faulty shutdown procedure; refer to the *NetIPC3000/V Programmer's Reference Manual*.

SUBMITTING AN SR

For further assistance from HP, document the problem as an SR (Service Request) and forward it to your HP Service Representative. Include the following information where applicable:

- A characterization of the problem. Describe the events leading up to and including the problem. Attempt to describe the source of the problem. Describe the symptoms of the problem and what led up to the problem.

Your characterization should include: MPE commands; communication subsystem commands; job streams; result codes and messages; and data that can reproduce the problem.

Illustrate as clearly as possible the context of any message(s). Prepare copies of information displayed at the system console and user terminal.

- Obtain the version, update and fix information for all software as described in the *NS3000/V Network Manager Reference Manual*. Use the following three programs:
 - NMAINT.PUB.SYS for NS3000/V and the IEEE 802.3 and Asynchronous 3000/V links,
 - DSLIST.PUB.SYS for the DS-Compatible links,
 - CSLIST.PUB.SYS for CS and for the INP and LANIC download files.

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 and the system console.
- Run NMDUMP.PUB.SYS to format the NM log file (NMLGnnnn.PUB.SYS) that was active when the problem occurred. You may need to issue the MPE command SWITCHNMLOG to free the NM log file.

Using NMDUMP, format the log file for NETXPORT (3), NETIPC (5), Network Services (6) and Link Manager (8) information. Inspect the formatted output and try to locate errors. Prepare the formatted output and a copy of the log file for your Hewlett-Packard representative to further analyze.

- Prepare a listing of the configuration file and the MPE I/O configuration you are using for your Hewlett-Packard representative to further analyze. Inspect the output and try to locate errors.
- Run LISTLOG5.PUB.SYS to format the system log file (LOGnnnn.pub.sys). You may need to issue the MPE command SWITCHLOG to free the system log file. Check this listing for apparent errors. Create a copy of this file for your Hewlett-Packard representative to further analyze.
- 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:
 - The *NS3000/V User/Programmer Reference Manual* (32344-90001) for NS3000/V.
 - The *LAN/3000 Diagnostic and Troubleshooting Guide* for the IEEE 802.3 links.

Troubleshooting

- The *DSN/DS HP 3000 to HP 3000 Network Administrator Reference Manual* (32189-90002) DS-Compatible links.
- The *INP Diagnostic Procedures Manual* (30010-90002) for the Point-to-Point (using INP) and the DS compatible link (using INP).
- Issue the MPE command `SHOWCOM ldev;ERROR`, where *ldev* is the logical device number of the LANIC being used. This provides a listing of the status of the LANIC. Repeat the command for each DS-Compatible link or Point-to-Point 3000/V Link with an INP installed, where *ldev* is the logical device number of the INP. Retain this output for your Hewlett-Packard representative to further analyze.
- Document your interim, or "workaround" solution. The cause of the problem can sometimes be found by comparing the circumstances in which it occurs with the circumstances in which it does not occur.
- Create copies of any NS3000/V or NetIPC user trace, Network Transport trace and communication link trace files that were active when the problem occurred for your Hewlett-Packard representative to further analyze.
- If the problem involves NMMGR, give a copy of `NMMGRF.PUB.SYS` to your Hewlett-Packard 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. Use the NSDPAN utility (`STREAM NSDUMPJ.NET.SYS`) to format the dump. This utility is customized to save virtual memory and to format the data structures used by the Network Transport. Send the formatted output to HP.

NOTE

You may need to modify your NSDPAN file to accommodate group and account passwords or printer environments.

The following is a list of error codes and messages for NS3000/V Network Services. The messages are grouped into several categories and listed in numerical sequence within each category. In most categories, in addition to the error number and message, you will find the possible cause(s) of the error and the action(s) you can take to recover from the error. This additional information is not displayed on \$STDLIST when the error message is printed.

Included in this list of Network Service errors are "DS-Compatible" errors. These appear only when the error occurs in a DS service over a point-to-point or X.25 link. If "DS-Compatible" is not specified, an error may be applicable to services over "DS-Compatible" as well as "NS-Compatible" (Local Area Network) links.

Some Command Interpreter errors (CIERRs) and "DS-Compatible" errors (DSERRs) generate different error codes depending on whether the link between two nodes is "NS-Compatible" or "DS-Compatible" and the type of service used. Refer to Appendix A for a complete list of corresponding NS and DS error codes.

NETWORK SERVICES CI ERRORS (CIERRS)

These errors are reported by the Command Interpreter when an error is detected in the :DSLIN or :REMOTE or :NSCONTROL commands. (Note that :NETCONTROL is not included; :NETCONTROL has its own set of errors.) 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.

The CI errors fit into four categories:

1. **Syntax errors or invalid options:** These errors result from user errors when issuing the command, and can be readily corrected.
2. **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).
3. **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.
4. **Internal errors:** These errors indicate that the Network Service software is malfunctioning. If they ever occur, an SE should be notified. Internal errors are also logged using Network Management logging, to log class 6, subclass 3.

DS-COMPATIBLE CI ERRORS

- 1300 REMOTE JOBS ARE NOT ALLOWED WITH *username*. (CIERR 1300)
- 1301 DSLINE CANNOT CONTAIN BOTH OPEN AND CLOSE. (CIERR 1301)
- 1302 DSLINE REQUIRES AT LEAST ONE PARAMETER. (CIERR 1302)
- 1303 DSNUMBER SPECIFICATION MUST BE A NUMBER FROM 1 THRU 255.
(CIERR 1303)
- 1304 DSLINE *dsnum* DOES NOT IDENTIFY AN OPEN DS LINE. (CIERR 1304)
- 1305 EXPECTED LINEBUF, PHNUM, LOCID, REMID, OPEN, CLOSE,
QUIET, COMP, NOCOMP, OR EXCLUSIVE. (CIERR 1305)
- 1306 MULTIPLE USE OF *option* IS NOT ALLOWED. (CIERR 1306)
- 1307 THE SYNTAX FOR *option* REQUIRES AN = SIGN FOLLOWED BY DATA.
(CIERR 1307)
- 1308 PHNUM IS 1 TO 20 DIGITS AND DASHES. (CIERR 1308)
- 1309 *option* LIST CAN CONTAIN ONLY ONE ELEMENT. (CIERR 1309)
- 1310 THE SPECIFIED LOGICAL DEVICE IS NOT OPEN. (CIERR 1310)
- 1311 THE FIRST CHARACTER OF AN ID SEQUENCE MUST BE A " OR A (
(CIERR 1311)
- 1312 THE ID SEQUENCE MUST TERMINATE WITH A). (CIERR 1312)
- 1313 THE ID SEQUENCE MUST TERMINATE WITH A ". (CIERR 1313)
- 1314 A NUMERIC ID SEQUENCE ELEMENT MUST BE 1 THRU 255 (OR
%377). (CIERR 1314)
- 1315 LINEBUF MUST BE A NUMERIC VALUE FROM 304 THRU 4096.
(CIERR 1315)
- 1316 UNABLE TO COMPLETE THE REMOTE COMMAND. (CIERR 1316)
- 1317 NOT A CURRENTLY AVAILABLE DSLINE. (CIERR 1317)
- 1318 USE OF EXCLUSIVE REQUIRES BOTH NS AND CS CAPABILITY.
(CIERR 1318)
- 1319 THE DS LINE *dsnum* IS IN USE BY A PROGRAM OR SUBSYSTEM AND
CANNOT BE CLOSED. (CIERR 1319)

- 1320 EXPECTED A RESPONSE OF YES, Y, NO, OR N. (CIERR 1320)
- 1321 UNABLE TO OPEN THE DS LINE ON DEVICE *ldev*. (CIERR 1321)
- 1322 @ IS INVALID IN THIS CONTEXT. (CIERR 1322)
- 1323 A DSLINE OPEN REQUIRES A VALID DS DEVICE NAME AS THE FIRST PARAMETER. (CIERR 1323)
- 1324 FROM ADDRESS MUST BE BETWEEN 1 AND 14 CHARACTERS INCLUSIVE. (CIERR 1324)
- 1325 TO ADDRESS MUST BE BETWEEN 1 AND 14 CHARACTERS INCLUSIVE. (CIERR 1325)
- 1326 FROM AND TO ADDRESS MUST BE A DECIMAL NUMBER. (CIERR 1326)
- 1389 INVALID OR MISSING DELIMITER FOR SELECTION SIGNAL SEQUENCE. (CIERR 1389)
- 1390 SELECTION SIGNAL SEQUENCE MUST BE FROM 1 TO 30 CHARACTERS. (CIERR 1390)
- 1391 BOTH QUEUE AND NOQUEUE SPECIFIED; NOQUEUE USED. (CIWARN 1391)
- 1392 ONLY *n* WORDS WERE ALLOCATED FOR THE LINE BUFFER. (CIWARN 1392)
- 1393 COMPRESSION REQUEST NOT HONORED. REMOTE DOES NOT SUPPORT THIS FEATURE. (CIWARN 1393)
- 1394 COMPRESSION PARAMETER RESPECIFIES AND OVERRIDES PREVIOUS COMPRESSION PARAMETER. (CIWARN 1394)
- 1395 OPEN PARAMETERS ENTERED ON A CLOSE REQUEST ARE IGNORED (CIERR 1395)
- 1396 AN ID LIST MUST CONTAIN 255 OR LESS ELEMENTS. (CIWARN 1396)
- 1397 AN UNNECESSARY DELIMITER IS IGNORED. (CIWARN 1397)
- 1398 THERE ARE NO DS LINES OPEN. (CIWARN 1398)
- 1399 MULTIPLE USE OF *option* IS REDUNDANT AND IGNORED. (CIWARN 1399)

CI ERRORS AND MESSAGES (CIERRS)

CI ERRORS AND MESSAGES (CIERRS)

Message	Meaning/Cause	Action
INTERNAL DS ERROR - NO KEYWORD TABLE. (CIERR 5000)	The NS Keyword Table was not allocated during system startup or prior to an NS command execution.	See "Submitting an SR" at the beginning of this manual
INTERNAL DS ERROR - NO ASGLOBAL DST. (CIERR 5001)	The NS global data segment was not allocated during system startup, or has been lost.	See "Submitting an SR" at the beginning of this manual
INVALID ASCAT.NET.SYS MESSAGE CATALOG. (CIERR 5002)	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.	Check that the message sets of the ASCAT.NET.SYS catalog are correct. Run the MAKECAT utility to prepare the message catalog properly.
INTERNAL DS ERROR -COULD NOT ALLOCATE KEYWORD BUFFER. (CIERR 5003)	The NS Keyword Table is not large enough to contain all the keywords from the ASCAT.NET.SYS catalog.	See "Submitting an SR" at the beginning of this manual
ASCAT.NET.SYS MESSAGE CATALOG DOES NOT EXIST (CIERR 5004)	The ASCAT.NET.SYS catalog file is missing; the NS command keywords cannot be loaded.	Inform your system manager; install ASCAT.NET.SYS from the NS product tape.
INTERNAL DS ERROR - COULD NOT CREATE KEYWORD TABLE. (CIERR 5005)	The NS Keyword Table extra data segment could not be allocated, because of insufficient memory or free DSTs.	Inform your system manager; increase the number of configured DSTs or obtain more memory.
NONNUMERIC CHARACTER IN ENVIRONMENT NUMBER. (CIERR 5006)	Syntax error in an environment number #Lxxx (in :DSLIN) or xxx (in :REMOTE), where one or more x is not numeric.	Correct the syntax error and reissue the command.
NONALPHANUMERIC CHARACTER IN ENVIRONMENT ID OR NODE NAME. (CIERR 5007)	Syntax error in an environment identifier in a :DSLIN or :REMOTE, where one or more characters are not alphanumeric or, for :DSLIN only, special characters @ # . or ?.	Correct the syntax error and reissue the command.

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
FILE NAME PART LONGER THAN 8 CHARACTERS. (CIERR 5008)	The file, group, or account portion of a file name is longer than the allowed maximum length.	Correct the file name and reissue the command.
NONALPHANUMERIC CHARACTER IN FILE NAME. (CIERR 5009)	There is a character in a file name that is not an alphabetic or numeric (or special character . or /).	Correct the file name and reissue the command.
EXPECTED , ; OR RETURN. (CIERR 5010)	An invalid delimiter was found after a parameter for a command option.	Correct the syntax error and reissue the command.
EXPECTED ON OR OFF. (CIERR 5011)	In a :DSLIME TRACE option, the first parameter was not ON (enable tracing) or OFF (disable tracing).	Correct the option parameter and reissue the command.
EXPECTED TRACE SERVICE: ALL, VT, NFT, RFA, PTOP, RPM. (CIERR 5012)	In a :DSLIME TRACE option, the second parameter was not the name of the service to be traced.	Correct the option parameter and reissue the command.
EXPECTED MAXIMUM NUMBER OF TRACE RECORDS. (CIERR 5013)	In a :DSLIME TRACE option, the third parameter was not the number of trace records in the trace file, an integer between 0 and 32767.	Correct the option parameter and reissue the command.
EXPECTED MAXIMUM LENGTH OF TRACE DATA. (CIERR 5014)	In a :DSLIME TRACE option, the fourth parameter was not the length of the trace record, an integer between 0 and 32767.	Correct the option parameter and reissue the command.
EXPECTED TRANS OPTION. (CIERR 5015)	In the :DSLIME TRACE option, the fifth parameter was not TRANS, which selects transport tracing.	Correct the option parameter and reissue the command.

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
EXPECTED =. (CIERR 5016)	A = was not found between the option keyword and a list of positional parameters.	Correct the syntax and reissue the command.
TOO MANY PARAMETERS IN TRACE OPTION. (CIERR 5017)	More than the five defined parameters were specified in a :DSLIME TRACE option.	Correct the command and reissue.
EXPECTED " OR ' (CIERR 5018)	A string starting with a " or ' was not ended with a " or '. (You must use the same delimiter for starting and ending the string.)	Correct the command and reissue.
EXPECTED ; OR RETURN. (CIERR 5019)	An unexpected character was found after a command option.	Correct the syntax and reissue the command.
QUIET OVERRIDES PREVIOUS QUIET OPTION. (CIWARN 5020)	Two or more QUIET options were specified.	None.
PROMPT OVERRIDES PREVIOUS PROMPT OPTION. (CIWARN 5021)	Two or more PROMPT options were specified. The prompt string from the last PROMPT is used.	None (unless you do not want the last prompt; then correct and reissue the command).
LOGON OVERRIDES PREVIOUS LOGON OPTION. (CIWARN 5022)	Two or more LOGON options were specified. The logon from the last LOGON will be used.	None (unless you do not want the last logon; then correct and reissue the command).
COMP OVERRIDES PREVIOUS COMP OR NOCOMP OPTION. (CIWARN 5023)	Two or more COMP and/or NOCOMP options were specified. The COMP option will take effect.	None (unless you do not want the COMP option; then correct and reissue the command).
NOCOMP OVERRIDES PREVIOUS COMP OR NOCOMP OPTION. (CIWARN 5024)	Two or more COMP and/or NOCOMP options were specified. The NOCOMP option will take effect.	None (unless you do not want the NOCOMP option; then correct and reissue the command).
TOO MANY TRACE OPTIONS (MAXIMUM OF 10). (CIERR 5025)	There were more than 10 TRACE options specified in a :DSLIME command.	Consolidate the TRACE options into less than 10, or break the :DSLIME command into two or more :DSLIME commands, each with less than 10 TRACE options.

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
DS/3000 DSLINE OPTION IS IGNORED FOR NS NODE. (CIWARN 5026)	A :DSLIME 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.	None.
INVALID DSLINE OPTION; EXPECTED QUIET, PROMPT, LOGON, COMP, NOCOMP, CLOSE, RESET, SHOW, OR TRACE. (CIERR 5027)	An unknown option keyword was found in a :DSLIME.	Correct or delete the option and reissue the command.
INTERNAL DS ERROR - COULD NOT ADD VTREQ PORT. (CIERR 5028)	The port used for communication between the CI and the Virtual Terminal server could not be added to the MPE port dictionary.	See "Submitting an SR" at the beginning of this manual
INTERNAL DS ERROR - COULD NOT SEND SERVICE REQUEST. (CIERR 5029)	The VT service request could not be sent to the DSDAD process port.	See "Submitting an SR" at the beginning of this manual
INTERNAL DS ERROR - COULD NOT SEND START VT MSG. (CIERR 5030)	The Start VT port message could not be sent to the Virtual Terminal server process.	See "Submitting an SR" at the beginning of this manual
INTERNAL DS ERROR - COULD NOT CREATE VT REQ PORT. (CIERR 5031)	A port to be used for communication between the CI and the Virtual Terminal server process could not be created.	See "Submitting an SR" at the beginning of this manual
INTERNAL DS ERROR - COULD NOT GET PORT DST. (CIERR 5032)	A port data segment entry could not be allocated for the port between the CI and the Virtual Terminal server.	See "Submitting an SR" at the beginning of this manual

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
INTERNAL DS ERROR - COULD NOT START VT. (CIERR 5033)	The Virtual Terminal service could not be initiated.	See "Submitting an SR" at the beginning of this manual
INTERNAL DS ERROR - RECEIVED BAD PORT MESSAGE. (CIERR 5034)	A port message with an unexpected function code was received from the Virtual Terminal server process.	See "Submitting an SR" at the beginning of this manual
VT SERVER NOT AVAILABLE NOW. (CIERR 5035)	<p>The Virtual Terminal server process could not be created. There may be several reasons:</p> <ol style="list-style-type: none"> 1. The DSSERVER.NET.SYS program is missing. 2. The number of created DSSERVER processes is at the allowed maximum. The :NSCONTROL STATUS=SERVERS command will tell you the current and maximum number of DSSERVERS. 3. The DSSERVER process aborted during its initialization. 	<p>Depending on the cause:</p> <ol style="list-style-type: none"> 1. Restore the DSSERVER.NET.SYS program from the NS3000/V 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 "Submitting an SR" at the beginning of this manual
LOCAL VT SERVICE HAS NOT BEEN STARTED. (CIERR 5036)	The local Virtual Terminal service (VTL) has not been started via an :NSCONTROL command.	<p>Issue</p> <p>:NSCONTROL START or</p> <p>:NSCONTROL START=VTL</p> <p>to start the local VT service, or wait until the service is started. (Only users with NM capability can use the :NSCONTROL command.)</p>

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
LOCAL VT SERVICE HAS BEEN ABORTED. (CIERR 5037)	An :NSCONTROL ABORT has been issued. This immediately terminates all network services, including the local Virtual Terminal service.	Issue :NSCONTROL START or :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.)
VIRTUAL TERMINAL SERVICE DETECTED AN ERROR. (CIERR 5038)	An error was detected by the Virtual Terminal server process. The error message for the VT error will precede the CI error message.	Some of the VT errors are normal responses (e.g. REMOTE NOT ACCEPTING SERVICE 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.
INTERNAL DS ERROR - COULD NOT SEND REMOTE COMMAND. (CIERR 5039)	A port message with the remote command could not be sent from the CI to the Virtual Terminal server process.	See "Submitting an SR" at the beginning of this manual
INVALID TRACE INFORMATION. (CIERR 5040)	Information in a :DSLIN TRACE option was incorrect. A DS error will also be displayed.	Correct the TRACE option and reissue the command.
COULD NOT USE ENVIRONMENT. (CIERR 5041)	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.	Correct the command, based on the DS errors, and reissue.

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
COULD NOT USE GENERIC ENVIRONMENT. (CIERR 5042)	This CI error is returned for a number of errors detected when a generic environment in a :DSLNE command cannot be used. One or more DS errors will accompany this CI error to more fully describe the error or errors.	Correct the command, based on the DS errors, and reissue.
ALL DSLNE OPTIONS BUT CLOSE ARE IGNORED. (CIWARN 5043)	Other options besides CLOSE were specified in a :DSLNE command.	None (the selected environment is closed).
ALL DSLNE OPTIONS BUT RESET ARE IGNORED. (CIWARN 5044)	Other options besides RESET were specified in a :DSLNE command.	None (the selected generic environment is closed).
DSLNE OPTION OVERRIDES PREVIOUS DSLNE OPTION. (CIWARN 5045)	More than one DSLNE option was included in a :REMOTE HELLO command. The last DSLNE option is used.	None (the :REMOTE HELLO will be executed).
DSLNE OPTION IGNORED. (CIWARN 5046)	Both the :envid and DSLNE=envid options were specified in a :REMOTE HELLO command. The :envid is used to select the environment.	None (the :REMOTE HELLO will be executed).
GENERIC ENVIRONMENT ID NOT ALLOWED HERE. (CIERR 5047)	A generic environment id (with the wild card characters @, #, and/or ?) was used in the :envid or DSLNE=envid option of a :REMOTE command.	Correct the command and reissue. If you want to execute a :REMOTE command for a set of environments, you must issue a separate :REMOTE for each environment.
NO DEFAULT ENVIRONMENT FROM PREVIOUS :DSLNE OR :REMOTE (CIERR 5048)	A :REMOTE or :DSLNE command was issued without an environment id or environment number, and there is no default environment set by a previous command.	Insert an environment id or number into the command and reissue.

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
INVALID NSCONTROL OPTION: EXPECTED START, STOP, ABORT, SERVER, LOG, DEBUG, STATUS OR VERSION. (CIERR 5049)	An unknown option keyword was found in an :NSCONTROL command.	Correct or delete the keyword and reissue the command.
TOO MANY NSCONTROL OPTIONS. (CIERR 5050)	The information in the :NSCONTROL command is too large to be sent to the DSDAD process for processing.	Consolidate options in the command, or break the command into two or more :NSCONTROL commands.
EXPECTED SERVER PROGRAM FILE NAME. (CIERR 5051)	The first parameter of a SERVER option in an :NSCONTROL command was not a program name.	Correct the SERVER option and reissue the command.
EXPECTED MINIMUM NUMBER OF SERVERS (>= 0 AND <32767). (CIERR 5052)	The second parameter of a SERVER option in an :NSCONTROL command was not the minimum number of servers, a positive integer.	Correct the SERVER option and reissue the command.
EXPECTED DEBUG OPTION. (CIERR 5053)	The fourth parameter of a SERVER option in an :NSCONTROL command was not DEBUG or NODEBUG.	Correct the SERVER option and reissue the command.
TOO MANY SERVER PARAMETERS; EXPECTED AT MOST FOUR. (CIERR 5054)	There were more than four defined parameters for a SERVER option in an :NSCONTROL command.	Correct the SERVER option and reissue the command.
TOO MANY LOG PARAMETERS; EXPECTED AT MOST THREE. (CIERR 5055)	There were more than three defined parameters for a LOG option in an :NSCONTROL command.	Correct the LOG option and reissue the command.
EXPECTED ON OR OFF. (CIERR 5056)	The first parameter of a log option in an :NSCONTROL command was not ON (enable logging) or OFF (disable logging).	Correct the LOG option and reissue the command.

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
EXPECTED MODULE TO BE LOGGED; EXPECTED DSDAD, DSSERVER, ENV, OR VT. (CIERR 5057)	The second parameter of a LOG option in an :NSCONTROL command was not the name of a module to be logged.	Correct the LOG option and reissue the command.
EXPECTED HIGH OR LOW. (CIERR 5058)	The parameter of a log option in an :NSCONTROL command was not HIGH (log all events) or LOW (log a subset of events).	Correct the LOG option and reissue the command.
INTERNAL DS ERROR-COULD NOT SEND CONTROL MESSAGE. (CIERR 5060)	The port message with the :NSCONTROL information could not be sent from the CI to the DSDAD process.	See "Submitting an SR" at the beginning of this manual.
DSDAD.NET.SYS DOES NOT EXIST. (CIERR 5061)	The DSDAD.NET.SYS program file is missing.	Restore the DSDAD.NET.SYS file from the NS product tape.
INVALID CONTROL OPTION. (CIERR 5062)	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.	Correct the error, based on the DS error(s), and reissue the command.
INVALID SERVER PIN. CIERR 5063)	The server process id number (PIN) in a DEBUG option in an :NSCONTROL command is not numeric.	Correct the PIN and reissue the command.
PROMPT MUST BE 8 CHARACTERS OR LESS. (CIERR 5064)	The prompt string in a :DSLIME PROMPT option is longer than the maximum of 8 characters.	Shorten the prompt string and reissue the command.
LOGON MUST BE 54 CHARACTERS OR LESS. (CIERR 5065)	The logon string in a :DSLIME LOGON option is longer than the maximum of 54 characters.	Shorten the logon string and reissue the command.

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
INTERNAL ERROR - DSLINE JCW NOT FOUND. (CIERR 5067)	The DSLINE Job Control Word, set to the DSLINE number by the DS software, could not be found.	See "Submitting an SR" at the beginning of this manual.
OPTION IS NOT SUPPORTED BY DS. (CIERR 5068)	An NS option that is not supported by the DS software was specified in a :DSLINE for a DS node. The NS options which are not supported by DS are: PROMPT, LOGON, and TRACE.	Delete the option and reissue the command.
TRACE OPTION IS IGNORED FOR DS NODE. (CIWARN 5069)	A :DSLINE with a generic environment including a DS node contained a TRACE option. The ENVIRONMENT message following the warning will identify the DS node.	None.
PROMPT OPTION IS IGNORED FOR DS NODE. (CIWARN 5070)	Same as for CIWARN 5069 except that a PROMPT option was found.	None.
LOGON OPTION IS IGNORED FOR DS NODE. (CIWARN 5071)	Same as for CIWARN 5069 except that a LOGON option was contained.	None.
REMOTE COMMANDS NOT ALLOWED DURING PTOP OR RPM USE. (CIERR 5072)	When there is a PTOP-or-RPM-created process active in the remote environment, remote commands cannot be issued to the remote session.	Wait for the PTOP or RPM process to terminate. A PTOP slave or dependent RPM son in the remote session can be terminated by aborting the local PTOP master or RPM father process. An independent RPM son can be terminated by a :DSLINE CLOSE (and by answering YES to ABORT RPM PROCESS? question).

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
ABORT DOES NOT ACCEPT ANY PARAMETERS. (CIERR 5073)	Parameters were specified for an :NSCONTROL ABORT option.	Delete the parameters and reissue the command.
EXPECTED ONE OF USERS, SERVICES, SERVERS, OR ALL. (CIERR 5074)	The parameter for a SHOW option in an :NSCONTROL command was not one of the defined choices.	Correct the SHOW command and reissue the parameters.
EXPECTED MAXIMUM NUMBER OF SERVERS (>= 0 AND <32767). (CIERR 5075)	The third parameter of a SERVER option in an :NSCONTROL command was not a maximum number of servers, a positive integer.	Correct the SERVER option and reissue the command.
WILD CARD CHARACTERS NOT ALLOWED IN NODE NAME. (CIERR 5076)	A wild card character (@, #, or ?) was used in a node name. Node names cannot be generic.	Correct the node name and reissue the command.
NETWORK SERVICE SOFTWARE VERSIONS DO NOT MATCH. (CIERR 5077)	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.	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.
PM CAPABILITY NEEDED TO USE DEBUG OPTION. (CIERR 5078)	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.	Execute the command from a user with PM capability.
SYSTEM CONSOLE NEEDED TO USE DEBUG OPTION. (CIERR 5079)	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.	Execute the command from the system console.

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
EXPECTED GENERIC ENVIRONMENT ID. (CIERR 5080)	In a :DSLIME RESET, the environment id was not generic.	Correct the command and reissue.
INVALID VERSION OPTION: EXPECTED MOD. (CIERR 5081)	In a :NSCONTROL VERSION command, an invalid option for VERSION was specified. VERSION=MOD is the only allowed option.	Correct the command and reissue.
REMOTE HELLO FAILED. (CIERR 5082)	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.	Check that the logon is valid, and the jobfence and session limits on the remote node, before reissuing the :REMOTE HELLO.
NS3000/V HAS NOT BEEN STARTED BY AN :NSCONTROL START. (CIWARN 5083)	An :NSCONTROL STOP or ABORT command was issued when the NS subsystem had not been started with :NSCONTROL START.	None.
INVALID ENVIRONMENT NUMBER. (CIERR 5084)	Environment number specified in :DSLIME command is greater than 32767 or the number was specified as #L.	Specify environment number as a decimal integer between 1 and 32767, inclusive, using the syntax #Ln.
LOGON STRING EXPECTED. (CIERR 5085)	The :DSLIME LOGON= option was specified without a logon sequence following the equal sign (=).	Reissue command with logon sequence included.
EXPECTED SERVICE NAME: VT, VTR, VTL, VTRL, NFT, NFTL, RFA, RFAL, PTOP, PTOPL, RPM, OR RPML. (CIERR 5086)	The :NSCONTROL START= or :NSCONTROL STOP= command was issued with no service names specified.	Reissue command, specifying one or more services (as listed in the error message).
EXPECTED ENVIRONMENT ID OR NODE NAME. (CIERR 5087)	The command :REMOTE HELLO;DSLIME= was issued without an <i>envid=node name</i> or <i>node name</i> .	Reissue the command, and include the <i>envid=nodename</i> or <i>nodename</i> following the equal sign (=).

CI ERRORS AND MESSAGES (CIERRS) (cont'd)

Message	Meaning/Cause	Action
UNABLE TO STORE NFT PORT ID IN PORT DICTIONARY (CIERR 5100)	Internal Resource Error.	See "Submitting an SR" at the beginning of this manual.
ERROR OCCURRED WHEN SETTING UP NFT SERVER (CIERR 5101)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
NFT SERVER WAS ABORTED (CIERR 5102)	NFT server process terminated abnormally.	Examine the logging information returned at the system console. If you cannot correct the problem, see "Submitting an SR" at the beginning of this manual.
CRITICAL INTERNAL NFT ERROR (CIERR 5103)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
ATTEMPT TO PLACE NFT SERVER INTO REQUESTORS ENVIRONMENT FAILED. (CIERR 5104)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
UNABLE TO CONTACT NFT SERVER. (CIERR 5105)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
NO NFT SERVERS ARE CURRENTLY AVAILABLE. (CIERR 5106)	Maximum allowable limit of NFT Servers reached on system.	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.
NS NFT NOT STARTED VIA NSCONTROL, DS/3000 NFT WILL BE USED (CIWARN 5107)	User has not issued the :NSCONTROL command to start Network Services. The system invokes DS/3000 as a non-LAN link substitute.	If you want to use NS/NFT, not DS/NFT, leave the DSCOPY subsystem and then tell the system manager to start Network Services (via the :NSCONTROL command).

MISCELLANEOUS DS-COMPATIBLE ERRORS (DSERRS)

Some of these same error codes are also used for Network Service Remote File Access and Process-to-Process Communications errors over a Local Area Network link. See "Remote File Access Errors" and "Process-to-Process Communications Errors" listed later in this section.

- 201 REMOTE DID NOT RESPOND WITH THE CORRECT REMOTE ID.
(DSERR 201)
- 202 SPECIFIED PHONE NUMBER IS INVALID. (DSERR 202)
- 204 UNABLE TO ALLOCATE AN EXTRA DATA SEGMENT FOR DS/3000.
(DSERR 204)
Cause: Lack of memory or lack of Data Segment Table (DST) entries.
Action: Wait until memory or DST entries become available, or ask
the system manager to increase the system's memory or
number of DST entries.
- 205 UNABLE TO EXPAND THE DS/3000 EXTRA DATA SEGMENT.
(DSERR 205)
- 212 FILE NUMBER FROM IOWAIT NOT A DS LINE NUMBER. (DSWARN 212)
Cause: Because GET calls IOWAIT(0), a non PTO completion
can also prematurely finish the GET.
For example, the slave accesses the file system
via NOWAIT I/O.
Action: Reissue the GET within the program.
- 213 EXCLUSIVE USE OF A DS LINE REQUIRES BOTH ND AND CS
CAPABILITY. (DSERR 213)
- 214 THE REQUESTED DS LINE HAS NOT BEEN OPENED WITH A USER
:DSLIN COMMAND OR A REQUIRED :REMOTE HELLO HAS NOT BEEN DONE.
(DSERR 214)
Action: Ensure that the :DSLIN and :REMOTE HELLO commands executed
successfully.
- 215 DSLIN CANNOT BE ISSUED BACK TO THE MASTER COMPUTER.
(DSERR 215)

NS3000/V Network Services Error Messages

- 216 MESSAGE REJECTED BY THE REMOTE COMPUTER. (DSERR 216)
Cause: Slave terminated prematurely or PTOP failed internally.
The DSSERVER process rejects a PTOP request message for the following reasons:
-slave was not active when the message was received.
-null virtual terminal could not be opened during POPEN.
-slave was not in proper internal state for receiving messages.
-PTOP message was corrupted.
Action: Ensure that the slave has not terminated.
Contact your SE if the error reoccurs often.
- 217 INSUFFICIENT AMOUNT OF USER STACK AVAILABLE. (DSERR 217)
Cause: PTOP program could not expand its stack to accommodate requirements of PTOP.
Action: Increase stack size and/or maxdata of the program.
Rerun the program.
- 221 INVALID DS MESSAGE FORMAT. INTERNAL DS ERROR. (DSERR 221)
Cause: Master program received invalid PTOP message format.
Possible internal error.
Action: Generate trace of PTOP message via the :DSLIN command.
Contact your SE.
- 224 FILE EQUATIONS FOR A REMOTE FILE CONSTITUTE A LOOP.
(DSERR 224)
- 227 REMOTE HELLO MUST BE DONE TO INITIATE REMOTE SESSION.
(DSERR 227)
Cause: HELLO command not issued.
Action: Ensure that REMOTE session is established during PTOP.
- 228 EXCEEDED MAXIMUM NUMBER OF VIRTUAL CHANNELS PER JOB.
(DSERR 228)
- 231 INVALID FACILITY IN CONNECTION REQUEST. (DSERR 231)
- 232 THE REMOTE COMPUTER IS NOT OBTAINABLE. (DSERR 232)
- 233 VIRTUAL CIRCUIT IS NOT AVAILABLE. (DSERR 233)
- 234 QUEUEING IS REQUIRED TO COMPLETE THE REQUEST. (DSERR 234)
- 235 DS MESSAGE SEQUENCING ERROR. (DSERR 235)
- 236 COMMUNICATIONS HARDWARE HAS DETECTED AN ERROR. (DSERR 236)

- 237 CANNOT CURRENTLY GAIN ACCESS TO THE TRACE FILE. (DSERR 237)
- 238 COMMUNICATIONS INTERFACE ERROR. INTERNAL FAILURE.
(DSERR 238)
- 239 COMMUNICATIONS INTERFACE ERROR. TRACE MALFUNCTION.
(DSERR 239)
- 240 LOCAL COMMUNICATION LINE WAS NOT OPENED BY OPERATOR.
(DSERR 240)
- 241 DS LINE IN USE EXCLUSIVELY OR BY ANOTHER SUBSYSTEM.
(DSERR 241)
Cause: NETCONTROL command not issued by the system operator.
Action: Contact the system operator.
- 242 INTERNAL DS SOFTWARE ERROR ENCOUNTERED. (DSERR 242)
Cause: Internal software error.
Action: Check the log file for an expanded error description.
Contact your SE.
- 243 REMOTE OR PDN IS NOT RESPONDING. (DSERR 243)
Cause: Remote computer or session went down. Consequently, the local
PTOP master program no longer waits for a response.
Action: Ensure that the remote compute and remote session are
operating. Restart the master program. Check the
log file for expanded error descriptions.
- 244 COMMUNICATIONS INTERFACE ERROR. LINE RESET OCCURRED.
(DSERR 244)
- 245 COMMUNICATIONS INTERFACE ERROR. RECEIVE TIMEOUT.
(DSERR 245)
- 246 COMMUNICATIONS INTERFACE ERROR. REMOTE DISCONNECTED.
(DSERR 246)
Cause: Error detected at NetIPC level. Communication
with the remote slave program is aborted.
Action: Terminate program and check the log file for
an expanded error description.
- 247 COMMUNICATIONS INTERFACE ERROR. LOCAL TIME OUT. (DSERR 247)
- 248 COMMUNICATIONS INTERFACE ERROR. CONNECT TIME OUT.
(DSERR 248)
- 249 COMMUNICATIONS INTERFACE ERROR. REMOTE REJECTED
CONNECTION. (DSERR 249)

NS3000/V Network Services Error Messages

250 COMMUNICATIONS INTERFACE ERROR. CARRIER LOST. (DSERR 250)

251 COMMUNICATIONS INTERFACE ERROR. LOCAL DATA SET FOR THE
DS LINE WENT NOT READY. (DSERR 251)

252 COMMUNICATIONS INTERFACE ERROR. HARDWARE FAILURE.
(DSERR 252)

253 COMMUNICATIONS INTERFACE ERROR. NEGATIVE RESPONSE TO THE
DIAL REQUEST BY THE OPERATOR. (DSERR 253)

254 COMMUNICATIONS INTERFACE ERROR. INVALID I/O CONFIGURATION.
(DSERR 254)

255 COMMUNICATIONS INTERFACE ERROR. UNANTICIPATED CONDITION.
(DSERR 255)

Cause: Either an error reported by NetIPC could not be mapped into
a PTOP error, or the slave program could not be created.
Internal software error.

Action: Terminate the program and check the log file for an
expanded error description.

256 REQUEST QUEUED BEHIND PREVIOUS REQUEST. (DSERR 253)

PROGRAM-TO-PROGRAM COMMUNICATION ERRORS (DSERRS)

- 203 REMOTE ABORT/RESUME NOT VALID WHEN DOING PROGRAM-TO-PROGRAM COMMUNICATION. USE LOCAL ABORT/RESUME. (DSWARN 203)
- 204 UNABLE TO ALLOCATE AN EXTRA DATA SEGMENT FOR DS/3000. (DSERR 204)
 Cause: Lack of memory or lack of Data Segment Table (DST) entries.
 Action: Wait until memory or DST entries become available, or ask the system manager to increase the system's memory or number of DST entries.
- 206 SLAVE PTOP FUNCTION ISSUED FROM A MASTER PROGRAM. (DSERR 206)
- 207 SLAVE PTOP FUNCTION OUT OF SEQUENCE. (DSERR 207)
 Cause: GET command was attempted before an ACCEPT or REJECT had been issued for the previous GET. Or perhaps ACCEPT or REJECT was attempted before any GET had been issued.
 Action: Correct program and rerun.
- 208 MASTER PTOP FUNCTION ISSUED BY A SLAVE PROGRAM. (DSERR 208)
 Cause: Slave PTOP program tried to execute a PTOP master function, such as PREAD, PWRITE, or PCONTROL. Or perhaps a master PTOP program tried to execute the above commands without first issuing a POPEN command.
 Action: Correct program and rerun.
- 209 SLAVE PROGRAM DOES NOT EXIST OR IS NOT PROGRAM FILE. (DSERR 209)
 Cause: Slave program's CREATE command failed.
 Action: Check the parameters passed in the POPEN call.
- 210 WARNING -- INVALID MAXDATA OR DLSIZE FOR A SLAVE PROGRAM. SYSTEM DEFAULTS ARE IN EFFECT. (DSWARN 210)
- 211 SLAVE ISSUED A REJECT TO A MASTER PTOP OPERATION. (DSWARN 211)
- 212 FILE NUMBER FROM IOWAIT NOT A DS LINE NUMBER. (DSWARN 212)
 Cause: Because GET calls IOWAIT(0), a non PTOP completion can also prematurely finish the GET. For example, the slave accesses the file system via NOWAIT I/O.
 Action: Reissue the GET within the program.
- 214 THE REQUESTED DS LINE HAS NOT BEEN OPENED WITH A USER :DLINE COMMAND OR A REQUIRED :REMOTE HELLO HAS NOT BEEN DONE. (DSERR 214)

NS3000/V Network Services Error Messages

Action: Ensure that the :DSLIN and :REMOTE HELLO commands executed successfully.

216 MESSAGE REJECTED BY THE REMOTE COMPUTER. (DSERR 216)

Cause: Slave terminated prematurely or PTOPT failed internally. The DSSERVER process rejects a PTOPT request message for the following reasons:
-slave was not active when the message was received.
-null virtual terminal could not be opened during POPEN.
-slave was not in proper internal state for receiving messages.
-PTOPT message was corrupted.

Action: Ensure that the slave has not terminated. Contact your SE if the error reoccurs often.

217 INSUFFICIENT AMOUNT OF USER STACK AVAILABLE. (DSERR 217)

Cause: PTOPT program could not expand its stack to accommodate requirements of PTOPT.

Action: Increase stack size and/or maxdata of the program. Rerun the program.

218 INVALID PTOPT FUNCTION REQUESTED. (DSERR 218)

219 MULTIPLE POPEN. ONLY ONE MASTER PTOPT OPERATION CAN BE ACTIVE ON A DS LINE. (DSERR 219)

Cause: An RPM or PTOPT created process already exists in the remote session specified by the "dsdevice" parameter. Only one RPM or PTOPT process can exist in a single remote session.

Action: Terminate the first RPM or PTOPT process, or change the "dsdevice" parameter to a different remote session.

220 PROGRAM EXECUTING GET WAS NOT CREATED BY POPEN. (DSERR 220)

222 MASTER PTOPT FUNCTION ISSUED PRIOR TO A POPEN. (DSERR 222)

223 REQUEST TO SEND MORE DATA THAN SPECIFIED IN POPEN. (DSERR 223)

Cause: -Illegal value specified in "bufsize" parameter of POPEN,
or
-"tcount" parameter in PWRITE or PREAD was larger than the value specified in "bufsize" parameter of POPEN,
or
-a request arrived to send or receive more data than the amount specified in the POPEN "bufsize" parameter.

Action: -Assign "bufsize" parameter in POPEN to a value between 1 and 16383,
or
-reduce "tcount" parameter of PWRITE or PREAD to less than the "bufsize" parameter value of POPEN.

- 221 INVALID DS MESSAGE FORMAT. INTERNAL DS ERROR. (DSERR 221)
Cause: Master program received invalid PTOP message format.
Possible internal error.
Action: Generate trace of PTOP message via the :DSLIN command.
Contact your SE.
- 224 FILE EQUATIONS FOR A REMOTE FILE CONSTITUTE A LOOP.
(DSERR 224)
- 225 CANNOT ISSUE POPEN TO A SLAVE SESSION IN BREAK MODE. (DSERR 225)
- 226 SLAVE PROGRAM HAS TERMINATED BEFORE EXECUTING GET. (DSERR 226)
- 227 REMOTE HELLO MUST BE DONE TO INITIATE REMOTE SESSION.
(DSERR 227)
Cause: HELLO command not issued.
Action: Ensure that REMOTE session is established during PTOP.
- 240 LINE WAS NOT OPENED BY OPERATOR. (DSERR 240)
Cause: Local PTOP service (PTOPL) not started, or was
started and aborted. Error only occurs during POPEN call.
Action: Ask system manager to start local PTOP service via
:NSCONTROL START=PTOPL or :NSCONTROL START commands.
- 243 REMOTE OR PDN IS NOT RESPONDING. (DSERR 243)
Cause: Remote computer or session went down. Consequently, the local
PTOP master program no longer waits for a response.
Action: Ensure that the remote compute and remote session are
operating. Restart the master program. Check the
log file for expanded error descriptions.
- 246 COMMUNICATIONS INTERFACE ERROR. REMOTE DISCONNECTED.
(DSERR 246)
Cause: Error detected at NetIPC level. Communication
with the remote slave program is aborted.
Action: Terminate program and check the log file for
an expanded error description.
- 255 COMMUNICATIONS INTERFACE ERROR. UNANTICIPATED CONDITION.
(DSERR 255)
Cause: Either an error reported by NetIPC could not be mapped into
a PTOP error, or the slave program could not be created.
Internal software error.
Action: Terminate the program and check the log file for an
expanded error description.

NETWORK SERVICES ENVIRONMENT ERROR MESSAGES (DSERRS)

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.

NETWORK SERVICES ENVIRONMENT ERROR MESSAGES (DSERRS)

Message	Meaning/Cause	Action
NO ENVIRONMENT FOR <i>envid</i> (DSERR 620)	A <code>:DSL</code> <i>envid</i> ; RESET was executed, and there is no generic environment for <i>envid</i> .	Correct <i>envid</i> and reissue.
ENVIRONMENT TABLE IS FULL. (DSERR 622)	The session environment table is full; there is no room for additional information on new environments or tracing.	Delete any unused environments, turn off any unused service tracing, and reissue the command.
NO DEFAULT ENVIRONMENT SET BY A <code>:DSL</code> OR <code>:REMOTE</code> . (DSERR 623)	A command using a default environment was executed, but no default environment was set by a previous <code>:DSL</code> or <code>:REMOTE</code> command.	Insert an environment id into the command and reissue.
NO ENVIRONMENT FOR <i>#envnum</i> . (DSERR 624)	An environment number was used in a <code>:DSL</code> or <code>:REMOTE</code> and the <i>envnum</i> does not correspond to any existing environments.	Correct the environment number and reissue the command. The <code>:DSL @.@.</code> command can be used to get a list of environments and their numbers.
ACTIVE SERVICES FOR <i>envid</i> ; CLOSE IGNORED. (DSERR 625)	A <code>:DSL</code> CLOSE was executed for an environment, identified by <i>envid</i> , that has one or more active services (RFA, RDBA, PTO, or RPM). The environment is not closed, and the services continue to be active.	Terminate the service or services, and reissue the command. The <code>:DSL</code> SHOW command will display which services are active for an environment.
CANNOT OPEN TRACE FILE <i>filename</i> . (DSERR 627)	A <code>:DSL</code> TRACE=ON was issued, but the indicated trace file cannot be opened.	Check the parameters for the TRACE option, correct if in error, and reissue the command.

NETWORK SERVICES ENVIRONMENT ERROR MESSAGES (DSERRS) (cont'd)

Message	Meaning/Cause	Action
CANNOT CLOSE TRACE FILE <i>filename</i> . (DSERR 628)	A :DSL _{LINE} TRACE=OFF was issued, but the indicated trace file cannot be closed.	Check the parameters for the TRACE option, correct if in error, and reissue the command.
CANNOT OBTAIN DATA SEGMENT FOR ENVIRONMENT TABLE. (DSERR 629)	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.	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.
CANNOT CHANGE NODE NAME FROM <i>nodename</i> WHILE ACTIVE SERVICES. (DSERR 630)	A :DSL _{LINE} <i>envid</i> = <i>nodename</i> was executed for an environment for which one or more services have been established on a remote node other than <i>nodename</i> . The environment's node cannot be changed until the services are finished.	Wait for the services to terminate, or terminate the services. The :DSL _{LINE} SHOW command can be used to determine the active services for the environment.
INVALID ENVIRONMENT ID OR NODE NAME LENGTH. (DSERR 631)	A fully qualified environment or node name in a command was longer than the allowed maximum of 50 characters.	Shorten the name and reissue the command.
ID OR NODE IN <i>name</i> DOES NOT BEGIN WITH AN ALPHA. (DSERR 632)	The first part of a (fully qualified) environment id or node name does not begin with an alphabetic character.	Correct the name and reissue the command.
ID OR NODE IN <i>name</i> IS GREATER THAN 16 CHARACTERS. (DSERR 633)	The first part of a (fully qualified) environment id or node name is longer than the allowed 16 characters.	Shorten the name and reissue the command.
ID OR NODE IN <i>name</i> CONTAINS A NONALPHANUMERIC CHARACTER. (DSERR 634)	The first part of a (fully qualified) environment id or node name contains a character that is not alphabetic or numeric.	Correct the name and reissue the command.

NETWORK SERVICES ENVIRONMENT ERROR MESSAGES (DSERRS) (cont'd)

Message	Meaning/Cause	Action
EXPECTED A DOMAIN AFTER THE NODE OR ID IN <i>name</i> . (DSERR 635)	Something other than a domain followed the node or id part of name.	Correct the name and reissue the command.
DOMAIN IN <i>name</i> DOES NOT BEGIN WITH AN ALPHA. (DSERR 636)	The second (domain) part of a (fully qualified) environment id or node name does not begin with an alphabetic character.	Correct the name and reissue the command.
DOMAIN IN <i>name</i> IS GREATER THAN 16 CHARACTERS. (DSERR 637)	The second (domain) part of a (fully qualified) environment id or node name is longer than the allowed 16 characters.	Correct the name and reissue the command.
DOMAIN IN <i>name</i> CONTAINS A NONALPHANUMERIC CHARACTER. (DSERR 638)	The second (domain) part of a (fully qualified) environment id or node name contains a character that is not alphabetic or numeric.	Correct the name and reissue the command.
EXPECTED ORGANIZATION AFTER DOMAIN IN <i>name</i> . (DSERR 639)	Something other than an organization followed the domain part of a (fully qualified) environment id or node name.	Correct the name and reissue the command.
ORGANIZATION IN <i>name</i> DOES NOT BEGIN WITH AN ALPHA. (DSERR 640)	The third (organization) part of a (fully qualified) environment id or node name does not begin with an alphabetic character.	Correct the name and reissue the command.
ORGANIZATION IN <i>name</i> IS GREATER THAN 16 CHARACTERS. (DSERR 641)	The third (organization) part of a (fully qualified) environment id or node name is longer than the allowed 16 characters.	Correct the name and reissue the command.
ORGANIZATION IN <i>name</i> CONTAINS A NONALPHANUMERIC CHARACTER. (DSERR 642)	The third (organization) part of a (fully qualified) environment id or node name contains a character that is not alphabetic or numeric.	Correct the name and reissue the command.

NETWORK SERVICES ENVIRONMENT ERROR MESSAGES (DSERRS) (cont'd)

Message	Meaning/Cause	Action
TOO MANY HIERARCHY LEVELS IN <i>name</i> ; EXPECTED NAME.DOMAIN.ORG (DSERR 643)	The fully qualified environment id or node name has more than three parts.	Correct the name and reissue the command.
TRANSPORT NOT INITIALIZED. (DSERR 644)	A :DSLNE or :REMOTE command has been issued and the Network Transport has not been started by a :NETCONTROL command.	Wait until the transport is started, or issue a :NETCONTROL to start the transport. (Only users with NM capability can use the :NETCONTROL command.)
UNKNOWN NODE <i>nodename</i> . (DSERR 645)	A :DSLNE 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.	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.
<i>ldev</i> IS NOT A NODE NAME OR DS LOGICAL DEVICE. (DSERR 646)	A logical device number (<i>ldev</i>) was included in a :DSLNE command, but the <i>ldev</i> is not for a DS logical device.	Correct the <i>ldev</i> and reissue the command.
ALREADY LOGGED ON AS <i>user.acct</i> (DSERR 647)	A :DSLNE with a LOGON option has been issued for an environment that has its remote session logged on.	Wait for the remote session to be logged off, or log off the remote session (e.g. by terminating any services using the environment).

NETWORK FILE TRANSFER ERRORS

Network File Transfer errors are organized into three separate error sets:

- DS-Compatible errors: DS NFT service over a DS point-to-point or DS X.25 link;
- NFT/3000 errors: NS NFT service over a Local Area Network link (HP 3000-specific);
- Standard NFT errors: NS NFT service over a Local Area Network link.

DS-Compatible errors returned after a DSCOPY intrinsic call are returned as negative values. NFT/3000 errors and generic NFT errors may be distinguished 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.

DS-Compatible NFT Errors (NFTERRs)

This list of DS NFT errors includes general DSCOPY errors (NFTERRs 4-42), DSCOPY intrinsic errors (NFTERRs 80-86), and DSCOPY internal errors (NFTERRs 101-110).

- 0 SUCCEEDED.
- 1 SUCCESSFULLY INITIATED.
- 4 UNABLE TO OPEN TRANSACTION FILE. (NFTERR 4)
- 5 UNABLE TO OPEN LIST FILE (DSCOPYL). (NFTERR 5)
- 6 I/O ERROR ON TRANSACTION FILE. (NFTERR 6)
- 7 TRANSACTION RECORD > 200 CHARS LONG. (NFTERR 7)
- 9 TEMPORARY TRANSACTION FILE FULL. (NFTERR 9)
- 10 PARAMETERS IMPLY CONFLICTING MODES. (NFTERR 10)
- 11 CAN'T "RUN" COPY PROCESS IN THIS MODE. (NFTERR 11)
- 13 UNRECOGNIZED PARAMETER. (NFTERR 13)
- 14 CONFLICTING OPTIONS HAVE BEEN SPECIFIED. (NFTERR 14)
- 16 UNIMPLEMENTED FEATURE. (NFTERR 16)
- 17 CANNOT CONTACT REMOTE NODE. (NFTERR 17)
- 18 FILE SYSTEM ERROR ON SOURCE FILE. (NFTERR 18)
- 19 FILE SYSTEM ERROR ON TARGET FILE. (NFTERR 19)
- 21 ILLEGAL DSLINE NAME. (NFTERR 21)
- 24 UNSUPPORTED STANDARD DEVICE TYPE. (NFTERR 24)
- 25 CAN'T FIND OR OPEN THE SOURCE FILE. (NFTERR 25)
- 26 CAN'T CREATE OR OPEN THE TARGET FILE. (NFTERR 26)
- 27 CANNOT CONTACT REMOTE SYSTEM. (NFTERR 27)
- 28 SOURCE AND TARGET FILES CANNOT BE ACCESSED THROUGH REMOTE FILE ACCESS.
(NFTERR 28)
- 29 COMMUNICATION I/O ERROR. (NFTERR 29)
- 30 INSUFFICIENT CAPABILITIES. (NFTERR 30)
- 33 NO SOURCE FILE WAS SPECIFIED. (NFTERR 33)
- 36 DS/3000 HAS NOT BEEN INSTALLED ON THIS SYSTEM. (NFTERR 36)

- 37 REMOTE SYSTEM UNABLE TO USE TRANSPARENT MODE. (NFTERR 37)
- 38 CAN'T FIND THE EXTRA DATA SEGMENT, USE THE DSCOPY INTRINSIC TO INVOKE NFT. (NFTERR 38)
- 39 INVALID EXTRA DATA SEGMENT CONTENTS, USE THE DSCOPY INTRINSIC TO INVOKE NFT. (NFTERR 39)
- 40 NEGOTIATIONS FAILED, NO COPY CAN BE PERFORMED. (NFTERR 40)
- 41 FILE TRANSFER ABORTED. (NFTERR 41)
- 42 COPY CANCELLED BY USER. (NFTERR 42)
- 80 BOUNDS VIOLATION. (NFTERR 80)
- 81 SPLIT STACK MODE CALLS NOT ALLOWED. (NFTERR 81)
- 82 FIRST PARAMETER VALUE IS OUT OF RANGE (-1:6). (NFTERR 82)
- 83 SECOND PARAMETER TOO SHORT TO CONTAIN VERSION STRING. (NFTERR 83)
- 84 NFT PROCESS IS BUSY, CAN'T START NEW TRANSACTION. (NFTERR 84)
- 85 NFT PROCESS IS NOT RUNNING. (NFTERR 85)
- 86 ILLEGAL BASIC CALLING SEQUENCE. (NFTERR 86)
- 101 INTERNAL ERROR ON REMOTE SYSTEM. (NFTERR 101)
- 102 REMOTE SYSTEM NFT VERSION IS INCOMPATIBLE. (NFTERR 102)
- 103 INTERNAL - STRING STORAGE OVERFLOW. (NFTERR 103)
- 104 UNABLE TO CREATE TEMPORARY TRANSACTION FILE. (NFTERR 104)
- 105 AN UNEXPECTED MESSAGE WAS RECEIVED. (NFTERR 105)
- 106 AN ILLEGAL VALUE WAS RECEIVED IN A MESSAGE. (NFTERR 106)
- 107 A MESSAGE RECEIVED IN INVALID FORMAT. (NFTERR 107)
- 108 A REQUIRED ELEMENT WAS MISSING FROM A RECEIVED MESSAGE. (NFTERR 108)
- 109 NFT PROCESS CREATE FAILED. (NFTERR 109)
- 110 ATTEMPT TO GET EXTRA DATA SEGMENT FAILED. (NFTERR 110)

NS/NFT Errors

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 NFT errors described below to further qualify errors that occur.

NS/NFTERR MESSAGES

Message	Meaning/Cause	Action
NO ERRORS WERE DETECTED. (NS/NFTERR 0)	Transfer succeeded.	None.
INTERNAL NFT ERROR. (NS/NFTERR 1)	An internal NFT error has occurred.	See "Submitting an SR" at the beginning of this manual.
UNABLE TO LOGON TO SOURCE NODE. (NS/NFTERR 2)	Error in logging on to the source computer, or no logon string supplied where required.	Check the logon string or provide a logon string and try again.
UNABLE TO LOGON TO TARGET NODE. (NS/NFTERR 3)	Error in logging on to the target computer, or no logon string where required.	Check the logon string or provide a logon string and try again.
UNABLE TO ACCESS SOURCE FILE/DEVICE. (NS/NFTERR 4)	An unexpected file system error occurred in opening or accessing the source file.	Verify that the source file is accessible. Also, refer to the qualifying file system error string.
UNABLE TO CONNECT TO SOURCE NODE. (NS/NFTERR 5)	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.	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.

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
UNABLE TO CONNECT TO TARGET NODE. (NS/NFTERR 6)	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.	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.
INSUFFICIENT RESOURCES ARE AVAILABLE ON SOURCE NODE. (NS/NFTERR 7)	Insufficient resources at the source computer to carry out the file transfer.	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.
INSUFFICIENT RESOURCES ARE AVAILABLE ON TARGET NODE. (NS/NFTERR 8)	Insufficient resources at the target computer to carry out the file transfer.	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.
SOURCE FILE WAS NOT FOUND. (NS/NFTERR 9)	Source file specified does not exist.	Verify that the source file name is correct.
TARGET FILE NOT FOUND. (NS/NFTERR 10)	The target file does not exist and APPend was specified.	Verify that the target file name is correct.
TRANSFER STOPPED PER USER REQUEST. (NS/NFTERR 11)	Acknowledges the user's Abort or Cancel request.	None. This is an informational message only.
REQUESTED DATA TYPE WAS REFUSED. (NS/NFTERR 14)	Consumer mainframe refused the data type offered by the producer mainframe.	Consult <i>NS3000/V User/Programmer Reference Manual</i> for the use of the ASC (ASCII) and BIN (binary) option.

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
REQUESTED RECORD TYPE WAS REFUSED. (NS/NFTERR 15)	Consumer mainframe refused the record type offered by the producer mainframe.	Consult the <i>NS3000/V User/Programmer Reference Manual</i> for the use of the FIX (fixed) and VAR (variable) options.
REQUESTED FILE TYPE WAS REFUSED. (NS/NFTERR 16)	Consumer mainframe refused the file type offered by the producer mainframe.	Consult the <i>NS3000/V User/Programmer Reference Manual</i> for the use of the DIR (direct) and SEQ (sequential) options.
REQUESTED RECORD SIZE WAS REFUSED. (NS/NFTERR 17)	Consumer mainframe refused the record size offered by the producer mainframe.	Consult the <i>NS3000/V User/Programmer Reference Manual</i> for the RSIZE option.
REQUESTED FILE SIZE WAS REFUSED. (NS/NFTERR 18)	Consumer mainframe refused the file size offered by the producer mainframe.	Consult the <i>NS3000/V User/Programmer Reference Manual</i> for the FSIZE option.
CONFLICTING ATTRIBUTES OR OPTIONS. (NS/NFTERR 19)	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.	Try the REP (replace option) or remove the offending file equation.
TARGET RECORD SIZE IS INVALID. (NS/NFTERR 20)	Requested RSIZE is too large.	Specify a smaller record size.
TARGET FILE SIZE IS INVALID. (NS/NFTERR 21)	Requested FSIZE is too large.	Specify a smaller file size.

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
DUPLICATE TARGET FILE. (NS/NFTERR 22)	The target file exists and neither REPLACE nor OVERWRITE was specified.	Verify that the target file name is correct, and specify OVERWRITE or REPLACE.
NEED PASSWORD TO ACCESS SOURCE FILE. (NS/NFTERR 23)	Source file could not be accessed without proper password.	Specify the password and the source-file name and try again.
NEED PASSWORD TO ACCESS TARGET FILE. (NS/NFTERR 24)	Target file could not be accessed without proper password.	Specify the password and the target-file name and try again.
CONNECTION TO SOURCE NODE HAS GONE DOWN. (NS/NFTERR 26)	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.	Determine which, if any, of the files were not transferred. Transfer these files by specifying the proper command and trying again.
CONNECTION TO TARGET NODE HAS GONE DOWN. (NS/NFTERR 27)	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.	Specify a command to copy the remainder of the files, and try again.
UNABLE TO PURGE TARGET FILE. (NS/NFTERR 28)	The existing target file could not be purged.	Refer to the qualifying file system error string to determine what to do.
INVALID TARGET FILE ID. (NS/NFTERR 29)	The target file name is not valid for the target computer.	Check the target file name syntax and try again.

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
UNABLE TO PURGE SOURCE FILE. (NS/NFTWARN 30)	The source file could not be purged after successfully copying the file (the MOVE option was given).	Refer to the qualifying file system error string to determine what to do.
READ FROM SOURCE FILE FAILED. (NS/NFTERR 31)	An unexpected file system error occurred while reading from the source file.	Refer to the qualifying file system error string to determine what to do.
WRITE TO TARGET FILE FAILED. (NS/NFTERR 32)	An unexpected file system error occurred while writing data to the target file.	Refer to the qualifying file system error string to determine what to do.
UNABLE TO CREATE OR OPEN TARGET FILE. (NS/NFTERR 33)	An unexpected file system error occurred in creating or opening the target file.	Refer to the qualifying file system error string to determine what to do.
INVALID OR UNSUPPORTED SOURCE DEVICE. (NS/NFTERR 34)	A request was made to send a file to a non-disc device. Such transfers are not supported.	Copy the non-disc device file to a disc file using a system utility program, and then use DSCOPY to copy that file to the target computer.
INVALID OR UNSUPPORTED TARGET DEVICE. (NS/NFTERR 35)	A request was made to send a file to a non-disc device. Such transfers are not supported.	Copy the file to disc on the target computer using DSCOPY and then to the non-disc device using a system utility program.
UNABLE TO CLOSE TARGET FILE. (NS/NFTERR 36)	An unexpected file system error occurred in closing the target file.	Refer to the qualifying file system error string to determine what to do.
INCORRECT SOURCE FILE PASSWORD. (NS/NFTERR 38)	The given source file password was incorrect.	Specify the correct source file password and try again.

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
INCORRECT TARGET FILE PASSWORD. (NS/NFTERR 39)	The given target file password was incorrect.	Specify the correct target file password and try again.
INVALID CHARACTERS IN TARGET FILE NAME WERE REMOVED. (NFTWARN 41)	Some non-MPE systems allow characters in their file names that are not legal in MPE. These characters are removed.	None.
TARGET FILE NAME HAS BEEN TRUNCATED. (NFTWARN 42)	Some non-MPE systems allow file names to be longer than 8 characters. These file names are truncated.	None.
SOURCE AND TARGET FILE ATTRIBUTES DIFER. (NFTWARN 43)	If interchange mode is used, source file attributes may differ from target file attributes.	None.
RECORD (S) WERE TRUNCATED TO FIT MAXIMUM TARGET FILE RECORD SIZE. (NFTWARN 44)	When the target record size is smaller than the source record size the source record will be truncated to fit the target file record size.	None.
COMPRESSION WILL NOT BE DONE FOR THE CURRENT TRANSFER. (NFTWARN 45)	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.	None.
UNABLE TO TURN ON TRACING. (NFTWARN 46)	Indicates that an internal error has occurred. File transfer will continue without tracing.	See "Submitting an SR" at the beginning of this manual.
INVALID USE OF STRIP OPTION. (NFTWARN 47)	The STRIP option may not be used with files that have a variable length record structure.	Do not use the STRIP option with variable length records.

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
UNABLE TO ACCESS TARGET FILE/DEVICE. (NS/NFTERR 48)	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.	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.
INVALID SOURCE FILE ID. (NS/NFTERR 49)	The source file name is invalid on the source computer.	Check the source file name syntax and try again.
APPEND NOT SUPPORTED. (NS/NFTERR 51)	Target mainframe does not support the APP (append) option.	None.
OVERWRITE NOT SUPPORTED. (NS/NFTERR 52)	Target mainframe does not support the OVER(overwrite) option.	None.
ERROR IN GENERATING LIST OF FILES MATCHING REQUEST. (NS/NFTERR 54)	An error occurred while a generic source file specification was being processed.	Verify that the generic source file specification does match up with existing files.
INCOMING CONNECTION HAS GONE DOWN. (NS/NFTERR 57)	An incoming connection to an NFT server program has gone down for an unknown reason.	This error will appear only in a log file. See "Submitting an SR" at the beginning of this manual.
MOVE NOT SUPPORTED (NFTWARN 58)	Source mainframe does not support the MOVE option. The transfer will take place, but the source file will not be purged.	None.

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>UNABLE TO OPEN CHECKPOINT/RESTART FILE. (NS/NFTERR 59)</p>	<p>NFT is unable to open the file containing the information needed to restart a checkpointed transfer. This may be caused by a number of factors, including:</p> <p>If CHECKPT is specified:</p> <p>99 restart files already exist in the group and account of one of the roles (initiator, producer, or consumer).</p> <p>If RESTART is specified:</p> <ol style="list-style-type: none"> 1. The file does not exist. 2. The file is being accessed exclusively. 3. The user is logged on to a different group and account when attempting to restart than when checkpointing. 	<p>If checkpointing, be sure there are not 99 restart files in the any of the necessary groups and accounts.</p> <p>If restarting, be sure you are logged on as the same user, group, and account as when checkpointing.</p>
<p>UNABLE TO RETRIEVE RESTART INFORMATION. (NS/NFTERR 60)</p>	<p>NFT fails to obtain valid information from the checkpointing/restart file and cannot restart the transfer. Causes for this include:</p> <ol style="list-style-type: none"> 1. An FREAD error from the restart file. 2. The restart file is in an inconsistent state and contains incomplete or invalid data. 	<p>The file transfer must be restarted from scratch.</p>
<p>UNABLE TO STORE CHECKPOINT INFORMATION. (NS/NFTERR 61)</p>	<p>NFT fails 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.</p>	<p>You may attempt a restart of the transfer. If this fails consistently, there may be a problem with the file system. See "Submitting an SR" at the beginning of this manual.</p>

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
UNABLE TO RESTART TRANSFER. (NSNFTERR 62)	This error is returned when NFT is attempting to restart a generic transfer and is 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.	Make sure the generic listf file (GENSETn) exists in the producer's group and account and is not accessed exclusively.
SOURCE AND TARGET CHECKPOINTS DO NOT MATCH. (NS/NFTERR 63)	This error is returned when a restart is attempted and the producer and consumer checkpoints do not match, i.e. they are "out of step". This will occur only if the checkpoint restart file(s) have been corrupted, or if a serious internal NFT error has occurred.	Restart the transfer from scratch. If the problem occurs again, see "Submitting an SR" at the beginning of this manual.
UNABLE TO INITIATE CHECKPOINTING. (NFTWARN 64)	This warning is returned for a variety of reasons, including: <ol style="list-style-type: none"> 1. A checkpoint/restart file cannot be opened or created. 2. The restart id file cannot be opened or created. 3. Information cannot be written to the checkpoint/restart file, the generic listf file, or the restart id file. 4. Checkpointing is being attempted on a circular file, a message file, or a variable length record file in interchange mode. 5. Checkpointing is being attempted to a node which does not supported checkpointing. 	After the warning is issued, the file transfer will continue with no checkpointing taking place. You have the option of aborting the transfer using control-y.

NS/NFTERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
CHECKPOINTING WILL NOT BE DONE FOR LOCAL TRANSFERS. (NFTWARN 65)	This warning is returned if checkpointing is specified for a transfer for which the producer and consumer environments are equivalent, i.e. the producer's user, group, account, and node name are the same as the consumer's.	After the warning is issued, the file transfer will continue with no checkpointing taking place. You have the option of aborting the transfer using control-y.

NFT/3000 Errors

NFT/3000 ERRORS

Message	Meaning/Cause	Action
NO ERRORS WERE DETECTED. (NFT/3000 ERR 0)	No errors.	None.
UNABLE TO OPEN NFT MESSAGE CATALOG. (NFT/3000 ERR 1)	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.	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.
ATTEMPTED READ FROM INPUT FILE FAILED. (NFT/3000 ERR 2)	Read from the command input file (formal designator DSCOPYI) failed.	Look for a file equation for DSCOPYI. Make sure it is what was intended.
UNABLE TO OPEN SECONDARY OUTPUT FILE. (NFT/3000 WARN 3)	FOPEN of the secondary output file (formal designator DSCOPYL) failed.	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.
UNABLE TO OPEN INPUT FILE. (NFT/3000 ERR 4)	FOPEN of the command input file (formal designator DSCOPYI) failed.	Look for a file equation for DSCOPYI. Ensure that it refers to a valid file (or \$STDIN).
COMMAND LINE IS TOO LONG. (NFT/3000 ERR 5)	Input command length exceeded the allowed maximum (~200 bytes).	Ensure that the command input file is correct. If the command is truly too long, global specifications may be used to shorten it.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
CALL TO GENMESSAGE FAILED. (NFT/3000 ERR 6)	DSCOPYMSG intrinsic could not retrieve the specified error string from the NFT message catalog.	See action for error #1.
KEYWORD DICTIONARY IS TOO LONG. (NFT/3000 ERR 8)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
COMMAND LINE CONTAINS TOO MANY PARAMETERS. (NFT/3000 ERR 9)	Too many delimiters were in the command line (each delimiter corresponds to one parameter).	If the command line was entered properly, try using global specifications to reduce the number of parameters.
NO SOURCE FILE WAS SPECIFIED. (NFT/3000 ERR 10)	Usually a typographical error.	Retype command and retry.
NO CLOSING QUOTE WAS SPECIFIED. (NFT/3000 ERR 11)	A matching pair of quotes was not found.	Quotes surrounding a parameter must be of the same type (" or ").
! IS AN INVALID DELIMITER BETWEEN SOURCE AND TARGET (NFT/3000 ERR 12)	Usually a typographical error.	Retype command and retry.
! IS INVALID DELIMITER BETWEEN TARGET AND KEYWORDS. (NFT 3000 ERR 13)	Usually a typographical error.	Retype command and retry.
UNKNOWN KEYWORD: ! (NFT/3000 ERR 14)	Usually a typographical error.	Retype command and retry.
REMOTE ENVIRONMENT SPECIFIED BY USER DOES NOT EXIST. (NFT/3000 ERR 15)	The session associated with the specified node or environment cannot be found. Either the session was aborted externally or an internal error occurred.	Ask your system manager if your session was aborted. If not, check the NM log file for additional error information.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
RESTART ID FILE NAME IS TOO LONG. (NFT/3000 ERR 16)	Restart ID file name exceeds the length of a legal MPE file name.	Correct the file name and respecify the command.
INVALID FSIZE. (NFT/3000 ERR 19)	FSIZE specified contains non-numeric characters or is too large.	Retype the command with the correct FSIZE.
INVALID CHECKPOINT INTERVAL. (NFT/3000 ERR 20)	Checkpoint interval specified contains non-numeric characters or is too large.	Retype the command with the correct checkpoint interval.
! IS AN INVALID DELIMITER AS USED IN CHECKPOINT SPEC. (NFT/3000 ERR 21)	Typographical error.	See the <i>NS3000/V User/Programmer Reference Manual</i> for correct delimiters.
FILE ID IS TOO LONG. (NFT/3000 ERR 22)	Usually a typographical error.	Retype command and retry.
MISSING RIGHT BRACKET IN LOG-ON SPECIFICATION. (NFT/3000 ERR 23)	Typographical error.	Retype command and retry.
INVALID RECORD NUMBER FOR RESTART ID FILE. (NFT/3000 ERR 24)	Record number specified for restart id file contains non-numeric characters or is too large.	Retype the command with the correct record number for the restart id.
SCHAR AND ICHAR NOT ALLOWED AS GLOBAL SPECS. (NFT/3000 ERR 25)	SCHAR and ICHAR may not follow "+" on command line.	Specify these options for every transfer.
INVALID RESTART SPEC. (NFT/3000 ERR 26)	RESTART option syntax is incorrect.	See the <i>NS3000/V User/Programmer Reference Manual</i> for correct syntax.
FILE ID NOT ALLOWED AS GLOBAL SPECIFICATION. (NFT/3000 ERR 27)	File ID cannot follow "+" on command line. All other specifications may be made global.	Retype commmand and retry.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
REP(LACE) OVERRIDES APP(END) AND OVER(WRITE). (NFT/3000 WARN 28)	Reminds user of REP option's consequences. Note that APP is currently unsupported.	None.
APP(END) OVERRIDES REP(LACE AND OVER(WRITE). (NFT/3000 WARN 29)	APP (append) was specified after REP (replace) or OVER (overwrite), therefore it takes effect during the transfer.	None.
OVER(WRITE) OVERRIDES APP(END) AND REP(LACE). (NFT/3000 WARN 31)	Reminds user of OVER option's consequences. Note that APP is currently unsupported.	None.
INVALID RSIZE. (NFT/3000 ERR 34)	RSIZE specified contains non-numeric characters or is too large.	Retype the command with the correct RSIZE.
EQUALS SIGN MUST FOLLOW ! (NFT/3000 ERR 35)	Equals sign not following SDEV, TDEV, or FCODE option.	Retype command and retry.
! OVERRIDES PREVIOUS RECORD TYPE. (NFT/3000 WARN 36)	Either FIX or VAR was specified when the other was already specified in the command line or globally.	None.
! OVERRIDES PREVIOUS FILE TYPE. (NFT/3000 WARN 37)	Either SEQ or DIR was specified when the other was already specified in the command line or globally.	None.
! OVERRIDES PREVIOUS DATA TYPE. (NFT/3000 WARN 38)	Either BIN or ASC was specified when the other was already specified in the command line or globally.	None.
INVALID FILE ID: ! (NFT/3000 ERR 40)	Usually caused by blank characters in the file ID, or by omitting a delimiter or parameter.	Retype the command and retry.
INVALID NODE SPEC: ! (NFT/3000 ERR 41)	Usually caused by blank characters in the node (or environment) specification.	Retype the command and retry.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
INVALID DEVICE SPEC: ! (NFT/3000 ERR 42)	Usually caused by blank characters in the device specification.	Retype the command and retry.
CREATION OF IPC SOCKET FAILED. (NFT/3000 ERR 43)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
NO LOGON FOR REMOTE ENVIRONMENT. (NFT/3000 ERR 44)	A node or environment was specified without a logon specification and without a pre-existing remote session.	Specify a logon string in the DSCOPY command line or perform a :DSLIN/:REMOTE HELLO before issuing the DSCOPY command.
ATTEMPT TO GET SOCKET ENDPOINT FAILED. (NFT/3000 ERR 45)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
VARIABLE LENGTH RECORDS CANNOT BE DIRECTLY ACCESSED. (NFT/3000 ERR 46)	The DIR option can not be used on variable record files or with the VAR option.	Retry.
BUFFER MANAGER ERROR. (NFT/3000 ERR 47)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
ATTEMPT TO PLACE NFT SERVER BACK IN SYSTEM ENVIRONMENT FAILED. (NFT/3000 ERR 48)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
ATTEMPT TO PLACE NFT SERVER IN USER'S ENVIRONMENT FAILED. (NFT/3000 ERR 49)	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.	Make sure that the sessions involving file transfer haven't been aborted. If the sessions are present, see "Submitting an SR" at the beginning of this manual.
INTERNAL ERROR - SEND QUEUE OVERFLOW. (NFT/3000 ERR 50)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
SOURCE AND TARGET FILE ATTRIBUTES MUST MATCH. (NFT/3000 ERR 51)	For certain operations (such as overwrite) the attributes (data type, file type, etc) of both files involved must match. When they don't this error results.	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.
FSIZE SPEC IS IGNORED IF TARGET EXISTS. (NFT/3000 WARN 52)	The FSIZE option cannot be used with the OVER (overwrite) or APP (append) option.	None.
INTERNAL ERROR - COMPLETION QUEUE OVERFLOW. (NFT/3000 ERR 53)	Internal error.	See "Submitting an SR" at the beginning of this manual.
UNABLE TO OBTAIN DATA SEGMENT FOR INTERNAL IPC. (NFT/3000 ERR 54)	Probable system resource problem.	See "Submitting an SR" at the beginning of this manual.
UNABLE TO FIND AFT ENTRY FOR INTERNAL IPC. (NFT/3000 ERR 55)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
CREATION OF INTERNAL IPC PORT FAILED. (NFT/3000 ERR 56)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
ATTEMPT TO RECEIVE NFT SERVICE REQUEST FAILED. (NFT/3000 ERR 57)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
UNKNOWN INTERNAL MESSAGE WAS RECEIVED. (NFT/3000 ERR 58)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
NFT SERVER WAS ABORTED. (NFT/3000 ERR 60)	An internal error or external request (ABORTJOB) may have aborted the NFT server.	Check NM log file. See "Submitting an SR" at the beginning of this manual if an internal error is indicated.
INTERNAL ERROR - WARNING QUEUE OVERFLOW. (NFT/3000 ERR 61)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
NEW SIZE SPECIFICATION OVERRIDES PREVIOUS SETTING. (NFT/3000 WARN 62)	The size specified in the transfer overrides the global specification.	None.
UNSUPPORTED KEYWORD: ! (NFT/3000 ERR 63)	Keyword specified is not currently supported by NFT/3000.	Retry.
UNABLE TO CREATE GENERIC TEMP FILE. (NFT/3000 ERR 65)	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 disc space, duplicate file name, etc.	Check file space available, increase it if necessary (and possible). Check for temporary files named GENSET@. Purge these and try the transfer again.
SOURCE DEVICE SPEC OVERRIDES GLOBAL SPEC. (NFT/3000 WARN 66)	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.	None.
TARGET NODE SPEC OVERRIDES GLOBAL SPEC. (NFT/3000 WARN 67)	See "cause" for warning #66.	None.
SOURCE NODE SPEC OVERRIDES GLOBAL SPEC. (NFT/3000 WARN 68)	See "cause" for warning #66.	None.
TARGET NODE SPEC OVERRIDES GLOBAL SPEC. (NFT/3000 WARN 69)	See cause for warning #66.	None.
SOURCE LOGON SPEC OVERRIDES GLOBAL SPEC. (NFT/3000 WARN 70)	See "cause" for warning #66.	None.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
TARGET LOGON SPEC OVERRIDES GLOBAL SPEC. (NFT/3000 WARN 71)	See "cause" for warning #66.	None.
UNABLE TO CONTACT NFT SERVER. (NFT/3000 ERR 72)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
UNABLE TO STORE NFT PORT ID IN PORT DICTIONARY. (NFT/3000 ERR 73)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
ERROR OCCURRED WHEN SETTING UP NFT SERVER. (NFT/3000 ERR 74)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
NO NFT SERVERS ARE CURRENTLY AVAILABLE. (NFT/3000 ERR 75)	The number of active NFT servers (set via NSCONTROL) has reached its limit.	Adjust the maximum number of NFT servers allowed via NSCONTROL. If this isn't possible, try to invoke NFT again, a server may have terminated.
MESSAGE FILE MAY NOT BE TRANSFERRED IN INTERCHANGE MODE. (NFT/3000 ERR 76)	MPE message file cannot be transferred using any of the options which invoke interchange mode.	Retry.
UNABLE TO OBTAIN PSEUDO-TERMINAL FOR LOGON. (NFT/3000 ERR 77)	All available pseudo-terminals are in use.	If this happens often, ask the system manager to configure more pseudo-terminals.
NFT TERMINATION FAILED. (NFT/3000 ERR 78)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
LOGON ID IS TOO LONG. (NFT/3000 ERR 79)	Usually a typographical error.	Retype command and retry.
NODE NAME IS TOO LONG. (NFT/3000 ERR 80)	Usually a typographical error.	Retype command and retry.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
FILE PASSWORD IS TOO LONG. (NFT/3000 ERR 81)	Usually a typographical error.	Correct command and retry.
DEVICE NAME IS TOO LONG. (NFT/3000 ERR 82)	Usually a typographical error.	Retype command and retry.
INSUFFICIENT BUFFER SPACE FOR USER REQUEST. (NFT/3000 ERR 84)	Probable system resource problem.	See "Submitting an SR" at the beginning of this manual.
PM CAPABILITY IS REQUIRED FOR DEBUG. (NFT/3000 ERR 85)	To enter debug in NFT, privileged mode (PM) capability is required.	Contact your system operator.
CI COMMAND EXECUTION FAILED. (NFT/3000 ERR 86)	Usually accompanied by an MPE error.	Fix the MPE error.
NEW SOURCE FILE CODE OVERRIDES PREVIOUS SETTING. (NFT/3000 WARN 87)	Reminder to user.	None.
INVALID FCODE. (NFT/3000 ERR 88)	File code contains non-numeric characters or is too large.	The file code must be specified as a number.
SM or PM CAPABILITY REQUIRED TO COPY PRIVILEGED FILES. (NFT/3000 ERR 89)	The user specified a negative file code but didn't have system manager or privileged mode capability.	Make sure that the source file is accessed from a session (or job) whose user has system manager or privileged mode capability.
INVALID DATA MESSAGE WAS RECEIVED. (NFT/3000 ERR 90)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.
UNABLE TO OBTAIN INFO ON NEWLY CREATED SESSION. (NFT/3000 ERR 91)	Probable internal error.	See "Submitting an SR" at the beginning of this manual.

NFT/3000 ERRORS (cont'd)

Message	Meaning/Cause	Action
INVALID STRING FOLLOWING RIGHT BRACKET. (NFT/3000 ERR 92)	An invalid character(s) follows the right bracket in the logon part of the :DSCOPY command.	Respecify the :DSCOPY command, using correct delimiters. Refer to the <i>NS3000/V User/Programmer Reference Manual</i> for correct syntax.
INVALID STRING FOLLOWING CLOSING QUOTE. (NFT/3000 ERR 93)	An invalid character(s) follows a closing quote. Only the appropriate delimiter is allowed following a file name, node name, or logon enclosed in quotes.	Respecify the :DSCOPY command, using correct characters as delimiters. Refer to the <i>NS3000/V User/Programmer Reference Manual</i> for correct syntax.
AUTOLOGON DISABLED; USE :REMOTE HELLO FOR REMOTE SESSION. (NFT/3000 ERR 103)	The programmatic logon facility has been turned off by the network manager.	Logon to the remote environment using the REMOTE HELLO command. Specify this remote environment in the NFT command.
RESTART KEYWORD NOT ALLOWED IN DSCOPYI FILE. (NFT/3000 ERR 104)	User is attempting a restart from the DSCOPYI command file. This is not allowed.	Only use the RESTART keyword when DSCOPYI has not been redirected to a file.
ERROR IN RETRIEVING RESTART ID NUMBER FROM RESTART ID FILE. (NFT/3000 ERR 105)	An error occurred while attempting to obtain the restart id from the specified file.	Verify that the restart id file name and record number are correct.
! IS AN INVALID DELIMITER AS USED IN RESTART SPEC. (NFT/3000 ERR 106)	Typographical error.	See the <i>NS3000/V User/Programmer Reference Manual</i> for correct delimiters.

NETWORK INTERPROCESS COMMUNICATION ERRORS (SOCKERRS)

NetIPC errors 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 (Transmission Control Protocol and Packet Exchange Protocol) errors are returned in the IPCCHECK intrinsic: NetIPC errors in the *ipcerr* parameter and Transport Protocol errors in the *pmerr* parameter.

NetIPC ERRORS (SOCKERRS)

Message	Cause	Action
0 SUCCESSFUL COMPLETION. (SOCKERR 0)	No error was detected.	None.
1 INSUFFICIENT STACK SPACE. (SOCKERR 1)	Area between S and Z registers is not sufficient for execution of the intrinsic.	:PREP your program file with a greater MAXDATA value.
3 PARAMETER BOUNDS VIOLATION. (SOCKERR 3)	A specified parameter is out of bounds.	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 TRANSPORT HAS NOT BEEN INITIALIZED. (SOCKERR 4)	A :NETCONTROL was not issued to bring up the transport.	Notify your operator.
5 INVALID SOCKET TYPE. (SOCKERR 5)	Specified socket type parameter is of an unknown value.	Check and modify your socket type parameter.
6 INVALID PROTOCOL. (SOCKERR 6)	Specified protocol parameter is of an unknown value.	Check and modify protocol parameter.
7 ERROR DETECTED IN <i>flags</i> PARAMETER. (SOCKERR 7)	An unsupported bit in the <i>flags</i> parameter was set, or a nonprivileged user set a privileged bit.	Make certain the bit is off before calling the intrinsic.
8 INVALID OPTION IN THE <i>opt</i> RECORD. (SOCKERR 8)	An unsupported option was specified in the <i>opt</i> record, or a nonprivileged user attempted to specify a privileged option.	Check your <i>opt</i> record and remove or modify the option.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
9 PROTOCOL IS NOT ACTIVE. (SOCKERR 9)	A :NETCONTROL has not been issued to activate the requested protocol module.	Notify your operator.
10 PROTOCOL DOES NOT SUPPORT THE SPECIFIED SOCKET TYPE. (SOCKERR 10)	The type of socket you are trying to create is not supported by the protocol to be used.	Use a different socket type or protocol.
13 UNABLE TO ALLOCATE AN ADDRESS. (SOCKERR 13)	No addresses were available for dynamic allocation.	Wait a while and try again. See "Submitting an SR" at the beginning of this manual.
14 ADDRESS OPTION ERROR. (SOCKERR 14)	The address option in the <i>opt</i> record has an error in it (e.g., invalid length).	Check the values being placed in the <i>opt</i> record.
15 ATTEMPT TO EXCEED LIMIT OF SOCKETS PER PROCESS. (SOCKERR 15)	User has already reached the limit of 64 sockets per process.	Shut down any sockets which are not being used or have been aborted.
16 PATH DESCRIPTORS OR PATH DESCRIPTOR EXTENSIONS UNAVAILABLE. (SOCKERR 16)	<ol style="list-style-type: none"> 1. Transport's path cache or path descriptor table is full. 2. Network Interface (NI) was not started. 3. IP address is incorrect either in the network directory, or the routing information in the configuration file. 	<ol style="list-style-type: none"> 1. Contact your operator to see if the table can be expanded. 2. Start the NI. 3. Use NMMGR to correct the network directory or configuration file. (After correcting the configuration file you must issue a :NSCONTROL UPDATE.)
18 FORMAT OF THE <i>opt</i> RECORD IS INCORRECT. (SOCKERR 18)	NetIPC was unable to parse the specified <i>opt</i> record.	Check your INITOPT and ADDOPT calls.
19 ERROR DETECTED WITH MAXIMUM MESSAGE SIZE OPTION. (SOCKERR 19)	Maximum message size option in the <i>opt</i> record had an error associated with it (e.g., too many bytes specified, invalid message size value).	Check the values being placed in the <i>opt</i> record.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
20 ERROR WITH DATA OFFSET OPTION. (SOCKERR 20)	Data offset option in the <i>opt</i> record had an error associated with it (e.g., too many bytes specified).	Check the values being placed in the <i>opt</i> record.
21 DUPLICATE <i>opt</i> RECORD OPTION SPECIFIED. (SOCKERR 21)	The same <i>opt</i> record option was specified twice.	Remove the redundant call.
24 ERROR DETECTED IN MAXIMUM CONNECTION REQUESTS QUEUED OPTION. (SOCKERR 24)	Maximum connection requests queued option in the <i>opt</i> record had an error associated with it (e.g., too many bytes specified, bad value).	Check the values being placed in the <i>opt</i> record.
25 SOCKETS NOT INITIALIZED; NO GLOBAL DATA SEGMENT. (SOCKERR 25)	Error occurred attempting to initialize NetIPC, or network management is still initializing.	Try again. If it still fails, see "Submitting an SR" at the beginning of this manual.
26 UNABLE TO ALLOCATE A DATA SEGMENT. (SOCKERR 26)	The attempt to create a data segment failed because the DST table was full or there was not enough virtual memory.	Contact your operator to see if these tables can be expanded.
27 REQUIRED PARAMETER NOT SPECIFIED. (SOCKERR 27)	A required parameter was not supplied in an option variable intrinsic call.	Check your calling sequence.
28 INVALID NAME LENGTH. (SOCKERR 28)	Specified name length was too large or negative.	Check your name length parameter. Shorten the name if necessary.
29 INVALID DESCRIPTOR. (SOCKERR 29)	Specified descriptor is not a valid socket, connection, or destination descriptor.	Check the value being specified.
30 UNABLE TO NAME CONNECTION SOCKETS. (SOCKERR 30)	The socket descriptor given in the IPCNAME call was for a VC socket; VC sockets may not be named.	Check if the correct descriptor was specified.
31 DUPLICATE NAME. (SOCKERR 31)	Specified name was previously given.	Use a different name.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
32 NOT CALLABLE IN SPLIT STACK. (SOCKERR 32)	The particular NetIPC intrinsic cannot be called from split stack.	Recode to call the intrinsic from the stack. Vectored data may be required.
33 INVALID NAME. (SOCKERR 33)	Name is too long or has a negative length.	Check the name's length. Shorten the name if necessary.
34 CRITICAL ERROR PREVIOUSLY REPORTED; MUST SHUTDOWN SOCKET. (SOCKERR 34)	NetIPC previously detected and reported an irrecoverable error; most likely it was initiated by the protocol module.	The socket can no longer be used. Call IPCSHUTDOWN to clean up.
35 ATTEMPT TO EXCEED LIMIT OF NAMES PER SOCKET. (SOCKERR 35)	A socket can have only four names; the caller attempted to give it a fifth.	Use no more than four names.
36 TABLE OF NAMES IS FULL. (SOCKERR 36)	Socket registry or give table is full.	Shut down unused sockets, call IPCNAMERASE on any sockets that no longer need to be looked up, or get given sockets. See "Submitting an SR" at the beginning of this manual.
37 NAME NOT FOUND. (SOCKERR 37)	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.	Check names specified, make sure names were properly agreed on, determine if a timing problem exists.
38 USER DOES NOT OWN THE SOCKET. (SOCKERR 38)	Attempted to erase a name of a socket you do not own.	Have the owner of the socket call IPCNAMERASE.
39 INVALID NODE NAME SYNTAX. (SOCKERR 39)	Syntax of the node name is invalid.	Check the node name being supplied.
40 UNKNOWN NODE. (SOCKERR 40)	Unable to resolve the specified node name as an NS node name.	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.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
41 ATTEMPT TO EXCEED PROCESS LIMIT OF DESTINATION DESCRIPTORS. (SOCKERR 41)	User has already reached the limit of 261 destination descriptors per process.	Call IPCSHUTDOWN on any unneeded destination descriptors.
43 UNABLE TO CONTACT THE REMOTE REGISTRY SERVER. (SOCKERR 43)	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.	Contact your operator. If unable to resolve the problem, see "Submitting an SR" at the beginning of this manual.
44 NO RESPONSE FROM REMOTE REGISTRY SERVER. (SOCKERR 44)	No reply was received from the remote registry process. This is often due to the remote node not having initialized its transport.	Contact your operator. If unable to resolve the problem, see "Submitting an SR" at the beginning of this manual.
46 UNABLE TO INTERPRET RECEIVED PATH REPORT. (SOCKERR 46)	Unable to interpret the information returned by the remote socket registry process regarding the looked-up socket.	See "Submitting an SR" at the beginning of this manual.
47 INVALID MESSAGE RECEIVED FROM REMOTE SERVER. (SOCKERR 47)	The message received from the remote registry process does not appear to be a valid socket registry message.	See "Submitting an SR" at the beginning of this manual.
50 INVALID DATA LENGTH. (SOCKERR 50)	Specified data length parameter is too long or negative.	Check and modify the value.
51 INVALID DESTINATION DESCRIPTOR. (SOCKERR 51)	Supplied destination descriptor value is not that of a valid destination descriptor.	Verify that you are passing an active destination descriptor.
52 SOURCE AND DESTINATION SOCKET PROTOCOL MISMATCH. (SOCKERR 52)	The source socket is not of the same protocol as the socket described by the destination descriptor.	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.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
53 SOURCE AND DESTINATION SOCKET TYPE MISMATCH. (SOCKERR 53)	The source socket cannot be used for communication with the socket described by the destination descriptor.	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 INVALID CALL SOCKET DESCRIPTOR. (SOCKERR 54)	Specified descriptor is not for a call socket.	Validate the value being passed.
55 EXCEEDED PROTOCOL MODULE'S SOCKET LIMIT. (SOCKERR 55)	Protocol module being used cannot create any more sockets.	Contact your operator; the limit may be configurable.
57 ATTEMPT TO EXCEED LIMIT OF NOWAIT SENDS OUTSTANDING. (SOCKERR 57)	User tried to send data too many times in nowait mode without calling IOWAIT.	Call IOWAIT to complete a send. The limit is 7.
58 ATTEMPT TO EXCEED LIMIT OF NOWAIT RECEIVES OUTSTANDING. (SOCKERR 58)	User tried to issue too many consecutive nowait receives without calling IOWAIT.	Call IOWAIT to complete a receive. The limit is 1.
59 SOCKET TIMEOUT. (SOCKERR 59)	The socket timer popped before data was received.	If this is not desired, call IPCCONTROL to increase or disable the timeout.
60 UNABLE TO ALLOCATE AN AFT. (SOCKERR 60)	User has no space for allocating an active file table entry.	Close unnecessary files or sockets.
62 CONNECTION REQUEST PENDING; CALL IPCRECV TO COMPLETE. (SOCKERR 62)	User called IPCCONNECT without a subsequent IPCRECV before issuing the current request.	Call IPCRECV.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
63 WAITING CONFIRMATION; CALL IPCCONTROL TO ACCEPT/REJECT. (SOCKERR 63)	IPCRECV called with deferred connection option. IPCCONTROL has not been called to accept/reject.	The call IPCCONTROL with accept/reject option.
64 REMOTE ABORTED THE CONNECTION. (SOCKERR 64)	Remote protocol module aborted the connection. This will occur when a peer has called IPCSHUTDOWN on the connection.	Call IPCSHUTDOWN to clean up your end of the connection.
65 CONNECTION ABORTED BY LOCAL PROTOCOL MODULE. (SOCKERR 65)	Local protocol module encountered some error which caused it to abort the connection.	Call IPCSHUTDOWN to clean up your end of the connection. See "Submitting an SR."
66 INVALID CONNECTION DESCRIPTOR. (SOCKERR 66)	Supplied value is not that of a valid VC socket (connection) descriptor.	Check the value being given.
67 CONNECTION FAILURE DETECTED. (SOCKERR 67)	An event occurred which caused the local protocol module to determine that the connection is no longer up (e.g., retransmitted data was never acknowledged).	Call IPCSHUTDOWN to clean up your end of the connection.
68 RECEIVED A GRACEFUL RELEASE OF THE CONNECTION. (SOCKERR 68)	Informational message.	Do not attempt to receive any more data.
69 MUTUALLY EXCLUSIVE <i>flags</i> OPTIONS SPECIFIED. (SOCKERR 69)	Bits in the <i>flags</i> parameter were set which indicate requests for mutually exclusive options.	Check and clear the appropriate bits.
70 CAN'T GIVE SHARED CONNECTIONS. (SOCKERR 70)	Transferring connections and shared connections are mutually exclusive actions.	Only attempt to transfer or share connections.
71 I/O OUTSTANDING. (SOCKERR 71)	Attempted an operation with nowait I/O outstanding.	Call IOWAIT to complete the I/O or IPCCONTROL to abort any receives.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
74 INVALID IPCCONTROL REQUEST CODE. (SOCKERR 74)	Request code is unknown or a nonprivileged user requested a privileged option.	Validate the value being passed.
75 UNABLE TO CREATE A PORT FOR LOW LEVEL I/O. (SOCKERR 75)	Unable to create an entity used for communication between NetIPC and the protocol module. This error might occur if you are trying to open a large number of connections and do not have enough PCBs configured.	Contact your operator to see if the number of PCBs could be increased. (Number of connections divided by two is a good estimate). See "Submitting an SR" at the beginning of this manual.
76 INVALID TIMEOUT VALUE. (SOCKERR 76)	Value specified for the timeout is negative.	Modify the value.
77 INVALID WAIT/NOWAIT MODE. (SOCKERR 77)	Mode of socket cannot be used.	Use IPCCONTROL to specify correct mode.
78 TRACING NOT ENABLED. (SOCKERR 78)	Attempted to turn off trace when tracing was not on.	Remove the call.
79 INVALID TRACE FILE NAME. (SOCKERR 79)	Requested trace file name is not valid.	Validate and modify the trace file name.
80 ERROR IN TRACE DATA LENGTH OPTION. (SOCKERR 80)	An error was detected in the option specifying the maximum amount of data to be traced (e.g., negative value, too large, too many bytes used to specify the value).	Modify the values being used.
81 ERROR IN NUMBER OF TRACE FILE RECORDS OPTION. (SOCKERR 81)	An error was detected in the option specifying the maximum amount of records to be in the trace file (e.g., negative or too large a value, too many bytes used to specify the value).	Modify the values being used.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
82 TRACING ALREADY ENABLED. (SOCKERR 82)	Attempted to turn on tracing when tracing already enabled.	Remove the call or turn off trace before the call.
83 ATTEMPT TO TURN ON TRACE FAILED. (SOCKERR 83)	Network Management was unable to enable tracing.	Call IPCCHECK; the protocol module error returned will be the Network Management error number. Consult your Network Management manual for the appropriate action to take.
84 PROCESS HAS NO LOCAL SOCKET DATA STRUCTURES. (SOCKERR 84)	IPCCKECK was called, but the user had no sockets or destination descriptors, and therefore no data structure for retaining error codes.	None, but no NetIPC or protocol module errors are available.
85 INVALID SOCKET ERROR NUMBER. (SOCKERR 85)	IPCERRMSG was called with an invalid NetIPC error code.	Check the value being passed.
86 UNABLE TO OPEN ERROR CATALOG SOCKCAT.NET.SYS. (SOCKERR 86)	The error message catalog does not exist, it is opened exclusively, or the caller does not have access rights to the file.	Notify your operator.
87 GENMESSAGE FAILURE; NOT A MESSAGE CATALOG. (SOCKERR 87)	MAKECAT was not successfully run on the message catalog.	Notify your operator.
88 INVALID REQUEST SOCKET DESCRIPTOR. (SOCKERR 88)	Internal error.	See "Submitting an SR" at the beginning of this manual.
89 INVALID REPLY SOCKET DESCRIPTOR (SOCKERR 88)	Internal error.	See "Submitting an SR" at the beginning of this manual.
91 WOULD EXCEED LIMIT OF REPLIES EXPECTED. (SOCKERR 91)	Internal error.	See "Submitting an SR" at the beginning of this manual.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
92 MUST REPLY TO BEFORE RECEIVING ANOTHER REQUEST. (SOCKERR 92)	Internal error.	See "Submitting an SR" at the beginning of this manual.
93 INVALID SEQUENCE NUMBER. (SOCKERR 93)	Internal error.	See "Submitting an SR" at the beginning of this manual.
94 NO OUTSTANDING REQUESTS. (SOCKERR 94)	Internal error.	See "Submitting an SR" at the beginning of this manual.
95 RECEIVED AN UNSOLICITED REPLY. (SOCKERR 95)	Internal error.	See "Submitting an SR" at the beginning of this manual.
97 WOULD EXCEED LIMIT OF SHARED CONNECTIONS. (SOCKERR 97)	Internal error.	See "Submitting an SR" at the beginning of this manual.
96 INTERNAL BUFFER MANAGER ERROR. (SOCKERR 96)	Attempted use of the buffer manager by NetIPC or the protocol module resulted in an error.	See "Submitting an SR" at the beginning of this manual.
98 INVALID DATA SEGMENT INDEX IN VECTORED DATA. (SOCKERR 98)	Data segment index value in the vectored data array is not valid.	Check the value being supplied.
99 INVALID BYTE COUNT IN VECTORED DATA. (SOCKERR 99)	The count of data in the vectored data array is invalid.	Check the values being given.
100 TOO MANY VECTORED DATA DESCRIPTORS. (SOCKERR 100)	More than two data locations were specified in the vectored data array.	Limit the number to two per operation. Use multiple sends or receives if necessary.
101 INVALID VECTORED DATA TYPE. (SOCKERR 101)	Type of vectored data is unknown (must be a 0, 1, or 2) or the data type is for a data segment (1 or 2) and the user is not privileged.	Check the value being used.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
102 UNABLE TO GRACEFULLY RELEASE THE CONNECTION. (SOCKERR 102)	1. Protocol module does not support graceful release. 2. Process tried to release connection that was not in correct state. 3. Output pending.	Check command sequence.
103 USER DATA NOT SUPPORTED DURING CONNECTION ESTABLISHMENT. (SOCKERR 103)	User data option is not supported for IPCRECV or IPCCONNECT.	Do not use user data option.
104 CAN'T NAME A REQUEST SOCKET. (SOCKERR 104)	Internal error.	See "Submitting an SR" at the beginning of this manual.
105 NO REPLY RECEIVED. (SOCKERR 105)	Internal error.	See "Submitting an SR" at the beginning of this manual.
106 ADDRESS CURRENTLY IN USE BY ANOTHER SOCKET. (SOCKERR 106)	Address being specified for use is already being used.	If you are a privileged user trying to specify a well known address, or try again later. If you are nonprivileged, then see "Submitting an SR".
107 TRANSPORT IS GOING DOWN. (SOCKERR 107)	The transport is being shut down.	Call IPCSHUTDOWN on all sockets and destination descriptors.
108 USER HAS RELEASED CONNECTION; UNABLE TO SEND DATA. (SOCKERR 108)	Process tried to send after initiating a graceful release.	Check command sequence.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
109 PEER HAD RELEASED THE CONNECTION; UNABLE TO RECEIVE DATA. (SOCKERR 109)	Process tried to receive after remote initiated graceful release.	Check command sequence.
110 UNANTICIPATED ERROR. (SOCKERR 110)	NetIPC received a protocol module error which it was unable to map.	Call IPCCHECK to get the protocol module error. Call IPCSHUTDOWN to clean up. See "Submitting an SR" at the beginning of this manual.
111 INTERNAL SOFTWARE ERROR DETECTED. (SOCKERR 111)	Internal error.	See "Submitting an SR" at the beginning of this manual.
112 NOT PERMITTED WITH SOFTWARE INTERRUPTS ENABLED. (SOCKERR 112)	A request was made which cannot be performed with software interrupts enabled.	Disable software interrupts or remove the request.
113 INVALID SOFTWARE INTERRUPT PROCEDURE LABEL. (SOCKERR 113)	Procedure label passed when enabling software interrupts is invalid.	Check the PLABEL you are passing.
114 CREATION OF SOCKET REGISTRY PROCESS FAILED. (SOCKERR 114)	Possible causes include: 1. Resource limitations or 2. Socket registry program missing.	 1. Retry later. 2. Contact your HP representative for assistance.

NetIPC ERRORS (SOCKERRS) (cont'd)

Message	Cause	Action
<p>116 DESTINATION UNREACHABLE. (SOCKERR 116)</p>	<p>The transport was unable to route the packet to the destination.</p> <p>This may be caused by:</p> <ol style="list-style-type: none"> 1. Network Interface (NI) was not started or 2. IP address is incorrect either in the network directory, or the routing information in the configuration file. 	<ol style="list-style-type: none"> 1. Start the NI. 2. Use NMMGR to correct the network directory or configuration file. (After correcting the configuration file you must issue a :NETCONTROL UPDATE.)
<p>117 ATTEMPT TO ESTABLISH CONNECTION FAILED. (SOCKERR 117)</p>	<p>Protocol module was unable to set up the requested connection. This may be caused by the remote protocol module not being active.</p>	<p>Notify your operator.</p>
<p>118 INCOMPATIBLE VERSIONS. (SOCKERR 118)</p>	<p>NetIPC software was incompatible with the software being executed by the remote registry process.</p>	<p>Notify your operator.</p>
<p>119 ERROR IN BURST SIZE OPTION. (SOCKERR 119)</p>	<p>An unsupported option was specified in the <i>opt</i> record, or a nonprivileged user attempted to specify a privileged option.</p>	<p>Check your <i>opt</i> record and remove or modify the option.</p>
<p>120 ERROR IN WINDOW UPDATE THRESHOLD OPTION. (SOCKERR 120)</p>	<p>An unsupported option was specified in the <i>opt</i> record, or a nonprivileged user attempted to specify a privileged option.</p>	<p>Check your <i>opt</i> record and remove or modify the option.</p>

VIRTUAL TERMINAL ERRORS (VT ERRORS)**VT ERRORS**

Message	Meaning/Cause	Action
RESOURCE NOT RELEASED ON TERMINATION (VT WARNING 1)	During the termination process a resource was not released with a good disposition.	None; this is not a severe problem since MPE forces cleanup upon process termination.
INVALID STATUS FOUND (VT ERROR 2)	Conflicting states existed in the VT status mask. The transition to a new state could not be made.	See "Submitting an SR" at the beginning of this manual.
ILLEGAL STATUS STATE (VT ERROR 3)	A VT routine requested an illegal option for altering the current state.	See "Submitting an SR" at the beginning of this manual.
VTS MESSAGE DOES NOT INCLUDE PARAMETERS (VT WARNING 4)	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.	Verify the VT versions on the different nodes, retry the VT session, and/or see "Submitting an SR".
VTS MESSAGE CONTAINS AN INVALID PARAMETER (VT ERROR 5)	The VTS protocol message contains an invalid request. This may be a transmission error or a result of incompatible versions of VT.	Check the VT version numbers using NMMAINT, retry the VT session, and/or see "Submitting an SR".
VTS MESSAGE HAS INVALID FORMAT (VT ERROR 6)	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.	Verify the VT software version numbers, retry the VT session, and/or see "Submitting an SR" at the beginning of this manual.
UNEXPECTED/BAD RESPONSE FROM VT (VT WARNING 7)	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.	One of your commands was probably not executed correctly: terminate the session and re-issue the commands. If problem persists, verify VT versions and/or submit SR.

VT ERRORS (cont'd)

Message	Meaning/Cause	Action
VT SERVER NOT ADOPTED (VT WARNING 8)	The VT process could not initialize the environment properly, probably because of poor timing or a resource shortage.	Terminate the session and log on again.
SAVED READ DATA NOT VALID (VT ERROR 9)	Sequencing problem: VT did not have read request from the remote system to satisfy your :REMOTE command.	Reissue your command.
BREAK NOT INVOKED (VT WARNING 10)	The request for a break was not recognized since it was not enabled at the time of the request.	None.
VT TRACE STATE NOT ALTERED (VT WARNING 11)	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.	Readjust the disc space parameters and reissue the command.
VT DATA AREA NOT UPDATED (VT ERROR 12)	Information could not be added to a VT environment-related table, usually because of ill timing or a resource shortage.	The VT can continue to function; however, it would be best to terminate the remote session and begin again.
RETRIEVE OF DSLINE DATA FAILED (VT ERROR 13)	The DSLINE table was not accessible to the VT service, probably because of a timing problem in the subsystems.	Terminate the remote session.
BUFFER/STORAGE NOT RELEASED (VT WARNING 14)	An internal buffer could not be returned to the buffer pool.	If the problem reoccurs, dump the system and see "Submitting an SR" at the beginning of this manual.

VT ERRORS (cont'd)

Message	Meaning/Cause	Action
FILE SYSTEM REQUEST FAILED (VT WARNING 15)	The terminal did not respond while VT was attempting terminal identification.	Verify that the terminal is configured correctly and reissue the remote request.
CR/LF SWITCH FAILED (VT WARNING 16)	The file system did not honor the request to alter the issuing of line feed on receipt of a carriage return.	This may affect the actions of the remote application program: if problems occur, reestablish the remote session.
SET READ TIMEOUT FAILED (VT WARNING 17)	Setting of a timed read failed.	This may affect the actions of the remote application program: if problems occur, reestablish the remote session.
SET ECHO FAILED (VT WARNING 18)	The echo setting was not altered as requested by the application program.	This will affect the remote program: terminate the program and rerun it.
SET PRE/POST SPACE FAILED (VT WARNING 19)	Space control was not altered.	Line feeds will not be issued as requested: rerun the remote program.
GENMESSAGE FAILED (VT WARNING 20)	A preemptive write could not be issued.	None.
FWRITE TO TERMINAL FAILED (VT WARNING 21)	Data could not be written to the terminal.	Reconfigure the terminal to respond to the attached CPU.
GET TERM-TYPE FAILED (VT WARNING 22)	Could not retrieve the terminal type from the file system.	Reattempt to establish the remote session. If it fails again, insure that the terminal is properly configured for MPE.

VT ERRORS (cont'd)

Message	Meaning/Cause	Action
SET EOR FAILED (VT WARNING 23)	End-of-Record setting failed.	Terminate the remote program, reset the terminal, and run the program again.
SET EDIT MODE FAILED (VT WARNING 24)	The mode required by the remote program was not set by MPE.	Terminate the remote program and attempt to rerun it.
SET DRIVER MODE FAILED (VT WARNING 25)	The file system did not alter the setting of the driver/terminal handshake mode.	Terminate the remote program.
TERMINAL NOT ALLOCATED (VT WARNING 26)	The terminal could not be allocated for access.	Check the MPE configuration; retry the remote session.
SET TERMINAL TYPE FAILED (VT WARNING 27)	The terminal type was not reset as requested.	Terminate the remote program and rerun it.
TERMINAL PARITY NOT ALTERED (VT WARNING 28)	The parity setting for reads/writes to the terminal was not altered.	Terminate the remote program, check the terminal's configuration, and rerun the program.
TERMINAL OPEN FAILED (VT ERROR 29)	The terminal could not be opened for VT access.	Verify that your terminal is correctly configured in SYSDUMP as a valid MPE terminal.
END OF FILE ENCOUNTERED (VT ERROR 30)	A hardware EOF was set on the terminal.	Reestablish your local session.

VT ERRORS (cont'd)

Message	Meaning/Cause	Action
FATAL INTERNAL ERROR OCCURRED (VT ERROR 31)	The VT could not continue because of a VTS protocol error or a corrupt data structure.	Verify the NS version numbers, and if they are compatible, see "Submitting an SR" at the beginning of this manual.
REMOTE SESSION LOGON FAILED (VT ERROR 32)	The remote logon was started; however, it did not succeed for one of several reasons: 1) logon timed out; 2) break during logon; 3) remote CI aborted; 4) loss of communication to the remote system.	Reattempt the remote logon.
REMOTE SESSION ABORTED (VT ERROR 33)	Some action on the remote system, probably an operator command, forced the session to be aborted.	Reestablish remote session.
CANNOT ACCESS SESSION DEVICE (VT ERROR 34)	The session device is: 1) incorrectly configured, 2) not a terminal, 3) not accessible through the file system.	Check the above and reattempt logon.
VT INITIALIZATION FAILED (VT ERROR 35)	VT could not initialize itself because of an internal error or a resource shortage.	Reattempt the logon; if it fails, see "Submitting an SR" at the beginning of this manual.
VT NEGOTIATIONS FAILED (VT ERROR 36)	The remote system could not support a VT option or the two systems have incompatible software versions.	Verify the VT version numbers and submit an SR.

VT ERRORS (cont'd)

Message	Meaning/Cause	Action
VTS MESSAGE PROTOCOL ERROR (VT ERROR 37)	The local and remote VT code are different versions, or a data transmission error occurred.	Reattempt session establishment. If the error reoccurs, verify the version numbers using NMMMAINT and see "Submitting an SR".
INVALID REMOTE NODE REQUESTED (VT ERROR 38)	The node name specified is not valid.	Check the validity of the node name and insure that it is installed in the Node Management Tables. If valid and installed, see "Submitting an SR".
REMOTE NOT ACCEPTING SERVICE REQUESTS (VT ERROR 39)	The remote machine has no VT servers available.	Enable/increase the number of VT servers on the remote machine.
REMOTE NOT RESPONDING, DATA SEND FAILED (VT ERROR 40)	The connection to the remote machine has failed; the session is terminated.	Attempt to re-login to the remote machine.
REMOTE NOT RESPONDING, RECEIVE FAILED (VT ERROR 41)	The connection to the remote machine has failed; the session is terminated.	Attempt to re-login to the remote machine.
REMOTE NOT RESPONDING, CONNECTION CLOSED (VT WARNING 42)	The remote VT closed the connection; the session has been terminated.	Attempt a re-login to the remote machine.
VT COULD NOT SECURE BUFFER SPACE (VT ERROR 43)	There is insufficient buffer space because of a shortage of stack space or extra data segments. The VT could not be started.	Check the number of users on the system and available data segments; adjust as required. Reattempt the command. If problem persists, see "Submitting an SR".
VT-CI ERROR, MISSING DATA STRUCTURE (VT ERROR 44)	There is an error in the interaction between the CI and VT.	Verify the version numbers of the NS subsystem for the CI and VT. See "Submitting an SR."

VT ERRORS (cont'd)

Message	Meaning/Cause	Action
DUPLICATE VT DATA STRUCTURE (VT ERROR 45)	Internal data structure allocation error.	When possible, dump the system and forward it to your SE.
REMOTE VT REQUESTED STOP (VT ERROR 46)	A condition on the remote system forced the VT to terminate.	None; this is a valid action.
VT RESTART ATTEMPT FAILED (VT ERROR 47)	An error occurred while trying to restart the VT because of old data or a non-responding remote node.	Close the DSLINE, reopen it, and initiate a new remote session.
VT TERMINATED NORMALLY (VT INFORMATIONAL MESSAGE 48)	No error.	None.
CANNOT ACCESS TERMINAL FOR REVERSE-VT (VT ERROR 49)	The device specified for access is not available.	Verify that the node name and device are valid.
VT TERMINATED, PSEUDO TERMINAL UNAVAILABLE (VT ERROR 50)	All available pseudo terminals are currently active.	Try the remote request later.
VT TERMINATED, COULD NOT FOPEN TERMINAL (VT ERROR 51)	A file system error has occurred; the terminal was not accessible by the VT program.	Save the Node Management logfile, and if the problem reoccurs, see "Submitting an SR" at the beginning of this manual.

VT ERRORS (cont'd)

Message	Meaning/Cause	Action
VT TERMINATED, INVALID DEVICE FOR SESSION (VT ERROR 52)	Your session device is not an acceptable MPE session device.	Verify the configuration in SYSDUMP.
NO DEVICE STRING SPECIFIED FOR REVERSE-VT (VT ERROR 53)	The device string was omitted in the FOPEN or file equation.	Insert a device string.
INVALID TERMINAL SPEED FOR REVERSE-VT (VT ERROR 54)	The terminal did not respond since the speed configured in SYSDUMP and the hardware-configured speed do not match.	Set the hardware to the speed configured in SYSDUMP.

NETWORK SERVICES INFORMATION MESSAGES

These messages, displayed on \$STDLIST during the execution of a :DSLIN 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).

NETWORK SERVICES INFORMATION MESSAGES

Message	Meaning/Cause
500 ENVIRONMENT <i>envum</i> : <i>envid</i>	The defined or affected environment has been assigned an environment number <i>envum</i> and environment ID <i>envid</i> . <i>Envid</i> will be fully qualified with domain and organization names. The node name for the environment is the same as the environment ID. If the :DSLIN specified a generic environment ID, there will be one ENVIRONMENT message displayed for each affected environment.
501 ENVIRONMENT <i>envum</i> : <i>envid</i> =nodename	The defined or affected environment has been assigned an environment number <i>envum</i> and environment ID <i>envid</i> . <i>Envid</i> will be fully qualified with domain and organization names. The environment is on <i>nodename</i> , which is different from <i>envid</i> . If the node is an NS node, <i>nodename</i> is fully qualified. If the node is a DS/3000 node, <i>nodename</i> will not be qualified. If the :DSLIN specified a generic environment ID, there will be one ENVIRONMENT message displayed for each affected environment.
502 NO ENVIRONMENTS	A :DSLIN with a generic environment ID was executed, and there were no environments with IDs that matched the generic ID. The :DSLIN then has no effect.
503 ABORT REMOTE SESSION ON <i>envid</i> ?	A :DSLIN CLOSE has been issued for an environment that has a Virtual Terminal remote session. <i>Envid</i> is the environment ID for the environment. This message expects a YES (or Y), or NO (or N) response from the user. If the user replies YES, the remote session will be aborted and the environment will be closed. If NO, the remote session will remain and the environment will not be closed. If a :DSLIN CLOSE with a generic environment is executed, there will be one ABORT REMOTE SESSION message for each matching environment with a remote session.
504 PLEASE ANSWER YES OR NO:	A question (such as ABORT REMOTE SESSION) has been asked, and the user has replied with something other than YES or NO. This prompt will be displayed until the user replies YES, Y, No, or N.

NETWORK SERVICES INFORMATION MESSAGES (cont'd)

Message	Meaning/Cause
505 KILL RPM PROCESS ON <i>envid</i> ?	A :DSLIME CLOSE has been issued for an environment that includes an RPM-created process. <i>Envid</i> is the environment ID for the environment. This message expects a YES (or Y), or NO (or N) response from the user. If the user replies YES, an RPMKILL will be issued for the process, and the close of the environment will continue. If NO, the RPM process will remain and the environment will not be closed. If a :DSLIME CLOSE with a generic environment is executed, there will be one KILL RPM PROCESS for each matching environment with an RPM process.
506 GENERIC ENVIRONMENT <i>envid</i>	A generic environment has been established by a :DSLIME for the specified <i>envid</i> pattern, which includes wild card characters @, #, and/or ?. All existing environments with IDs that match the generic <i>envid</i> will acquire the characteristics specified in the :DSLIME command. (The affected environments will be listed.) In addition, all future environments with IDs that match the generic pattern will assume the :DSLIME options as defaults. (These default options can be explicitly overridden, though.) The generic environment will be in effect until it is reset by a :DSLIME RESET command.
507 NO GENERIC ENVIRONMENTS	For a :DSLIME or :DSLIME SHOW, there are no currently defined generic environments with IDs that match the specified pattern.
508 REMOTE SESSION ABORTED.	During a :DSLIME CLOSE, the ABORT REMOTE SESSION ON <i>envid</i> ? question has been asked, and the reply was yes. The remote session on the specified environment has been aborted.
510 TRACE FILE FOR ALL SERVICES TO <i>envid</i> IS filename	See Meaning/Cause for Message #516
511 TRACE FILE FOR VT TO <i>envid</i> IS filename	See Meaning/Cause for Message #516
512 TRACE FILE FOR NFT TO <i>envid</i> IS filename	See Meaning/Cause for Message #516
513 TRACE FILE FOR RFA TO <i>envid</i> IS filename	See Meaning/Cause for Message #516

NETWORK SERVICES INFORMATION MESSAGES (cont'd)

Message	Meaning/Cause
514 TRACE FILE FOR RDBA TO <i>envid</i> IS filename	See Meaning/Cause for Message #516
515 TRACE FILE FOR RPM TO <i>envid</i> IS filename	See Meaning/Cause for Message #516
516 TRACE FILE FOR PTOP TO <i>envid</i> IS filename	A :DSLIN 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 :DSLIN with a generic environment ID turns tracing on or off for a set of environments, there will be one TRACE message for each environment.

REMOTE FILE ACCESS ERRORS

The following error codes refer to Network Service Remote File Access over Local Area Network (NS-Compatible) links. These error codes are also used, with different meanings, for miscellaneous DS-Compatible errors over point-to-point or X.25 links. (See "Miscellaneous DS-Compatible Errors" earlier in this section.)

REMOTE FILE ACCESS ERRORS

Message	Meaning/Cause	Action
201 ERROR IN ACCESSING DSLINE/ENVIRONMENT TABLE.	Internal inconsistency in table or in RFA services data structures.	Release the environment and set it up again.
204 UNABLE TO CREATE/EXPAND EXTRA DATA SEGMENT BUFFERS FOR RFA.	System does not have enough virtual memory or maximum DST size is too small for this RFA application.	See your system manager.
205 UNABLE TO ALLOCATE/MANAGE BUFFERS FOR RFA.	Internal inconsistency in AS'BUFFER'MANAGER while being used by RFA.	See "Submitting an SR" at the beginning of this manual.
214 ILLEGAL USE OF NODE NAME.	Node doesn't exist or node name is invalid.	Correct node name.
217 NOT ENOUGH STACK SPACE FOR RFA.	the MPE :PREP command allocated the default ;MAXDATA or STACK values to the program, which are too small.	Run the program again with 2000 additional words allocated in the ;STACK=stacksize parameter of :PREP.
224 FILE EQUATIONS FOR REMOTE FILE CONSTITUTE AN INFINITE LOOP.	File equations on the remote machine loop back to the local side causing reverse RFA.	Correct file equations.
239 Network Service TRACING MALFUNCTION.	Tracing malfunction	See "Submitting an SR" at the beginning of this manual.
242 INTERNAL ERROR.	Myriad possibilities.	See "Submitting an SR" at the beginning of this manual.
246 REMOTE NODE DISCONNECTED CONNECTION.	Remote node is no longer running on the network.	Contact the system operator of the remote node.

REMOTE FILE ACCESS ERRORS (cont'd)

Message	Meaning/Cause	Action
249 REMOTE SESSION ENVIRONMENT COULD NOT ADOPT RFA SERVER.	RFA initiation failed.	Ensure that the remote system is running. If so, then see "Submitting an SR" at the beginning of this manual.
255 TRANSPORT ERROR ON CONNECTION.	Connection aborted by IPC/transport.	Ensure that the remote system is running; if so, then see "Submitting an SR" at the beginning of this manual.

REMOTE PROCESS MANAGEMENT ERRORS

RPM errors are (32-bit) integers that are returned in the *result* parameter of the intrinsics RPMCREATE, RPMKILL, 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 3000 implementation of RPM. The first range (0-99) includes generic RPM errors. The second range (100-199) includes errors specific to the HP 3000 implementation.

REMOTE PROCESS MANAGEMENT ERRORS

Message	Meaning/Cause	Action
0 NO ERROR	Successful execution	None
1 NETWORK DOWN	The transport is not available for use by RPM.	Wait until the transport is available.
2 ILLEGAL PROGRAM NAME	The program <i>namelen</i> parameter in an RPMCREATE call is greater than the allowed maximum of 256 (characters).	Shorten the program name.
3 ILLEGAL FLAG	An RPMCREATE call includes a <i>flags</i> parameter with one or more undefined flag bits set.	Correct the <i>flags</i> parameter. The defined flags are: bit 0 - No dslne (3000-specific) bit 1 - Wait until son dies (3000-specific) bit 31 - Dependent
4 ILLEGAL OPTION	An RPMCREATE call includes an <i>opt</i> parameter with one or more invalid options.	Correct the <i>opt</i> parameter. The valid options are: 20000 RPM string 22001-22012, 22100 MPE options
5 ILLEGAL OPTION FORMAT	The <i>opt</i> parameter in an RPMCREATE call is not formatted correctly.	Correct the <i>opt</i> format; use the INITOPT and ADDOPT intrinsics to format the <i>opt</i> array.

REMOTE PROCESS MANAGEMENT ERRORS (cont'd)

Message	Meaning/Cause	Action
6 INVALID LOGIN	<p>This may be caused by several conditions relating to the <i>login</i> (Env) and <i>password</i> parameters of RPMCREATE:</p> <ol style="list-style-type: none"> 1. The <i>login</i> parameter is syntactically incorrect for the remote machine. For the 3000, the logon syntax is: <code>user[/userpass].group [/grouppass].acct [/acctpass]]</code> 2. The <i>password</i> parameter is syntactically incorrect for the remote machine. For the 3000, the password syntax is: <code>[userpass],grouppass [,acctpass]</code> 3. The <i>login</i> and <i>password</i> are syntactically correct, but the login (on the 3000, user, group, or account) is not defined on the remote machine. 4. The <i>login</i> and <i>password</i> parameters do not supply required passwords for the login. 5. The <i>login</i> and <i>password</i> parameters were correct, but the logon failed for some reason (on the 3000: jobfence too high, session limit exceeded). 	<p>Correct the <i>login</i> and <i>password</i> parameters, if necessary. If <i>login</i> and <i>password</i> are correct, determine the reason for the remote logon failure: possibly wait until the remote logon resources are available.</p>
7 INVALID PROGRAM NAME	<p>The program indicated by the <i>progrname</i> (and <i>namelen</i>) parameters of an RPMCREATE was not found on the remote computer.</p>	<p>Correct the <i>progrname</i> (and <i>namelen</i>) 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 <i>login</i>) will be used.</p>

REMOTE PROCESS MANAGEMENT ERRORS (cont'd)

Message	Meaning/Cause	Action
<p>8 INVALID PROGRAM DESCRIPTOR</p>	<p>The program descriptor (<i>pd</i>) 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:</p> <ol style="list-style-type: none"> 1. The <i>pd</i> value was not generated by RPM on the remote node. This would happen if the program descriptor were incorrect or corrupted, or the RPMCREATE that was to return the descriptor failed. 2. The <i>pd</i> 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. 	<p>Depending on the cause:</p> <ol style="list-style-type: none"> 1. Correct the program descriptor. Don't issue an RPMKILL when the RPMCREATE failed. 2. Don't issue an RPMKILL if the created process is supposed to terminate itself. Don't issue more than one RPMKILL for the same process.

REMOTE PROCESS MANAGEMENT ERRORS (cont'd)

Message	Meaning/Cause	Action
9 REMOTE PROCESS LIMIT	<p>A resource needed to create the process is not available. On a remote HP 3000 (or the local HP 3000 if the created process is local), this can include:</p> <ol style="list-style-type: none"> 1. Process Control Block entry for created process 2. stack space for created process 3. RPM Table entry for created process 4. pseudo terminal for created session <p>On the local HP 3000, some resources needed for a process creating a dependent process may not be available:</p> <ol style="list-style-type: none"> 5. RPM Table entry for creator process 6. AFT entry in creator process' stack 	<p>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.</p>

REMOTE PROCESS MANAGEMENT ERRORS (cont'd)

Message	Meaning/Cause	Action
10 REMOTE MEMORY LIMIT	<p>Memory was not available for storage of data. The possible reasons for this include:</p> <ol style="list-style-type: none"> 1. RPM String could not be stored 2. buffers in the RPM server could not be allocated 	Wait until the resource(s) become available.
11 PROGRAM ACCESS ERROR	<p>The program to be created by an RPMCREATE could not be accessed. This may be due to one of the following reasons:</p> <ol style="list-style-type: none"> 1. The program file is secured against access from the <i>login</i> user and account. 2. The program file has a lockword that was not specified in <i>progrname</i>. 3. The program name in <i>progrname</i> is not syntactically correct. 	<p>Depending on the cause:</p> <ol style="list-style-type: none"> 1. Change the program file's security or the <i>login</i> user and account to allow Execute access to the program. 2. Insert the program file's lockword into the <i>progrname</i> parameter. The syntax is: <code>progrname/lockword [.group[.acct]]</code> 3. Correct the syntax of the <i>progrname</i>.
12 UNKNOWN ERROR	Internal software error. For example, the RPM Table (which is always supposed to be there) was not found.	See "Submitting an SR" at the beginning of this manual.
13 PROTOCOL ERROR	An RPM message is incorrect or has been corrupted.	Turn on tracing for RPM and submit an SR.
14 NETWORK ERROR	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.	Examine the log file and submit an SR.

REMOTE PROCESS MANAGEMENT ERRORS (cont'd)

Message	Meaning/Cause	Action
15 INCOMPATIBLE VERSIONS	The versions of the RPM software on the local and remote computers are incompatible.	Check the versions of the RPM software on the local and remote computers. On a 3000, 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 UNSUPPORTED OPTION	A legal option specified in the <i>opt</i> parameter of the RPMCREATE is not supported by the remote RPM software.	Modify the option, or update the remote RPM software to a version that supports the option.
17 RPMCREATE LENGTH ERROR	An RPMCREATE resulted in a message that could not be handled by the remote node RPM software.	Decrease the size of the RPMCREATE message by shortening the program name or the lengths of options.
18 ILLEGAL OPTION PARAMETER	The value of an option in the <i>opt</i> parameter of an RPMCREATE was invalid.	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 INVALID NODE NAME	The node name specified by the <i>location</i> and <i>loclen</i> parameters of an RPMCREATE call is not a valid node. It may be syntactically incorrect, or it may not be defined in the network.	Correct the <i>location</i> and <i>loclen</i> parameters.

REMOTE PROCESS MANAGEMENT ERRORS (cont'd)

Message	Meaning/Cause	Action
20 NO RPM STRING	<p>A program called the RPMGETSTRING intrinsic, but there was no RPM string to be passed to the program. This could be caused by:</p> <ol style="list-style-type: none"> 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 <i>opt</i> 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. 	<p>Either add the RPM string to the creating process' RPMCREATE call, or remove the RPMGETSTRING from the created program.</p>
22 REMOTE SON ABORTED	<p>The remote process terminated abnormally.</p>	<p>Check the remote program to ascertain what caused the premature termination.</p>
100 INSUFFICIENT STACK SPACE	<p>The program calling RPMCREATE, RPMKILL, or RPMGETSTRING could not expand its stack to accommodate the requirements of the RPM software.</p>	<p>Increase the stack size and/or maxdata of the program and rerun.</p>
101 NOT AT THE STACK	<p>RPMCREATE, RPMKILL, or RPMGETSTRING was called when the DB register was not at the process' stack ("split-stack mode").</p>	<p>Switch the DB register to the process stack before calling any RPM intrinsic.</p>

REMOTE PROCESS MANAGEMENT ERRORS (cont'd)

Message	Meaning/Cause	Action
102 PARAMETER OUT OF BOUNDS	A parameter for an RPMCREATE, RPMKILL, or RPMGETSTRING call was not fully within the stack of the calling process.	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 DL and S.
103 PROGRAM DOES NOT HAVE PH CAPABILITY	A program without PH (Process Handling) capability called RPMCREATE or RPMKILL.	:PREP the program with CAP=PH... and rerun. (Only users with PH capability can :PREP a program with CAP=PH.)
104 REQUIRED PARAMETER OMITTED	A required parameter for RPMCREATE or RPMKILL has been omitted. The required parameters are: RPMCREATE - <i>progrname</i> - <i>namelen</i> RPMKILL - <i>pd</i>	Add the required parameter to the call.
106 RPM OR PTOP PROCESS AT <i>location</i>	An RPM- or PTOP-created process already exists in the remote session specified by the <i>location</i> parameter. Because of the design of the RPM and PTOP services, only one RPM or PTOP process can exist in a remote session.	Terminate the first RPM or PTOP process, or change the <i>location</i> 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 :DSLIN commands to set up the environments; for example: :DSLIN S1=NODE :DSLIN S2=NODE Then use the different environment ids (S1 and S2) in the <i>location</i> parameter of the RPMCREATE(s) (and of a POPEN).

REMOTE PROCESS MANAGEMENT ERRORS (cont'd)

Message	Meaning/Cause	Action
107 LOGON TIME OUT	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 hour (3600.0 seconds) is used.	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. But be forewarned that 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 LOCAL RPM SERVICE NOT STARTED	The local RPM service (RPML) has not been started, or has been stopped and aborted.	Start the local RPM service with :NSCONTROL START=RPML or :NSCONTROL START. (Only users with NM capability can use the :NSCONTROL command.)
111 RPMDAD CREATE ERROR	The remote node was unable to create the RPMDAD process.	Check to verify that RPMDAD.PUB.SYS exists on the remote node. Also check that the process limit has not been exceeded on the remote node.
113 BAD RPMCONTROL STATE	RPMCONTROL was unable to suspend the remote process. Possible reasons include: 1. System process had impeded the remote process. 2. Process is waiting for a system resource.	Call RPMCONTROL again with the suspend option, or attempt to use another method of synchronization such as NetIPC.

NETWORK TRANSPORT PROTOCOL ERRORS

The following errors are returned by Transmission Control Protocol (TCP) and Packet Exchange Protocol (PXP) as the 32-bit integer "PMERR" parameter in calls to IPCCHECK. They are also found in the "parm" field of the TCP/PXP 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 you the user.

NETWORK TRANSPORT PROTOCOL ERRORS

Message	Meaning/Cause	Action
0 NO ERROR	IPCCHECK has been called when no PMERR has occurred. Also returned when a connection or socket is closed at the local user's request. This code is also returned when a connection is shut down gracefully at either end.	None.
1 INTERNAL ERROR	An internal error, e.g. corrupted data structures, has been detected.	See "Submitting an SR" at the beginning of this manual.
2 MAX SOCKETS OPEN	Maximum number of call sockets allowed by TCP are currently open.	Configure a greater number of call sockets in the TCP configuration screen.
3 SHUT PENDING	Protocol module (PM) had previously returned an error stating that a socket should be closed, however the user still attempted to access that socket.	Close the socket.

NETWORK TRANSPORT PROTOCOL ERRORS (cont'd)

Message	Meaning/Cause	Action
4 NODE SHUT PENDING	User attempted to open or use a socket after a NETCONTROL STOP had been issued.	Close the socket.
5 PORT CREATE FAILED	Protocol module (PM) failed in an attempt to create a port.	Ensure that enough Data Segment Tables Entries (DST's) are configured . If so, then see "Submitting an SR" at the beginning of this manual.
6 LOCAL FAILURE	PM detected a protocol error and aborted the connection.	See "Submitting an SR" at the beginning of this manual.
7 MAXIMUM CONNECTIONS OPEN	Maximum number of connections allowed by TCP are currently open.	Configure a greater number of connections in the TCP configuration screen.
8 REMOTE ABORT	The remote side of the TCP connection has closed the connection. However, this does not imply that the shutdown was caused by an error condition.	TCP returns this error code normally, whenever the remote session is aborted (as opposed to gracefully closed.) The local side of the connection receives no clues to the reason for the remote session's closure. If you suspect a remote error then examine the remote node's Node Management (NMLGccccccc) logfile.
9 PACKET SECURITY MISMATCH	Security/Precedence fields of the received packet do not agree with fields of the local TCP.	See "Submitting an SR" at the beginning of this manual.

NETWORK TRANSPORT PROTOCOL ERRORS (cont'd)

Message	Meaning/Cause	Action
<p>10 RETRANSMISSION TIMEOUT</p>	<p>A packet was transmitted the maximum number of times, yet the PM has not received acknowledgement. Timeouts are caused by several conditions:</p> <p>Unacknowledged packets outstanding to a remote node which closed or whose transport has not been started. Excessive system loads during the connection set-up stages. Packets lost due to congestion or lack of buffers on the remote node.</p>	<p>Ensure that the remote node is up and that its transport has started. If so, then take one of the following actions: TCP connection set-up may fail when the remote node is heavily loaded. If this problem persists, configure a larger "Initial Retransmission Interval" in the TCP configuration screen. PXP may also Time Out when the remote node is heavily loaded. If this problem persists, configure a larger "Retransmission Interval" in the PXP configuration screen. Execute SHOWCOM command on remote node and examine BUFF OVERFLOWS field. Occasional buffer overflows do not signify a problem. However, if buffers have overflowed often, or if a series of SHOWCOMs executed over several minutes show that field is increasing, see "Submitting an SR." Examine remote node's console and log file. If Internet Protocol (IP) is logging "Unable to Deliver Packet" messages then configure more inbound buffers in remote node's link configuration data screen. If none of the above conditions apply, increase TCP retransmission interval upperbound or maximum retransmissions parameter. Increase these values in TCP configuration screen. If all else fails see "Submitting an SR."</p>

NETWORK TRANSPORT PROTOCOL ERRORS (cont'd)

Message	Meaning/Cause	Action
11 CONNECTION ASSURANCE TIMEOUT	TCP has not received acknowledgment of its connection assurance (CA) packets. CA packets are sent at intervals over any idle connection to ensure that the remote node is operating. Causes for this error message are the same as those for error 10.	Essentially the same as error 10. If reconfiguration is required, the user should increase the CA maximum number and CA retransmission interval.
13 DESTINATION NOT FOUND IN IP "DIRECTLY CONNECTED NETWORK" TABLE	Network Interface not started on local node or the address is incorrect in the network directory or configuration file.	Ensure that both local and remote networks are started with the :NETCONTROL command. If so, check that the home addresses of local and remote configuration files both specify the same IP network number. Also check local network directory.
14 NO AVAILABLE PATH DESCRIPTORS	User has exceeded the configured number of path descriptor elements.	Configure more path descriptors in the Global configuration screen of the NETXPORT branch.
15 LOOPBACK NETWORK NOT STARTED	User attempted to use the loopback network when it had not been started.	Use the :NETCONTROL command to start the loopback network interface.
16 PXP REQUEST FAILURE	A PXP protocol failure has been detected.	See "Submitting an SR" at the beginning of this manual.

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 the *NS3000/V User/Programmer Reference Manual*.

FPARSE ERROR MESSAGES

FPARSE error codes	Meaning/Cause
-1	Bad item values
-2	Parameter bounds violation
-3	Illegal delimiter--misuse of ".", "/", or ":"
-4	User specified only one of items array or vector array.
-5	Illegal item value in items array
-6	Item list not terminated by the 0 terminator
-7	Undefined system file
-8	"*FDesig" has lockword specified
-9	NS not present, but user specified envvid
-101	First character of filename not alpha
-102	Filename expected in the string
-103	Filename identifier too long
-104	First character of lockword not alpha
-105	Lockword expected in the string
-106	Lockword identifier too long
-107	First character of groupname not alpha

FPARSE ERROR MESSAGES (cont'd)

FPARSE error codes	Meaning/Cause
-108	Groupname expected in the string
-109	Groupname identifier too long
-110	First character of accountname not alpha
-111	Accountname expected in the string
-112	Accountname identifier too long
-113	First character of envidname not alpha
-114	Envidname expected in the string
-115	Envidname identifier too long

The Network Manager uses Node Management Services (NMS) to configure, initialize, and maintain NS3000/V on the HP 3000. The Node Management Services messages are arranged as follows:

- **NETXPORERR** 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.
- **NMCNERR** Messages are written to the console by NMMON and NMLOGMON. NMMON and NMLOGMON are internal processes of the Node Management Services subsystem.
- **NMDUMP** Messages are returned to \$STDLIST when initiating NMDUMP, the NMS Trace/Log File Analyzer. NMDUMP formats logging and tracing records stored on disc files. See the "Log and Trace Files" section in Volume II of the *NS3000/V Network Manager Reference Manual* for information on NMDUMP.
- **NMERR** Messages, **NMFSERR** Messages, and **NMGRERR** Messages. **NMGRERR**s are returned in the message field of the NMMGR Open Configuration Screen. **NMERR**s and **NMFSERR**s are lower-level messages displayed in the Error Information Screen of NMMGR utility. See "The Error Information Screen" later in this section for details. For a description of NMMGR see the "NMS Configurator (NMMGR)" section in Volume I of the *NS3000/V Network Manager Reference Manual*. **NMERR**s are also returned by other subsystems when the subsystems encounter errors using Node Management Services.
- **NDIERR** messages are returned in the message field of the Network Directory Main, Network Directory Select Node Name, and Network Directory Data Configuration screens. These errors can occur as a result of issuing commands from the maintenance mode interface. See the "Network Directory" section in Volume I of the *NS3000/V Network Manager Reference Manual* for more information.
- **NMGRVER** Messages are returned to \$STDLIST when running the NMMGRVER conversion utility of NMS. NMMGRVER converts a configuration file created with earlier versions of NMMGR to the format required by NMMGR version A.01.00. See Appendix C in Volume I of the *NS3000/V Network Manager Reference Manual* for more information on the NMMGRVER conversion utility.
- **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 NS3000/V.
- **VALERR** Messages are returned to \$STDLIST as a result of using the configuration validation screen of NMMGR. See the *NS3000/V Network Manager Reference Manual* for information on using this screen.

NETCONTROL ERRORS (NETXPORTERRS)

NETCONTROL ERRORS (NETXPORTERRS)

Message	Meaning/Cause	Action
TRANSPORT NOT ACTIVE. (NETXPORTWARN 0001)	Issued :NETCONTROL STATUS command on inactive transport.	Issue :NETCONTROL START.
TRACE FILE IS !. (NETXPORT 2000)	Informative message.	None.
TOO MANY PARMS IN COMMAND LINE. (NETXPORTERR 4000)	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.	Check <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
EXPECTED STATUS KEYWORD ALL (NETXPORTERR 4002)	Typographical error.	Type the word ALL after STATUS=. Correct and retry.
EXPECTED SEMICOLON (NETXPORTERR 4003)	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.	Check <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
INVALID NETCONTROL KEYWORD: EXPECTED START, STOP, TRACEON, TRACEOFF, MONON, MONOFF, STATUS, VERSION, NET, OR NI. (NETXPORTERR 4004)	Only the keywords listed are allowed.	Check the <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
EXPECTED COMMA. (NETXPORTERR 4005)	Trace options are positional. They must be separated by commas.	Check the <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
EXPECTED EQUAL. (NETXPORTERR 4006)	For TRACEON= <i>Type</i> , the type is a required parameter, one of H,D,M,B,N,S.	Check the <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.

NETCONTROL ERRORS (NETXPORTERRS) (cont'd)

Message	Meaning/Cause	Action
KEYWORD SPECIFIED REDUNDANTLY. (NETXPORTERR 4008)	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.	Check the <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
BOTH START AND STOP ISSUED. (NETXPORTERR 4009)	Both parameters not allowed in a single :NETCONTROL command.	Pick appropriate command. Correct and retry.
TRACE ENTITY SPECIFIED REDUNDANTLY. (NETXPORTERR 4010)	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.	Check the <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
INVALID TRACE TYPE. EXPECTED COMBINATION OF D,H,M,B,N,S. (NETXPORTERR 4011)	Usually a typographical error. Recommended combination for trace type is HMD.	Check the <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
INVALID TRACE DESTINATION. EXPECTED DISC OR TAPE. (NETXPORTERR 4012)	Usually a typographical error. DEFAULT: Disc.	Check the <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
INVALID FILE NAME. (NETXPORTERR 4013)	Usually a typographical error.	Check the <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Ensure file exists. Correct and retry.
INVALID RECORD SIZE, MUST BE > 5 AND < 1024. (NETXPORTERR 4014)	Trace file record size specified in command line parameter is too large or too small.	Correct with valid value; retry.
INVALID FILE SIZE, MUST BE > THAN 32 AND < 32000. (NETXPORTERR 4015)	Trace file size specified in command line parameter is too large or too small.	Correct with valid value; retry.
CONTROL PROCESS NOT STARTED (NMERR= !) (NETXPORTERR 4016)	User issued a command when the transport was not active.	Issue :NETCONTROL START. Then retry command.

NETCONTROL ERRORS (NETXPORTERRS) (cont'd)

Message	Meaning/Cause	Action
DATA DICTIONARY FULL, TRY AGAIN. (NETXPORTERR 4017)	Data dictionary full.	Wait, then reissue command. If the problem persists, then see "Submitting an SR" at the beginning of this manual.
EXPECTED STOP KEYWORD. (NETXPORTERR 4018)	User typed an illegal command. NET= <i>niName</i> must be combined with START or STOP.	Check <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
BAD NAME. NAME MUST BE ALPHANUMERIC WITH FIRST CHARACTER ALPHA. (NETXPORTERR 4019)	Usually a typographical error. Only valid MPE filenames allowed.	Correct name using an alphanumeric character for the first character, and retry command.
CONTROL PROCESS TIMEOUT, TRY AGAIN. (NETXPORTERR 4020)	Usually a temporary timeout on a loaded system.	Wait and try again; if problem persists, then see "Submitting an SR" at the beginning of this manual.
TRACE OPEN ERROR. (NETXPORTERR 4021)	Usually, you're trying to open a trace on an already opened trace file.	Ensure that the trace file exists and is open. If it exists and is not open, then see "Submitting an SR" at the beginning of this manual.
TRANSPORT IS ACTIVE, CONFIGURATION FILE IS NOT ALLOWED. (NETXPORTERR 4022)	The configuration file may only be specified on the initiation command that creates the control process.	Shut down the transport; then issue the command NETCONTROL START; with CONF= <i>filename</i> .
BAD DEBUG VALUE, EXPECTED SET(0-31) OR RST(0-31). (NETXPORTERR 4023)	Invalid DEBUG value	The DEBUG keyword command is not for customer use. Contact your HP representative.
BOTH MONON AND MONOFF ISSUED. (NETXPORTERR 4024)	The MONON and MONOFF parameters cannot appear on the same command line.	Pick the appropriate MON parameter; reissue the :NETCONTROL command.
NET NOT ALLOWED WITH PROT. (NETXPORTERR 4025)	The two entities (NET and PROT) cannot be used together.	Pick appropriate entity and reissue command.
EXPECTED VERSION KEYWORD MOD. (NETXPORTERR 4026)	User typed an illegal command.	Type word MOD after VERSION=.

NETCONTROL ERRORS (NETXPORTERRS) (cont'd)

Message	Meaning/Cause	Action
PARAMETER NOT ALLOWED WITH STOP. (NETXPORTERR 4027)	Only NET= <i>niName</i> is allowed with STOP.	Check <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
FOPEN FAILED ON NETMSG.NET.SYS. (NETXPORTERR 4028)	Usually appears with an MPE command.	Fix the MPE error. Ensure that the NETMSG file exists; if it does, then see "Submitting an SR" at the beginning of this manual.
MESSAGE CATALOG ERROR ON NETMSG.NET.SYS (NETXPORTERR 4029)	Usually appears with an MPE command.	Fix the MPE error. Ensure that the NETMSG file exists; if it does, then see "Submitting an SR" at the beginning of this manual.
OBJECT REQUIRED FOR ONE OR MORE FUNCTION KEYWORDS. (NETXPORTERR 4032)	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.	Check <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
NO FUNCTION KEYWORD ENTERED. (NETXPORTERR 4033)	User typed an illegal command. Specifying an entity requires a function to act on it.	Check <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
TRACE PREVIOUSLY ENABLED. (NETXPORTERR 4034)	Informative message.	None.
ENTITY WAS NOT TRACING. (NETXPORTERR 4035)	Informative message.	None.
MONITOR PREVIOUSLY ENABLED. (NETXPORTERR 4036)	Informative message.	None.
ENTITY WAS NOT MONITORING. (NETXPORTERR 4037)	Informative message.	None.

NETCONTROL ERRORS (NETXPORTERRS) (cont'd)

Message	Meaning/Cause	Action
VERSION ERROR: FIX NUMBERS DIFFER (NETXPORTERR 4040)	Network Transport software module version numbers do not match.	Issue the :NETCONTROL VERSION=MOD command to see which numbers do not match, then see "Submitting an SR" at the beginning of this manual.
VERSION ERROR: UPDATE NUMBERS DIFFER (NETXPORTERR 4041)	Network Transport software module version numbers do not match.	Issue the :NETCONTROL VERSION=MOD command to see which numbers do not match, then see "Submitting an SR" at the beginning of this manual.
VERSION ERROR: VERSION NUMBERS DIFFER. (NETXPORTERR 4042)	Network Transport software module version numbers do not match.	Issue the :NETCONTROL VERSION=MOD command to see which numbers do not match, then see "Submitting an SR" at the beginning of this manual.
VERSION ERROR: MISSING REQUIRED MODULE (S). (NETXPORTERR 4043)	Either missing software module or possible internal error.	Issue the NETCONTROL VERSION=MOD command to find out which module is missing.
VERSION ERROR: BAD MODULE (S). (NETXPORTERR 4044)	There may be no version stamp; file label may be overwritten, or possible bad software installation.	See "Submitting an SR" at the beginning of this manual.
ALREADY STARTED. (NETXPORTERR 4045)	:NETCONTROL START command issued for an already active entity.	None.
NOT STARTED. (NETXPORTERR 4046)	:NETCONTROL STOP command issued for an inactive entity.	None.
! : TOO MANY MESSAGES TO BE DISPLAYED. (NETXPORTERR 4047)	Error message buffer filled.	Fix error messages that were displayed; retry command.
PROTOCOL IS NOT ACTIVE. (NETXPORTERR 4048)	Trace issued on an inactive protocol.	Check configuration file. All protocols must be configured.

NETCONTROL ERRORS (NETXPORTERRS) (cont'd)

Message	Meaning/Cause	Action
THIS COMBINATION OF FUNCTIONS AND ENTITIES NOT ALLOWED. (NETXPORTERR 4049)	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.	Check <i>NS3000/V Network Manager Reference Manual</i> for proper syntax. Correct and retry.
! NOT CONFIGURED. (NETXPORTERR 4050)	The protocol or NI(named) is not configured.	Alter the configuration file appropriately, shut down the transport, and reconfigure.
NAME LONGER THAN 8 CHARACTERS. (NETXPORTERR 4051)	Usually a command line syntax error.	Rename if necessary; retype and retry.
COMMAND NOT EXECUTED DUE TO VERSION MISMATCH. (NETXPORTERR 4052)	Missing software modules or module version number mismatch.	Issue the :NETCONTROL VERSION=MOD command for more information. See "Submitting an SR" at the beginning of this manual.
THE ENTITY IS NOT ACTIVE. (NETXPORTERR 4054)	Issued a NETCONTROL STATUS command on an inactive entity.	None.
INTERNAL ERROR ON STATUS. (NETXPORTERR 4055)	:NETCONTROL STATUS error.	Wait and try again; if problem persists, see "Submitting an SR" at the beginning of this manual.
DEVICE ALREADY STARTED. (NETXPORTERR 4056)	:NETCONTROL ADDLINK command issued for a device already started.	None.
DEVICE NOT STARTED. (NETXPORTERR 4057)	:NETCONTROL DELLINK command issued for an inactive device.	None.
NETWORK NOT STARTER... X.25 NOT INSTALLED. (NETXPORTERR 4058)	:NETCONTROL START was issued for an X.25 network, but the X.25 software is not installed.	Install X.25 or use a different network type.

NETCONTROL ERRORS (NETXPORTERRS) (cont'd)

Message	Meaning/Cause	Action
<p>CONFIGURATION FILE NOT VALID. (NETXPORTERR 4061)</p>	<p>Validation errors occurred on a NETCONTROL START or UPDATE commands.</p>	<p>Correct the invalid parameters in your configuration file and try again.</p>
<p>UNABLE TO LOCK CONFIGURATION FILE. NMERR=! (NETXPORTERR 4062)</p>	<p>Unable to lock the configuration file for execution of a NETCONTROL START or UPDATE.</p>	<p>Wait and try again; if problem persists see "Submitting an SR" at the beginning of this manual.</p>

NMCNERR ERRORS

The first seven NMCNERR messages are written to the console by the NMMON process. The remainder of NMCNERR messages are written by one of the NMLOGMON processes to the console. "NM Log Monitor" messages are returned by the "Main Log Monitor"; this is the first NMLOGMON process created and later handles most tracing. "NM Log Process" messages are returned by the "Log type Monitor," which is the NMLOGMON process that handles logging.

NMCNERR MESSAGES

Message	Meaning/Cause	Action
NMMON: Unable to allocate area for port table. (NMCNERR 1)	NMMON is unable to expand the DL-DB area in its stack.	See "Submitting an SR" at the beginning of this manual.
NMMON: Unable to obtain port data segment. (NMCNERR 2)	INITPORTDST returned a DST number of 0. The system is unable to allocate any extra data segments.	See "Insufficient MPE Resources" at the beginning of this manual.
NMMON: Unable to create port in data segment. (NMCNERR 3)	CREATEPORT returned a PORTID of 0.	See "Submitting an SR" at the beginning of this manual.
NMMON: Unable to add port dictionary entry. (NMCNERR 4)	DICTADD returned a non-zero result.	See "Submitting an SR" at the beginning of this manual.
NMMON: Unable to create NMFILE process. (NMCNERR 5)	<p>CREATEPROCESS failed for NMFILE.</p> <ol style="list-style-type: none"> 1. The NMFILE.PUB.SYS program file might not be present, or might be corrupted. 2. The NMFILE program file might not be load-able. This could happen if the NMS software is not correctly installed, or if there is a mismatch between NMFILE and SL module versions, or there are other MPE limitations such as insufficient table space. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Invalid Software Installation" at the beginning of this manual. See "Insufficient MPE Resources" at the beginning of this manual.

NMCNERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>NMMON: Unable to create NMLOGMON process. (NMCNERR 6)</p>	<p>CREATEPROCESS failed for NMLOGMON.</p> <ol style="list-style-type: none"> 1. The NMLOGMON.PUB.SYS program file might not be present, or might be corrupted. 2. The NMLOGMON program file might not be load-able. This could happen if the NMS software is not correctly installed, or if there is a mismatch between NMLOGMON and SL module versions, or there are other MPE limitations such as insufficient table space. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Invalid Software Installation" at the beginning of this manual. See "Insufficient MPE Resources" at the beginning of this manual.
<p>NMMON: NMS version mismatch. NMS-based datacomm unavailable. (NMCNERR 7)</p>	<p>A version problem has been detected with the NMS software on the system. Rather than continue and possibly cause system integrity problems, NMMON has stopped NMS and NMS-based datacomm initialization. All datacomm services that depend on NMS services are unavailable.</p>	<p>See "Invalid Software Installation" at the beginning of this manual.</p>
<p>NM Log Monitor: Another MainLogMonitor exists. This one terminating. (NMCNERR 16)</p>	<p>A main Log Monitor process has found its entry already exists in the port dictionary.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>NM Log Monitor: Unable to obtain port data segment. (NMCNERR 17)</p>	<p>INITPORTDST returned a DST number of 0. The system is unable to allocate any extra data segments.</p>	<p>See "Insufficient MPE Resources" at the beginning of this manual.</p>
<p>NM Log Monitor: Unable to create port in data segment. (NMCNERR 18)</p>	<p>CREATEPORT returned a PORTID of 0.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>

NMCNERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
NM Log Monitor: Unable to add port dictionary entry. (NMCNERR 19)	DICTADD returned a non-zero result.	See "Submitting an SR" at the beginning of this manual.
NM Log Monitor: Unable to add to NM Monitor port table. (NMCNERR 20)	NMMONADDID failed for MainLogMonitor.	See "Submitting an SR" at the beginning of this manual.
NM Log Monitor: Unable to create user logging data segment. (NMCNERR 21)	Main Log Monitor is unable to acquire an extra data segment.	See "Insufficient MPE Resources" at the beginning of this manual.
NM Log Monitor: Unable to create trace dictionary data segment. (NMCNERR 22)	Main Log Monitor is unable to acquire an extra data segment.	See "Insufficient MPE Resources" at the beginning of this manual.
NM Log Monitor: Input/Output error in accessing the system disc cold load area. (NMCNERR 23)	An error occurred trying to access the system disc cold load area, which stores the next NMLGnnnn and NMTCnnnn file numbers. Check for other error indications that may affect this area of disc, such as disc I/O errors.	See "Submitting an SR" at the beginning of this manual.
NM Log Monitor: Illegal parameter passed; create failed. (NMCNERR 24)	Create failed.	See "Submitting an SR" at the beginning of this manual.
NM Log Monitor: Unable to create NM Log Process. (NMCNERR 25)	NM Log Process not created.	See "Submitting an SR" at the beginning of this manual.
NM Log Monitor: Internal error trying to set up NMS logging. (NMCNERR 26)	Written by Main LogMon to console. Error occurred trying to set up tables for NMS logging process (Log Proc).	See "Submitting an SR" at the beginning of this manual.

NMCNERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
NM Log Process: Unable to obtain port data segment. (NMCNERR 30)	INITPORTDST returned a DST number of 0. The system is unable to allocate any extra data segments.	See "Insufficient MPE Resources" at the beginning of this manual.
NM Log Process: Unable to create port in data segment. (NMCNERR 31)	CREATEPORT returned a PORTID of 0.	See "Submitting an SR" at the beginning of this manual.
NM Log Process: Unable to add port dictionary entry. (NMCNERR 32)	DICTADD returned a non-zero result.	See "Submitting an SR" at the beginning of this manual.
NM Log Process: Unable to add to NM Monitor port table. (NMCNERR 33)	NMMONADDID failed for MainLogMonitor.	See "Submitting an SR" at the beginning of this manual.
NM Log Process: Unable to create logging buffer data segment. (NMCNERR 34)	NM Log Process is unable to acquire an extra data segment.	See "Insufficient MPE Resources" at the beginning of this manual.
NMLG FILE NUMBER <i>nnnn</i> ERROR # <i>nnn</i> . NM LOGGING STOPPED. (NMCNERR 36)	<ol style="list-style-type: none"> 1. If ERROR # is > 1, this is the file system error that occurred when accessing file NMLG<i>nnnn</i>, where <i>nnnn</i> is the file number specified. 2. If ERROR # is 1, refer to NMCNERR 23. 	1. Correct this problem, then type RESUMENLOG.
NMLG FILE NUMBER <i>nnnn</i> ERROR # <i>nnn</i> . NM LOGGING SUSPENDED. (NMCNERR 38)	<ol style="list-style-type: none"> 1. If ERROR # is > 1, this is the file system error that occurred when accessing file NMLG<i>nnnn</i>, where <i>nnnn</i> is the file number specified. 2. If ERROR # is 1, refer to NMCNERR 23. 	1. Correct this problem, then type RESUMENLOG.

NMCNERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
UNABLE TO ACCESS NMLG FILE NUMBER <i>nnnn</i> . (NMCNERR 42)	The log buffer indicates the logging state is normal or suspended, but it contains a current file number of zero, or FFILEINFO returned a <> condition on the file.	Try RESUMENMLOG. If SHOWNMLOG after this gives this message again, try re-booting the system to force logging to open a new NMLG <i>nnnn</i> file.
NM Log Process: Unable to create log dictionary data segment. (NMCNERR 44)	NM Log Process is unable to acquire an extra data segment.	See "Insufficient MPE Resources" at the beginning of this manual.
NM Log Process: Cannot format log msg. Cannot access formatter for subsystem <i>nn</i> . (NMCNERR 45)	A request to write a formatted log message specifies a subsystem number that Log Process was unable to LOADPROC the formatter for when Log Process first started.	The SUBSYS <i>n</i> LOGFORMA procedure, where <i>n</i> is the subsystem number specified in the message, either did not exist in SL.PUB.SYS or could not be loaded when NM Log Process started. Check that subsystem <i>n</i> is completely, correctly installed. See chart below.

NMCNERR MESSAGES (cont'd)

<i>nn</i>	Subsystem
0	Node Management Services (32099-11017)
1	SNA Transport (32099-11015)
2	SNA/NRJE (Product #30245)
3	Network Transport (Product #30242)
4	Port Translator (32099-11017)
5	Sockets
6	Network Services (Product #32344)
7	Buffer Manager (32099-11016)
8	Link Manager (part of Node Management Services)
9	Reserved for future use
10	Reserved for future use
11	SNA/IMF
12/15	Reserved for future use

NMCNERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
NM Log Process: Cannot format log msg. Unknown subsystem <i>nn</i> . (NMCNERR 46)	A request to write a formatted log message specifies a subsystem number outside the bounds $0 \leq n \leq 15$.	This is an internal error. See "Submitting an SR" at the beginning of this manual.
NMLG FILES <i>nnnnn</i> THRU <i>nnnn</i> SKIPPED. (NMCNMSG 47)	NM log files <i>nnnnn</i> thru <i>nnnn</i> were skipped over when NM Log Process tried to open a new disc log file. Files <i>nnnnn</i> thru <i>nnnn</i> already exist. This is an information message only; no error occurred.	None.
NMLG FILES 0000 THRU 9999 ALL USED, NONE AVAILABLE FOR NEXT LOGFILE. (NMCNERR 48)	NM Log Process finds that files NMLG0000 thru NMLG9999 all already exist. It is more likely that a directory problem or an internal problem exists.	See "Submitting an SR" at the beginning of this manual.
MainLogMon: NMGLOBAL file found, purged. (NMCNMSG 49)	Privileged file NMGLOBAL.PUB.SYS was found. This file is not needed in this version of NMS software. The file information is transferred to the Cold Load area of disc, and the file is purged.	None. Informative message.
NM Log Process: Cannot access NMCAT.PUB.SYS to format a log and message. (NMCNERR 50)	NM log process could not open the message catalog to format a logging message.	See "Invalid Software Installation" at the beginning of this manual.
NM Log process: Logging class <i>nn</i> not configured for subsystem <i>nn</i> in <i>nn</i> (NMCNERR 51)	Console message written by NMS logging server process. The subsystem has tried to write a log message to a class not configured by the specified configuration file. The log message is considered lost.	Stop all instances of that subsystem from running on the system. Using NMMGR, add the specified logging class under that subsystem ID in the logging configuration file of the specified configuration file, and retry.

NMDUMP ERROR MESSAGES

NMDUMPERR MESSAGES

Message	Meaning/Cause	Action
Unable to retrieve text of message #! of set #! from the message catalog. (NMDUMPERR 0)	<p>This message is actually not returned by the message catalog, but by the program, if the error message requested to be returned cannot be retrieved by the program.</p> <p>(1) There is no message catalog, NMCAT.PUB.SYS.</p> <p>(2) The message catalog is not valid (corrupt).</p> <p>(3) The version of the NMS message catalog on the system is not compatible with the current NMS software.</p> <p>(4) File system error.</p> <p>(5) Problem accessing and retrieving information from message catalog.</p> <p>(6) An internal error in the NMDUMP program.</p>	<p>(1,2) Verify that the message catalog exists and is valid.</p> <p>(3) Verify that the version of NMCAT.PUB.SYS is compatible with the current NMS software.</p> <p>(4,5,6) See "Submitting an SR" at the beginning of this manual.</p>
Data type must be 1 or 2. (NMDUMPERR 1)	User responded incorrectly to prompt for data type.	Correct input and re-enter.
Invalid subsystem ID entered. (NMDUMPERR 2)	User responded incorrectly to prompt for subsystem ID.	Correct input and re-enter.
Input must be YES or NO. (NMDUMPERR 3)	User responded incorrectly to a prompt requiring a Y or N answer. "Y", "YES", "y", "yes" are allowed for Y. "N", "NO", "n", "no" are allowed for N.	Correct input and re-enter.

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
ERROR - file is not of log type. (NMDUMPERR 4)	User specified that she wanted to format a log file, but the input file specified was not type NLOG.	(1) Check spelling of file name. (2) Check file's type code. (3) Correct input and re-enter.
ERROR - file is not of trace type. (NMDUMPERR 5)	User specified that she wanted to format a trace file, but the input file specified was not type NTRAC.	(1) Check spelling of filename. (2) Check file's type code. (3) Correct input and re-enter.
Invalid date and time string entered. (NMDUMPERR 6)	(1) User entered an invalid date and/or time. (2) User entered the date and/or time in improper format. For files that have the same starting and finishing date enter the time in the form HH:MM, using the conventions for a 24-hour clock. (For example, 3:25 PM is 15:25 on a 25 - hour clock.) For files that have different starting and finishing dates, enter the date and time in the form MM/DD/YY, HH:MM (for example, 7/25/85, 18:30).	Correct input and re-enter.
Time not within time range of file. (NMDUMPERR 7)	User entered a date and/or time that is beyond the time range of the input file.	Correct input and re-enter.
Finishing time earlier than starting time. (NMDUMPERR 8)	User entered a finishing date and time that was earlier than the starting date and time.	Correct input and re-enter.

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>ERROR - unexpected end of input data file. (NMDUMPERR 20)</p>	<p>EOF was reached at an unexpected point in the input file.</p> <p>(1) There was a system failure while tracing/logging was enabled and the file was closed improperly.</p> <p>(2) An internal error in the NMS trace/log facility or the NMDUMP facility.</p> <p>(3) Data file has become corrupt.</p>	<p>(1) Attempt to re-log or re-trace the error situation.</p> <p>(2) See "Submitting an SR" at the beginning of this manual.</p> <p>(3) Attempt to recreate the trace or log file.</p>
<p>ERROR occurred during output of file header. (NMDUMPERR 21)</p>	<p>Bad status was returned from NMWRITE when trying to output the file header to the output file.</p> <p>(1) A file system error occurred.</p> <p>(2) An internal error in NMWRITE.</p>	<p>(1a) Attempt to find out what file system error occurred.</p> <p>(1b) Rerun NMDUMP and see if error occurs.</p> <p>(2) Rerun NMDUMP. If the same problem occurs. see "Submitting an SR" at the beginning of this manual.</p>

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>No data records, from the subsystems selected, were found in the input file. (NMDUMPERR 22)</p>	<p>There were no data records in the input file that had a subsystem ID which matched one of the subsystems selected by the user.</p> <p>(1) No records were logged/traced to the file from the selected subsystems.</p> <p>(2) If the input file is a log file, logging for the subsystems selected may not be enabled.</p> <p>(3) An internal error in the NMS trace/log facility or the NMDUMP facility.</p>	<p>(1) None</p> <p>(2) Check the logging configuration portion of NMCONFIG.PUB.SYS to ensure that logging to disc is enabled for the subsystem(s) and log class(es) desired. If it is not, make the appropriate changes to the configuration file through NMMGR.PUB.SYS.</p> <p>(3) See "Submitting an SR" at the beginning of this manual.</p>

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>No data records, from the subsystem selected, were found within the time selected. (NMDUMPWARN 23)</p>	<p>There were no data records in the input file that had a subsystem ID which matched one of the subsystems selected by the user.</p> <p>(1) No records were logged/traced to the file from the selected subsystems during the time range specified.</p> <p>(2) If the input file is a log file, logging for the subsystems selected may not be enabled.</p> <p>(3) An internal error in the NMS trace/log facility or the NMDUMP facility.</p>	<p>(1) None</p> <p>(2) Check the logging configuration portion of NMCONFIG.PUB.SYS to ensure that logging to disc is enabled for the subsystem(s) and log class(es) desired. If it is not, make the appropriate changes to the configuration file through NMMGR.PUB.SYS.</p> <p>(3) See "Submitting an SR" at the beginning of this manual.</p>
<p>ERROR - invalid data record in trace file. (NMDUMPERR 24)</p>	<p>NMDUMP did not find appropriate data record information where expected.</p> <p>(1) There was a system failure while tracing was enabled and the file was closed improperly.</p> <p>(2) An internal error in the NMS trace facility or the NMDUMP facility.</p> <p>(3) Data file has become corrupt.</p>	<p>(1) Attempt to re-trace the error situation.</p> <p>(2) See "Submitting an SR" at the beginning of this manual.</p> <p>(3) Attempt to recreate the trace file.</p>

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>ERROR - invalid data record in log file. (NMDUMPERR 25)</p>	<p>NMDUMP did not find appropriate data record information where expected.</p> <p>(1) There was a system failure while logging was enabled and the file was closed improperly.</p> <p>(2) An internal error in the NMS log facility or the NMDUMP facility.</p> <p>(3) Data file has become corrupt.</p>	<p>(1) Attempt to re-trace the error situation.</p> <p>(2) See "Submitting an SR" at the beginning of this manual.</p> <p>(3) Attempt to recreate the log file.</p>
<p>ERROR - invalid trace data file. (NMDUMPERR 26)</p>	<p>NMDUMP did not find appropriate data record header information where expected.</p> <p>(1) There was a system failure while tracing was enabled and the file was closed improperly.</p> <p>(2) An internal error in the NMS trace facility or the NMDUMP facility.</p> <p>(3) Data file has become corrupt.</p>	<p>(1) Attempt to re-trace the error situation.</p> <p>(2) See "Submitting an SR" at the beginning of this manual.</p> <p>(3) Attempt to recreate the trace file.</p>

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>ERROR - invalid log data file. (NMDUMPERR 27)</p>	<p>NMDUMP did not find appropriate data record header information where expected.</p> <p>(1) There was a system failure while logging was enabled and the file was closed improperly.</p> <p>(2) An internal error in the NMS log facility or the NMDUMP facility.</p> <p>(3) Data file has become corrupt.</p>	<p>(1) Attempt to re-trace the error situation.</p> <p>(2) See "Submitting an SR" in the front of this manual.</p> <p>(3) Attempt to recreate the log file.</p>
<p>EOF was reached on the output file. The output listing is incomplete. (NMDUMPWARN 28)</p>	<p>The output disc file was not built large enough to hold the full dump listing.</p>	<p>(1) Redirect the output to a non-disc file, or</p> <p>(2) Increase the number of records in the output file with a FILE equation or BUILD command.</p>
<p>ERROR occurred during output of formatted data record. (NMDUMPERR 29)</p>	<p>Bad status was returned from a subsystem formatter when trying to output a data record with the help of NMWRITE.</p> <p>(1) A file system error occurred when NMWRITE was trying to write to the output file. (A probable file system error in this case would be "out of disc space".)</p> <p>(2) An internal error in NMWRITE.</p>	<p>(1a) Verify that the system is at least NOT "out of space".</p> <p>(1b) Re-run NMDUMP and see if the same error occurs.</p> <p>(2) Re-run NMDUMP. If the same problem occurs, see "Submitting an SR" at the beginning of this manual.</p>

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Invalid trace destination specified in global header. Reassigned according to file characteristics. (NMDUMPWARN 30)</p>	<p>(1) An internal error in the NMS trace facility which caused bad data to be written to the data file.</p> <p>(2) Data file has become corrupt.</p>	<p>(1) No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may wish to file an SR regarding the trace facility. If so, see "Submitting an SR" at the beginning of this manual.</p> <p>(2) No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.</p>
<p>No data records in the input file. (NMDUMPWARN 31)</p>	<p>If a log file, the block word count of the first block in the log file = 0, or the record length of the first data record = 0. If a trace file, the record length of the first disc trace (start or continuation) record = 0.</p> <p>(1) No data records were logged/traced to the data file.</p> <p>(2) An internal error in the NMS trace/log facility or the NMDUMP facility.</p> <p>(3) Data file has become corrupt.</p>	<p>(1) None</p> <p>(2) See "Submitting an SR" at the beginning of this manual.</p> <p>(3) Attempt to recreate the data file.</p>

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>No additional data records are in the input file. (NMDUMPWARN 32)</p>	<p>If a log file, the block word count of a block, other than the first, =0, or the record length of a data record, other than the first, =0. If a trace file, the record length of a disc tract (start or continuation) record, other than the first, =0.</p> <p>(1) It is the end of file.</p> <p>(2) An internal error in the NMS trace/log facility or the NMDUMP facility.</p> <p>(3) Data file has become corrupt.</p>	<p>(1) None</p> <p>(2) See "Submitting an SR" at the beginning of this manual.</p> <p>(3) Attempt to recreate the data file.</p>
<p>An out-of-range block length was found. It was reassigned the maximum allowable value, 1024. (NMDUMPWARN 33)</p>	<p>The block word count of a log file is beyond the maximum allowable value. The value was reassigned by NMDUMP.</p> <p>(1) An internal error in the NMS log facility which caused bad data to be written to the log data file.</p> <p>(2) Log data file has become corrupt.</p>	<p>(1) No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may want to submit an SR regarding the log facility. If so, see "Submitting an SR" at the beginning of this manual.</p> <p>(2) No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.</p>

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>An out-of-range data record length was found. It was reassigned the maximum allowable value, 2046. (NMDUMPWARN 34)</p>	<p>A data record length (beyond the maximum allowable value) was found in the log file. Its value was reassigned by NMDUMP.</p> <p>(1) An internal error in the NMS log facility which caused bad data to be written to the log data file.</p> <p>(2) Log data file has become corrupt.</p>	<p>(1) No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may wish to submit an SR regarding the log facility. If so, see "Submitting an SR" at the beginning of this manual.</p> <p>(2) No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.</p>
<p>An out-of-range start data record length was found. It was reassigned the maximum allowable value, 8192. (NMDUMPWARN 35)</p>	<p>A data record length (beyond the maximum allowable value) was found in the trace file. Its value was reassigned by NMDUMP.</p> <p>(1) An internal error in the NMS trace facility which caused bad data to be written to the trace data file.</p> <p>(2) Trace data file has become corrupt.</p>	<p>(1) No action actually needed. NMDUMP recovers from such an error in the data file. However, an SR may be filed against the log facility. Refer to "Submitting an SR" at the beginning of this manual.</p> <p>(2) No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.</p>

NMDUMPERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>An out-of-range continuation data record length was found. It was reassigned the maximum allowable value. (NMDUMPWARN 36)</p>	<p>(1) An internal error in the NMS trace facility which caused bad data to be written to the trace data file.</p> <p>(2) Trace data file has become corrupt.</p>	<p>(1) No action is actually needed. NMDUMP recovers from such an error in the data file. However, an SR may be filed against the log facility. Refer to "Submitting an SR" at the beginning of this manual.</p> <p>(2) No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.</p>

THE ERROR INFORMATION SCREEN

The Error Information Screen displays the last error that NMMGR encountered and the associated error messages, if any. It does not display the prompts that are a result of entering invalid data types in fields. This screen is displayed when you type ERRORS in the command window of any screen and press **ENTER**.

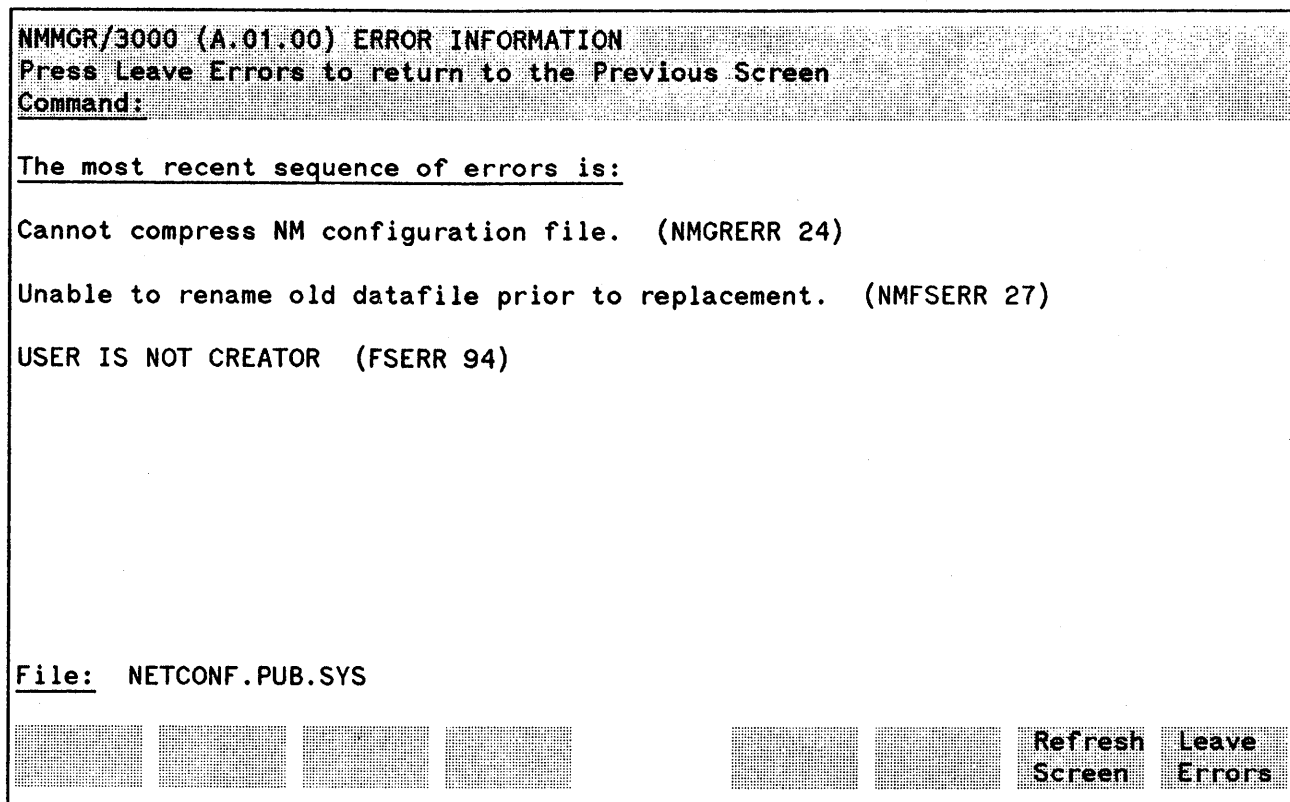


Figure 3-1. Error Information Screen

In the example shown in Figure 3-1, a user tried to open the NETCONF.PUB.SYS utility used to configure the DS X.25 link instead of a copy of the NSCONF.NET.SYS configuration file used for the ThickLAN link. The first line shows the NMMGR error that was originally displayed in the message field of the Open Configuration File screen. The other error messages displayed are from the NMS File System. In examining these error messages, the user finds that the file code of the file specified is not correct, which helps to identify why NMMGR was unable to open the configuration file.

In most cases, the NMMGR error message displayed in the screen message line contains sufficient information to correct the error and continue operation; you do not need to use the Error Information Screen. However, if you do not know the cause of the error, or if a more serious error is encountered, you may use the Error Information Screen to check if there are any other error messages associated with the NMMGR error. There can be up to five levels of error messages displayed in the Error Information Screen depending on where in the underlying software the error occurred. An example of the hierarchy of errors returned by NMS is shown in Figure 3-2. The top level is the NMMGR error message. The middle levels are from the configuration file access software provided by NMS. It is also used by subsystems, such as the Network Transport, when accessing the configuration file during operation. In other cases, there may be an error returned by the MPE File System if there is an error while reading or

writing the configuration file; or an error may be returned by VPLUS/3000 if there is an error in screen processing.

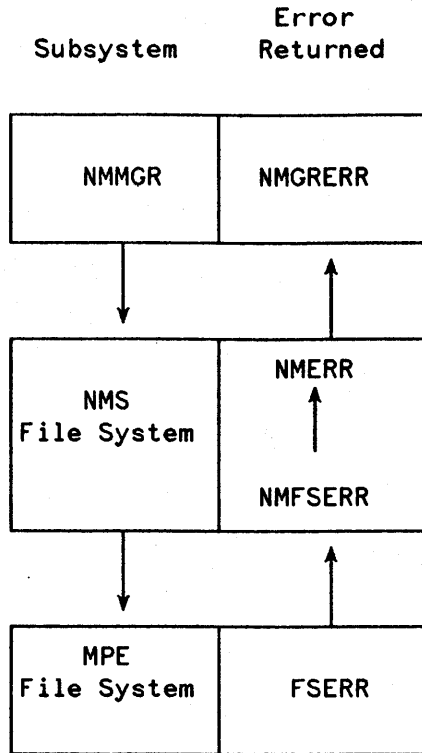


Figure 3-2. The Hierarchy of Errors

Once you have the NMS error message name and number, you refer to the appropriate table in this section for the cause and recovery of any NMS error messages from the upper two levels of the hierarchy. If the error is returned by another subsystem, such as FSERRs, CIERRs, or other non-Node-Management errors, see the appropriate reference manual for MPE or associated subsystems. FSERRs are not listed in this manual.

NMERR MESSAGES

NMERR MESSAGES

Message	Meaning/Cause	Action
Invalid parameter specified. (NMERR 1)	The caller of an NMS procedure has passed an invalid value for one or more of the parameters.	See "Submitting an SR" at the beginning of this manual.
Invalid SubsystemID parameter. (NMERR 2)	The caller of an NMS procedure has passed an invalid value for the parameter SubsystemID. Returned by NMOPENTRACE, NMOPENLOG, NMGETTRACEID, NMVERSCHECK. This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
Invalid UserID parameter. (NMERR 3)	The caller of an NMS procedure has passed an invalid value for the parameter UserID. Returned by NMOPENTRACE, NMGETTRACEID This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
Invalid TraceType parameter. (NMERR 4)	The caller of an NMS procedure passed an invalid value to the the TraceType parameter. Returned by NMOPENTRACE, NMGETTRACEID. This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
Invalid TraceElement parameter. (NMERR 5)	The caller of an NMS procedure passed an invalid value to the the TraceElement parameter. Returned by NMOPENTRACE, NMGETTRACE This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Invalid Dest parameter. (NMERR 6)	The caller of an NMS procedure passed an invalid value to the <i>Dest</i> parameter. Returned by NMOPENTRACE. This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
Invalid TraceID parameter. (NMERR 7)	The caller of an NMS procedure passed an invalid value to the TraceID parameter. Returned by NMWRITETRACE, NMCLOSETRACE. This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
Invalid InfoMode parameter. (NMERR 8)	The caller of an NMS procedure passed an invalid value to the InfoMode parameter. Returned by NMWRITETRACE. This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
Invalid Mode parameter. (NMERR 9)	The caller of an NMS procedure passed an invalid value to the Mode parameter. Returned by NMWRITETRACE, NMCLOSETRACE, NMOPENLOG, NMWRITELOG, NMCLOSELOG. This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Invalid FileName, RecordSize, and/or FileSize parameter. (NMERR 10)</p>	<p>The caller of an NMS procedure passed an invalid value to the FileName, RecordSize, and/or FileSize parameters. Returned by NMOPENTRACE, NMCONFOPEN.</p> <ol style="list-style-type: none"> 1. An invalid file name, record size, or filesize was specified by the user in a CI command, subsystem command, or NMMGR screen or in a configuration file. 2. One or more of these parameters are being passed incorrectly by the calling subsystem. 	<ol style="list-style-type: none"> 1. Correct and retry. 2. See "Submitting an SR" at the beginning of this manual.
<p>Invalid LogID parameter. (NMERR 11)</p>	<p>The caller of an NMS procedure passed an invalid value to the LogID parameter. Returned by NMWRITELOG, NMCLOSELOG. This is usually an internal error in the calling subsystem.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Invalid LogClass parameter. (NMERR 12)</p>	<p>The caller of an NMS procedure passed an invalid value to the LogClass parameter. Returned by NMWRITELOG. This is usually an internal error in the calling subsystem.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Invalid LogDataMode parameter. (NMERR 13)</p>	<p>The caller of an NMS procedure passed an invalid value to the LogDataMode parameter. Returned by NMWriteLog. This is usually an internal error in the calling subsystem.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Unable to create new datafile. (NMERR 15)	<p>Returned by: NMCONFOPEN. NMCONFOPEN detected an error on MIDASOPEN, attempted on the user's stack, on a new file that was to be created. A File System error occurred. (Normal File System restrictions apply when creating NM files.)</p>	See "NMS Utility Error" at the beginning of this manual.
Unable to open the datafile. (NMERR 16)	<p>Returned by: NMCONFOPEN or NMOPENTRACE.</p> <ol style="list-style-type: none"> 1. A File System error occurred. (Normal File System restrictions apply when accessing NM files.) 2. An internal error occurred. 	<ol style="list-style-type: none"> 1. See "NMS Utility Error" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
Unable to close the datafile. (NMERR 17)	<p>Returned by: NMCONFCLOSE or NMOPENTRACE.</p> <ol style="list-style-type: none"> 1. For NMCONFCLOSE, NMFILE detected an error on MIDASCLOSE. 2. For NMOPENTRACE, an error occurred on an FCLOSE call that was trying to save the new trace file as a permanent file. Usually this is due to such file system errors as: user out of disc space, user lacks SF (save files) capability, directory out of space. 	<ol style="list-style-type: none"> 1. See "Submitting an SR" at the beginning of this manual. 2. If these are not the problem, then see "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Unable to write the data record to datafile. (NMERR 18)</p>	<p>1. Returned by: NMCONFADDDATA, NMCONFUPDATEDATA, NMCONFRENAMEPATH, NMCONFADDDPATH, NMCONFPURGEDATA, NMCONFPURGEPATH. NMFILE detected file system or configuration file error while processing write request.</p> <p>2. Returned by: NMOPENTRACE, NMWRITETRACE, NMCLOSETRACE, NMWRITELOG, NMCLOSELOG. NMS Tracing or Logging could not write to a trace or log file. Check for File System errors such as out of file, group, account, or system disc space, or I/O errors.</p>	<p>1. See "NMS Utility Error" at the beginning of this manual. See "Corrupt Configuration File" at the beginning of this manual.</p> <p>2. If error persists and no File System error is detectable, then do the following: see "Submitting an SR" at the beginning of this manual.</p>
<p>Unable to read the data record from datafile. (NMERR 19)</p>	<p>Returned by: NMCONFGETDATA, NMCONFNEXTPATH, NMCONFDATALENGTH, NMCONFFILEINFO. NMFILE detected file system or configuration file error while processing a read request.</p>	<p>See "NMS Utility Error" at the beginning of this manual or "Corrupt Configuration File" at the beginning of this manual.</p>
<p>Unable to obtain data segment for tracing. (NMERR 20)</p>	<p>Returned by: NMOPENTRACE. Main NMLogMon was unable to get an extra data segment, or if internal tracing was specified, was unable to lock the extra data segment it did get.</p>	<p>See "Insufficient MPE Resources" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Must have 1 <= data length <= 8192 bytes. (NMERR 21)</p>	<p>A call to NMCONFADDDATA or NMCONFUPDATEDATA cannot send more than 8192 bytes of data. This is probably an internal error in the calling subsystem.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Multiple accesses to a trace entity are not supported. (NMERR 25)</p>	<p>The trace entity passed to NMOPENTRACE is a duplicate trace entry. NMS tracing will not support multiple NMOPENTRACE calls for the same trace entity. A trace entity is a unique combination of the parameters SubSystemID, TraceElement, and TraceType.</p> <ol style="list-style-type: none"> 1. A user entered a command requesting a particular kind of trace when this trace is already active. 2. An internal error has occurred. 	<ol style="list-style-type: none"> 1. Do not request a trace when that trace is already active. 2. See "Submitting an SR" at the beginning of this manual.
<p>Trace entity is not currently being traced. (NMERR 26)</p>	<p>A request was made for the TraceID of a trace entity that is not currently active. Returned by NMGETTRACEID. (A trace entity is composed of a SubSystemID, TraceElement, and TraceType).</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Request can not be completed immediately. (NMERR 27)</p>	<p>A nowait type request cannot be processed immediately. Returned by some of the NMnnTRACE and NMnnLOG procedures when the MODE parameter is set to 1 (nowait mode) and NMS Tracing or NMS Logging cannot process the request immediately.</p>	<p>Normally this is not an error condition.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Subsystem not configured in logging configuration. (NMERR 28)	Returned by: NMOPENLOG or NMOPENLOG2. The SubSystemID passed to the open log intrinsic cannot be found in the LOGGING part of NMCONFIG.PUB.SYS (NMOPENLOG) or the specified config file (NMOPENLOG2). 1. The subsystem has not been configured for logging, or the entry is spelled wrong, or the configuration file has been corrupted.	Manually check the configuration file using NMMGR and ensure the logging entry for that subsystem is configured properly. Refer to the appropriate reference manual for assistance.
LogClass not configured in configuration file. (NMERR 29)	NMS logging cannot find the specified log class in the config file NMCONFIG.PUB.SYS. Returned by NMWRITELOG. The log class specified for the calling subsystem is not configured correctly in NMCONFIG.PUB.SYS.	Use NMMGR to manually check and correct the logging configuration in NMCONFIG.PUB.SYS. Make sure the class name is spelled correctly. Refer to the appropriate reference manual for assistance.
Unable to reposition trace to beginning of file. (NMERR 31)	FCONTROL 5 failed.	See "Submitting an SR" at the beginning of this manual.
This program may not be run as a user process. (NMERR 32)	User attempted to RUN one of the NMS program files that are not allowed to be RUN. These program files include LINKMGR.PUB.SYS, NMFILE.PUB.SYS, NMLOGMON.PUB.SYS, PCMANAGE.PUB.SYS	None.
Unable to access logging configuration file. (NMERR 33)	Returned by: NMOPENLOG or NMOPENLOG2. An unexpected error occurred while NMS logging was trying to read the logging configuration data in NMCONFIG.PUB.SYS (NMOPENLOG) or the specified config file (NMOPENLOG2).	See "Corrupt Configuration File" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Invalid reference parameter specified. (NMERR 34)</p>	<p>Condition code ">" returned from an internal "data segment move" routine within the parameter-copying routines of NMFILE. One of the move routines between data segments (MBFDS, MFDS, MBTDS, MTDS) returned a bad condition code. An attempt to write to this parameter would cause a bounds violation. Returned by:</p> <p>NMCONFOPEN, NMCONFGETDATA, NMCONFNEXTPATH, NMCONFDATALENGTH, NMCONFFILEINFO, NMCONFGETERROR, NMCONFADDDATA, NMCONFUPDATEDATA, NMCONFPURGEDATA, NMCONFADDPATH, NMCONFPURGEPATH, NMCONFRENAMEPATH.</p> <p>Also returned by NMMONSTARTREQ, NMOPENLINK, NMMANAGELINK, NMLINKINFO, and NMLINKDIAL. These are internal errors.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Internal error: Invalid data segment number. (NMERR 35)</p>	<p>Condition code "<" returned from an internal data segment move routine within the parameter copying portions of NMFILE. One of the move routines between data segments (MBFDS, MFDS, MBTDS, MTDS) returned a bad condition code. An invalid DST number was specified. Returned by:</p> <p>NMCONFOPEN, NMCONFGETDATA, NMCONFNEXTPATH, NMCONFDATALENGTH, NMCONFFILEINFO, NMCONFGETERROR, NMCONFADDATA, NMCONFUPDATEDATA, NMCONFPURGEDATA, NMCONFADDPATH, NMCONFPURGEPATH, NMCONFRENAMEPATH. Also returned by NMMONSTARTREQ, NMOPENLINK, NMMANAGELINK, NMLINKINFO, and NMLINKDIAL. These are internal errors.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p> <p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Unable to find port for NM Monitor process. (NMERR 36)</p>	<p>Returned by NMMONADDID, NMMONADDID2, and NMMONMAINTREQ. NMMON does not have an entry in Port Dictionary.</p>	<p>See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Calls from split stack are not supported. (NMERR 37)</p>	<p>Returned by NMMONADDID, NMMONSTARTREQ, NMMONMAINTREQ, NMOPENLINK, NMCLOSELINK, NMMANAGELINK, NMLINKINFO, NMLINKDIAL, and NMADDID2. Also, all NMCONF intrinsics return this.</p> <p>Attempt to call above procedures in Split stack. Caused by an internal problem, or bad software installation.</p>	<p>See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>
<p>Parameter length out of range. (NMERR 38)</p>	<p>Returned by NMMONSTARTREQ and NMOPENLINK. Length given for string parameter negative or too long. Caused by an internal problem, or bad software installation.</p>	<p>See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>
<p>System shutdown in progress. Can't complete request. (NMERR 39)</p>	<p>Returned by NMMONADDID, NMMONSTARTREQ, NMMONMAINTREQ, NMOPENLINK, NMCLOSELINK, NMMANAGELINK, NMCONFOPEN, NMLINKINFO and NMLINKDIAL. NMMON, NMFILE and Link Manager are in the process of shutting down.</p>	<p>None. This is normally not an error condition.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Port table full. Unable to expand capacity. (NMERR 40)	Returned by NMMONADDID, NMMONADDID2. NMMON cannot expand its DL DB area to accomodate addition. Internal problem, or bad software installation.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Port identifier not found in port table. (NMERR 41)	Returned by NMMONDELETEID. Port ID to be deleted does not exist in NMMON's table, NMMONADDID was not called for this ID. Caused by an internal problem, or bad software installation.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Unable to create specified system process. (NMERR 42)	Returned by NMMONSTARTREQ. Error calling CREATEPROCESS intrinsic. Caused by not enough MPE resources in system, an internal error, a loader error, or bad software installation.	See "Insufficient MPE Resources" at the beginning of this manual. See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Unable to obtain data segment for port. (NMERR 43)	Returned by NMOPENLINK. Link Manager found an error calling procedure INITPORTDST'.	See "Insufficient MPE Resources" at the beginning of this manual. See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Unable to create IPC port. (NMERR 44)	Returned by NMOPENLINK. Link Manager found an error calling CREATEPORT.	See "Submitting an SR" at the beginning of this manual.
Add to NM Monitor port table failed. (NMERR 45)	Returned by NMOPENLINK. Error calling procedure NMMONADDID (see NMERR 40 above). Caused by an internal error, or bad software installation.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Add to IPC port dictionary failed. (NMERR 46)	Returned by NMOPENLINK. Error calling procedure DICTADD to add Link Manager in Port Dictionary. Caused by an internal error, or bad software installation.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Unable to access message catalog NMCAT.PUB.SYS. (NMERR 47)	Returned by Version Checking Routines. Unable to FOPEN file NMCAT.PUB.SYS. Caused by a bad software installation.	See "Invalid Software Installation" at the beginning of this manual.
Unable to open \$STDIN for process. (NMERR 48)	Returned by NMOPENLINK. Unable to FOPEN \$STDIN for Link Manager process. Caused by an internal error.	See "Submitting an SR" at the beginning of this manual.
Unable to open \$STDLIST for process. (NMERR 49)	Returned by NMOPENLINK. Unable to FOPEN \$STDLIST for Link Manager process. Caused by an internal error.	See "Submitting an SR" at the beginning of this manual.
Unable to find port for Link Manager process. (NMERR 50)	Returned by NMOPENLINK. Link Manager does not have an entry in Port Dictionary. Caused by an internal problem, or bad software installation.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Length of data to be logged not in range 1 <= LogDataSize <= 2034 bytes. (NMERR 51)	Probably an internal error. Returned by NMWriteLog. Caller has requested that either too much or too little data be logged by NMS logging.	See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
<p>Invalid NMCONF pathname. Non-printable characters not allowed. (NMERR 53)</p>	<p>Returned by most NMCONF intrinsics. Caller has sent NMCONF intrinsic a pathname with non-printable character(s). May be a subsystem problem.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Invalid transaction number. (NMERR 54)</p>	<p>Returned by most of the NMCONF procedures.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>NMTC files 0000 thru 9999 all used, none available for next tracefile. (NMERR 55)</p>	<p>NMS Trace finds that files NMTC0000 thru NMTC9999 all already exist. It is more likely that a directory problem or an internal problem exists.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Invalid infolen, must be in range: 1 <= infolen <= 8. (NMERR 56)</p>	<p>Returned by: NMCONFFILEINFO.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Duplicate identifier already exists. (NMERR 57)</p>	<p>Returned by: NMCONFADDPATH, NMCONFRENAMEPATH. NMFILE detected NMFSEERR 21 on MIDASADDPATH.</p> <ol style="list-style-type: none"> 1. User of configuration program entered erroneous information. 2. Configuration file has internal error. 3. Internal software error. 	<ol style="list-style-type: none"> 1. Enter correct data specifications. 2. See "Corrupt Configuration File" at the beginning of this manual. 3. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
<p>Unable to find identifier in path name. (NMERR 58)</p>	<p>Returned by: NMCONFGETDATA, NMCONFADDPATH, NMCONFPURGEPATH, NMCONFNEXTPATH, NMCONFADDDATA, NMCONFUPDATEDATA NMCONFDATALENGTH, NMCONFRENAMEPATH, NMCONFPURGEDATA. NMFILE detected NMFERR 9.</p> <ol style="list-style-type: none"> 1. Erroneous pathname. 2. Configuration database has internal error. 3. Internal error. 	<ol style="list-style-type: none"> 1. Enter correct pathname. 2. See "Corrupt Configuration File" at the beginning of this manual. 3. See "Submitting an SR" at the beginning of this manual.
<p>Path depth < minimum or > maximum allowed. (NMERR 59)</p>	<p>Returned by: NMCONFNEXTPATH. Procedure received a path depth < 0, or > 256. Returned by: NMCONFADDDATA, NMCONFUPDATEDATA, NMCONFGETDATA, NMCONFDATALENGTH, NMCONFPURGEDATA, NMCONFRENAMEPATH, NMCONFPURGEPATH, NMCONFADDPATH. Procedure received a path depth < 1, or > 256. Internal error in the calling program.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
<p>Unable to find NM Log Monitor. (NMERR 60)</p>	<p>An NM Trace or Logging procedure is unable to locate the server trace or log process (NMLogMon). Returned by NMOPENTRACE, NMGETTRACEID, NMWRITETRACE, NMCLOSETRACE, NMOPENLOG, NMWRITELOG, NMCLOSELOG, and by the SHOWNMLOG CI command.</p> <ol style="list-style-type: none"> 1. The trace or log server process creation failed at system startup due to a bad software installation, a loader error, or an internal error. 2. An =SHUTDOWN or NMMAINT,SHUTDOWN has been executed prior to the Trace or Logging procedure call. The server process has already shut down. This is not an error condition. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual. 2. None
<p>DB register at absolute. (NMERR 61)</p>	<p>Caller's DB register is at an absolute DB location (WHERE'SDB returned a < condition code). This is not allowed in the called procedure. Returned by those trace and log procedures that can otherwise be called in split stack mode.</p> <p>This is probably an internal error by the calling subsystem.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
<p>NM trace dictionary table is full. (NMERR 62)</p>	<p>An unexpectedly large number of NMOPEN TRACE calls have been made, each specifying a different combination of SubSystemID, TraceType, and TraceElement. If this is being done by user request, turn off some of the traces, then retry. If this is not being done by user request, then this is an internal error.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>NM log table is full. (NMERR 63)</p>	<p>An unexpectedly large number of NMOPEN TRACE calls have been made, each specifying internal memory tracing or a different destination filename. If this is being done by user request, turn off some of the traces, then retry. If this is not being done by user request, then this is an internal error.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>Specified file is a system file. (NMERR 64)</p>	<p>The file name (FileName) parameter of the NMOPEN TRACE procedure contains a system file name (the first ASCII character is "\$"). User specified an incorrect filename either in the command that starts tracing, or in the configuration file.</p>	<p>Specify a valid file name and retry.</p>
<p>Specified file is a back referenced file. (NMERR 65)</p>	<p>The file name (FileName) parameter of the NMOPEN TRACE procedure contains a back referenced file name (the first ASCII character is "*"). User specified an incorrect filename either in the command that starts trace for that subsystem, or in configuration file for that subsystem.</p>	<p>Specify a valid file name and retry.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
<p>User logging entries are not available. (NMERR 67)</p>	<p>The LogBuf XDS used for a particular NMS trace file or for NMS logging has no more available entries to add one more user. An additional entry is used for tracing whenever additional traces are requested to go to an existing open trace file. An additional entry is used for logging whenever a subsystem opens a log file.</p> <ol style="list-style-type: none"> 1. The user has requested an unexpectedly large number of concurrent traces to go to the same trace file. 2. An internal error has occurred. 	<ol style="list-style-type: none"> 1. Turn off some of the traces and retry. 2. See "Submitting an SR" at the beginning of this manual.
<p>Unable to create the trace process. (NMERR 69)</p>	<p>The tracing subsystem is unable to create a trace server process for the NMOPENTRACE request (NMMONSTARTREQ failed).</p>	<p>See "Invalid Software Installation" at the beginning of this manual. See "Insufficient MPE Resources" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>
<p>Unable to initialize the trace process. (NMERR 70)</p>	<p>The tracing subsystem is unable to initialize the trace server process for the NMOPENTRACE request (unable to create a port, acquire a data segment, etc.).</p>	<p>See "Invalid Software Installation" at the beginning of this manual. See "Insufficient MPE Resources" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
Logging has stopped. (NMERR 71)	An I/O error or File System error occurred earlier and logging is not currently happening. Returned by NMOPENLOG.	Enter the SHOWNMLOG command to find out the status of the log file and the type of error. Correct the error, and restart logging with a RESUMENMLOG or a SWITCHNMLOG command. Then retry the action that led to this error.
This command has no parameter. (NMERR 72)	Parameters were specified for an NMS command that does not require any parameters. Returned by SHOWNMLOG, RESUMENMLOG, and SWITCHNMLOG. User entered parameters for an NMS CI command SHOWNMLOG, SWITCHNMLOG, or RESUMENMLOG.	Enter the command name alone without any other text on the \$STDIN or \$STDINX record.
Invalid logging configuration file. (NMERR 73)	Returned by: NMOPENLOG, NMOPENLOG2, NMCONFIG.PUB.SYS (NMOPENLOG) or the specified config file (NMOPENLOG 2) contains invalid logging configuration data.	See "Corrupt Configuration File" at the beginning of this manual.
NM Log dictionary table is full. (NMERR 74)	Network management logging facility has a log dictionary table with a fixed number of available entries. If no free entries are available to complete the caller request this error message is returned. 1. Incompatible software versions installed. 2. Internal error.	1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
<p>Data is already associated with this identifier. (NMERR 75)</p>	<p>Returned by: NMCONFADDDATA. NMFILE detected NMFERR 12. Attempt to add data to a path location where data already exists. This may not necessarily be an error if the calling program is trying to determine if data already exists at that location. This could also be caused by data base corruption, or by an internal error.</p>	<p>If data base corruption is suspected, then see "NMS UTILITY ERRORS" at the beginning of this manual. If an internal error is suspected, then see "Submitting an SR" at the beginning of this manual.</p>
<p>File associated with this transaction is not locked. (NMERR 76)</p>	<p>Returned by: NMCONFUNLOCKFILE. NMFILE determined that an NMCONFUNLOCKFILE was attempted on a transaction without a corresponding NMCONFLOCKFILE. This is not necessarily an error if the intent of the caller was to determine the lock status of the file. This could also be caused by an internal error.</p>	<p>If an internal error is suspected, do the following: see "Submitting an SR" at the beginning of this manual.</p>
<p>File associated with this transaction is locked. (NMERR 77)</p>	<p>Returned by: NMCONFADDDATA, NMCONFUPDATEDATA, NMCONFPURGEDATA, NMCONFADDPATH, NMCONFPURGEPATH, NMCONFRENAMEPATH. Attempt to write to a locked file.</p>	<p>Wait until the file is unlocked by the other user(s) before proceeding.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
No data associated with this identifier. (NMERR 78)	Returned by: NMCONFGETDATA, NMCONFDATALENGTH, NMCONFPURGEDATA, NMCONFUPDATEDATA. NMFILE detected NMFERR 18. This may not be an error if the call to these procedures was using this return to test if data was associated with the identifier. If it was an error, it could be due to corruption of the database.	If file corruption is suspected, then: See "Corrupt Configuration File" at the beginning of this manual.
Data buffer length longer than the maximum 8192 bytes. (NMERR 82)	Returned by NMCONFGETDATA. Length parameter is longer than maximum allowed. Probable internal error by caller.	See "Submitting an SR" at the beginning of this manual.
Transaction table is full. (NMERR 83)	Returned by: NMCONFOPEN. NMFILE cannot open a new file because the maximum allowable transaction has been reached. This is probably due to corruption of the configuration data file.	1. Retry later. 2. See "Submitting an SR" at the beginning of this manual.
Data structures internal error in NMFILE (NMERR 85)	Returned by most NMCONF procedures in NMFILE. Internal error.	See "Submitting an SR" at the beginning of this manual.
Invalid path type value, must be 1 or 2. (NMERR 90)	Returned by: NMCONFNEXTPATH. NMCONFNEXTPATH detected invalid path type value. Internal error by the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
Unable to purge datafile. (NMERR 92)	Returned by NMCONFPURGE. File system error.	Try to purge the file from a CI session, and note the error. Correct this and retry.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Recovery
<p>No identifiers beyond this point in datafile. (NMERR 94)</p>	<p>Returned by: NMCONFNEXTPATH. NMFILE detected warning NMFSWARN 23, in MIDASNEXTPATH. This may not be an error if the caller's intention is to search the data file. Otherwise it might indicate corruption of the file.</p>	<p>If file corruption is suspected, then: see "Corrupt Configuration File" at the beginning of this manual. If this is not a problem, it may be due to incompatible software modules, or an internal error by the calling subsystem. See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>
<p>Read truncated to capacity of buffer. (NMERR 95)</p>	<p>Returned by: NMCONFGETDATA. NMFILE detected NMFWARN 19 on MIDASGETDATA. This is probably an internal error by the calling subsystem.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>File code mismatch. (NMERR 96)</p>	<p>Returned by: NMCONFOPEN. NMFILE detected NMFSWARN 6 on MIDASOPEN.</p> <ol style="list-style-type: none"> 1. Trying to open a file which is not a valid configuration file. 2. Corruption of file. 3. Internal error. 	<ol style="list-style-type: none"> 1. Check to see if the file is configuration file. 2. See "Corrupt Configuration File" at the beginning of this manual. 3. See "Submitting an SR" at the beginning of this manual.
<p>Failure of DICTSEND procedure. (NMERR 97)</p>	<p>Returned by all NMCONF procedures. Error detected on DICTSEND to NMFILE.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
SUBSYSTEM DOES NOT SUPPORT VERSION CHECKING. (NMERR 100)	Returned by NMVERSCHECK. Coding error by caller of NMVERSCHECK. The SUBSYSID parameter must refer to a subsystem number that has a second level version cross check routine.	See "Invalid Software Installation," and "Submitting an SR" at the beginning of this manual.
FIX LEVELS DIFFER IN ONE OR MORE MODULES. (NMERR 101)	<p>Returned by NMSUBSYSVERS, SUBSYSOVERS, other subsystem level 2 version check procedures. There is a version mismatch between the various modules of the subsystem.</p> <ol style="list-style-type: none"> 1. Incorrect software installation. 2. Someone has RESTORED one or more of the subsystem's modules from a backup tape that had a different version, but either did not restore all of the modules and/or did not bring in the SL modules. 3. Someone has LOADED the system from a backup tape that had a different version of software, but did not also RESTORE other necessary modules. 	<ol style="list-style-type: none"> 1. Get a known good installation tape, and follow the installation procedures carefully. 2. To correctly go back to an earlier version on a backup tape, the tape must be a SYSDUMP tape, and you must load the system from the tape to bring in the SL modules, and RESTORE all of the PUB.SYS modules. 3. Correct as in 2 above.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>UPDATE LEVELS DIFFER IN ONE OR MORE MODULES. (NMERR 102)</p>	<p>There is a version mismatch between the various modules of the Node Management Services subsystem. Returned by NMVERS.</p> <ol style="list-style-type: none"> 1. Incorrect installation of NMS software. 2. Someone has RESTORED one or more of the NMS PUB.SYS modules from a backup tape that had a different version of NMS, but either did not restore all of the PUB.SYS modules and/or did not bring in the SL modules. 3. Someone has LOADED the system from a backup tape that had a different version of NMS software, but did not also RESTORE the NMS PUB.SYS modules. 	<ol style="list-style-type: none"> 1. Get a known good installation tape, and follow the installation procedures carefully. 2. To correctly go back to an earlier version on a backup tape, the tape must be a SYSDUMP tape, and you must LOAD the system from the tape to bring in the SL modules, and RESTORE all of the PUB.SYS modules. 3. Correct as in 2 above.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>VERSION LEVELS DIFFER IN ONE OR MORE MODULES. (NMERR 103)</p>	<p>There is a version mismatch between the various modules of the Node Management Services subsystem. Returned by NMVERS.</p> <ol style="list-style-type: none"> 1. Incorrect installation of NMS software. 2. Someone has RESTORED one or more of the NMS PUB.SYS modules from a backup tape that had a different version of NMS, but either did not restore all of the PUB.SYS modules and/or did not bring in the SL modules. 3. Someone has LOADED the subsystem from a backup tape that had a different version of NMS software, but did not also RESTORE the NMS PUB.SYS modules. 	<ol style="list-style-type: none"> 1. Get a known good installation tape, and follow the installation procedures carefully. 2. To correctly go back to an earlier version on a backup tape, the tape must be a SYSDUMP tape, and you must LOAD the system from the tape to bring in the SL modules, and RESTORE all of the PUB.SYS modules. 3. Correct as in 2 above.
<p>ONE OR MORE SUBSYSTEM MODULES ARE MISSING. (NMERR 104)</p>	<p>Returned by NMSUBSYSVERS, SUBSYSOVERS, other subsystem level 2 version check procedures. A module required for normal operation of the subsystem is missing.</p>	<p>Get a known good installation tape and follow the installation procedures carefully. Run NMAINT.PUB.SYS to see which module is missing.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>ONE OR MORE SUBSYSTEM MODULES ARE INVALID. (NMERR 105)</p>	<p>Returned by NMSUBSYSVERS, SUBSYSOVERS, or other subsystem level 2 version check procedures. An error has occurred trying to read the version ID of one or more of the subsystem's modules.</p> <ol style="list-style-type: none"> 1. An I/O error, disc error, or similar error has prevented reading the version stamp correctly. 2. Some of the program files and data files have the version stamp located in the last user label record. Perhaps the file was copied without copying its user label records properly. For NMS, these files include NMMGR, NMMGRF, NMDUMP, and NMCAT. 3. There is a mismatch in versions between the subsystem version check procedure and one or more of the subsystem's other modules; and the method for reading the <i>versionid</i> for that module has changed across these versions. 	<ol style="list-style-type: none"> 1. Correct this problem and retry. 2. Install these files properly. 3. Install a consistent version of the subsystem software and try again.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
MODULE FLAGS parameter invalid. (NMERR 106)	The MODULE FLAGS MODE field (bits 7:6) is not in the range 0 to 5, or the TYPE field (bits 13:3) is not in the range 0 to 2. Returned by NMSUBSYSVERS, SUBSYSOVERS, and other subsystem level 2 version check procedures. Probable internal error by caller.	See "Submitting an SR" at the beginning of this manual.
FLAGS options are incompatible. (NMERR 107)	Some mutually incompatible option bits were set in the FLAGS parameter. Returned by NMSUBSYSVERS, SUBSYSOVERS, and other subsystem level 2 version check procedures.	See "Submitting an SR" at the beginning of this manual.
UNABLE TO CREATE THE LINK MANAGER PROCESS. (NMERR 130)	<p>A non-zero result code was returned by NMMONSTARTREQ to NMOPENLINK. Returned by NMOPENLINK.</p> <ol style="list-style-type: none"> 1. Loader error trying to load the link manager program file. (For the PC Link Manager, file: PCMANAGE.PUB.SYS; for other links, file: LINKMGR.PUB.SYS. 2. Insufficient MPE resources. 3. Internal error. 	<ol style="list-style-type: none"> 1. Try to ALLOCATE LINKMGR.PUB.SYS (or PCMANAGE.PUB.SYS for the PC links manager). If this fails, correct the problem according to the error messages given. If this succeeds, retry the action that led to the problem. If this error reoccurs, follow steps 2 and 3 below. 2. See "Insufficient MPE Resources" at the beginning of this manual. 3. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
INVALID ITEM DETECTED IN CONFIGURATION RECORD. (NMERR 131)	Error reading and/or interpreting data from configuration file. Returned by NMOPENLINK.	See "Corrupt Configuration File" at the beginning of this manual.
LINK IN EXCLUSIVE USE BY ANOTHER SUBSYSTEM. (NMERR 132)	<p>Link has already been opened by another process. Returned by NMOPENLINK.</p> <ol style="list-style-type: none"> 1. Another process has this link opened. 2. A link manager process that had this link previously did not close it when expected. This is an internal error. 	<ol style="list-style-type: none"> 1. Shut down the other process to free the link. 2. See "Submitting an SR" at the beginning of this manual. If possible, include a memory dump with the SR.
LINK MUST BE IN USE BEFORE EXECUTING FUNCTION. (NMERR 134)	NMOPENLINK has not been called successfully yet. Returned by NMCLOSELINK, NMMANAGELINK, NMLINKINFO, and NMLINKDIAL. This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
REQUIRED ITEMS MISSING IN CONFIGURATION RECORD. (NMERR 135)	Error reading data from configuration file. Returned by NMOPENLINK. Configuration file is not valid.	See "Corrupt Configuration File" at the beginning of this manual.
PARAMETER INFORMATION EXCEEDS PERMISSABLE LENGTH. (NMERR 136)	Information buffer given by caller exceeds 128 words in length. Returned by NMMANAGELINK and NMLINKDIAL. This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
LINK MUST BE ACTIVATED BEFORE EXECUTING FUNCTION. (NMERR 137)	NMOPENLINK has not been executed successfully for this link. Returned by NMCLOSELINK, NMMANAGELINK, NMLINKINFO and NMLINKDIAL This is usually an internal error in the calling subsystem.	See "Submitting an SR" at the beginning of this manual.
OPEN REQUEST TO COMMUNICATIONS BOARD FAILED. (NMERR 140)	Call to procedure COPEN failed. CS error is logged. Returned by NMOPENLINK.	Read the CS error number from the NMLog (check NMCONFIG.PUB.SYS to see where SUB0008 CLAS0000 log messages are sent.) Correct the CS error and retry.
CLOSE REQUEST TO COMMUNICATIONS BOARD FAILED. (NMERR 141)	Call to procedure CCLOSE failed. CS error is logged. Returned by NNMCLOSELINK.	Read the CS error number from the NMLog (check NMCONFIG.PUB.SYS to see where SUB0008 CLAS0000 log messages are sent.) Correct the CS error.
STATUS REQUEST TO COMMUNICATIONS BOARD FAILED. (NMERR 142)	Call to procedure TRANGETINFO failed. Returned by NMLINKINFO. 1. Bad software installation. Make sure that the versions of NMS software and port translator software are compatible. 2. An internal error occurred.	1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>CONTROL REQUEST TO COMMUNICATIONS BOARD FAILED. (NMERR 143)</p>	<p>Call to procedure CCONTROL or similar control procedure failed. Returned by NMOPENLINK and NMMANAGELINK.</p> <ol style="list-style-type: none"> 1. Possible hardware or line problems, detectable by CS. 2. Bad software installation. 3. An internal error occurred. 	<ol style="list-style-type: none"> 1. The CS error number might be accessible by the SHOWCOM command. Correct and retry. 2. See "Invalid Software Installation" at the beginning of this manual. 3. See "Submitting an SR" at the beginning of this manual.
<p>UNABLE TO INITIALIZE PORT TRANSLATOR. (NMERR 144)</p>	<p>Call to procedure TRAN'OPEN failed. Returned by NMOPENLINK.</p> <ol style="list-style-type: none"> 1. Bad software installation. Make sure that the versions of NMS software and port translator software are compatible. 2. An internal error occurred. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
UNABLE TO SHUTDOWN PORT TRANSLATOR. (NMERR 145)	<p>Call to TRAN'CLOSE failed. Returned by NMOPENLINK or NMCLOSELINK.</p> <ol style="list-style-type: none"> 1. Bad software installation. Make sure that the versions of NMS software and port translator software are compatible. 2. An internal error occurred. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
USER SPECIFIED BUFFER INADEQUATE FOR REQUEST. (NMERR 146)	<p>Caller did not supply a buffer large enough for returned data. Returned by NMLINKINFO.</p> <ol style="list-style-type: none"> 1. Bad software installation. Make sure that the versions of NMS software and port translator software are compatible. 2. An internal error occurred. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
LINK MANAGER BUFFER AREA INADEQUATE FOR REQUEST. (NMERR 147)	<p>Link Manager's internal buffer is not large enough to handle this request. Returned by NMLINKINFO.</p> <ol style="list-style-type: none"> 1. Bad software installation. Make sure that the versions of NMS software and port translator software are compatible. 2. An internal error occurred. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>SPECIFIED ITEM CODE IS OUT OF RANGE. (NMERR 148)</p>	<p>No information item corresponds to the given item code. Returned by NMLINKINFO.</p> <ol style="list-style-type: none"> 1. Bad software installation. Make sure that the versions of NMS software and port translator software are compatible. 2. An internal error occurred. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
<p>DIAL REQUEST TO COMMUNICATIONS BOARD FAILED. (NMERR 149)</p>	<p>Error calling procedure TRAN'CONFIGDIAL. Returned by NMLINKDIAL.</p> <ol style="list-style-type: none"> 1. Bad software installation. Make sure that the versions of NMS software and port translator software are compatible. 2. An internal error occurred. 	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
<p>ADDING THE MULTICAST ADDRESS TO MCTABLE FAILED. (NMERR 150)</p>	<p>Error calling procedure MCADDEENTRY. Returned by NMOPENLINK.</p>	<p>See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>
<p>DELETING MULTICAST ADDRESS FROM MCTABLE FAILED. (NMERR 151)</p>	<p>Error calling procedure MNDELETEENTRY. Returned by NMOPENLINK or NMCLOSELINK.</p>	<p>See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>
<p>GETTING MULTICAST ADDRESSES FROM MCTABLE FAILED. (NMERR 152)</p>	<p>Error calling procedure MCGETLIST. Returned by NMOPENLINK or NMCLOSELINK.</p>	<p>See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
DOWNLOADING MULTICAST ADDRESS (ES) FAILED. (NMERR 153)	Error calling procedure TRAN'CONFIGADDR. Returned by NMOPENLINK.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
DIAL FACILITY IS NOT SUPPORTED. (NMERR 154)	Call to LINKDAILREQ failed. Returned by NMLINKDIAL.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
MULTICAST ADDRESSES DOWNLOADING IS NOT SUPPORTED. (NMERR 155)	Call to LINKDOWNMC failed. Returned by NMLINKDOWNMC.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
INVALID PARMARRAY CODE. (NMERR 156)	The caller of an NMOPENLINK2 procedure has passed an invalid item code in the parameter ParmArray. Returned by NMOPENLINK2. This is usually an internal error in the calling system.	See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
UNABLE TO LOCK THE LINK MANAGER PORT DST. (NMERR 159)	A call to LockSeg to lock the link Manager's port DST failed. Returned by NMOPENLINK. 1. Bad software installation. Make sure that the version of NMS software and port translator software are compatible. 2. An internal error occurred.	1. See "Invalid Software Installation" at the beginning of manual. 2. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
NUMBER OF PARAMETERS EXCEEDS MAXIMUM OF 20. (NMERR 160)	More commands are found in the LINKCONTROL command than are permitted.	Correct the command and try again.
EXPECTS LINK NAME PARAMETER. (NMERR 161)	Expects to find the link name in this command.	Correct the command and try again.
EXPECTS A NAME FROM ONE TO EIGHT CHARACTERS LONG. (NMERR 162)	The link name specified was longer than the length allowed.	Correct the command and try again.
EXPECTS ALPHANUMERIC NAME STARTING WITH ALPHABETIC. (NMERR 163)	Link name must be alphanumeric and begin with alphabetic.	Correct the command and try again.
EXPECTS A SEMICOLON AFTER LINK NAME PARAMETER. (NMERR 164)	Expects to find a semicolon following the link name.	Correct and try again.
EXPECTS TRACE KEYWORD. (NMERR 165)	Expects to find the "TRACE" keyword in this position.	Correct the command and try again.
EXPECTS AN EQUALS SIGN AFTER TRACE KEYWORD. (NMERR 166)	Expects to find an equals sign after the "TRACE" keyword.	Correct and try again.
EXPECTS AN OCTAL OR DECIMAL. (NMERR 167)	Keyword DEBUG is followed by an octal or decimal number.	The DEBUG keyword command is not for customer use. Contact your HP representative.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
UNABLE TO ACCESS ! SUBSYSTEM MESSAGE CATALOG !. (NMERR 200)	First parameter is the subsystem name or subsysid. Second parameter is the message catalog file name. Returned by a datacomm subsystem message-generating routine. The specified subsystem encountered an error trying to access an error message in the specified message catalog file. Something is wrong with the specified message catalog file - either it 1) does not exist, 2) is the wrong version, or 3) is inaccessible due to someone else :STOREing it or accessing it exclusively. It is also possible that some other I/O error has occurred.	Correct the problem within the message catalog and retry.
ERROR ACCESSING NMCAT.PUB.SYS SET=! MSG=! . (NMERR 201)	Returned by NMPRINTERRMSG. Usually followed by one or more of messages 202 through 205 below, which further clarifies the error. NOTE: This message is actually hard-coded in NMPRINTERRMSG and is included here only for documentation purposes.	Look for one or more of NMERR 202 through 205 following this message, and take the remedial action suggested below.
FOPEN FSERR ! ON NMCAT.PUB.SYS. (NMERR 202)	Returned by NMPRINTERRMSG. Usually followed by the text of the FSError message.	Correct the FOPEN problem and retry.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>ENCOUNTERED GENMESSAGE ERROR !. (NMERR 203)</p>	<p>Returned by NMPRINTERRMSG. If error number is 1 or 2, NMERR 204 follows with a further description. Otherwise the error is described in the MPE Intrinsic Manual under GENMESSAGE.</p>	<p>If the error number is 1 or 2, see the NMERR 204 message and comments. If the error number is not 1 or 2, look up the error number in the MPE Intrinsic Manual under GENMESSAGE. It is likely that the problem is due to a bad software installation. If this is consistent with the GENMESSAGE error, see "Corrupt Configuration File" at the beginning of this manual. Otherwise, correct the problem that is causing the GENMESSAGE error and try again.</p>
<p>GENMESSAGE ENCOUNTERED FSERR !. (NMERR 204)</p>	<p>Returned by NMPRINTERRMSG. This message follows the NMERR 203 message, and is usually followed by the text of the FSERR message as well.</p>	<p>Correct the FS error and retry.</p>
<p>FCLOSE FSERR ! ON NMCAT.PUB.SYS. (NMERR 205)</p>	<p>Returned by NMPRINTERRMSG after printing a message from NMCAT.PUB.SYS. The FCLOSE of NMCAT.PUB.SYS failed.</p>	<p>Correct the FS error and retry.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>!: ERROR TRYING TO ACCESS ! MSGNUM ! SETNUM !. (NMERR 206)</p>	<p>First parameter is Subsys (module) name. Second parameter is Subsys message catalog name. Third parameter is message number. Fourth parameter is set number.</p> <p>Returned by a subsystem message-generating routine when it was unable to access the specified message catalog.</p>	<p>Note that this message is usually followed by one or more of messages NMERR 207 through 210.</p>
<p>ENCOUNTERED FOPEN FSERR ! ON !. (NMERR 207)</p>	<p>First parameter is FSERR number. Second parameter is message catalog name.</p> <p>Returned by a subsystem message-generating routine when it was unable to FOPEN the specified message catalog. Usually preceded by message NMERR 206.</p>	<p>Correct the FOPEN error and retry.</p>
<p>ENCOUNTERED GENMESSAGE ERROR !. (NMERR 208)</p>	<p>First parameter is the GENMESSAGE errnum.</p> <p>Returned by a subsystem message-generating routine, usually following NMERR 206. If the error number is 1 or 2, NMERR 209 follows with a further description. Otherwise the error is described in the MPE Intrinsic Manual under GENMESSAGE.</p>	<p>If the error number is one or 2, see the NMERR 209 message and comments. If the error number is not 1 or 2, look up the error number in the MPE Intrinsic Manual under GENMESSAGE. It is likely that the problem is due to a bad software installation. If this is consistent with the GENMESSAGE error, see "Corrupt Configuration File" at the beginning of this manual. Otherwise, correct the problem that is causing the GENMESSAGE error and try again.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>GENMESSAGE ENCOUNTERED FSERR !. (NMERR 209)</p>	<p>First parameter is the FSERR number.</p> <p>Returned by a subsystem message-generating routine. This message usually follows NMERR 208, and is usually followed by the text of the FSError message as well (by calling the intrinsic FErrMsg).</p>	<p>Correct the FS error and retry.</p>
<p>ENCOUNTERED FCLOSE FSERR ! ON !. (NMERR 210)</p>	<p>First parameter is the FSERR number. Second parameter is the message catalog name.</p> <p>Returned by a subsystem message-generating routine after reading a message from the specified message catalog. The FCLOSE of the message catalog failed.</p>	<p>Correct the FS error and retry.</p>
<p>CONFIG FILE INTERNAL ERROR DETECTED AND RECOVERY FAILED. (NMERR 220)</p>	<p>Corrupt configuration file.</p>	<p>See "Corrupt Configuration File" at the beginning of this manual.</p>

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
TOTAL DATA LENGTH TOO LARGE TO RETURN AS INTEGER. (NMERR 221)	Returned by NMCONFSONINFO. The total data length associated with the path name and all its first-level sons was greater than 32767 and could not be returned to caller.	<ol style="list-style-type: none"> 1. Possible corrupt configuration file. See "Corrupt Configuration File" at the beginning of this manual. 2. Possible internal error. See "Submitting an SR" at the beginning of this manual. 3. Possibly there is no error at all. It is theoretically possible, although unlikely, to have more than 32767 bytes of data associated with a path and its first-level sons.
SON COUNT TOO LARGE TO RETURN AS INTEGER. (NMERR 222)	Returned by NMCONFSONINFO. The number of first-level sons linked to the path name sent by the calling subsystem exceeds 32767.	<ol style="list-style-type: none"> 1. Possible corrupt config file. See "Corrupt Configuration File" at the beginning of this manual. 2. Possible internal error. See "Submitting an SR" at the beginning of this manual.
REQUEST TYPE OUT OF BOUNDS--ERROR IN PORT MSG TO NMFILE. (NMERR 223)	Returned if NMFILE receives a request type that is <0 or >16. Request type defines what NMCONF intrinsic is to be serviced by NMFILE.	Internal error. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>NO ASNP DEVICES ARE PRESENT WITHIN THE SYSTEM. (NMERR 250)</p>	<p>The PC Link Manager could not find any device types 42 in the system. Returned by NMOPENLINK.</p>	<ol style="list-style-type: none"> 1. Check SYSTEM configuration to verify that there are ASNP devices configured (Device type 42). 2. See "MPE Configuration Incorrect" at the beginning of this manual.
<p>INSUFFICIENT RESOURCES TO CONTINUE. (NMERR 251)</p>	<p>The PC Link Manager was unable to obtain the necessary DST resources. Returned by NMOPENLINK.</p>	<ol style="list-style-type: none"> 1. See "Insufficient MPE Resources" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
<p>DEVICE NOT IN INTERNAL TABLES. (NMERR 252)</p>	<p>The PC Link Manager has no record of the device in its internal tables. The device may not be a device type 42. Returned by NMOPENLINK, NMCLOSELINK, NMMANAGELINK, NMLINKINFO or NMSHOWCOM.</p>	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
<p>UNABLE TO OBTAIN SHOWCOM INFORMATION. (NMERR 253)</p>	<p>Call to procedure TRAN'SHOWCOM failed. Returned by NMSHOWCOM.</p>	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
TOO MANY ASNP DEVICES IN THE SYSTEM FOR THE PC LINK MANAGER TO HANDLE. (NMERR 254)	<p>The number of ASNP devices in the system exceeds the maximum that the PC Link Manager can handle. Returned by NMOPENLINK.</p> <p>User has configured more than 400 ASNP devices in the system configuration. Current software only supports up to 400 ASNP devices.</p>	Reconfigure fewer than 400 ASNP devices.
THE PC LINK MANAGER ENCOUNTERED A REQUEST FOR A NON-SUPPORTED FUNCTION. (NMERR 255)	A request for a non-supported function type was received by the PC Link Manager. Returned by NMLINKDOWNMC.	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
THE PC LINK MANAGER ENCOUNTERED AN INTERNAL ERROR. (NMERR 256)	The PC Link Manager has suffered an internal error. Returned by NMOPENLINK, NMCLOSELINK, NMMANAGELINK, NMLINKINFO, and NMSHOWCOM.	See "Submitting an SR" at the beginning of this manual.
THE PC LINK MANAGER WAS UNABLE TO COMPLETE EXECUTION. (NMERR 257)	The PC Link Manager encountered an error during the setup to execute the function. This is returned by NMOPENLINK, NMCLOSELINK, NMMANAGELINK, NMLINKINFO, and NMSHOWCOM.	See "Submitting an SR" at the beginning of this manual.
UNABLE TO DELETE THE LINKNAME FROM THE PORT DICTIONARY. (NMERR 258)	The PC Link Manager encountered an error during the deletion of the LinkName from the port dictionary. Returned by NMCLOSELINK.	See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
PROBLEM ENCOUNTERED WITH TRACE ENTRIES. (NMERR 259)	The PC Link Manager encountered a problem while creating and moving a trace entry. Returned by NMOPENLINK, NMCLOSELINK, or NMMANAGELINK.	<ol style="list-style-type: none"> 1. See "Invalid Software Installation" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
FAILED TO UNLOCK THE TRACE DST. (NMERR 260)	The PC Link Manager was unable to unlock the trace DST. Returned by NMCLOSELINK or NMMANAGELINK.	See "Submitting an SR" at the beginning of this manual.
FAILED TO LOCK THE TRACE DST. (NMERR 261)	The PC Link Manager was unable to lock the trace DST. Returned by NMOPENLINK or NMMANAGELINK.	<ol style="list-style-type: none"> 1. See "Insufficient MPE Resources" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
FAILED TO OBTAIN THE TRACE DST. (NMERR 262)	The PC Link Manager was unable to obtain a DST for tracing. Returned by NMOPENLINK or NMMANAGELINK.	<ol style="list-style-type: none"> 1. See "Insufficient MPE Resources" at the beginning of this manual. 2. See "Submitting an SR" at the beginning of this manual.
OPEN REQUEST TO COMMUNICATIONS BOARD FAILED. (NMERR 263)	<p>Call to procedure PCOPEN failed. Returned by NMOPENLINK.</p> <p>A CS error occurred.</p>	<ol style="list-style-type: none"> 1. Read the CS error number from the NMLog (check NMCONFIG.PUB.SYS to see where SUB0008 CLAS0001 log messages are sent). 2. Correct the CS error and retry.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
CLOSE REQUEST TO COMMUNICATIONS BOARD FAILED. (NMERR 264)	<p>Call to procedure PCCLOSE failed. Returned by NMCLOSELINK.</p> <p>A CS error occurred.</p>	<ol style="list-style-type: none"> 1. Read the CS error number from the NMLog (check NMCONFIG.PUB.SYS to see where SUB0008 CLAS0001 log messages are sent). 2. Correct the CS error and retry.
CONTROL REQUEST TO COMMUNICATIONS BOARD FAILED. (NMERR 265)	<p>Call to procedure PCCONTROL failed. Returned by NMOPENLINK and NMMANAGELINK.</p> <ol style="list-style-type: none"> 1. Possible hardware or line problems. 2. Corrupt files. 3. An internal error occurred. 	<ol style="list-style-type: none"> 1. The CS error number might be accessible by the SHOWCOM command. Correct and retry. 2. See "Invalid Software Installation" at the beginning of this manual. 3. See "Submitting an SR" at the beginning of this manual.

NMERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Will use LOGGING configuration for this subsystem that is already active. (NMMSG 301)</p>	<p>Returned by NMOPENLOG, NMOPENLOG2. The open log was successful; logging may proceed. There is another openlog outstanding for the same subsystem id, so the configuration info already in use will continue to be used. This result code is returned as a negative number (-301) to indicate it is not an error and that the openlog was, in fact, successful.</p>	<p>None.</p>

NMFS ERROR MESSAGES

NMFSERR MESSAGES

Message	Meaning/Cause	Action
Unable to create new datafile. (NMFSERR 1)	This error is due to a FOPEN failure during NMCONFOPEN. It could be due to a faulty call to NMCONFOPEN or an error due to specific problems on the system itself, such as insufficient disc space, I/O error on file label, etc.	See "NMS Utility Errors" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Unable to write root directory entry to datafile. (NMFSERR 2)	This error happens when there is an FWRITE during the root set up of a configuration file while processing an NMCONFOPEN.	See "NMS Utility Errors" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Unable to close datafile. (NMFSERR 3)	This error is due to a FCLOSE error during NMCONFOPEN.	See "NMS Utility Errors" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Unable to open datafile. (NMFSERR 4)	This error happens when FOPEN fails during a NMCONFOPEN. It may also happen when MIDAScompress is called by the user interface. 1. File doesn't exist. 2. File system error.	1. Create file first. 2. See "NMS Utility Errors" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
Unable to retrieve filecode from datafile. (NMFSERR 5)	This error is due to a FGETINFO failure while trying to read the file label in NMCONFOPEN. This may indicate that the file label has been corrupted.	See "NMS Utility Errors" at the beginning of this manual.

NMFSERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Datafile does not match user specified filecode. (NMFSWARN 6)</p>	<p>This warning happens when a caller of NMCONFOPEN tries to open a file that does not have a CONF file code.</p> <p>(1) The data file specified is not a configuration file (more likely) or</p> <p>(2) the data file label has been corrupted in some way.</p>	<p>See "Corrupt Configuration File" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>
<p>Unable to read root directory entry in datafile. (NMFSERR 7)</p>	<p>This error can be evoked by most NMCONF intrinsics. It is due to a FREADDIR error while trying to read root of data file.</p>	<p>See "Corrupt Configuration File" at the beginning of this manual. See "NMS Utility Errors" at the beginning of this manual.</p>
<p>Unable to find root directory entry in datafile. (NMFSERR 8)</p>	<p>Invoked by most NMCONF intrinsics. Root record is not in correct format in the data file.</p>	<p>See "NMS Utility Errors" at the beginning of this manual. See "Corrupt Configuration File" at the beginning of this manual.</p>

NMFSEERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Unable to find identifier in pathname. (NMFSEERR 9)	<p>This error is caused by most NMCONF intrinsics. Pathway specified cannot be found in data file.</p> <ol style="list-style-type: none"> 1. User error. Make sure pathname requested was previously entered into the file. 2. File possibly corrupted. 	<ol style="list-style-type: none"> 1. Check spelling. 2. See "Corrupt Configuration File" at the beginning of this manual.
Directory linkage error in datafile. (NMFSEERR 10)	<p>This error occurs when there is a failure in an FREADDIR while trying to read the data file. The next link or the root cannot be found. Specifically an unexpected end of file was found. Invoked by most NMCONF intrinsics.</p>	<p>See "Corrupt Configuration File" at the beginning of this manual.</p>
Unable to read directory entry in datafile. (NMFSEERR 11)	<p>This error is similar to NMFSEERR 10 except that the end of file was not the error when FREADDIR was called.</p>	<p>See "NMS Utility Errors" at the beginning of this manual. See "Corrupt Configuration File" at the beginning of this manual.</p>
Data is already associated with this identifier. (NMFSEERR 12)	<p>This error is invoked by NMCONF when data already exists at the location where it was to be added.</p>	<p>See "Corrupt Configuration File" at the beginning of this manual. See "Invalid Software Installation" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.</p>
Unable to retrieve freespace pointer from datafile. (NMFSEERR 13)	<p>This error is invoked by most NMCONF intrinsics when trying to obtain the logical EOF pointer with FGETINFO and a failure occurs.</p>	<p>See "NMS Utility Errors" at the beginning of this manual. See "Corrupt Configuration File" at the beginning of this manual.</p>

NMFERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Filespace exhausted. Unable to add entry. (NMFERR 14)	This is caused when FGETINFO returns insufficient file space left for an additional entry in the configuration file.	The file should be compressed at this point or the procedure calling NMCONFOPEN with createflag true should ask for more space.
Unable to write data record to datafile. (NMFERR 15)	This due to an FWRITEDIR failure.	See "NMS Utility Errors" at the beginning of this manual.
Unable to write directory entry to datafile. (NMFERR 16)	This is due to an FWRITEDIR failure.	See "NMS Utility Errors" at the beginning of this manual.
No data associated with this identifier. (NMFERR 18)	Invoked by NMCONF procedures. Request on data cannot be processed since no data exists for specified pathname.	See "NMS Utility Errors" at the beginning of this manual. See "Corrupt Configuration File" at the beginning of this manual.
Read truncated to capacity of data buffer. (NMFERR 19)	This error occurs when caller of NMCONFGETDATA specifies a buffer length smaller than the actual data entry size.	See "Submitting an SR" at the beginning of this manual.
Unable to read data record from datafile. (NMFERR 20)	This error results from a failure of FREADDIR in many NMCONF intrinsics. The failure is not an end-of-file found.	See "NMS Utility Errors" at the beginning of this manual.
Duplicate identifier already exists. (NMFERR 21)	This error is returned when trying to add a path that already exists.	See "NMS Utility Errors" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.

NMFSEERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Resultant file size beyond permissible range. (NMFSEERR 22)	This error results in MIDAScompress when the spacebias + maximum file size is greater than 64K. Check the spacebias of MIDAScompress call in user interface. The file might also be too large or the file label might be corrupted.	See "NMS Utility Errors" at the beginning of this manual. See "Submitting an SR" at the beginning of this manual.
No identifiers exist beyond this path. (NMFSEERR 23)	This happens when NMCONFnextpath is called and no further path identifiers exist. This may not be an error. Applications calling NMCONFnextpath may use this to find the end of a data branch. Otherwise, it may indicate file corruption.	If this is the case, See "NMS Utility Errors" at the beginning of this manual. and See "Submitting an SR" at the beginning of this manual.
Pathname exceeds user specified maximum depth. (NMFSEERR 24)	This is returned by MIDASsparepath when the user-specified pathname is longer than the pathdepth. No NMCONF intrinsic calls this intrinsic.	See "Submitting an SR" at the beginning of this manual.
Identifier exceeds maximum permissible length. (NMFSEERR 25)	This is returned by MIDASsparepath when the pathname is too long. No NMCONF intrinsic calls this intrinsic.	See "Submitting an SR" at the beginning of this manual.
Pathname length exhausted user specified buffer. (NMFSEERR 26)	This is returned by MIDASstraverse when the maxlevel parameter is exceeded by the pathlevel parameter. This is probably caused by an excessive pathdepth parameter in the MIDAScompress call. Check calling programs.	See "Submitting an SR" at the beginning of this manual.

NMFSERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Unable to rename old datafile prior to replacement. (NMFSERR 27)	This is caused by an FRENAME failure in MIDAScompress. Currently only returned by user interface.	See "NMS Utility Errors" at the beginning of this manual.
Unable to purge old datafile prior to replacement. (NMFSWARN 28)	This is due to an FCLOSE failure in MIDAScompress. Currently returned only by user interface.	See "NMS Utility Errors" at the beginning of this manual.
Datafile is empty. (NMFSWARN 29)	This is returned by MIDAScompress when existing data file has no data in it. This might not be an error if compress is called from the user interface but no data was put into the file.	If the user suspects that there should have been data, then see "Corrupt Configuration File" at the beginning of this manual.
Parameter out of range. (NMFSERR 30)	This is a generic error returned from several MIDAS intrinsics. No subsystems should be calling MIDAS directly.	See "Submitting an SR" at the beginning of this manual.
Unable to open message catalog NMCAT.PUB.SYS. (NMFSERR 31)	Returned by MIDASerrmsg if there is a failure to open NMCAT.PUB.SYS. See if this file is on the system. If it is, it might be corrupted.	If so, then See "Submitting an SR" at the beginning of this manual.
Unable to read message catalog NMCAT.PUB.SYS. (NMFSERR 32)	Returned by MIDASerrmsg. The file might be corrupted.	See "Invalid Software Installation" at the beginning of this manual.
Unable to close message catalog NMCAT.PUB.SYS. (NMFSERR 33)	Returned by MIDASerrmsg. FCLOSE failure on the file.	See "Submitting an SR" at the beginning of this manual.

NMMGR ERRORS

NMGRERR MESSAGES

Message	Meaning/Cause	Action
<p>Terminal is of incorrect type or cannot be opened. (NMGRERR 1)</p>	<p>NMMGR was unable to open the user's terminal for block mode access. This error can occur at program startup or when returning to a form after a character mode operation (e.g. execution an MPE command). Possible situations which may cause this error include:</p> <ol style="list-style-type: none"> 1. The user's terminal is not a block mode terminal supported by VPLUS/3000. 2. A terminal I/O or internal VPLUS/3000 error occurred. 	<p>Check the VPLUS/3000 error (if one is reported) for further information.</p> <ol style="list-style-type: none"> 1. Check the terminal type. See <i>(VPLUS/3000 Reference Manager Part No. 32209-90001)</i> for supported terminals. 2. Check the version of VPLUS/3000 and repeat VPLUS/3000 installation if necessary.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Form file is missing or cannot be opened. (NMGRERR 2)</p>	<p>NMMGR was unable to open the forms file NMMGRF.PUB.SYS at program startup. Possible situations which may cause this error include:</p> <ol style="list-style-type: none"> 1. The file NMMGRF.PUB.SYS is missing. 2. A file equation exists for NMMGRF.PUB.SYS. 3. File NMMGRF.PUB.SYS is not a valid VFAST or VFORM forms file, or it has become corrupted. 4. An internal VPLUS/3000 error occurred. 	<p>Check the VPLUS/3000 error (if one is reported) for further information.</p> <ol style="list-style-type: none"> 1. Restore a backup version of this file, or repeat installation of Node Management if necessary. 2. Check for file equations using LISTEQ and RESET if necessary. 3. Restore a backup version of this file, of Node Management if necessary. 4. Check the version of VPLUS/3000 and repeat VPLUS/3000 installation if necessary.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
That type is not defined for this class of items. (NMGRERR 3)	The user entered a type name in the TYPE field of a type-select screen that is not defined for this screen.	Check the subsystem manual for correct type names and try again.
That function is not implemented. (NMGRERR 4)	The user pressed an invalid function key (with a blank label).	Try to press the labelled function key.
That command is invalid. (NMGRERR 5)	The user typed an unrecognizable command in the command window and pressed (ENTER) .	Check the spelling of the command, and check the list of valid commands in your subsystem node management or configuration manual.
End of file on \$STDINX. Cannot accept further input. (NMGRERR 6)	The user typed :EOF or :EOD in response to the prompt "Press Return when done viewing screen contents."	This error is irrecoverable since the terminal is closed for further input. Run NMMGR again to continue configuration.
Warning: Screen changed. Use UPDATE to save data. (NMGRWARN 7)	The user changed information on a data screen and pressed a key other than UPDATE . This warning prevents accidental exit from the screen without saving changes.	The user may ignore the warning by pressing a key other than UPDATE , or s/he may save changes by pressing UPDATE .
There are no entries at this level to display. (NMGRWARN 8)	The user pressed the PREV PAGE or NEXT PAGE key in a selection screen when there are no items to be displayed on this select screen. Scrolling with these keys is only necessary when there are already items configured.	None.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Internal NM configuration file error. (NMGRERR 9)</p>	<p>NMMGR has encountered an unexpected condition in the configuration file. Possible situations which may cause this error include:</p> <ol style="list-style-type: none"> 1. Two or more users are updating the same configuration file concurrently, and one renames or deletes a path which another is configuring. 2. An internal NMCONF error occurred. 	<p>Check the NMCONF error (if one is reported) for further information.</p> <ol style="list-style-type: none"> 1. Coordinate activity between users. 2. Check the version of NMCONF and repeat installation of Node Management if necessary.
<p>Unexpected type: NM config file corrupt or bad version. (NMGRERR 10)</p>	<p>NMMGR has encountered a data record with a type code (word #1) that is not currently supported. The configuration file may have been corrupted by a file system or disc error.</p>	<p>Restore a back-up copy of the configuration file if possible.</p>
<p>Type must be present. (NMGRERR 11)</p>	<p>The user attempted to add a new item in a typed-select screen without specifying a type.</p>	<p>The type for a new item must be specified. Check the subsystem manual for correct type names for this screen and try again.</p>

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Unexpected data: NM config file corrupt or bad version. (NMGRERR 12)</p>	<p>NMMGR has encountered unrecognizable data in the configuration file. A file system or disc error may have corrupted the configuration file. Possible situations which may cause this error include:</p> <ol style="list-style-type: none"><li data-bbox="646 615 997 674">1. A data record does not match the expected format.<li data-bbox="646 709 997 804">2. A data record has an unexpected type code (word #1) or is missing a type code.<li data-bbox="646 840 997 934">3. A path exists without a data record to indicate its type.	<p>Restore a back-up copy of the configuration file if possible.</p>

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Maximum number of allowed items already configured. (NMGRERR 13)	The user attempted to add more items than the maximum allowed at this level.	Check the NMMGR manual for these maximum values.
Cannot build command table; NMMGRCAT.PUB.SYS corrupt. (NMGRERR 14)	<p>The table of commands in the NM catalog file NMMGRCAT.PUB.SYS is corrupt or missing. Possible situations which may cause this error include:</p> <ol style="list-style-type: none"> 1. The file NMMGRCAT.PUB.SYS is missing. 2. A file equation exists for NMMGRCAT.PUB.SYS. 3. File NMMGRCAT.PUB.SYS is not a valid catalog file, or it has become corrupted. 4. Set 7 of NMMGRCAT.PUB.SYS (the command set) is missing, or some commands have been deleted from this set. 	<ol style="list-style-type: none"> 1. Restore a backup version of this file, or repeat installation of Node Management if necessary. 2. Check for file equations using LISTEQ command and RESET is necessary. 3. Restore a backup version of this file, or repeat installation of Node Management if necessary. 4. Restore a backup version of this file, or repeat installation of Node Management if necessary.
Missing data: NM config file corrupt or bad version. (NMGRERR 15)	NMMGR was unable to locate type code in data record. See explanation for error #2.	Restore a back-up copy of the configuration file if possible.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Cannot set up form for next screen. (NMGRERR 16)</p>	<p>NMMGR was unable to display the form for the screen which the user selected. Possible situations which may cause this error include:</p> <ol style="list-style-type: none"> 1. The forms file NMMGRF.PUB.SYS may be missing or corrupt. 2. A terminal I/O error may have occurred. 3. A data record may be corrupted, making it impossible for NMMGR to display it. Also, see explanation for error #10. 4. an internal VPLUS/3000 or NMCONF error may have occurred. 5. The user typed :EOF: or :EOD in response to the prompt "Press RETURN when done viewing screen contents". The terminal is closed for further input. 	<p>Check the VPLUS/3000 or NMCONF error (if one is reported) for further information.</p> <ol style="list-style-type: none"> 1. Restore a backup version of this file, or repeat installation of Node Management is necessary. 2. Check a back-up copy of the configuration file if possible. 3. Restore a back-up copy of the configuration file if possible. 4. Check the version of VPLUS/3000 and repeat installation of VPLUS/3000 or Node Management if necessary. 5. None.
<p>No errors have yet occurred. (NMGRWARN 17)</p>	<p>The user has gone to the ERRORS screen to check the last error, but no errors have occurred.</p>	<p>None.</p>
<p>MPE command error. (NMGRERR 19)</p>	<p>The user executed an MPE command (by entering the command preceded by a colon and hitting ENTER), and the command terminated in an error state.</p>	<p>Use the Error Information screen and check the Command Interpreter error (CIERR) for further information.</p>

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Item does not exist: use the ADD key to create a new item. (NMGRERR 20)	The user tried to DELETE , RENAME , or UPDATE an item in a select screen, but the item does not yet exist in the configuration file.	Use the ADD key if you intend to add the new item; otherwise check the spelling of the item name.
Item already exists. (NMGRERR 21)	The user tried to ADD an item in a select screen, but the item already exists.	Check the spelling of the item name.
Cannot open NM configuration file. (NMGRERR 22)	NMMGR was unable to open configuration file specified in the open file screen. Possible situation which may cause this error include: 1. The NMFILE process may not be running. 2. Another user or program may have exclusive access to this file. 3. An internal NMCONF error may have occurred.	 1. Restart the system to bring this process up. 2. Check for this condition using LISTDIR5.PUB.SYS. 3. Check the version of NMCONF and repeat installation of Node Management if necessary.
Cannot reopen NM configuration file. (NMGRERR 23)	NMMGR was unable to reopen the configuration file after closing it for compression.	Check the NMCONF or File System error (if one is reported) for further information. This error is fatal. The configuration file cannot be recovered except by running NMMGR again. See the explanation for error number 22.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Cannot compress NM configuration file. (NMGRERR 24)</p>	<p>NMMGR was unable to successfully compress the configuration file. Possible situations which may cause this error include:</p> <ol style="list-style-type: none"> 1. The configuration file is being accessed by another process. Compression requires exclusive access to the configuration file. 2. The user is not the creator of the configuration file. In this case, a security violating error will be reported. 3. The user may have specified a negative number of additional records which was too big. The resulting file size may not be large enough to contain the records of the file. 4. A internal NMCONF or File System error may have occurred. 	<p>Check the NMCONF, File System, or other NMMGR error errors (if reported) for additional information.</p> <ol style="list-style-type: none"> 1. Check for this condition using LISTDIR5.PUB.SYS. Try again later. 2. Only the creator of the file can compress the file. 3. Try a different value. 4. See "Submitting an SR" at the beginning of this manual.
<p>NA or NM capability is needed to run NMMGR. (NMGRERR 25)</p>	<p>The user does not have the correct capability required to run NMMGR.</p>	<p>Check the correct capability list in your subsystem Node Management manual or Configuration manual. And, Check user capability with program LISTDIR5.PUB.SYS, and contact the account manager or system manager if an additional capability is needed.</p>

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
File already exists. Use OPEN FILE (f1). (NMGRERR 26)	The user tried to CREATE a file, which already exists, in the OPEN FILE screen.	Use the OPEN key to open an existing file. Or, use the create key to create a new file.
Must specify new name for rename. (NMGRERR 27)	The user tried to RENAME an item in a select screen without specifying the new name.	Enter a new name in the newname field and try again.
File does not exist. Use CREATE FILE (f2). (NMGRERR 28)	The user tried to OPEN a file, which does not exist, in the OPEN FILE screen.	Use the CREATE key to create a new file.
That command is ambiguous -- use more letters. (NMGRERR 31)	The user typed an ambiguous command prefix in the command window and hit ENTER.	Make the prefix unambiguous by using more letters of the command. Check the NMMGR manual for unambiguous command prefixes.
Maximum path depth exceeded. (NMGRERR 32)	<ol style="list-style-type: none"> 1. The user has entered a pathname whose depth is greater than 8 in the command window. 2. This error is an internal NMMGR error. NMMGR generated a path name whose depth exceeds the maximum allowable depth for paths. 	<ol style="list-style-type: none"> 1. Check the path name and try again. 2. See "Submitting an SR" at the beginning of this manual.
Path name format is invalid. (NMGRERR 33)	<p>NMMGR encounters a path name whose format is not recognized.</p> <ol style="list-style-type: none"> 1. The user has entered an incorrect path name in the window. 2. An internal NMMGR error has occurred. 	<ol style="list-style-type: none"> 1. Check your subsystem node management or configuration manual for correct format of a path name and check the subsystem manual for valid paths. 2. See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Error occurred while listing configuration file. (NMGRERR 34)	<p>An error occurred during output of the tree structure or data records of a configuration file. Potential situations which may cause this error include:</p> <ol style="list-style-type: none"> 1. The configuration file may have corrupt data records or invalid paths. See explanation for error #12. 2. If the file FORMLIST is equated to a disc file, the file may be too small to accommodate the output listing. 	<p>Check the NMCONF or File System error to determine the specific error.</p> <ol style="list-style-type: none"> 1. Restore a back-up copy of the configuration file if possible. 2. Check the size of the file and change file size specification if necessary.
Invalid syntax for file name. (NMGRERR 36)	The user attempted to OPEN or CREATE a configuration file with an invalid file name.	Check the spelling and syntax of the file name.
ENTER executes commands: the command field is blank. (NMGRERR 37)	The user pressed ENTER without putting a command in the command window. NMMGR uses ENTER ONLY for commands. Modifications to the configuration file are all made using function keys.	Make modifications to the configuration file by using the function keys.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
MPE command warning. (NMGRERR 38)	The user executed an MPE command (by entering the command preceded by a colon and hitting ENTER), and the command terminated in a warning state.	Use the Error Information screen and check the Command Interpreter error (CIERR) for further information.
Unable to set termination trap handler. (NMGRERR 39)	The termination trap handling procedure for program aborts cannot be set. This error indicates an internal MPE problem in the procedure XDSNTRAP, which places a termination procedure PLABEL in the process context for use by MPE during process termination.	Check the MPE installation to see that XDSNTRAP is present and working.
Must open a file before using this command. (NMGRERR 40)	The user is trying to view a configuration or directory screen without first opening the configuration or directory file.	Open the configuration or directory file and enter the command again.
Internal error: Unexpected screen length. (NMGRERR 41)	<p>NMMGR cannot properly display a data field in the configuration file on the screen.</p> <ol style="list-style-type: none"> 1. The configuration file is corrupted. 2. The forms file is corrupted or of bad version. 3. An internal NMMGR error has occurred. 	<ol style="list-style-type: none"> 1. Restore a back-up copy of config file if possible. 2. Check that correct version of NMMGRF.PUB.SYS is installed. 3. See "Submitting an SR" at the beginning of this manual.
Internal error: Unexpected screen contents. (NMGRERR 42)	This is an internal NMMGR error. NMMGR has encountered unexpected data from the screen.	Check to see that the correct version of NMMGR is installed. See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Internal error: Unexpected data record length. (NMGRERR 43)	This is an internal NMMGR error. NMMGR cannot properly create a data record from the input from the screen.	See "Submitting an SR" at the beginning of this manual.
Internal error: Unexpected data record contents. (NMGRERR 44)	NMMGR cannot properly display a data field in the configuration file on the screen. 1. The configuration file is corrupted. 1. Restore a back-up copy of the configuration file if possible.	2. An NMMGR internal error has occurred. 2. See "Submitting an SR" at the beginning of this manual.
Internal error: Unexpected status code from procedure. (NMGRERR 45)	This is an internal NMMGR error. An unknown status code is returned from a procedure.	See "Submitting an SR" at the beginning of this manual.
Specified path is not in this configuration file. (NMGRERR 46)	The user has entered a path name in the command field that is not in the configuration file.	Check the path name entered and try again.
Internal error: No child with this type is in schema. (NMGRERR 47)	This is an internal NMMGR error. NMMGR cannot match a path name and a type code to an internal table.	See "Submitting an SR" at the beginning of this manual.
Internal error: Can't find this path in the schema. (NMGRERR 48)	This is an internal NMMGR error. NMMGR cannot match a path name to an internal table.	See "Submitting an SR" at the beginning of this manual.
Internal error: The root node has parent node. (NMGRERR 49)	This is an NMMGR internal error. NMMGR is scanning the configuration file off the boundary.	See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Internal error: The schema has an invalid format. (NMGRERR 50)	This is an internal NMMGR error. NMMGR cannot locate a node in an internal table describing the configuration file structure.	See "Submitting an SR" at the beginning of this manual.
No screen for this path. (NMGRERR 51)	There is no screen to display that is associated with this path name. A path exists in the configuration file but is not recognized by NMMGR.	This path is for internal use only. Check the pathname and try again.
Internal error: Cannot create version stamps. (NMGRERR 52)	NMMGR creates version stamps for each subsystem in configuration file at file creation time, and in some cases at file open time. This is an internal NMMGR error. NMMGR cannot create version stamps in config file due to an NMCONF error. Check the NMCONF error number for detail.	Purge this new file and try to recreate it again. If error still occurs, see "Submitting an SR" at the beginning of this manual.
Cannot open a file due to version checking error. (NMGRERR 53)	NMMGR checks version stamps of each subsystem in the configuration file at file open time. Version checking results show that there is configuration data for at least one subsystem in the configuration file that is not supported by this version of NMMGR.	Run the version control program NMMGRVER to update the file, or open another file, or create a new file.
Internal error: Version checking routine failed. (NMGRERR 54)	NMMGR checks version stamps of each subsystem in the configuration file at file open time. An error has occurred in the version checking routine: <ol style="list-style-type: none"> 1. The configuration file may have corrupt data records or invalid paths. 2. An internal NMMGR error has occurred. 	Check the NMCONF or File System error to determine the specific error. <ol style="list-style-type: none"> 1. Restore a back-up copy of configuration file if possible. 2. See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Internal error: Unable to get info on VPLUS screen field. (NMGRERR 70)	<p>NMMGR was unable to retrieve information on the screen field via VPLUS utilities. Possible causes are:</p> <ol style="list-style-type: none"> 1. The forms file NMMGRF.PUB.SYS is corrupted. 2. The forms file NMMGRF.PUB.SYS and NMMGR are of different version. 3. An internal VPLUS or NMMGR error has occurred. 	<p>Check the VPLUS error message to determine the specific error.</p> <ol style="list-style-type: none"> 1. Restore a back-up version of this file, or repeat installation of Node Management if necessary. 2. Restore a back-up version of NMMGRF, or repeat installation of Node Management if necessary. 3. See "Submitting an SR" at the beginning of this manual.
Internal error: Unable to get info on VPLUS form. (NMGRERR 71)	<p>NMMGR was unable to retrieve information on the screen via VPLUS utilities. Possible causes are:</p> <ol style="list-style-type: none"> 1. The forms file NMMGRF.PUB.SYS is corrupted. 2. The forms file NMMGR.PUB.SYS and NMMGR are of different version. 3. An internal VPLUS or NMMGR error has occurred. 	<p>Check the VPLUS error message to determine the specific error.</p> <p>1,2,3. Same as 1,2, and 3 in NMGRERR 70</p>
Internal error: Data field alignment error. (NMGRERR 72)	This is an NMMGR internal conversion table error.	See "Submitting an SR" at the beginning of this manual.
Internal error: Data field extraction is out of bounds. (NMGRERR 73)	This is an NMMGR internal conversion table error. NMMGR cannot locate data for a field to display on this screen.	See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Internal error: Conversion code not yet implemented. (NMGRERR 74)	This is an NMMGR internal conversion table error. NMMGR encountered an unknown conversion code.	See "Submitting an SR" at the beginning of this manual.
Internal error: Screen conversion ptr is out of bounds. (NMGRERR 76)	This is an internal NMMGR error. Possible causes are: <ol style="list-style-type: none"> 1. The VPLUS is not in the correct version as specified in your subsystem node management or configuration manual. 2. The forms file NMMGRF.PUB.SYS and NMMGR are not of the same version. 3. An internal NMMGR or VPLUS error has occurred. 	Check the VPLUS error number if any for detail. <ol style="list-style-type: none"> 1. Check the version of VPLUS and repeat VPLUS installation if necessary. 2. Restore a back-up version of NMMGRF, or repeat installation of Node Management if necessary. 3. See "Submitting an SR" at the beginning of this manual.
Internal error: Data conversion ptr is out of bounds. (NMGRERR 77)	This is an internal NMMGR conversion table error.	See "Submitting an SR" at the beginning of this manual.
Internal error: Missing description for this screen. (NMGRERR 78)	This is an NMMGR internal table error. The screen name is not in an internal conversion table.	See "Submitting an SR" at the beginning of this manual.
Internal error: Invalid scr field position from VPLUS. (NMGRERR 79)	This is an internal NMMGR error. NMMGR cannot properly locate field data from this screen.	See "Submitting an SR" at the beginning of this manual.
Internal error: Data field not on proper unit boundary. (NMGRERR 80)	This is an internal NMMGR conversion table error.	See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Cannot lock NM configuration file. (NMGRERR 81)	NMMGR was unable to successfully lock the configuration file.	Check the NMCONF File System error (if reported) for further information. Otherwise, contact your HP representative for assistance.
Cannot unlock NM configuration file. (NMGRERR 82)	NMMGR was unable to successfully unlock the configuration file.	Check the NMCONF File System error (if reported) for further information. Otherwise, contact your HP representative for assistance.
Incomplete summary printed. (NMGRERR 85)	Some configuration data could not be found or printed in the summary. The data that could not be found or printed is replaced with asterisks in the summary printout.	
Maximum pagecount exceeded. (NMGRERR 94)	<p>1. User attempted to go to next page at the maximum page count (256).</p> <p>2. User attempted to do "LAST PAGE" or "CONDENSE PAGE". The configuration file may have Reachable Network paths in excess of the maximum page count.</p>	<p>1. Use CONDENSE PAGE.</p> <p>2. Restore the configuration file with Reachable Network paths within the maximum page count.</p>
You must enter a configuration file name to open or create. (NMGRERR 95)	The user pressed "Open Config" or "Create Config" but did not enter the configuration file name on the OPEN screen.	Supply the configuration file name.
You must enter a directory file name to open or create. (NMGRERR 96)	The user pressed "Open Directory" or "Create Directory", but did not fill in the Network Directory File Name field on the OPEN screen.	Supply the network directory file name.
There is no next screen after this screen. (NMGRERR 97)	The user entered the NEXT command but there is no next screen.	None.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Condense Page function failed. (NMGRERR 99)</p>	<p>Error occurs during "CONDENSE PAGE" while doing a "nmconfgetdata" or "nmconfrenamepath". It can be caused by a corrupted configuration file. Or internal error occurs on NMCONF intrinsics.</p>	<p>Restore a back up copy of configuration file and try again. If the error still occurs, see "Submitting an SR" at the beginning of this manual.</p>
<p>Internal error: Nmconf file number not in file table. (NMGRERR 100)</p>	<p>The file number was changed in NMMGR but not entered in the table.</p>	<p>1. Exit NMMGR, and NMMGR and try to observe what damage has been done. Repair if possible or restore config file.</p> <p>2. See "Submitting an SR" at the beginning of this manual.</p>
<p>Internal error: Midas file number not in file table. (NMGRERR 101)</p>	<p>The file number was not located in a search through the table thus a file number was changed in NMMGR but not entered in the table.</p>	<p>1. Exit NMMGR, and rerun NMMGR and try to observe what damage has been done. Repair if possible or restore configuration file.</p> <p>2. See "Submitting an SR" at the beginning of this manual.</p>
<p>Internal error: Unable to remove closed file from file table (NMGRERR 102)</p>	<p>An attempt to clear the file table of a closed file failed.</p>	<p>1. Exit NMMGR. No damage may have occurred. Rerun NMMGR.</p> <p>2. See "Submitting an SR" at the beginning of this manual.</p>
<p>Internal error: NMMGR file table inconsistent. (NMGRERR 103)</p>	<p>On trying to access the file table an error was found in the table. This will happen at open time. If an attempt is made to put a file into the file table, and the slot in the table is already occupied.</p>	<p>1. Exit NMMGR. No damage may have occurred. Rerun NMMGR.</p> <p>2. See "Submitting an SR" at the beginning of this manual.</p>

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Netxport has locked the file; cannot begin guided task; wait (NMGRERR 104)	Transport is being started using the file NMMGR has open as the active configuration file. A guided dynamic update cannot be started until the transport has been started.	Wait until transport is started and they try again.
The file has been locked; type 'STOP' to abort, or wait (NMGRERR 105)	Transport is being started using the file NMMGR has open as the active configuration file. NMMGR is processing a guided dynamic update which cannot continue until the transport has been started.	Wait until the transport is started and then try again.
The file has been locked; cannot begin guided task (NMGRERR 106)	Transport is using the file NMMGR has open as the active configuration file. Guided configuration cannot be performed on an active configuration file; only guided dynamic updates.	None.
The file has been locked; 'STOP' to abort (NMGRERR 107)	Transport is being started using the file NMMGR has open as the active configuration file. NMMGR is performing a guided configuration which cannot continue while the transport is up. The file cannot be modified except with guided dynamic updates until the transport is brought down.	Type 'STOP' in the command window and press ENTER to stop guided configuration.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
The file has been locked; cannot make any modification (NMGRERR 108)	Transport is using the file NMMGR has open as the active configuration file. The file cannot be changed except with guided dynamic updates.	None.
The file has been locked; subtree copy aborted (NMGRERR 109)	Transport is beeing started using the file NMMGR has open as the active configuration file. NMMGR was processing a subtree copy.	When the transport is no longer running, purge the subtree you were copying into and restart the subtree copy.
Internal error: Cannot check file lock status; data not updated (NMGRERR 110)	NMMGR cannot check to see if the transport is using this file or not.	<ol style="list-style-type: none"> 1. If the transport is being started or shut down wait until it is finished and then try again. 2. See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Cause	Action
Error in build statement table. (NMGRERR 200)	This is an internal NMMGR error. The number of statements in an internal table does not match the number expected by NMMGR.	<ol style="list-style-type: none"> 1. Restore the file NMMGRCAT.PUB.SYS 2. Run NMMAINT.PUB.SYS to make sure the version of NMMGR is correct.
Internal error in Guided config. (NMGRERR 201)	This is an internal guided configuration error caused by a corrupt NMMGRCAT.PUB.SYS file.	<ol style="list-style-type: none"> 1. Restore NMMGRCAT and retry. 2. See "Submitting an SR" at the beginning of this manual.
Aux NMCONF file already open. (NMGRERR 202)	This is an internal guided configuration error caused when more than one NMCONF file is opened by the guided configuration open statement.	See "Submitting an SR" at the beginning of this manual.
Cannot open source, destination, or Aux NMCONF file. (NMGRERR 203)	This is cause when the source/destination file or the file NMAUX1.PUB.SYS is missing, the wrong version, is locked for exculsive access, or corrupt during a subtree copy.	<ol style="list-style-type: none"> 1. If doing a subtree copy, check to see that the source and destination files really exist. 2. If performing a guided configuration task copy NMAUX1.PUB.SYS from backup tape, and run NMMAINT.PUB.SYS to make sure that you have the correct version.
Aux NMCONF file not opened. (NMGRERR 204)	This is an internal guided configuration error caused when data is copied from the auxiliary file to the user file and the auxiliary file was not opened.	See "Submitting an SR" at the beginning of this manual.
Auxiliary file does not contain specified path. (NMGRERR 205)	This is guided configuration error caused when NMMGRCAT specifies a path in the auxiliary file that does not exist.	Copy NMAUX1.PUB.SYS from back-up tape, and run NMAINT.PUB.SYS to make sure that the version of NMAUX1 is the same as NMMGR.

NMGRERR MESSAGES (cont'd)

Message	Cause	Action
Path to subtree in user file does not exist. (NMGRERR 206)	This problem could be caused by an old configuration file that needs to be updated, or a corrupt file.	<ol style="list-style-type: none"> 1. Run NMMGRVER.PUB.SYS 2. Restore old configuration file from a back-up tape. 3. Create a new configuration file with NMMGR.
Internal error; Guided token overflow. (NMGRERR 207)	This is an internal guided configuration error.	<ol style="list-style-type: none"> 1. Restore NMMGRCAT.PUB.SYS from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual
Unexpected Guided Config error. Type ERRORS. (NMGRERR 208)	An unexpected or internal guided configuration error occurred. A PC value is specified at the end of this error message. If the user is unable to include the value problem, the user should submit an SR. Be sure to include the value of the PC with the SR.	<ol style="list-style-type: none"> 1. Type the "ERROR" command after this message is displayed for clarification of the error(s). 2. See "Submitting an SR" at the beginning of this manual.
Cannot Stop Guided Configuration. (NMGRERR 209)	The stop command is only allowed on screens which contain a "path". This is most likely to occur when the user types the command "STOP" on the errors screen during guided configuration.	Move to a screen which contains a "path" at the top of the menu and retype the stop command.
Cannot perform NEXT function. (NMGRERR 211)	This error occurs when the user attempts to use the NEXT command when no selection screen has been encountered.	There is no need to use this function at this time.

NMGRERR MESSAGES (cont'd)

Message	Cause	Action
Function is not allowed during Guided configuration. (NMGRERR 214)	The user has pressed a function key that is not allowed during guided configuration. If the user is on a data screen, it is possible to advance by pressing the Update function key.	Press a labeled function key.
Illegal vplus field specified in Guided config. (NMGRERR 215)	This is an internal guided configuration error that is caused by missing information in the forms file.	<ol style="list-style-type: none"> 1. Restore NMMGRF.PUB.SYS from back-up tape, and run NMAINT.PUB.SYS. 2. See "Submitting an SR" at the beginning of this manual.
Illegal Guided config variable name. (NMGRERR 216)	This is an internal guided configuration error.	See "Submitting an SR" at the beginning of this manual.
Illegal path iden name in Guided config. (NMGRERR 217)	This is an internal guided configuration error.	See "Submitting an SR" at the beginning of this manual.
Max num of items that can be put to a screen exceeded. (NMGRERR 218)	This is an internal guided configuration error.	See "Submitting an SR" at the beginning of this manual.
String over flow. (NMGRERR 219)	This is an internal guided configuration error.	<ol style="list-style-type: none"> 1. Restore NMMGRCAT.PUB.SYS from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Cause	Action
Boolean logic error. (NMGRERR 220)	This is an internal guided configuration error.	See "Submitting an SR" at the beginning of this manual.
Missing ENDIF statement. (NMGRERR 221)	This is an internal guided configuration error.	See "Submitting an SR" at the beginning of this manual.
Select loops nested too deep. (NMGRERR 222)	This is an internal guided configuration error.	See "Submitting an SR" at the beginning of this manual.
Select stack underflow missing ENDSELECT. (NMGRERR 223)	This is an internal guided configuration error.	See "Submitting an SR" at the beginning of this manual.
Missing ENDSELECT statement. (NMGRERR 224)	This is an internal guided configuration error.	See "Submitting an SR" at the beginning of this manual.
Unknown statement in Guided Configuration driver. (NMGRERR 226)	This is an internal guided configuration error.	<ol style="list-style-type: none"> 1. Restore NMMGRCAT.PUB.SYS from back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
Command not allowed on error or version screen. (NMGRERR 227)	Certain commands are only allowed on states which contain a path. This is likely to occur when the user types stop on the errors screen or the version screen during guided configuration.	Move to a state which contains a path and retype the stop command.
The network interface data and the topology key must match. (NMGRERR 228)	The type of the network interface does not match the topology key which you selected.	<ol style="list-style-type: none"> 1. Make sure you pressed the corrected topology key. 2. Make sure you have the correct network interface name. 3. Check the type of the network interface name by going to NEXPORT.NI (do a direct branch).

NMGRERR MESSAGES (cont'd)

Message	Cause	Action
The Network interface must be type ROUTER. (NMGRERR 229)	The Network interface is the wrong type.	Check the type of the network interface name by going to NETXPORT.NI (do a direct branch).
The Network interface may not be of type LOOPBACK. (NMGRERR 230)	There is no Internet data to configure under the loopback.	The user should not use this function with loopback.
No network interface found, or unknown type. The name may be spelled incorrectly. (NMGRERR 231)	Check the type of the network interface name by going to NETXPORT.NI (do a direct branch).	File an SR if the type is labeled as UNKNOWN. (See "Submitting an SR" at the beginning of this manual). The unknown type should be deleted and the operation retried.
Unable to open source NMCONF file for copy. (NMGRERR 232)	File does not exist or is the wrong version.	<ol style="list-style-type: none"> 1. If in Guided config, then NMAUXI.PUB.SYS could not be opened. 2. If performing a copysubtree then check the source file to make sure it exists and it is the correct version.
Unable to open destination NMCONF file for copy. (NMGRERR 233)	File does not exist or is wrong version.	<ol style="list-style-type: none"> 1. If in Guided config, then NMCONFIG.PUB.SYS or the user file does not exist, or is corrupt. You may check the version by running NMMMAINT.PUB.SYS. You may also run NMMGRVER to determine if your file is corrupt. 2. If performing a copysubtree then check the destination file to make sure it exists. Check the version and check to see if the file is corrupt (as in part 1).

NMGRERR MESSAGES (cont'd)

Message	Cause	Action
<p>The source path was not found. (NMGRERR 280)</p>	<p>The path to the subtree to copy was not found.</p>	<ol style="list-style-type: none"> 1. Check to make sure you have the correct file. 2. Check the source path spelling.
<p>The destination path was not found. (NMGRERR 281)</p>	<p>The destination path, which is created by taking the source path, and substituting any destination ids into it, was not accessible. The path in the file was not an exact match, or is missing the destination path.</p>	<ol style="list-style-type: none"> 1. Check to make sure you have the correct file. 2. Check the source and destination path spelling.
<p>The destination path exists. Use the overwrite option to replace. (NMGRERR 282)</p>	<p>The destination path already exists in the file.</p>	<p>Enter 'Y' in the overwrite option.</p>
<p>Source and destination do not map with each other correctly. (NMGRERR 283)</p>	<p>The source and destination paths must start at the same spot in the NMMGR schema. Most likely the user attempted to change the name of an item in the destination of a subtree copy.</p>	<ol style="list-style-type: none"> 1. The user should check to see if the item that was changed was a select or type select identifier. If not, that will cause the subcopy to fail. 2. The user should check to make sure that any destination type select items that were changed, were changed to items of the same type. (i.e. lan to lan, instead of lan to router.)

NMGRERR MESSAGES (cont'd)

Message	Cause	Action
Internal ERROR in subtree copy. (NMGRERR 284)	Internal error.	Submit an SR.
A non select screen id was changed in the destination path. (NMGRERR 285)	Incorrect ids in the destination path.	Check ids in the destination path. Make sure that they are all select nodes.
Illegal path name identifier in destination path name. (NMGRERR 286)	A path id in the destination pathname is not legal.	<ol style="list-style-type: none"> 1. Check the destination path id for typing mistakes. 2. Check the <i>NS3000/V Network Manager Reference Manual</i> for the selection screen which corresponds to the path which is formed from the destination id in error. The documentation describes the legal names.
Invalid destination path -- path too long. (NMGRERR 287)	The source and destination paths must be the same length. When entering data on the subtree copy screen, the source path may appear longer, but should this be the case, then the destination path uses ids from the source path. This error is generated in the other case when the destination path is longer than the source path i.e. source = netxport, destination = netxport.ni.lan1.	The user should check to make sure that he is not missing path ids in the source path.
Source path contains empty path identifiers. (NMGRERR 288)	This occurs when the user leaves path ids empty in the middle of the source path field on the copy sub screen.	The user should check the source path, and fix the path, such that none of the source path ids are blank in the middle of the source path.

NMGRERR MESSAGES (cont'd)

Message	Cause	Action
The source and destination may not be the same file and path. (NMGRERR 289)	The user is copying over his source data, this is not allowed.	The user should select another file to copy into, or the user should choose another path to copy into.
The file does not exist or cannot be opened. (NMGRERR 290)	A NMCONF file to be opened for a copy could not be accessed.	<ol style="list-style-type: none"> 1. Check the spelling of the filename. 2. Do a "listf <filename>" to see if file exists.
Internal NMMGR error: cannot close current Network Directory. (NMGRERR 300)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Internal NMMGR error: corrupt file likely. (NMMGRERR 301)	This an internal error.	<ol style="list-style-type: none"> 1. The directory file is probably corrupt and should be replaced by a copy from a back-up tape. Restore both data and key files. 2. See "Submitting an SR" at the beginning of this manual.
No next page of node names. (NMMGRERR 302)	This is an informative message that is issued when the user hits NEXT PAGE and there are no subsequent names in the directory, or when the name supplied does not exist.	None.
No previous page of node names. (NMMGRERR 303)	This is an informative message that is issued when the user hits PREV PAGE and there are none, or when the name supplied does no exist.	None.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
A node with the same name and global/local setting already exists. (NMGRERR 304)	This is an informative message that is issued when the user tries to add a node name that already exists in the directory. Name probably misspelled, or wrong global/local setting given.	Correct the node name and/or global/local setting.
Cannot find a node with this name and global/local setting. (NMGRWARN 305)	This is an informative message that is issued when the user tries to delete or update a node name that does not exist. Name probably misspelled, or wrong global/local setting given.	Correct the node name and/or global/local setting.
RENAME requires a new node name and/or new global/local setting. (NMGRERR 306)	This is an informative message that is issued when the user tries to rename a node name (global/local setting), but both the new node name and new global/local setting, were omitted.	Specify the missing information.
The current node name entry has been deleted by another user. (NMGRERR 307)	The user attempted to delete or update a network address, or path data, but another user who is modifying the same directory file has just deleted the entry.	Coordinate update activities with other user(s).
Duplicate IP address. (NMGRERR 308)	The user attempted to add a network address that already exists in the current path report.	<ol style="list-style-type: none"> 1. Choose a different network address. 2. Make sure you are updating the correct node name global/local setting.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Not enough room in the path report list for this addition. (NMGRERR 321)	This is an informative message that is issued when the user attempts to add or update a path in a very large path report list. This can happen only on very large gateway nodes. (e.g. node with > 15 network addresses.)	See "Submitting an SR" at the beginning of this manual. (Request an expansion on the limit on path reports.)
Internal NMMGR error - corrupt path report list data. (NMGRERR 322)	Severe error indicating an internal logic error.	See "Submitting an SR" at the beginning of this manual.
No directory file open. (NMGRERR 323)	Maintenance mode interface: An informative message issued when a user gives a command prior to completing a successful OPENDIR command.	Open or create a directory file using OPENDIR, then reissue the command.
Cannot find this entry in the directory. (NMGRWARN 324)	Maintenance mode interface: An informative message issued when no directory entry (either global, local, or neither - if no ;GLOBAL or ;LOCAL keyword given) could be found in the directory matching the specified node name.	Correct the node name.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Cannot open source file / wrong file type. (NMGRERR 325)</p>	<p>Maintenance mode interface: An informative message issued when an invalid file was specified in a MERGEDIR command. Possible causes are:</p> <ol style="list-style-type: none"> 1. Nonexistent file 2. Wrong type of file (not directory or configuration file) 3. Security violation 4. A system file name was given (e.g. \$null,\$STDLIST) 5. Other file system problem 	<p>Correct the filename.</p>
<p>Cannot specify a node name when source is a configuration file. (NMGRERR 326)</p>	<p>Maintenance mode interface: Informative message issued when a user specified a node name in conjunction with a configuration file in a MERGEDIR command.</p>	<ol style="list-style-type: none"> 1. Omit the node name from the command. 2. Use a directory file as the source and retain the node name.
<p>Local and global entries exist for this node name; choose one. (NMGRERR 327)</p>	<p>Maintenance mode interface: An informative message issued when the user has given a DELETENODE command, specifying a node name that is not unique; e.g. both a local and global entry exist for the node name.</p>	<p>Explicitly state the entry to be deleted using ;LOCAL or ;GLOBAL</p>
<p>The node name must be of the form NAME.DOMAIN.ORG. (NMGRERR 328)</p>	<ol style="list-style-type: none"> 1. A node name was expected, however, the data present did not conform to the node name format. 2. The node name is more than 50 characters long. 	<p>Correct the node name.</p>

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Catalog file has an error in the Batch Command list. (NMGRERR 329)	A internal error in NMMGR has occurred.	<ol style="list-style-type: none"> 1. Run NMMAINT.PUB.SYS to make sure that you have the correct version of NMMGR. 2. Restore the file NMMGRCAT.PUB.SYS from a back-up tape. 3. See "Submitting an SR" at the beginning of this manual.
Extra data was specified for this command. (NMGRERR 330)	The user specified too much data.	Check syntax of command or type "help" for more information.
A key operator was already specified. (NMGRERR 332)	The user specified both a ;LOCAL and ;GLOBAL key operator.	Retype the command with only a ;LOCAL or ;GLOBAL.
A merge operator was already specified. (NMGRERR 333)	The user specified more than one merge operator (KEEP, NOKEEP, TIMESTAMP).	Retype command with only one merge operator.
Unknown command encountered. (NMGRERR 334)	The user typed in an incorrect command.	<ol style="list-style-type: none"> 1. If the command is an MPE command, the command must start with a '?. 2. Check spelling of the command name.
Internal Batch Mode error. (NMGRERR 335)	An internal batch mode error has occurred.	See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Unexpected semicolon encountered. (NMGRERR 336)	<p>A semicolon was encountered before other expected data was entered.</p> <ol style="list-style-type: none"> 1. OPENDIR: no options (no semicolon) is allowed. 2. MERGEDIR: no filename was specified. 3. LISTDIR: no options (no semicolon) is allowed. 4. EXPANDDIR: no options (no semicolon) is allowed. 	Check syntax of the command or type "help" for more information.
Expected parameter after command. (NMGRERR 337)	<p>A parameter is needed after certain commands. This error occurs if the user does not specify that parm.</p> <ol style="list-style-type: none"> 1. OPENDIR: needs a filename. 2. MERGEDIR: needs a filename. 3. EXPANDDIR: needs an integer. 	Check syntax of the command or type "help" for more information.
Unknown or extra keyword parameter specified. (NMGRERR 338)	<p>This occurs in DELETENODE or MERGEDIR when the keyword local, global, keep, nokeep, or timestamp is spelled incorrectly or you have a duplicate type of keyword (I.E. DELETENODE a.b.c;local;global). DELETENODE only allows local or global keywords.</p>	<ol style="list-style-type: none"> 1. Check spelling of keywords. 2. Check for duplicate keyword types. 3. Type "help" for correct syntax.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Illegal configuration file name. (NMGRERR 339)	Configuration file name may be too long, or contains illegal characters.	Recheck file name specified.
Illegal directory file name. (NMGRERR 340)	Directory name may be too long, or contains illegal characters.	Recheck file name specified.
No keywords are allowed for this command. (NMGRERR 341)	This command does not allow keywords.	Check syntax of the command or type "help" for more information.
Node name length must be from 5 to 50 chars in length. (NMGRERR 342)	The node name length is wrong.	Check the length of each segment in the node name. Each segment (name, domain, org) must be 1-16 characters in length.
Name segment in node name must be from 1 to 16 chars in length. (NMGRERR 343)	The name portion of the node name is the incorrect length.	Fix the length of the name in NAME.domain.org.
Domain segment in node name must be from 1 to 16 chars in length. (MNGRERR 344)	The domain portion of the node name is the incorrect length.	Fix the length of the domain in name.DOMAIN.org.
org segment in node name must be from 1 to 16 chars in length. (NMGRERR 345)	The org portion of the node name is the incorrect length.	Fix the length of the org in name.domain.ORG.
Each segment in the node name must begin with an alphabetic char. (NMGRERR 346)	Each seg in node name (name, domain, and org) must begin with an alphabetic character.	Check to see that the first char in each segment is in the set ['A'..'Z'].
Node names may only be composed of alpha, numeric and "_", "-". (NMGRERR 347)	Illegal character specified.	Check each segment for an illegal character.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Expected the destination path and file to be formatted as PATH:FILE. (NMGRERR 348)	Incorrect format specified.	Check to make sure that the three components: path, colon, and file are present.
Expected three filename parameters : streamfile, nodefile, cmdfile. (NMGRERR 349)	File name parameters incorrectly specified.	Check to make sure that there are three filenames separated by commas.
Expected the source path and file to be formatted as PATH:FILE. (NMGRERR 350)	Incorrect format specified.	Check to make sure that the three components: path, colon, and file are present.
Missing comma. (NMGRERR 351)	Incorrect format specified.	correct syntax of command.
Problem accessing the existing directory file. (NMGRERR 380)	Maintenance mode interface: An operation on the existing directory file could not be performed. The possible operations are: FOPEN the file as a KSAM file exclusively, FGETINFO and FGETKEYINFO on the file, or FCLOSE the file with the delete option.	Check the accompanying file system error for more information. If the error reflects an exclusive access violation (e.g. another process has the file open, or the user does not possess adequate capabilities to open the file, etc.) then correct the multiple access and/or correct user capabilities.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>Problem accessing the new (expanded directory file. (NMGRERR 381)</p>	<p>Maintenance mode interface: An operation on a COPY of the existing directory file could not be performed. The possible operations are: FOPEN the file (new) as a KSAM file (opened with a temporary file name "ZTMPxxxx"), FWRITE to the file, FCLOSE with save option, FOPEN the data file in copy mode, FREADLABEL the data file, FWRITELABEL the data file, FOPEN the key file in copy mode, FREAD from the key file, FUPDATE the key file, FCLOSE the key file.</p>	<ol style="list-style-type: none"> 1. Check the accompanying file system error for more information. If the error reflects a security violation, then the user is most likely (a) trying to access a file for read/write access for which he does not have adequate capabilities, or (b) trying to expand the file in a different account than his logon account. Since the expand operation involves a RENAME, the user MUST be logged into the same account as the directory file that he is trying to expand. 2. If the original directory file does not exist, but the temporary files ("ZTMPxxxx" and ZTMPxxxK") do exist, then the directory can be recovered by building a new KSAM file manually (use KSAMUTIL) with identical attributes as the original file, then use FCOPY to copy the data and key files SEPARATELY into the newly built KSAM data and key files -- use the ";NOKSAM" option of FCOPY. 3. If the temporary files do not exist, then the original directory must be restored from a back-up tape.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Incompatible version of KSAM for file rename operation. (NMGRERR 382)	Maintenance mode interface: The location of internal KSAM data and key information has changed and thus cannot be updated with this version of the NMC software.	<ol style="list-style-type: none"> 1. For an intermediate solution, use KSAMUTIL to build a larger (expanded) file and use FCOPY to copy the directory to the new file. 2. See "Submitting an SR" at the beginning of this manual.
Cannot specify a negative number for expansion. (NMGRERR 383)	Maintenance mode interface: the user gave a negative number of records to expand the file.	Supply a positive number of records.
Cannot open command file "NMMGRCMD". (NMGRERR 384)	The command file NMMGRCMD could not be opened.	<ol style="list-style-type: none"> 1. Check for any file equations set for "NMMGRCMD". 2. See the accompanying file system error message for problem resolution.
Cannot open the nodelist file. (NMGRERR 400)	The nodelist file could not be opened for read/write access.	See the accompanying file system error message for resolution.
Record size of nodelist file too small; must be >= 80 bytes. (NMGRERR 401)	The record size of the nodelist file is too small to be used.	<ol style="list-style-type: none"> 1. If creating the nodelist file using the LISTDIR command, then do not included a ;REC= parameter in the file equation. 2. Copy the nodelist file into a file with a larger record width.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Filecode of nodelist non zero. (NMGRERR 402)	The nodelist file supplied did not have a 0 filecode; i.e. it was not a standard EDITOR-type file.	<ol style="list-style-type: none"> 1. If creating the nodelist file using the LISTDIR command, then do not include a ;CODE= parameter in the file equation. 2. Copy the nodelist file into a file created with no file code.
FREADDIR failed trying to read from nodelist file. (NMGRERR 403)	Could not issue a directed read to the nodelist file. The file most likely has a variable-length record structure.	See the accompanying file system error message for resolution.
FWRITEDIR failed trying to write to nodelist file. (NMGRERR 404)	Could not issue a directed write against the nodelist file.	See the accompanying file system error message for resolution.
Cannot close nodelist file. (NMGRERR 405)	Could not close the nodelist file.	See the accompanying file system error message for resolution.
FCONTROL failed trying to set EOF marker on nodelist file. (NMGRERR 406)	Internal error.	See "Submitting an SR" at the beginning of this manual.
FPOINT failed on nodelist file. (NMGRERR 407)	Could not set the record pointer in the nodelist file.	See the accompanying file system error message for resolution.
FGETINFO failed on nodelist file. (NMGRERR 408)	Internal error.	See "Submitting an SR" at the beginning of this manual.
FREAD failed trying to read from nodelist file. (NMGRERR 409)	Could not read sequentially from the nodelist file.	See the accompanying file system error message for resolution.
Cannot gain access to the stream file. (NMGRERR 410)	A check to verify that the stream file does not already exist could not be completed.	See the accompanying file system error message for resolution.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
The stream file already exists; choose another name. (NMGRERR 411)	The stream file given already exists as a permanent file. The MAKESTREAM command requires that this file not exist.	<ol style="list-style-type: none"> 1. Choose another file name. 2. Rename the existing file to another name.
Cannot gain access to the command file. (NMGRERR 412)	A check to verify that the command file does exist could not be completed.	See the accompanying file system error message for resolution.
The command file does not exist. (NMGRERR 413)	The command file given does not exist.	Supply the name of an existing command file.
Internal catalog error: job text identifier table overflow. (NMGRERR 414)	Message catalog NMMGRCAT.PUB.SYS incorrect.	<ol style="list-style-type: none"> 1. :RESTORE NMMGRCAT.PUB.SYS from a backup tape. 2. See "Submitting an SR" at the beginning of this manual.
Internal catalog error: incorrect format for job text ID entry. (NMGRERR 415)	Message catalog NMMGRCAT.PUB.SYS incorrect.	<ol style="list-style-type: none"> 1. :RESTORE NMMGRCAT.PUB.SYS from a backup tape. 2. See "Submitting an SR" at the beginning of this manual.
Error converting a catalog entry into a number value. (NMGRERR 416)	Message catalog NMMGRCAT.PUB.SYS incorrect.	<ol style="list-style-type: none"> 1; :RESTORE NMMGRCAT.PUB.SYS from a backup tape. 2. See "Submitting an SR" at the beginning of this manual.
Catalog entry value not in range - 32768-32767. (NMGRERR 417)	Message catalog NMMGRCAT.PUB.SYS incorrect.	<ol style="list-style-type: none"> 1. :RESTORE NMMGRCAT.PUB.SYS from a backup tape. 2. See "Submitting an SR" at the beginning of this manual.

NMGRERR MESSAGES (cont'd)

Message	Meaning/Cause	Action
Cannot read an entry from the message catalog. (NMGRERR 418)	Message catalog NMMGRCAT.PUB.SYS incorrect.	<ol style="list-style-type: none"> 1. :RESTORE NMMGRCAT.PUB.SYS from a backup tape. 2. See "Submitting an SR" at the beginning of this manual.
Cannot open the stream file. (NMGRERR 419)	The stream file could not be opened.	See the accompanying file system error message for resolution.
FWRITE failed trying to write to the stream file. (NMGRERR 420)	Could not write to the stream file. Most likely, the end-of-file has been reached and the file is full.	<ol style="list-style-type: none"> 1. See the accompanying file system error message for resolution. 2. If end-of-file has been reached, issue a file equation for the stream file: FILE yourfile;DISC=nnnn,32,1 where "yourfile" is the name of the stream file, and "nnnn" is the number of records needed in the file. Approximately 150 records should be allocated for each node in the nodelist file. Note that the stream file is created as a variable-length file, so fewer records should be required per node. The file is opened with a default of 5000 records. Retry the MAKESTREAM command with the new file equation.
Cannot close the stream file. (NMGRERR 421)	The stream file could not be closed.	See the accompanying file system error message for resolution.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES**NETWORK DIRECTORY (NDIERR) ERROR MESSAGES**

Message	Cause	Action
Directory file not open. (NDIERR 001)	No directory file was opened.	See "Submitting an SR" at the beginning of this manual.
Directory is not open for write access. (NDIERR 002)	The currently opened directory was not opened with write access.	See "Submitting an SR" at the beginning of this manual.
FLOCK failed - internal error. (NDIERR 003)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Requires Network Administrator capability. (NDIERR 004)	User does not have Network Administrator capabilities.	Change user capabilities.
Not enough room in directory for new entry. (NDIERR 006)	The directory file is full.	Expand the directory file capacity using the NMMGR maintenance mode EXPANDDIR command.
FCONTROL/FUNLOCK failed - internal error. (NDIERR 007)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Name type invalid; must be 1 (NS node name). (NDIERR 008)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Name length invalid for name type. (NDIERR 009)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Path report list length cannot be negative. (NDIERR 010)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Directory entry length exceeds maximum. (NDIERR 011)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
Duplicate node name in directory - cannot add new entry. (NDIERR 012)	An entry with the same node name and global/local flag setting already exists in the directory.	Supply a different node name and/or global/local setting.
FFINDBYKEY failed - corrupt file likely. (NDIERR 013)	Possible corrupt network directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
Directory file not open. (NDIERR 020)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Cannot close directory file - internal error. (NDIERR 021)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Requires Node Manager or Network Administrator capability. (NDIERR 022)	User does not have Node Manager or Network Administrator capabilities.	Change user capabilities.
Directory size too small; must be > 0. (NDIERR 040)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Directory size too large; must be <= 10,000 records. (NDIERR 041)	Directory size parameter too large.	1. If a larger file is really desired, create one at the maximum size, then use NMMGR maintenance mode EXPANDDIR command to increase the file to desired size. 2. See "Submitting an SR" at the beginning of this manual.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
Directory entry length negative; must be > 0. (NDIERR 042)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Directory entry length exceeds maximum. (NDIERR 043)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Cannot create directory file. (NDIERR 044)	The network directory file could not be opened.	See the accompanying file system error message for problem resolution.
FWRITE of header record failed - internal error. (NDIERR 045)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FCLOSE failed - internal error. (NDIERR 046)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Directory name cannot contain a lockword. (NDIER 047)	Directory file names may not be lockword protected.	Resubmit the file name with no lockword or a null lockword.
Requires Node Manager or Network Administrator capability. (NDIERR 048)	User does not have Node Manager or Network Administrator capabilities.	Change user capabilities.
No file system error had occurred. (NDIERR 060)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Directory file not open. (NDIERR 080)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Item number invalid; must be 1, 2, 3, 4, 5, or 6. (NDIERR 081)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Requires Node Manager or Network Administrator capability. (NDIERR 082)	User does not have Node Manager or Network Administrator capabilities.	Change user capabilities.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
FGETINFO failed - internal error. (NDIERR 083)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FLOCK failed - internal error. (NDIERR 084)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FCONTROL/FUNLOCK failed - internal error. (NDIERR 085)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Cannot open directory file. (NDIERR 100)	Could not open the directory file due to various MPE file system errors.	Consult accompanying file system error message for problem resolution.
FGETINFO failed - internal error. (NDIERR 101)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Wrong filecode for directory file; expected 1211. (NDIERR 102)	The file name specified is not a network directory file.	Correct filename to refer to a network directory file.
Access mode invalid; must be 0 or 1. (NDIERR 103)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Share option invalid; must be 0, 1, 2 or 3. (NDIERR 104)	This is an internal error.	See "Submitting an SR" at the beginning of this manual
FLOCK failed - internal error. (NDIERR 105)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Incompatible directory version - outdated directory. (NDIERR 106)	The current level of software does not support the format of the directory file.	<ol style="list-style-type: none"> 1. Install correct versions of NMC software. 2. Restore correct version of network directory file.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
FCONTROL/FUNLOCK failed - internal error. (NDIERR 107)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FCLOSE failed - internal error. (NDIERR 108)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Directory name cannot contain a lockword. (NDIERR 109)	The network directory file cannot be lockword protected.	Remove the lockword from the filename, or replace it with a null lockword.
Requires Node Manager or Network Administrator capability. (NDIERR 110)	User does not have Node Manager or Network Administrator capabilities.	Change user capabilities.
File is not a Network Directory. (NDIERR 111)	User calling ND'OPEN passed a file that is not a network directory file. The most likely cause is that the file is not a KSAM file.	Correct the filename.
One or more required parameters are missing. (NDIERR 120)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Directory file not open. (NDIERR 121)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Relop parameter invalid; must be 0, 1 or 2. (NDIERR 122)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Name type invalid; must be 1 (NS node name). (NDIERR 123)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Name length invalid for name type. (NDIERR 124)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
FFINDBYKEY failed - corrupt file likely. (NDIERR 125)	Possible corrupt network directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
Cannot find a matching node name in the directory. (NDIERR 126)	In the directory, no entry could be found with the requested nodename and global/local flag setting. Or, a partial nodename (generic key) was requested and no match could be found.	Supply the nodename of an existing entry, or a generic key to satisfy the match.
FREAD failed - corrupt file likely. (NDIERR 127)	Possible corrupt network directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
FLOCK failed - internal error. (NDIERR 128)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FCONTROL/FUNLOCK failed - internal error. (NDIERR 129)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Requires Node Manager or Network Administrator capability. (NDIERR 130)	User does not have Node Manager or Network Administrator capabilities.	Change user capabilities.
Select parameter invalid; must be 0, 1 or 2. (NDIERR 131)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FSPACE failed - corrupt file likely. (NDIERR 132)	Probable corrupt directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
Directory file not open. (NDIERR 140)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
Directory is not open for write access. (NDIERR 141)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FLOCK failed - internal error. (NDIERR 142)	Internal error.	See "Submitting an SR" at the beginning of this manual.
FLOCK failed - internal error. (NDIERR 143)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Cannot remove node name - internal error. (NDIERR 143)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Requires Network Administrator capability. (NDIERR 144)	User does not have Network Administrator capabilities.	Change user capabilities.
FREAD failed - corrupt file likely. (NDIERR 145)	Possible corrupt network directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
FCONTROL/FUNLOCK failed - internal error. (NDIERR 146)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Name type invalid; must be 1 (NS node name). (NDIERR 147)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Name length invalid for name type. (NDIERR 148)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FFINDBYKEY failed - corrupt file likely. (NDIERR 149)	Possible corrupt network directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
No such name in directory - cannot remove it. (NDIERR 150)	The name does not exist in the directory file.	Correct the nodename and/or global/local setting
Directory file not open. (NDIERR 160)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Requires Node Manager or Network Administrator capability. (NDIERR 161)	User does not have Node Manager or Network Administrator capabilities.	Change user capabilities.
Request parameter invalid; must be 1 or 2. (NDIERR 162)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FREADBYKEY failed - corrupt file likely. (NDIERR 163)	Possible corrupt network directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
FREAD failed - corrupt file likely. (NDIERR 164)	Possible corrupt network directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
FLOCK filed - internal error. (NDIERR 165)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FCONTROL/FUNLOCK failed - internal error. (NDIERR 166)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Cannot read node name back reference record - corrupt file likely. (NDIERR 167)	Possible corrupt network directory file.	1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
FOPEN of message catalog failed. (NDIERR 180)	<p>The message catalog NMMGRCAT.PUB.SYS could not be opened. Possible causes include:</p> <ol style="list-style-type: none"> 1. Incorrect software installation. 2. User does not have sufficient access rights to the file. 3. Incorrect version of software. 	<ol style="list-style-type: none"> 1. Restore NMMGRCAT.PUB.SYS from a back-up tape, or 2. Reinstall the product.
GENMESSAGE failed. (NDIERR 181)	A message could not be read from the message catalog. A possible cause is incorrect version of the software.	Reinstall the product.
Error in NMCONF Intrinsic; check for error status. (NDIERR 190)	A problem was encountered when calling an NMCONF procedure.	Refer to the accompanying NMCONF error message.
Error in Network Directory; check for error status. (NDIERR 191)	This is an internal error.	Refer to the accompanying NMCONF error message. If the associated error is number 58, then the configuration file to merge from does not have any directory data in it. The file must first be read by the network transport by bringing up the transport in order to extract the directory data.
Requires Network Administrator capability. (NDIERR 192)	User does not have Network Administrator capabilities.	Change user capabilities.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
File recovery: cannot open message catalog. (NDIERR 200)	<p>The message catalog NMMGRCAT.PUB.SYS could not be opened. Possible causes include:</p> <ol style="list-style-type: none"> 1. Improper product installation. 2. User does not have sufficient access rights to the catalog file. 3. Incorrect version of software installed. 	<ol style="list-style-type: none"> 1. Reinstall the product. 2. Restore NMMGRCAT.PUB.SYS from a back-up tape.
File recovery: FOPEN of temporary command file failed. (NDIERR 201)	<p>Could not open a scratch file to write file recovery commands into. Possible causes include:</p> <ol style="list-style-type: none"> 1. Duplicate file name. As the file name generated is "random", this cause is very unlikely. 2. User does not have Save Files capability. 3. Other file system error. 	<ol style="list-style-type: none"> 1. Consult the associated file system error for problem resolution. 2. Attempt manual recovery of the directory file using KSAMUTIL.PUB.SYS
File recovery: GEMMESSAGE failed. (NDIERR 202)	<p>Could not read a message from the catalog NMMGRCAT.PUB.SYS. A possible cause is a wrong version of the software is installed.</p>	<ol style="list-style-type: none"> 1. Reinstall the product. 2. Restore NMMGRCAT.PUB.SYS 3. Attempt manual recovery of the directory file using KSAMUTIL.PUB.SYS
File recovery: FWRITE to temporary command file failed. (NDIERR 203)	<p>This is an internal error.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
File recovery: FCLOSE of temporary file failed. (NDIERR 204)	<p>This is an internal error.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
File recovery: CREATEPROCESS of KSAMUTIL.PUB.SYS failed. (NDIERR 205)	Problem encountered trying to create a son process to run KSAM.PUB.SYS. Possible causes include: 1. KSAMUTIL.PUB.SYS program file missing. 2. Out of some type of system resource - check SYSDUMP configuration.	1. Restore KSAMUTIL.PUB.SYS 2. Consult CREATEPROCESS errors in the MPE Intrinsic Reference Manual.
File recovery: cannot open directory file exclusively. (NDIERR 206)	The network directory file could not be opened exclusively in order to recover the file.	1. See the accompanying file system error message. 2. If FSERR 192 is displayed, recover the network directory file as described in the Introduction of this manual (under "Determine the Action".)
File recovery: FCLOSE failed - internal error. (NDIERR 207)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
File recovery: FFINDBYKEY failed - internal error. (NDIERR 208)	Network directory file is irrecoverable.	1. Attempt manual recovery of the file using KSAMUTIL.PUB.SYS 2. Restore the data and key files from a back-up tape.
File recovery: FREAD failed - internal error. (NDIERR 209)	Network directory file is irrecoverable.	1. Attempt manual recovery of the file using KSAMUTIL.PUB.SYS 2. Restore the data and key files from a back-up tape.
FPOINT to header record failed corrupt file likely. (NDIERR 220)	The file is corrupt, is empty, or not a network directory file.	Restore the data and key files from a back-up tape.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
FREADC of header record failed corrupt file likely. (NDIERR 221)	The file is not a KSAM file (and thus not a network directory file), or is a corrupt network directory.	<ol style="list-style-type: none"> 1. Restore the proper KSAM file from a back-up tape (data and key files) 2. Attempt manual recovery on the file using KSAMUTIL.PUB.SYS
Length of header record incorrect corrupt file likely. (NDIERR 222)	Possible corrupt network directory file.	<ol style="list-style-type: none"> 1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
FPOINT to header record failed. (NDIERR 230)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FUPDATE of header record failed. (NMIERR 231)	Internal error.	See "Submitting an SR" at the beginning of this manual.
FUPDATE of existing record failed. (NDIERR 240)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FWRITE of new record failed. (NDIERR 241)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Actual path report list length differs from passed length. (NDIERR 250)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Path report list length too small to support minimal report. (NDIERR 251)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Domain report in path report list too short (< 6 bytes). (NDIERR 252)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.

NETWORK DIRECTORY (NDIERR) ERROR MESSAGES (cont'd)

Message	Cause	Action
Version of domain report in path report list <> 0. (NDIERR 253)	The version number (1st octet) of a domain indicates an unsupported version.	<ol style="list-style-type: none"> 1. Possible version mismatch; reinstall the product. 2. See "Submitting an SR" at the beginning of this manual.
Domain number of domain report in path report list <> 1. (NDIERR 254)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
Cannot read a node name back reference record corrupt file likely. (NDIERR 260)	Possible corrupt network directory file.	<ol style="list-style-type: none"> 1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
A required node name record is not in dir corrupt file likely. (NDIERR 261)	Possible corrupt network directory file.	<ol style="list-style-type: none"> 1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
FUPDATE failed - internal error. (NDIERR 262)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FGETINFO failed - internal error. (NDIERR 270)	This is an internal error.	See "Submitting an SR" at the beginning of this manual.
FFINDBYKEY failed - corrupt file likely. (NDIERR 271)	Possible corrupt network directory file.	<ol style="list-style-type: none"> 1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.
FREAD failed - corrupt file likely. (NDIERR 272)	Possible corrupt network directory file.	<ol style="list-style-type: none"> 1. Restore the data and key files from a back-up tape. 2. See "Submitting an SR" at the beginning of this manual.

NMMGRVER ERROR MESSAGES

NMMGRVER MESSAGES

Message	Meaning/Cause	Action
<p>CONVERSION completed successfully. (NMMGRVERMSG 0)</p>	<p>Successful completion.</p>	<p>None</p>
<p>NO NEED TO CONVERT (NMMGRVERMSG 1)</p>	<p>Configuration file version is correct; file does not require conversion.</p>	<p>None</p>
<p>OPEN FILE ERROR: Cannot convert file. (NMMGRVERWARN 2)</p>	<p>NMMGRVER was unable to open the configuration file during conversion.</p> <p>(1) More than one user accessing file.</p> <p>(2) Internal file system unable to LOCK and OPEN the file with write access due to file system security.</p> <p>(3) Internal file system unable to OPEN the file if incorrect LOCKWORD was provided.</p> <p>(4) Another internal error has occurred when opening the file.</p>	<p>(1) Execute the LISTDIR5 subsystem and type LISTF to check whether other users are accessing or storing this file. NMMGRVER needs exclusive access to the configuration file. Rerun NMMGRVER when file is freed.</p> <p>(2) Resolve the MPE security restriction and retry. Run LISTDIR5 and type LISTSEC <i>configFileName</i> to determine the security restrictions of the file.</p> <p>(3) Rerun NMMGRVER with correct LOCKWORD.</p> <p>(4) An internal file system error has occurred. See "Submitting an SR" at the beginning of this manual.</p>

NMMGRVER MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>INTERNAL ERROR: cannot convert file. (NMMGRVERWARN 3)</p>	<p>The configuration file is corrupted. One or more of the following situations were detected in the file.</p> <p>(1) Paths are missing.</p> <p>(2) Version stamps are missing or are incorrect.</p> <p>(3) A LINKCONF detail data record has unexpected record length.</p> <p>NOTE: This corrupted configuration file is not changed.</p>	<p>Restore an old configuration file if possible and rerun NMMGRVER. If error still occurs, see "Submitting an SR" at the beginning of this manual.</p>
<p>FILE CORRUPT: Conversion failed, file might be changed. (NMMGRVERERR 4)</p>	<p>NMMGRVER was unable to complete the configuration file conversion. Situations which may cause this error are:</p> <p>(1) NMMGRVER does not recognize a portion of the file after it has started converting the file.</p> <p>(2) An internal file system error occurred while NMMGRVER was trying to convert the file.</p> <p>NOTE: The configuration file may have been changed.</p>	<p>The current file may be corrupted, restore a back-up copy of configuration file if possible, and rerun NMMGRVER. If error still occurs, see "Submitting an SR" at the beginning of this manual.</p>

NMMGRVER MESSAGES (cont'd)

Message	Meaning/Cause	Action
<p>INTERNAL ERROR: Conversion failed, file might be changed. (NMMGRVERERR 5)</p>	<p>NMMGRVER was unable to complete the file conversion due to file corruption or internal error. Possible situations which may cause this error are:</p> <p>(1) file space is exhausted, or</p> <p>(2) other internal errors on file system has occurred.</p> <p>NOTE: The configuration file may have been changed.</p>	<p>Restore an old configuration file if possible and rerun NMMGRVER. If the error reoccurs, see "Submitting an SR" at the beginning of this manual.</p>
<p>CLOSE FILE ERROR: File may have been changed. (NMMGRVERERR 6)</p>	<p>An internal NMMGRVER error has occurred when attempting to close the configuration file.</p> <p>NOTE: The configuration file may have been changed.</p>	<p>See "Submitting an SR" at the beginning of this manual.</p>
<p>User Has Insufficient Capability To Run NMMGRVER. (NMMGRVERWARN 7)</p>	<p>The user is required to have NM or NA capability to run NMMGRVER. However, the current user does not have sufficient capability.</p>	<p>Check user capability with program LISTDIR5.PUB.SYS, and modify the capability list. Contact the account manager or system manager, if needed.</p>

NMMGRVER MESSAGES (cont'd)

Message	Meaning/Cause	Action
ACCESS VIOLATION: Cannot convert file. (NMMGRVERWARN 8)	NMMGRVER was unable to write (update or add data) to the existing configuration file due to inconsistent access type (FSERR 40). Usually occurs when updating a file across account boundary. The WRITE, SAVE access types of the GROUP or ACCOUNT for this configuration file are limited to ACCOUNT only. The file is SECURED. NOTE: The configuration file is not changed.	Release file security and rerun NMMGRVER, or run NMMGRVER in the GROUP and ACCOUNT where the configuration file is stored.
Config File Version Is Newer than NMMGRVER can support. (NMMGRVERWARN 9)	At least one version stamp of the configuration file is newer than NMMGRVER can support. NMMGRVER cannot convert this file. (i.e.. This NMMGRVER cannot convert MPE/XL configuration file because NETXPORT version stamp is greater than NMMGRVER can support.) Note: This configuration file is not changed.	<ol style="list-style-type: none"> 1. Check the module version of NMMGRVER and overall NMC. Install the newer version of NMC and run the newer NMMGRVER if needed. 2. OR, restore an old configuration file if possible and rerun NMMGRVER. 3. If error still occurs, please consult your HP system engineers and see "Submitting an SR" at the beginning of this manual.
Error accessing NMMGRCAT.PUB.SYS set=! msg=!. (NMMGRVERERR 21)	Returned by NMCPRINTERRMSG. Usually followed by one or more of messages 22 thru 25 below, which further clarifies the error.	Look for one or more of NMMGRVERERR 22 thru 25 following this message, and take the remedial action suggested below. Look up in this file the text and comments for original message specified in the message, and take the suggested actions.
FOPEN FSERR ! on NMMFCAT.PUB.SYS. (NMMGRVERERR 22)	Returned by NMCPRINTERRMSG. Usually followed by the text of the FSError message.	Correct the FOPEN problem and retry.

NMMGRVER MESSAGES (cont'd)

Message	Meaning/Cause	Action
Encountered GENMESSAGE error !. (NMMGRVERERR 23)	Returned by NMCPRINTERRMSG. If error number is 1 or 2, NMMGRVERERR 24 follows with a further description. Otherwise the error is described in the MPE Intrinsic Manual under GENMESSAGE.	<ol style="list-style-type: none"> 1. If the error number is 1 or 2, see the NMMGRVERERR 24 messages and comments. 2. If the error number is not 1 or 2, look up the error number in the MPE Intrinsic Manual under GENMESSAGE. It is likely the problem is due to a bad software installation. Restore the compatible NMMGRCAT.PUB.SYS and try again. Otherwise, correct the problem causing the GENMESSAGE error and try again.
GENMESSAGE encountered FSERR !. (NMMGRVERERR 24)	Returned by NMCPRINTERRMSG. This message follows NMMGRVERERR 23 message, and is usually followed with the text of the FSERR message as well.	Correct the FS error and retry.
FCLOSE FSERR ! on NMMGRCAT.PUB.SYS. (NMMGRVERERR 25)	Returned NMCPRINTERRMSG after printing a message from NMMGRCAT.PUB.SYS failed.	Correct the FS error and try again.

NSCONTROL ERRORS

These errors are reported during the execution of an NSCONTROL command. There may be several errors reported for one NSCONTROL. They are displayed on \$STDLIST (unless the NSCONTROL command is executed through the COMMAND intrinsic). They 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.

NSCONTROL ERRORS (DSERRS)

Message	Meaning/Cause	Action
SERVICE servicename NOT STARTED. (DSERR 651)	An NSCONTROL command with a START option was issued, but the indicated service was not started.	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 "Submitting an SR" at the beginning of this manual.
SERVICE servicename ALREADY STARTED. (DSERR 652)	An NSCONTROL command with a START option was issued; the indicated service, however, was already active.	None. The other specified services have been started.
SERVICE servicename NOT STOPPED. (DSERR 653)	An NSCONTROL command with a STOP option was issued, but the indicated service was not stopped.	This may be an internal error. Check the network management log file for the internal errors associated with this problem. See "Submitting an SR" at the beginning of this manual.
SERVICE servicename ALREADY STOPPED. (DSERR 654)	An NSCONTROL command with a STOP option was issued; the indicated service, however, was not active.	None. The other specified services have been stopped.
UNKNOWN SERVICE servicename. (DSERR 655)	An NSCONTROL command with a START or STOP option was issued; the indicated service name is not a defined service.	Delete or correct the name and reissue the command. The NSCONTROL SHOW=SERVICES command will display the valid service names.

NSCONTROL ERRORS (DSERRS) (cont'd)

Message	Meaning/Cause	Action
UNKNOWN SERVER servername. (DSERR 656)	An NSCONTROL command with a SERVER option was issued; the indicated server name is not a defined service.	Delete or correct the name and reissue the command. The NSCONTROL SHOW=SERVERS command will display the valid server names.
SERVER pin DOES NOT SUPPORT DEBUG. (DSERR 657)	An NSCONTROL command with a DEBUG= <i>pin</i> option was issued, but the server selected by <i>pin</i> does not support the DEBUG option. Only the DSSERVER process supports the DEBUG option.	Correct the <i>pin</i> and reissue the command, or ignore.
PROCESS pin NOT A SERVER. (DSERR 658)	An NSCONTROL command with a DEBUG= <i>pin</i> option was issued, but the pin is not a server process.	Correct the pin and reissue the command, or ignore.
MINIMUM SERVER NUMBER > MAXIMUM SERVER NUMBER FOR servername. (DSERR 659)	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.	Correct the SERVER option and reissue the command. The NSCONTROL SHOW=SERVERS command will show the current minimum and maximum server limits for the server type.
TOTAL MINIMUM SERVER NUMBERS > MINIMUM PROCESS LIMIT. (DSERR 660)	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 precreated servers exceeds the minimum process limit. The minimum process limit prevents precreated servers from taking up too many processes and hindering other applications on the system.	Adjust the minimum number of servers to fit within the minimum process limit. The NSCONTROL SHOW=SERVERS will display the minimum process limit for the system and the minimum number of servers for each server type.

NSCONTROL ERRORS (DSERRS) (cont'd)

Message	Meaning/Cause	Action
MISSING DADCONF.NET.SYS CONFIGURATION FILE. (DSERR 661)	The NS subsystem has not been activated because the required configuration file DADCONF is missing.	Attempt to re-install the file.
INVALID DADCONF.NET.SYS CONFIGURATION FILE. (DSERR 662)	The file DADCONF, required for DSDAD, is invalid. The NS subsystem cannot be activated as a result.	Attempt to re-install DADCONF. If the error still occurs, submit a service request. See "Submitting an SR" earlier in this manual.

CONFIGURATION VALIDATION MESSAGES (VALERRS)

CONFIGURATION VALIDATION MESSAGES (VALERRs)

Message	Meaning/Cause	Action
CAN'T OPEN MESSAGE CATALOG	File containing VALERR messages cannot be opened (file NETMSG.NET.SYS).	See "Submitting an SR" at the beginning of this manual.
NO DATA FOUND IN PATH RECORD. (VALERR 1)	No data has been entered for the specified path.	Check for correct spelling of configuration path; enter data for the path, if necessary.
INCORRECT DATA LENGTH, LENGTH = <i>n</i> , EXPECTED = <i>m</i> (VALERR 2)	Name(s) entered in configuration screen is too long.	Rename, using no more than the expected number of characters.
NO CORRESPONDING LINKCONF LINK CONFIGURED. (VALERR 3)	Link name specified in Link Configuration Screen differs from the name in network interface Link Screen.	Make sure that link name specified in Link Configuration Screen (LINKCONF) is the same as that specified in the network interface Link Screen (path NETXPORT.NI. <i>niname</i> .LINK).
EXPECTED NO DATA IN RECORD, FOUND <i>n</i> BYTES. (VALERR 4)	Displayed path should contain no data.	See "Submitting an SR" at the beginning of this manual.
HOME NETWORK SPECIFIED NOT CONFIGURED. (VALERR 5)	Home network specified in the Global Transport Configuration Screen is not configured.	Check the names of the network interfaces configured (path NETXPORT.NI). With the exception of loop and gatehalf type networks, enter one of the configured network interfaces as the home network name on the Global Transport Configuration Screen (path NETXPORT.GLOBAL).
CONFIGURATION PATH EXPECTED, NOT FOUND. (VALERR 6)	Displayed configuration path not found in configuration file.	See "Submitting an SR" at the beginning of this manual.

CONFIGURATION VALIDATION MESSAGES (VALERRs) (cont'd)

Message	Meaning/Cause	Action
NO NETWORKS (NETWORK INTERFACES) CONFIGURED. (VALERR 7)	No network interfaces have been configured.	Configure a network interface, using the Network Interface Configuration Screen (path NETXPORT.NI).
RETRANSMIT LOWER (<i>n</i>) BOUND MUST BE <= UPPER BOUND (<i>m</i>) (VALERR 8)	Retransmission interval lower bound is set higher than upper bound in Transmission Control Protocol Screen.	Reconfigure the retransmission interval bounds so that the lower bound is less than or equal to the upper bound in the Transmission Control Protocol Screen (Path NETXPORT.GPROT.TCP.)
RETRANSMIT INITIAL (<i>n</i>) OUT OF RANGE. (VALERR 9)	Initial retransmission interval is not in range between lower and upper retransmission interval bounds in the Transmission Control Protocol Screen.	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).
INITIAL (<i>n</i>) AND MAXIMUM (<i>m</i>) BUFFERS MUST BE EQUAL. (VALERR 10)	Initial number and maximum number of outbound buffers configured are not equal.	Reconfigure initial and maximum outbound buffers so that they are set to the same value, using the Loopback Network Interface Configuration Screen (path NETXPORT.NI. <i>niName</i>).
INITIAL (<i>n</i>) AND MAXIMUM (<i>m</i>) PD'S MUST BE EQUAL. (VALERR 11)	Initial and maximum number of path descriptors as entered in the Global Transport Configuration Screen must be the same value.	Reconfigure initial and maximum number of path descriptors in the Global Transport Configuration Screen, setting them to the same value. (path NETXPORT.GLOBAL)
INITIAL BUFFERS (<i>n</i>) MUST BE < MAXIMUM BUFFERS (<i>m</i>). (VALERR 12)	Initial number of buffers as configured in the Link Configuration: LAN802.3 Link Data Screen is greater than the maximum number of buffers as configured in the same screen.	Reconfigure Link Configuration (path LINKCONF. <i>linkname</i>) so that the initial number of buffers is equal to the maximum number of buffers.

CONFIGURATION VALIDATION MESSAGES (VALERRs) (cont'd)

Message	Meaning/Cause	Action
INITIAL BUFFERS (<i>n</i>) MUST BE $\geq 2 * \text{MAX READS}$ (<i>m</i>). (VALERR 13)	The initial number of buffers as set in the Link Configuration: LAN802.3 Link Data Screen is less than the maximum number of outstanding reads that is configured in the same screen.	Reconfigure Link Configuration: LAN802.3 Link Data Screen, making sure that the number of initial buffers is at least twice the number of maximum reads. (path LINKCONF. <i>linkname</i>)
UNKNOWN PATH IN CONFIGURATION FILE. (VALERR 14)	Unknown path found in configuration file.	See "Submitting an SR" at the beginning of this manual.
NUMBER OF BUFFERS CONFIGURED (<i>n</i>) IS TOO SMALL, MUST BE $\geq (m)$. (VALERR 15)	Not enough network interface or Link Configuration buffers have been configured. Refer to the <i>NS3000/V Network Manager Reference Manual</i> for the correct number of buffers to configure.	Reconfigure network interface buffers, using the Interface Configuration Screen (path NETXPORT.NI. <i>niName</i>) or reconfigure the Link Configuration buffers, using the Link Configuration: LAN802.3 Link Data Screen (path LINKCONF. <i>linkname</i>). Make sure the number of buffers configured matches the requirements given in the <i>NS3000/V Network Manager Reference Manual</i> .
CONFIGURED NI'S (<i>n</i>) > MAX NI'S IN RECORD (<i>m</i>) (VALERR 16)	The number of network interfaces configured is greater than the maximum number of network interfaces allowed, as configured in the Global Transport Configuration Screen.	Make sure the number of network interfaces configured (path NETXPORT.NI) is no greater than the maximum number of network interfaces configured in the Global Transport Configuration Screen. (path NETXPORT.GLOBAL)
MUST CONFIGURE PHONE # FOR DIAL LINK. (VALERR 17)	In the Router Mapping Screen the specified link is a dial type link and local is specified, but a phone number is not configured.	Configure the appropriate phone number for the dial link in the Router Mapping Screen (path NETXPORT.NI. <i>routename</i> .MAPPING. <i>mappednode</i>)

CONFIGURATION VALIDATION MESSAGES (VALERRs) (cont'd)

Message	Meaning/Cause	Action
<p>MUST CONFIGURE SECURITY STRING - SECURITY ENABLED. (VALERR 18)</p>	<p>On the Router Mapping Screen local is specified, dial is enabled for the specified link, and Security On = Y in the the Dial Protocol screen, but there is no security string configured for the mapping entry.</p>	<p>Either configure a security string in the Router Mapping Screen (path <i>NETXPORT.NI.routername.MAPPING.mappednode</i>), or set Security On = N in the Dial Protocol screen (path <i>NETXPORT.NI.routername.PROTOCOL.DIAL</i>).</p>
<p>GATEWAY IP NETWORK # DOESN'T MATCH NI IP NETWORK #. (VALERR 19)</p>	<p>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.</p>	<p>Make sure the gateway IP network number in the Neighbor Gateway Screen (path <i>NETXPORT.NI.niname.INTERNET.gatename</i>) is the same as the IP network number specified in the IP Protocol screen (path <i>NETXPORT.NI.niname.PROTOCOL.IP</i>).</p>
<p>LAN802.3 LINK FROM LINKCONF IS NOT ALLOWED FOR THIS NI TYPE. (VALERR 20)</p>	<p>The link specified on the network interface Link Screen corresponds to a LAN802.3 link type in the Link Configuration Screen interface type is not LAN802.3.</p>	<p>Reconfigure the link on the network interface Link Screen (path <i>NETXPORT.NI.niname.LINK</i>) to correspond to a non-LAN link type from Link Configuration (path <i>LINKCONF</i>)</p>
<p>NO PHONEDAT CONFIGURED FOR CORRESPONDING LINKCONF LINK. (VALERR 21)</p>	<p>The link type specified on the Network Interface Link Screen in dial type (direct dial or shared dial), but the corresponding link specified on the Link Configuration Screen does not have Phonedat configured.</p>	<p>Configure Phonedat for the corresponding link in Link Configuration (path <i>LINKCONF.linkname.PHONEDAT</i>).</p>
<p>MUST NOT CONFIGURE PHONEDAT FOR CORRESPONDING LINKCONF LINK. (VALERR 22)</p>	<p>The link type specified on the Network Interface Link Screen is direct connect, but the corresponding link specified on the Link Configuration Screen has phonedat configured.</p>	<p>Delete the Phonedat configuration for the corresponding link in Link Configuration (path <i>LINKCONF.linkname.PHONEDAT</i>).</p>

CONFIGURATION VALIDATION MESSAGES (VALERRs) (cont'd)

Message	Meaning/Cause	Action
DIAL ENABLED BUT DIAL PROTOCOL NOT CONFIGURED. (VALERR 23)	The network interface link entry has Dial Enabled = Y, but the Dial Protocol is not configured.	Configure the Dial Protocol (path NETXPORT.NI. <i>niname</i> .PROTOCOL.DIAL).
CORRESPONDING LINKCONF LINK MUST HAVE SUBTYPE = 1 OR 2. (VALERR 24)	The link type specified on the network interface link screen is dial type (DD or SD), and the type of the corresponding link in Link Configuration is ATP/ASNP, but the link subtype is 0 (hardwired).	Reconfigure the corresponding link's subtype to 1 (Modem) or 2 (European Modem), in the Link Configuration Screen. (LINKCONF. <i>linkname</i>)
SECURITY ENABLED BUT NO SECURITY STRINGS CONFIGURED. (VALERR 25)	The Dial Protocol screen is configured with Security On = Y but there are no security strings configured.	Either reconfigure the Dial Protocol screen with Security On = N (path NETXPORT.NI. <i>niname</i> .PROTOCOL.DIAL), or configure at least 1 security string (path NETXPORT.NI. <i>niname</i> .PROTOCOL.DIAL.SECURITY).
HOME NETWORK NAME MUST NOT BE GATEWAY HALF. (VALERR 26)	The specified home network name in the Global Transport Configuration screen corresponds to a configured gatehalf type network interface.	Check the names of the network interfaces configured (path NETXPORT.NI). With the exception of loop and gatehalf type networks, enter one of the configured network interfaces as the home network name on the Global Transport Configuration Screen (path NETXPORT.GLOBAL).

CONFIGURATION VALIDATION MESSAGES (VALERRs) (cont'd)

Message	Meaning/Cause	Action
HOME NETWORK NAME MUST NOT BE LOOPBACK. (VALERR 27)	The specified home network name in the Global Transport Configuration Screen corresponds to configured loopback type network interface.	Check the names of the network interfaces configured (path NETXPORT.NI). With the exception of loop and gatehalf type networks, enter one of the configured network interfaces as the home network name on the Global Transport Configuration Screen (path NETXPORT.GLOBAL).
NO MAPPING ENTRIES CONFIGURED FOR ROUTER NI. (VALERR 28)	There are no entries configured on the Router Mapping Screen.	Configure Mapping entries for the Router NI (path NETXPORT.NI.routername.MAPPING).
MAXIMUM # OF READ (n) AND WRITES (m) MUST ALWAYS BE 3. (VALERR 29)	Either the maximum # of reads or the maximum # of writes (or both) is not = 3 in the data record for the LAP-B link in Link Configuration.	See "Submitting an SR" at the beginning of this manual.
MUST CONFIGURE A HOME NETWORK - GATEHALF NI IS CONFIGURED. (VALERR 30)	A home network configured on the Transport Global Screen yet a gatehalf network interface is configured.	Check the names of the network interface configured (path NETXPORT.NI). With the exception of loop and gatehalf type networks, enter one of the configured network interfaces as the home network name of the Global Transport Configuration Screen (path NETXPORT.GLOBAL).
CONFIGURED REACHABLE NETS (n) MUST BE <= IPU MAX NETS (m). (VALERR 31)	The number of internet reachable networks configured for the specified network interface exceeds the maximum number of networks in internet configured in the IP Update screen.	Reconfigure the maximum number of networks in internet in the IP Update screen to account for ALL reachable networks you wish to configure now and in the near future (path NETXPORT.GPROT.IPU).

CONFIGURATION VALIDATION MESSAGES (VALERRs) (cont'd)

Message	Meaning/Cause	Action
CONFIGURED GATEWAYS (n) MUST BE <= IPU MAX GATES (m). (VALERR 32)	The number of internet gateways for a NI exceeds the maximum number of gateways per network configured in the IP Update Screen.	Reconfigure the maximum number of gateways per network in the IP Update (IPU) screen to be at least as big as the number of gateways configured for this NI (path NETXPORT.GPROT.IPU).
CONFIGURED MAPPINGS (n) MUST BE <= # OF ROUTER TABLE ENTRIES (m). (VALERR 33)	The number of configured entries on the Router Mapping Screen exceeds the number of route table entries configured on the Router Network Interface Screen.	Reconfigure the number of route table entries in the Router Network Interface Screen (path NETXPORT.NI.routername) to be at least as big as the number of entries configured on the Router Mapping Screen (path NETXPORT.NI.routername.MAPPING).
NO CORRESPONDING NI LINK CONFIGURED. (VALERR 34)	The link name entered in the Router Mapping Screen differs from any configured in the Network Interface Link Screen.	Make sure that the link name specified in the Router Mapping Screen (path NETXPORT.NI.routername.MAPPING) is the same as one of the links configured in the outer Network Interface Screen (path NETXPORT.NI.routername.LINK).
IP NETWORK # IN RECORD DOESN'T MATCH NI IP NETWORK #. (VALERR 35)	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.	Make sure the IP network number in the Mapping Screen (path NETXPORT.NI.niname.MAPPING) is the same as the IP network number specified in the IP Protocol Screen (path NETXPORT.NI.niname.PROTOCOL.IP).

CONFIGURATION VALIDATION MESSAGES (VALERRs)

Message	Meaning/Cause	Action
LINESPEED MUST NOT BE 0. (VALERR 36)	The linespeed is configured to 0 in the LAP-B data screen in Link Configuration.	Make sure the linespeed is not 0 in the LAP-B Data Screen in Link Configuration (path LINKCONF. <i>linkname</i>)
LINK TYPE MUST BE LAN802.3 IN LINKCONF. (VALERR 37)	The network interface type is LAN802.3, but the link configured network interface link screen corresponds to a non-LAN link in Link Configuration.	Configure a LAN802.3 type link on the Network Interface Link Screen (path NETXPORT.NI. <i>niname</i> .LINK).
ONLY 1 WILD CARD ADDRESS MAPPING ALLOWED FOR EACH ROUTER NI. (VALERR 39)	There are 2 or more Router Mapping Screens with the wild card IP address, "@", configured for the same router network interface.	Consult the discussion on the use of the wild card address on the Router Mapping Screen in the <i>NS3000/V Network Manager Reference Manual</i> .
WILD CARD ADDRESS REQUIRES THAT EXACTLY 2 ROUTER MAPPINGS BE CONFIGURED. (VALERR 40)	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 network interface.	Consult the discussion on the use of the wild card address on the Router Mapping Screen in the <i>NS3000/V Network Manager Reference Manual</i> .
WILD CARD ALLOWED ONLY WHEN SINGLE NI LINK CONFIGURED. (VALERR 41)	The wild card IP address was used in the specified Router Mapping screen and there is more than one link configured for the NI.	Consult the discussion on the use of the wild card address on the Router Mapping Screen in the <i>NS3000/V Network Manager Reference Manual</i> .
SUBSYSTEM 3 LOGGING NOT CONFIGURED. (VALERR 42)	Transport logging (subsystem 3) is not configured.	Configure log classes 1 - 6 for subsystem 3. (path LOGGING.SUB0003)

Node Management Error Messages

The remainder of messages are Validation Warning Messages; ie. they do not cause the network startup to abort.

CONFIGURATION VALIDATION MESSAGES (VALERRs) (cont'd)

Message	Meaning/Cause	Action
NO STORE AND FORWARD BUFFERS CONFIGURED. (VALERR 1004)	Store and Forward Buffers = 0 in the IP Protocol screen, and either the NI is a router with more than one link configured or there is more than 1 NI configured (excluding Loop NI).	Reconfigure Store and Forward Buffers > 0 in the IP Protocol screen if you intend for this node to implement store and forward (path NETXPORT.NI. <i>niname</i> .PROTOCOL.IP).
PROXY ENABLED BUT INBOUND PROXY MULTICAST ADDRESS (n) NOT CONFIGURED. (VALERR 1005)	Proxy Enabled = Y in the Probe Protocol screen but the indicated proxy address does not exist in the data record for inbound HP multicast addresses.	See "Submitting an SR" at the beginning of this manual.
INBOUND PROBE MULTICAST ADDRESS (n) NOT CONFIGURED. (VALERR 1006)	The Probe Protocol is configured but the indicated probe address does not exist in the data record for inbound HP multicast addresses.	See "Submitting an SR" at the beginning of this manual.
CONFIGURED T1 PARAMETER (n) IS < THE RECOMMENDED FORMULA VALUE. (m). (VALERR 1007)	The specified T1 Parameter in the LAP-B data screen in Link Configuration is less than the computed recommended formula value.	Configure the T1 parameter in the LAP-B data screen in Link Configuration at least as big as the indicated formula value (path LINKCONF. <i>linkname</i>).
INBOUND PROXY MULTICAST ADDRESS CONFIGURED BUT PROXY NOT ENABLED. (VALERR 1008)	The inbound proxy multicast address is configured yet proxy is not enabled on the Probe Protocol screen.	See "Submitting an SR" at the beginning of this manual.

OVERVIEW

Logging records events such as errors and console commands. You configure logging for each of the subsystems of NS3000/V. 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 *user.account*, then that user will receive logged messages any time there is an active session for that *user.account*.

LOGGING FORMAT

Logging events can be directed to the system console or to a disk file. Node Management Services automatically formats 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 4-1 shows a typical log record formatted by NMDUMP. To learn how to use NMDUMP see the Log and Trace Files section in Volume II of the *NS3000/V Network Manager Reference Manual*. Two examples of the information returned in a formatted log file are explained in "Using Log Files" later in this section.

Logging Location Codes

NMDUMP output of data file: nmlg0008.pub.sys
Time of output: FRI, NOV 30, 1984, 1:41 PM
Subsystems being formatted: 3,5,6,8

```
*****
* THU, NOV 29, 1984, 2:45 PM                                NETXPORT(3) *
*-----*
*   Event           : INFORMATIVE                               *
*   Entity          : LAN NI                                   *
*   Internal Event  : Network Interface Start                 *
*   Log Class       : Nodal Logging                           *
*   Port ID/PIN    : %000211 %001742                         *
*   Location       : 78           Parameter      : %000000    *
* Info Section (octal):                                       *
* 000000: 000000 000034 000024 000116 000211 001742 000004 000000 *
* 000010: 000001                                             *
*-----*
* Port Message Frame:                                       *
*   Function Code  : CONTROL, INITIALIZATION                 *
*   Reply Port ID  : %000200 %004750                         *
*   Subqueue Number : 0           Message Length : 39        *
*   Reply Subqueue #: 5           Flow ID         : %000000    *
*   Interface      : (Control Process)==>(NI General)        *
* Data Section (octal):                                       *
* 000000: 000000 000047 000200 004750 000005 001400 000000 063163 *
* 000010: 000000 000000 000001 000001 002734 000000 000000 000000 *
* 000020: 000000 000000 000000 000000 000000 000000 000000 000000 *
* 000030: 000000 000171 000002 000002 050205 000200 000166 004271 *
* 000040: 004400 004400 000056 000004 000003 000024 000000    *
0*****
```

Figure 4-1. A Typical Formatted Log Record.

LOGGING SUBSYSTEMS

Each subsystem of NS3000/V logs different classes of events. Table 4-1 summarizes the subsystem logging classes.

TABLE 4-1. LOGGING SUBSYSTEM AND CLASS NAMES

Subsystem Name	Class Name	Events
SUB0003 Network Transport	CLAS0001	Serious Internal Error -- Causes SYSFAIL #969.
	CLAS0002	Internal Error/Operator Attention
	CLAS0003	Non-Critical Errors.
	CLAS0004	Nodal Messages (Start/Stop).
	CLAS0005	Informative Messages.
	CLAS0006	Statistical Information.
SUB0005 Network IPC	CLAS0000	Internal Errors.
	CLAS0001	Resource Errors.
	CLAS0002	Informative Messages.
SUB0006 Network Services	CLAS0002	Resource Errors.
	CLAS0003	Internal Errors.
	CLAS0004	Detailed Events. (Enable with NSCONTROL LOG.)
	CLAS0005	NetIPC Internal Errors.
SUB0008 NMS Link Manager PC Link Manager	CLAS0000	Internal Errors.
	CLAS0001	Internal Errors. (PC Link only)

Logging for the Network Transport (SUB0003) *must* be configured in the configuration file which is specified with the NETCONTROL START command that initiates the Network Transport. The default configuration file at initiation is NSCONF.NET.SYS. Logging for all other subsystems (SUB0005, SUB0006, SUB0008) *must* be configured in NMCONFIG.PUB.SYS. See the NMS Configurator (NMMGR) and Logging Configuration sections in Volume I of the NS3000/V Network Manager Reference 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

Logging Location Codes

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.

Table 4-2 describes the Network Transport entities and lists their corresponding tables found in this section. 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 Parameter description, if relevant, as shown in the typical formatted log example in Figure 4-1.

The PATH Network Transport Entity logs no event information.

Parameters

Many Network Transport logging records contain important information in the Parameter value. This Parameter number indicates the shutdown reason. A Parameter value of %0 means the user closed the connection; a value of %10 means the remote aborted the connection. Both of these values are used for normal shutdown. However, if you want more information on the specific reason for the remote abort you need to check the log file of the remote node.

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 (Table 4-8) for definition of the Parameter value. Other logging location explanations refer to the "SEMAPHORE RESULT CODE" table (Table 4-12) for definition of the Parameter value. Parameter meaning for the "PXP Deactivated", "PXP Deactivated w/Error", and "PXP Statistics" internal events are listed in the "Network Transport Protocol Errors" in Section 2 of this manual, which are the Protocol module errors returned by IPCCHECK. In general, refer to a specific logging location code explanation for definition of Parameter meaning if any. Other logging location explanations refer to the "ICMP Type/Code Word" table (Table 4-16) for the definition of the Parameter value.

TABLE 4-2. NETWORK TRANSPORT ENTITIES

Entity	Description
Control Process (TABLE 4-4)	The Control Process -- created by the NETCONTROL command. Handles network startup and shutdown.
Dial ID (TABLE 4-15)	The Dial ID protocol. Used only for point-to-point links such as router and gateway half.
Gateway Half NI (TABLE 4-7)	The network interface for the gateway half connection. Interfaces to the point-to-point devices such as BSC, LAP-B and ATP/ASNP.
IP (TABLE 4-5)	Internet Protocol
IP UPDATE (TABLE 4-6)	IP Update maintains IP internet routing tables.
LAN NI (TABLE 4-7)	The network interface for the LAN connection. The LAN NI performs functions such as IP to IEEE 802.3 address mapping and the LANIC device interface.
Loopback NI (TABLE 4-7)	The network interface for software loopback. Performs the nodename to IP address mapping required for loopback.
Probe (TABLE 4-9)	The Probe address resolution protocol.
PXP PM (TABLE 4-10)	The PXP protocol module performs actual protocol functions.
PXP SIP (TABLE 4-11)	The PXP Socket Interface Port. The PXP SIP functions as a "controller" for the PXP protocol. It handles the creation of sockets and connections.
TCP PM (TABLE 4-13)	The TCP protocol module is responsible for the actual protocol functions. There is one TCP PM for each side of a connection.
TCP SIP (TABLE 4-14)	The TCP Socket Interface Port. The TCP SIP functions as a "controller" for the TCP protocol. It handles the creation of call sockets and connections.
PATH (TABLE 4-8)	The Path Resolution procedures that determine the outbound path and resources for a connection.

TABLE 4-2. NETWORK TRANSPORT ENTITIES

Entity	Description
Router NI (TABLE 4-7)	The network interface for the router connection. Interfaces to BSC, LAB-B, and ATP/ASNP devices
User Interface ("NETCONTROL ERRORS NETXPORERR" Table in Section 3)	The NETCONTROL command user interface.
X.25 NI (TABLE 4-7)	The network interface for the DS X.25 network connection.

Network Services Subsystem Logging

The Network Services Subsystem (SUB0006) Modules are described in Table 4-3. Table 4-3 also lists the corresponding Network Services Logging table for each module.

TABLE 4-3. NETWORK SERVICE MODULES

Module	Description
DSDAD (TABLE 4-18)	The DSDAD process controls the initiation and termination of network services, including creation of server processes.
DSSERVER (TABLE 4-19)	There is a DSSERVER process created for each use of the RFA, VT, PTOP, or RPM services. The DSSERVER process receives and processes protocol messages for the service, and accesses files and terminals are required by the service.
CX (TABLE 4-17)	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.
BFM	The NS Buffer Management module provides for the allocation of buffers for the other NS modules. (The NS Buffer Management module is different from the Buffer Management software used by the transport and translator.)
ENV (TABLE 4-21)	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.
DSUTIL (TABLE 4-20)	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.
RFA (TABLE 4-24)	Remote File Access and Remote Data Base (IMAGE) Access.
VT	Virtual Terminal.
NFT (TABLE 4-22)	Network File Transfer.
PTOP (TABLE 4-23)	Program-to-Program Communication.
RPM (TABLE 4-25)	Remote Process Management.

Logging Messages for the Network Services (SUB0006) subsystem are listed in Tables 4-17 through 4-25.

The NS Buffer Management module (BFM) logs no event information.

Tables 4-17 through 4-25 contain the logging messages for most NS Subsystem Modules. However, event messages for the VT module are listed in the "Network Services Error Messages" section of this manual. Each error message number listed in the VT error message table in Section 2 is identical to a logging

Logging Location Codes

message error number found in the log file for the VT module. "Actions" advised for individual VT errors listed in Section 2 apply to individual VT logging messages.

As described in Section 2, 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 NS3000/V.

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 NS3000/V. (See the "Logging Configuration" section of the *NS3000/V Network Manager Reference Manual* Volume I, for more information).

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 *NetIPC3000/V 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 the "Network Interprocess Communication Errors" table in Section 2 of this manual.

Logging codes for the NetIPC subsystem of the associated links are listed in Table 4-26.

NMS Link Manager Subsystem Logging

NMS Link Manager (SUB0008) subsystem logging messages are partially listed in the "NMERR Messages--Link Manager" table in the "Node Management Error Messages" section of this manual. NMERRs 131-149 refer to the Link Manager logging messages. If any other internal errors (CLAS000) are returned to the NMS Link Manager subsystem, see "Submitting an SR" at the beginning of this manual.

PC Link Manager

The PC Link Manager (SUB0008) subsystem logging messages are listed in the "NMERR Messages--Link Manager" table in the "Node Management Error Messages" section of this manual. NMERR messages 131-149 are used by both the PC Link Manager and the NMS Link Manager. NMERR Messages 250-265 apply only to the PC Link Manager. If any other internal errors (CLAS0001) are returned to the PC Link Manager, see "Submitting an SR" at the beginning of this manual.

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 parameter. 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 defined a log class for internal errors, as listed in Table 4-1. 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 "Submitting an SR" at the beginning of this manual.

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 4-2.

```
*****
* MON, MAR 18, 1985, 6:20 PM                                NETXPORT(3) *
*-----*
*   Event           : INFORMATIVE                            *
*   Entity          : TCP                                    *
*   Internal Event  : PM deactivated                          *
*   Log Class       : Non-critical error                      *
*   Port ID/PIN    : %001105 %000516                        *
*   Location       : 83                                     Parameter : %000010 *
* Info Section (octal):                                     *
* 000000: 000147 000034 000125 000123 001105 000516 000003 000015 *
* 000010: 000001                                           *
*-----*
* Port Message Frame:                                     *
*   Function Code  : SIP, CLOSE REPLY                       *
*   Reply Port ID : %000327 %002316                        *
*   Subqueue Number : 1                                     Message Length : 8 *
*   Reply Subqueue #: 0                                     Flow ID : %177777 *
*   Interface     : (TCP SIP)==>(TCP)                       *
* Data Section (octal):                                     *
* 000000: 000001 000010 000327 002316 000000 001511 177777 064147 *
*****
```

Figure 4-2. Class 3, a non-critical error for the Network Transport.

Logging Location Codes

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 4-2, the internal event is PM deactivated, which indicates that the connection shut with an error condition. The Parameter number indicates the shutdown reason. In the example of Figure 4-2, the Parameter field (%10) indicates that the Network Loopback was not started. Parameter values for PM deactivated are listed in the "Network Transport Protocol Errors" table in Section 2 of this manual. Also check the explanation and action listed under the Location code number which is 83 in the example.

Statistics Logging Example

An example of log class 6, statistics, is shown in Figure 4-3.

```
*****
* MON, MAR 18, 1985, 6:20 PM                                NETXPORT(3) *
*-----*
*   Event           : INFORMATIVE                            *
*   Entity          : TCP                                    *
*   Internal Event  : Statistics                             *
*   Log Class       : Statistics                             *
*   Port ID/PIN    : %000721 %000266                       *
*   Location       : 86                                     Parameter : %000010 *
* Info Section (octal):                                     *
* 000000: 000147 000034 000121 000126 000721 000266 000006 000010 *
* 000010: 000001                                           *
*-----*
* Statistics:                                             *
*   IPC Port ID    : %000371 %000144                       *
*   Bytes sent     : 248                                     Bytes received : 851 *
*   User pkts sent : 11                                     User pkts recd  : 23 *
*   PM pkts sent   : 6                                       PM pkts recd   : 6 *
*   Cn ass pkts sent: 0                                     Cn ass pkts recd: 0 *
*   User sends     : 11                                     User receives   : 23 *
*   Pkts discarded : 0                                       Pkts rtx'ed    : 0 *
*   Checksum errors : 0                                     Smooth R/T delay: 2948 *
*   Init rcv window: 15400                                   Init send window: 15400 *
*   Recv Burst size : 7                                       Send burst size : 7 *
*   Max send size  : 2200                                   Max rcv size   : 2200 *
*   Local SAP      : 32846                                   Remote SAP     : 1537 *
*   Flags          : %100341                                   Flags1        : %120230 *
*   Flags2         : %000000                                   *
* Data Section (octal):                                     *
* 000000: 000000 000053 000371 000144 000000 000370 000000 001523 *
* 000010: 000000 000013 000000 000027 000000 000006 000000 000006 *
* 000020: 000000 000000 000000 000000 000000 000000 000013 000000 000027 *
* 000030: 000000 000000 000000 000000 000000 000000 000000 000000 005604 *
* 000040: 036050 036050 000007 000007 004230 004230 100000 003001 *
* 000050: 100341 120230 000000 *
*****
```

Figure 4-3. An example of Logging Statistics for the Network Transport.

This example 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. In Figure 4-3, the internal event is **Statistics**, which indicates that the logging message contains statistical information. The **Parameter** number indicates the shutdown reason. If it is **%0**, the user closed the connection normally. The value of **%10** means the remote aborted the connection. This may be a normal shutdown. For more information on the specific reason for the remote abort you need to check the log file of the remote node.

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 acknowledgements.
- **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 acknowledgements 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 **IPCCONNECT** 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 **IPCCONNECT** used to initiate the connection.

Logging Location Codes

- **Local/Remote SAP.** Shows the TCP Service Access Point address for the local and the remote node. If you don't 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.

NETWORK TRANSPORT LOGGING LOCATIONS

For each of the logging explanations, any or all of the following may be present:

PARM = Meaning of the parameter logged.

DIR = Direction of data flow.

IN = Inbound Data

PARM = Meaning of the parameter logged.

NI = NI Type which logged the event:

LOOP = Loopback

LAN = IEEE802

ROUTER = Router

GATEHALF = Gateway Half

DEV = Relevant device type.

LAN = IEEE802

LOOP = Loopback

ROUTER = BSC, LAPB, or ATP/ASNP

GATEHALF = BSC, LAPB, or ATP/ASNP

DIR = Direction of data flow.

IN = Inbound Data

OUT = Outbound Data

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action
2	CLAS0002	Out of PCB Entries.	See "Submitting an SR" at the beginning of this manual.
4	CLAS0002	Failed to create NETSERVE process (PARM = Error returned from CreateProcess Intrinsic).	See "Submitting an SR" at the beginning of this manual.
10	CLAS0002	Error in reading NETXPORT.NODE record from config file (PARM = status returned by NMCONFGetData).	Check nodename in configuration file; if fine, then see "Submitting an SR" at the beginning of this manual.
11	CLAS0002	Error on creation of Semaphore DST table (PARM = result code returned by SM4'Make'Table).	See "Submitting an SR" at the beginning of this manual.
12	CLAS0002	Closing outbound buffer pool user ID failed (PARM = result code returned by BFMCloseUser).	See "Submitting an SR" at the beginning of this manual.
13	CLAS0002	No data associated with Gateway neighbor path (PATH = Status returned by NMCONFGetData).	Check the configuration file, and if it is not the problem see "Submitting an SR" at the beginning of this manual.
14	CLAS0002	Attempt to write to Gateway update buffer failed (Result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
15	CLAS0002	Out of NIB Entries.	See "Submitting an SR" at the beginning of this manual.
16	CLAS0002	Out of GPB Entries.	See "Submitting an SR" at the beginning of this manual.
17	CLAS0002	Error in attempting to close trace ID (PARM = status returned by NMCloseTrace).	See "Submitting an SR" at the beginning of this manual.
19	CLAS0002	Too many networks configured in configuration file (PARM = maximum networks allowed).	Check the configuration file, and if it is not the problem see "Submitting an SR" at the beginning of this manual. (Refers to display only fields).

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
20	CLAS0002	Received unexpected message while waiting for Reply message (PARM = message function code of received message).	See "Submitting an SR" at the beginning of this manual.
21	CLAS0002	Attempt to get buffer for nodal information failed (PARM = result code returned by BFMGetBufNow).	See "Submitting an SR" at the beginning of this manual.
22	CLAS0002	Error in reading NETXPORT.NODE.REPORT record from configuration file (PARM = status returned by NMCONFGGetData).	Check the configuration file, and if it is not the problem see "Submitting an SR" at the beginning of this manual.
23	CLAS0002	Attempt to write path report into buffer failed (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
24	CLAS0002	Failed to open configuration file (PARM = status returned by NMCONFOpen).	Check that configuration file exists, and not opened. See "Submitting an SR" at the beginning of this manual.
25	CLAS0002	Error in reading NETPORT.GLOBAL record from configuration file (PARM = status returned by NMCONFGGetData).	Check the configuration file, and if it is not a problem, see "Submitting an SR" at the beginning of this manual.
26	CLAS0002	Unable to initialize Path Descriptor Table (PARM = initial number of path descriptors to create).	See "Submitting an SR" at the beginning of this manual.
27	CLAS0002	Attempt to create transport utility buffer pool failed (PARM = result code returned by BFMCreateBufPool).	See "Submitting an SR" at the beginning of this manual.
28	CLAS0002	Attempt to open transport utility buffer pool user failed (PARM = result code returned by BFMOpenUser).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
29	CLAS0002	Version in configuration file not in range expected by the transport (PARM = status returned by NMCONFGetData).	Run program NMMGRVER to convert configuration file to the current version.
30	CLAS0002	Attempt to initialize the Node/Address Path cache failed (PARM = maximum cached node names).	See "Submitting an SR" at the beginning of this manual.
31	CLAS0002	Trying to add the CP entry to the data dictionary failed (PARM = result code returned by DictAdd).	See "Submitting an SR" at the beginning of this manual.
32	CLAS0002	Error in creating the Port for a General Protocol (PARM = result code returned from CreatePort').	See "Submitting an SR" at the beginning of this manual.
33	CLAS0002	Asynchronous message received from the Port Translator (PARM = status code from translator message).	Run appropriate diagnostic depending on the logical device. If all is fine, see "Submitting an SR" at the beginning of this manual.
36	CLAS0002	Attempt to write son config record into buffer failed (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
37	CLAS0002	Attempt to release buffer (son's) because of error failed (PARM = result code returned by BFMFreeBuf).	See "Submitting an SR" at the beginning of this manual.
38	CLAS0002	Attempt to write path report in configuration file failed (PARM = status returned by NMCONFAddData).	See "Submitting an SR" at the beginning of this manual.
40	CLAS0002	Attempt to start auto-reads on device failed (PARM = result code returned by TRAN'Start'AReads).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
41	CLAS0002	Attempt to close link after error failed (PARM = status returned by NMCloseLink).	See "Submitting an SR" at the beginning of this manual.
42	CLAS0002	Attempt to physically start device failed (PARM = status returned by NMOpenLink).	Could indicate missing or inaccessible NMCONFIG.PUB.SYS file. Check NMCONFIG file. If file is present and accessible, see "Submitting an SR" at the beginning of this manual.
43	CLAS0002	Error in attempting to open transport read buffer user ID for device (PARM = result code returned by BFMOpenUser).	See "Submitting an SR" at the beginning of this manual.
44	CLAS0002	Error in reading NETXPORT.NI.niname record from configuration file (PARM = status returned by NMCONFGetData).	Check the configuration file; if fine, see "Submitting an SR" at the beginning of this manual.
45	CLAS0002	Attempt to create outbound buffer pool for NI failed (PARM = result code returned by BFMMakeBufPool).	See "Submitting an SR" at the beginning of this manual.
46	CLAS0002	Attempt to open outbound buffer pool user ID failed (PARM = result code returned by BFMOpenUser).	See "Submitting an SR" at the beginning of this manual.
48	CLAS0002	Attempt to create NI Port failed (PARM = result code from CreatePort').	See "Submitting an SR" at the beginning of this manual.
50	CLAS0004	Network Transport Started	Informative message
51	CLAS0004	Network Transport Stopped	Informative message
52	CLAS0002	Error in reading PROBE Protocol record for NI from configuration file (PARM = status returned by NMCONFGetData).	Check the configuration file; if fine, see "Submitting an SR" at the beginning of this manual.
53	CLAS0002	Subsystem separate from device failed for a protocol (PARM = result code returned by TRAN'Subsys'Separate).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
54	CLAS0002	Physical close when stopping device failed (PARM = status returned by NMCloseLink).	See "Submitting an SR" at the beginning of this manual.
55	CLAS0002	Attempt to get buffer for Alias List for IP failed (PARM = result code returned by BFMGetBufNow).	See "Submitting an SR" at the beginning of this manual.
56	CLAS0002	Attempt to share buffer for Alias List to IPU failed (PARM = result code returned by BFMShareBuf).	See "Submitting an SR" at the beginning of this manual.
57	CLAS0002	Attempt to write alias list to buffer failed (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
58	CLAS0002	Error in closing configuration file (PARM = status returned by NMCONFClose).	See "Submitting an SR" at the beginning of this manual.
59	CLAS0002	Could not get a semaphore for the PROBE unsolicited request (PARM = result code returned from SM4'Get).	See "Submitting an SR" at the beginning of this manual.
60	CLAS0002	Error in reading CEP Protocol record for NI from configuration file (PARM = status returned by NMCONFGGetData).	Check the configuration file, and if it is not the problem, see "Submitting an SR" at the beginning of this manual.
76	CLAS0002	Writing general transport info to buffer failed on status request (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
77	CLAS0002	Writing general protocol info to buffer failed on status request (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
78	CLAS0002	Writing specific protocol info to buffer failed on status request (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
79	CLAS0002	Writing network info to buffer failed on status request (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
80	CLAS0002	Writing gateway info to buffer failed on status request (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
81	CLAS0002	Writing network interface info to buffer failed on status request (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
82	CLAS0002	Writing network interface info to buffer failed on status request (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
83	CLAS0002	Writing specific protocol info to buffer failed on status request (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
84	CLAS0001	Bad or unexpected message received by Control Process port (PARM = message function code).	See "Submitting an SR" at the beginning of this manual.
100	CLAS0002	Attempt to write node name into buffer failed (PARM = result code returned by BFMWriteBuf).	See "Submitting an SR" at the beginning of this manual.
101	CLAS0002	Outbound aborted write message received by the Control Process (PARM = ldev number of device for write write was aborted).	This error usually follows a previous asynchronous link error. If not, then see "Submitting an SR" at the beginning of this manual.
102	CLAS0002	Internal error.	See "Submitting an SR" at the beginning of this manual.
118	CLAS0002	Error in attempting to get trace ID from info from User Interface (PARM = status returned by NMOpenTrace).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
131	CLAS0002	Attempt to get buffer for Ldev Table failed (PARM = result code returned by BFMGetBufNow).	See "Submitting an SR" at the beginning of this manual.
134	CLAS0002	Unable to create NI Port data segment.	See "Submitting an SR" at the beginning of this manual.
135	CLAS0002	Error in reading IP Protocol record for NI from configuration file (PARM = status returned by NMCONFGetData).	Check the configuration file, and if it is not the problem, see "Submitting an SR" at the beginning of this manual.
136	CLAS0002	Could not rendezvous protocol to the Port Translator device (PARM = result code returned by TRAN'Subsys'Rendezvous).	See "Submitting an SR" at the beginning of this manual.
137	CLAS0002	Error in sperating subsystem from translator after error (PARM = result code returned by TRAN'Subsys'Separate).	See "Submitting an SR" at the beginning of this manual.
138	CLAS0002	Configuration File Validation failed (PARM = status returned by Validate Netxport).	Check configuration file in NMMGR and Validate file in NMMGR to find and correct errors.
143	CLAS0002	Could not create Store/Forward Buffer Pool (PARM = result code returned by BFMMakeBufPool).	Check total store/forward buffers for all NIs configured. Check resources (DSTs, Virtual Memory).

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (If Any)
144	CLAS0002	Attempt to open outbound buffer pool user ID failed (PARM = result code returned from BFMOpenUser).	See "Submitting an SR" at the beginning of this manual
145	CLAS0002	Attempt to create inbound buffer pool for NI failed (PARM = result code returned by BFMMakeBufPool2).	Depending on PARM value, check Configured Buffers for Inbound NI buffers, Device Read Buffers and System Resources.
146	CLAS0002	Attempt to open inbound buffer user ID for NI failed (PARM = result code returned from BFMOpenUser).	See "Submitting an SR" at the beginning of this manual
154	CLAS0002	Error in reading DIAL Protocol record for NI from configuration file (PARM = status returned by NMCONFGetData).	Check the configuration file and if it is not the problem see "Submitting an SR" at the beginning of this manual.
162	CLAS0002	Could not get buffer for gateway configuration (PARM = result code returned by BFMGetBufNow).	See "Submitting an SR" at the beginning of this manual
163	CLAS0005	A Path Verify has been executed because of a change detected by the software.	None.
164	CLAS0003	Device closing due to an asynchronous message (error/hangup/other) from the device driver (PARM = logical device number of device).	This will be for "normal" errors, such as phone hangup, busy, timeouts, etc. This should be given consideration if there are any other problems with devices.
165	CLAS0003	A device is being restarted after being shutdown due to a shutdown event (See 164).	None.

TABLE 4-4. CONTROL PROCESS LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (If Any)
167	CLAS0005	IP Update record has been sent to IPU Module (PARM = True - STOP/ False - START).	None.
168	CLAS0003	Device being restarted due to either a DIAL misconnection or IDLE device timeout (PARM = device index of affected device).	None.
169	CLAS0002	Could not obtain buffer for IP update information (PARM = result code returned from BFMGetBufNow).	See "Submitting an SR" at the beginning of this manual
170	CLAS0005	Sending IP update to IPU Module (PARM = True - Stop/False - Start).	None.
171	CLAS0002	Could not obtain buffer for X.25 configuration information (PARM = result code returned by BFMGetBufNow).	See "Submitting an SR" at the beginning of this manual
222	CLAS0002	Out of available space for phone number storage.	If phone numbers have been changed via :NETCONTROL UPDATE, shutdown and restart network, or decrease number of phone numbers configured.
235	CLAS0002	Could not put lock on configuration file for transport startup (PARM=Status returned by NMCONF Lock File).	Check explanation of NMERR (returned by PARM) and see "Submitting an SR" at the beginning of this manual.
236	CLAS0002	Could not remove lock from configuration file for Transport shutdown (PARM=Status returned by NMCONF Lock File).	Check explanation of NMERR (returned by PARM) and see "Submitting an SR" at the beginning of this manual.
237	CLAS0002	Could not lock configuration file for validation at transport startup (PARM=Status returned by NMCONF Lock File).	Check explanation of NMERR (returned by PARM) and see "Submitting an SR" at the beginning of this manual.
238	CLAS0002	Could not lock configuration file for execution of network start or update (PARM=Status returned by NMCONF lock file).	Check explanation of NMERR (returned by PARM) and see "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action
1	CLAS0001	Received a port message containing an invalid format code or an invalid function code (PARM = complete function code).	See "Submitting an SR" at the beginning of this manual.
2	CLAS0001	Received a port message containing an invalid sub-function code of the Control function. (PARM = sub-function code).	See "Submitting an SR" at the beginning of this manual.
3	CLAS0002	The length of the IP Address Alias List passed in an INFO message exceeds the space allocated for the list in the IP port DST. The space is allocated based on the maximum number of directly connected networks (DCNs).	Take down the transport (NETCONTROL STOP). Check the global screen of the Netxport branch using NMMGR for a disparity between networks configured and maximum DCNs specified.
4	CLAS0001	Encountered a buffer manager failure attempting to read the IP Address Alias list from the buffer passed in an INFO message (PARM = READBUF result code).	See "Submitting an SR" at the beginning of this manual.
5	CLAS0001	Received a port message containing an invalid sub-function of the PROBE function code (PARM = sub-function code).	See "Submitting an SR" at the beginning of this manual.
6	CLAS0003	Probe reply ID does not match any Probe ID on IP Probe Wait Queue. The incidence of this situation should match the number of packets discarded because the probe wait queue limit was exceeded. See location code 54.	If incidence of Loc. code 6 log messages exceeds Loc. code 54 log messages then notify your HP representative for assistance in analyzing possible internal error. See "Submitting an SR" at the beginning of this manual.
7	CLAS0001	Encountered a buffer manager failure attempting to get the length of the buffer passed in an INFO message (PARM = BUFFERINFO result code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
8	CLAS0001	Encountered a buffer manager error attempting to get a buffer for an ECHO REQUEST (PARM = GETBUFNOW result code).	See "Submitting an SR" at the beginning of this manual.
9	CLAS0001	Encountered a buffer manager error attempting to write into a buffer for an ECHO REQUEST message (PARM = WRITEBUF result code).	See "Submitting an SR" at the beginning of this manual.
10	CLAS0001	Received a port message containing an invalid sub-function of the DATA function code (PARM = sub-function code).	See "Submitting an SR" at the beginning of this manual.
11	CLAS0006	Log IP statistics prior to port terminate (PARM unused).	Informative.
13	CLAS0001	Encountered a buffer manager error attempting to read the IP header from the buffer in an inbound data message (PARM = READBUF result code).	See "Submitting an SR" at the beginning of this manual.
14	CLAS0003	Inbound data message IP header checksum failed (PARM unused).	Frequent occurrences probably indicate transmission hardware/line problems. Refer to <i>LAN/3000 Diagnostic Troubleshooting Guide</i> .
15	CLAS0003	Unable to deliver inbound data to upper layer protocol. Socket not open (PARM = XP'ULP'SEND result code).	Informative. Indicates that a message was received for a destination socket that has been closed.
16	CLAS0003	Unable to deliver inbound data to upper layer protocol. Upper layer SAP address not valid (PARM = XP'ULP'SEND result code).	Protocol address is not active on the local node. Ensure that all protocols are configured.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
17	CLAS0001	Unable to deliver inbound data to upper layer protocol. Internal error (PARM = XP'ULPSEND result code).	See "Submitting an SR" at the beginning of this manual.
18	CLAS0001	Encountered buffer manager error attempting to read IP header from an inbound data message buffer dequeued from the probe wait queue after a PROBE REPLY (PARM = READBUF result code).	See "Submitting an SR" at the beginning of this manual.
19	CLAS0002	No buffers available for ECHO REQUEST (PARM = GETBUFNOW) result code.	If this message is logged frequently enough to disrupt effective communication, consider reconfiguring to increase the number of buffers in outbound buffer pool. Refer to the LAN 802.3 Network Interface screen in NMMGR.
20	CLAS0003	Received a probe reply with an error status (PARM = probe reply status code).	An occasional error may be tolerated. Persistent errors should be reported to HP.
30	CLAS0001	Encountered error attempting to release the semaphore for queued outbound data messages before terminating IP port (PARM = SM4'REL result code).	See "Submitting an SR" at the beginning of this manual.
31	CLAS0002	Inbound data addressed to destination network other than those that are directly connected to the node. Internet store and forward is not required for the LAN.	Indicates incorrect addressing or invalid configuration file. Check the network component of IP address of all nodes on the LAN. Review the configuration file.
32	CLAS0001	Reserved for future use.	See "Submitting an SR" at the beginning of this manual.
33	CLAS0006	Log IP statistics prior to port termination was delayed awaiting a probe reply.	Informative message.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
34	CLAS0004	Log IP port termination following receipt of last outstanding probe reply.	Informative message.
35	CLAS0002	Unable to deliver inbound data to upper layer protocol because upper layer protocol cannot transfer buffer ownership from the inbound buffer pool to its own pool (PARM = XP'ULP'SEND result code).	If this condition occurs frequently enough to disrupt operations, consider reconfiguring the link to increase the size of the inbound buffer pool. (In Linkconf LAN802.3 Link Data config. screen)
38	CLAS0003	Unable to establish an outbound path to send an ECHO REQUEST (PARM = PATH'RESOLVE result code).	Determine particular failure from "PARM" result codes listed elsewhere in this section.
43	CLAS0002	Probe wait queue limit exceeded when attempting to queue an outbound data message to wait for a probe reply. In this case Probe has been activated for an earlier outbound data message to the same destination. No Probe has been activated for this data message. The data message is discarded (PARM = queue limit).	If this happens repeatedly, see "Submitting an SR" at the beginning of this manual.
51	CLAS0004	Log IP port initiation.	Informative message.
52	CLAS0004	Log IP port termination when TERMINATE message is received.	Informative message.
54	CLAS0002	Internal queue limit exceeded when attempting to queue an outbound data message to wait for a Probe reply. Probe has been activated; the data message has been discarded, not queued waiting for reply. When the Probe reply is received, it will be discarded. See log location code 6 (PARM = internal message queue limit).	If this happens repeatedly, see "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
60	CLAS0003	Unable to get a semaphore to send an ICMP message. The ICMP message is not sent (PARM = SM4'GET result code).	Occasional instances should be tolerable. Persistent occurrences should be reported to HP. See "Submitting an SR" at the beginning of this manual.
61	CLAS0001	Encountered buffer manager failure attempting to get a buffer to send an ICMP message (PARM = GETBUFNOW result code).	See "Submitting an SR" at the beginning of this manual.
62	CLAS0001	Encountered an error attempting to release a semaphore when unable to get a buffer to send an ICMP message (PARM = SM4'REL result code).	See "Submitting an SR" at the beginning of this manual.
63	CLAS0001	Encountered buffer manager error attempting to write ICMP message headers (PARM = WRITEBUF result code).	See "Submitting an SR" at the beginning of this manual.
64	CLAS0001	Encountered an error attempting to release a semaphore following a buffer manager error (PARM = SM4'REL result code).	See "Submitting an SR" at the beginning of this manual.
65	CLAS0001	Encountered buffer manager error attempting to write ICMP header into buffer (PARM = WRITEBUF result code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
66	CLAS0003	Cannot get a path descriptor for an outbound ICMP message (PARM = PATH'RESOLVE result code).	Determine failure from "PARM" result code listed elsewhere in this section.
67	CLAS0002	No buffers available to build an outbound ICMP message (PARM = GETBUFNOW result code).	If this happens repeatedly, consider reconfiguring to increase the size of the outbound buffer pool. Use the IEEE802 NI Data Configuration screen in the Netxport branch.
68	CLAS0005	Log that ICMP message was sent (PARM = ICMP message type).	Informative message. See "PARM" result codes listed elsewhere in this section.
70	CLAS0001	Encountered error attempting to release a semaphore following a buffer manager failure (PARM = SM4'REL error code).	See "Submitting an SR" at the beginning of this manual.
71	CLAS0001	Encountered a buffer manager error attempting to write the IP header into an outbound data buffer (PARM = WRITEBUF result code).	See "Submitting an SR" at the beginning of this manual.
74	CLAS0001	Outbound data from upper layer protocol requires fragmenting.	See "Submitting an SR" at the beginning of this manual.
85	CLAS0001	Encountered a buffer manager error attempting to free a buffer (PARM = FREEBUF result code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
101	CLAS0001	Received a port message containing an invalid function code (PARM = complete function code).	See "Submitting an SR" at the beginning of this manual.
102	CLAS0004	Log IP port initiation (PARM unused).	Informative.
103	CLAS0002	The length of the IP address alias list passed in an INFO message exceeds the space allocated for the list in the IP port DST. The space is allocated based on the maximum number of directly connected networks (DCNs) (PARM = upper 8 bits max DCNs; lower 8 bits length of alias in words).	Check the configuration file for a disparity between networks configured and the maximum DCNs specified.
104	CLAS0006	Log IP statistics prior to port terminate (PARM unused).	Informative.
105	CLAS0004	Log IP port termination when a TERMINATE message is received (PARM unused).	Informative.
106	CLAS0003	Received a Probe reply with an error status (PARM = Probe reply status code).	An occasional error may be tolerated. For persistent errors see "Submitting an SR" at the beginning of this manual.
107	CLAS0003	Probe reply ID does not match any probe ID on the IP Probe wait queue. This happens when a packet is discarded because the probe wait queue limit was exceeded. See location codes 138 and 151. If there is no matching packet discard logged, there is a possible internal error (PARM = probe reply ID).	If the incidence of this log message exceeds the incidence of packet discards when the queue limit has been exceeded, see "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
108	CLAS0001	Received a semaphore reply for outbound ULP fragmenting when not in the semaphore wait state (PARM = semaphore reply ID).	See "Submitting an SR" at the beginning of this manual.
109	CLAS0001	Received a buffer reply message on the wrong subqueue or not in a buffer reply wait state (PARM = i'outfrag'state).	See "Submitting an SR" at the beginning of this manual.
110	CLAS0001	Encountered a buffer manager error attempting to adjust the data length of an inbound packet (PARM = BFMSETBUF result code).	See "Submitting an SR" at the beginning of this manual.
111	CLAS0003	The packet length carried in the IP header is greater than the packet length supplied by the link device (PARM = link length - IP header length).	See "Submitting an SR" at the beginning of this manual.
112	CLAS0003	Unable to deliver an inbound ICMP message to an upper layer protocol (TCP/PXP). The most probable cause is lack of buffers at the upper layer (PARM = XP'ULP SEND result code).	If this happens repeatedly, see "Submitting an SR" at the beginning of this manual.
113	CLAS0003	Discarded an inbound ICMP message because the ICMP checksum was bad (PARM unused).	Frequent occurrences probably indicate hardware or transmission line problems.
114	CLAS0003	Discarded an inbound ICMP message because the ICMP type code was unrecognized (PARM = ICMP type code). To decode the PARM value refer to Table 4-16, ICMP type/code words.	Indicates that a non-HP3000 node has implemented an ICMP type not prescribed by the ICMP RFC standard.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
115	CLAS0002	Indicates that Class 2 log calls were suppressed for performance reasons. The following log message is the one that was suppressed (PARM = count of suppressed messages).	Informative.
116	CLAS0003	Received a GGP protocol message. This is an unsupported protocol (PARM unused).	Informative. A non-HP3000 node which supports the GGP protocol is part of the network configuration.
117	CLAS0003	Inbound data packet discarded because IP was unable to deliver it to the upper layer protocol because the socket was not open (PARM = XP'ULP'SEND result code).	Informative. Indicates that a packet was received for a destination socket that has been closed.
118	CLAS0003	An inbound data packet was discarded as undeliverable because the upper layer SAP address was invalid (PARM = XP'ULP'SEND result code).	Validate that all nodes in the network have complementary protocol stacks.
119	CLAS0002	An inbound data packet was discarded as undeliverable to the upper layer protocol because there were no upper layer buffers available (PARM = XP'ULP'SEND result code).	An indication of nodal congestion. If this condition occurs frequently, increase the size of the inbound buffer pool.
120	CLAS0001	An inbound data packet was discarded as undeliverable to an upper layer protocol due to an internal error (PARM = XP'ULP'SEND result code).	See "Submitting an SR" at the beginning of this manual.
121	CLAS0003	An inbound packet was discarded because it failed IP header validation tests (PARM not significant).	If this occurs frequently see "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
122	CLAS0003	An inbound packet was discarded because the IP header checksum failed (PARM unused).	Frequent occurrences probably indicate hardware or transmission line problems.
123	CLAS0003	An inbound data packet was discarded because an error was detected in IP options (PARM = byte location in IP header of error).	Check to see that the source node correctly formats the options stream.
124	CLAS0002	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).	Configure store and forward buffers for the IP protocol on the inbound network interface.
125	CLAS0002	An inbound message fragment was discarded because a fragmented message data structure could not be allocated (PARM = count of data structures already allocated).	If this occurs frequently, reconfigure the IP protocol for this network interface to increase the number of fragment assembly queue elements.
126	CLAS0002	An inbound message fragment was discarded because a semaphore get failed (PARM = SM4'GET result code).	If this occurs frequently, see "Submitting an SR" at the beginning of this manual.
127	CLAS0002	An inbound message fragment was discarded because a fragment data structure could not be allocated. (PARM = count of data structures already allocated).	If this occurs frequently, reconfigure the IP protocol for the inbound network interface to increase the number of fragment assembly queue elements. Note that if the count displayed in PARM is less than the fragment assembly queue elements configured, the problem lies elsewhere. See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
128	CLAS0002	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).	Indicates that someone is sending a duplicate message in error (i.e., with the same message ID) but with a longer length.
129	CLAS0002	A message fragment was discarded because IP was unable to get a layer 4 buffer to transfer it into (PARM = BFMTACBUF result code).	If this happens frequently consider reconfiguring the size the number of inbound buffers for this NI.
130	CLAS0001	A message fragment was discarded because of an internal failure of BFMTACBUF (PARM = BFMTACBUF result code).	See "Submitting an SR" at the beginning of this manual.
131	CLAS0001	A partially assembled message was discarded because BFMTACBUF incorrectly appended a fragment (PARM = byte offset of the received fragment).	See "Submitting an SR" at the beginning of this manual.
132	CLAS0002	A message fragment was discarded because IP was unable to get a layer 4 buffer to transfer it into (PARM = BFMTACBUF result code).	If this happens frequently, reconfigure the number of inbound buffers for this NI.
133	CLAS0001	A message fragment was discarded because of an internal failure of BFMACBUF (PARM = BFMTACBUF result code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
134	CLAS0001	A partially assembled message was discarded because BFMTACBUF incorrectly appended a fragment (PARM = byte offset of the received fragment).	See "Submitting an SR" at the beginning of this manual.
135	CLAS0002	Unable to transfer an inbound buffer into the layer 4 buffer pool (PARM = BFMTRANSFERBUF result code).	If this happens frequently, reconfigure to increase the number of buffers in the inbound pool for this network interface.
136	CLAS0001	An internal failure in BFMTRANSFERBUF (PARM = BFMTRANSFERBUF result code).	See "Submitting an SR" at the beginning of this manual.
137	CLAS0003	A partially assembled message was discarded because the fragment assembly timer expired (PARM is not significant).	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.
138	CLAS0002	Outbound message discarded because internal queue limit was exceeded (PARM = internal queue limit).	If this occurs frequently, consider reconfiguring to increase the length of the internal message queue for the IP protocol in the network interface.
139	CLAS0003	A store and forward packet was discarded because there were no store and forward semaphores for the outbound network interface (PARM = SM4'GET result code).	This indicates that the gateway is congested. It may happen occasionally until congestion avoidance measures are applied at the sending source nodes. If it occurs persistently it may indicate that there is a runaway node on the network that is disregarding SOURCE QUENCH messages.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
140	CLAS0001	An internal failure occurred in SM4'GET (PARM = SM4'GET result code).	See "Submitting an SR" at the beginning of this manual.
141	CLAS0003	After processing a store and forward packet, congestion control thresholds have been reached (i.e., 70% or more internal resources have been used). A Source Quench packet will be sent to the source (PARM = % of resources remaining).	Informative.
142	CLAS0003	A store and forward packet was discarded because no buffers were available in the store and forward buffer pool (PARM = BFMGETBUFNOW result code).	See "Submitting an SR" at the beginning of this manual.
144	CLAS0001	A store and forward packet was discarded because an internal error was encountered in xp'copybuf (PARM = XP'COPYBUF result code).	See "Submitting an SR" at the beginning of this manual.
145	CLAS0003	A store and forward packet was discarded because the IP time to live expired (PARM unused).	Informative.
146	CLAS0003	A store and forward packet was discarded because a parameter error was discovered in IP header options (PARM = byte location of error in IP header).	See "Submitting an SR" at the beginning of this manual.
147	CLAS0003	A store and forward packet was discarded because the next local destination address supplied from the routing tables was not in the source route list in the IP header (PARM unused).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
148	CLAS0003	A store and forward packet was discarded because fragmentation was necessary but the "Don't Fragment" flag was set (PARM unused).	See "Submitting an SR" at the beginning of this manual.
149	CLAS0002	An store and forward packet was discarded because an outbound path could not be established (PARM = PATH'RESOLVE result code).	Indicates that network reachability information was not properly configured.
150	CLAS0003	A store and forward packet was discarded because store and forward was disabled on the outbound network (PARM = PATH'RESOLVE result code).	Reconfigure to enable store and forward on the outbound NI.
151	CLAS0002	A packet was discarded because it had to wait for a probe reply and IP's internal message queue was at the limit (PARM = queue max).	If this occurs frequently, increase the length of the internal message queue for the IP protocol in the network interface.
152	CLAS0002	An outbound ICMP message was discarded because IP could not get an outbound semaphore (PARM = SM4'GET result code).	This might happen occasionally when there is heavy outbound traffic from the node. If it occurs frequently, see "Submitting an SR" at the beginning of this manual.
153	CLAS0001	An outbound ICMP message was discarded because of an internal failure in SM4'GET (PARM = SM4'GET result code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
154	CLAS0003	An outbound ICMP message was discarded because IP could not get a buffer from the outbound buffer pool (PARM = BFMGETBUFNOW result code).	This might happen occasionally when there is heavy outbound traffic from the node. If it occurs frequently, see "Submitting an SR" at the beginning of this manual.
155	CLAS0001	An outbound ICMP message was discarded because of an internal failure in XP'COPYBUF (PARM = XP'COPYBUF result code).	See "Submitting an SR" at the beginning of this manual.
156	CLAS0003	An outbound ICMP message was discarded because IP could not get an outbound path (PARM = PATH'RESOLVE result code).	Indicates that routing information to the destination node was not configured or the outbound network interface is not started.
157	CLAS0001	Outbound packet discarded because of an internal error in the IP/ULP interface. Specifically, the length of options data was out of the valid range (PARM = outbound options length).	See "Submitting an SR" at the beginning of this manual.
158	CLAS0001	An outbound ICMP request was discarded because of an internal failure in a get buffer call (PARM = BFMGETBUF result code).	See "Submitting an SR" at the beginning of this manual.
159	CLAS0001	An outbound ICMP request packet was discarded because an error reply was returned in a delayed buffer get reply (PARM = BFMGETBUF reply message result code).	See "Submitting an SR" at the beginning of this manual.
160	CLAS0001	An outbound data packet that required fragmenting was discarded because of an internal error in XP'COPY'BUF (PARM = XP'COPYBUF result code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
161	CLAS0001	An outbound data packet that required fragmenting was discarded because of an internal error in a SM4'GET call (PARM = SM4'GET result call).	See "Submitting an SR" at the beginning of this manual.
162	CLAS0001	An outbound data packet that required fragmenting was discarded because an error occurred in a get buffer call (PARM = BFMGETBUF result code).	See "Submitting an SR" at the beginning of this manual.
163	CLAS0001	An outbound data packet that required fragmenting was discarded because an error was returned on a get buffer reply message (PARM = BFMGETBUF reply result code).	See "Submitting an SR" at the beginning of this manual.
164	CLAS0001	An outbound data packet requiring fragmentation was discarded because of an IP/ULP interface error, i.e., the ULP requested the DON'T FRAGMENT bit set (PARM unused).	See "Submitting an SR" at the beginning of this manual.
165	CLAS0001	A store and forward packet was discarded because an error occurred creating a fragment with XP'COPYBUF (PARM = XP'COPYBUF result code).	See "Submitting an SR" at the beginning of this manual.
166	CLAS0003	A store and forward packet was discarded because no store and forward semaphores were available (PARM = SM4'GET result code).	If this occurs frequently, increase the number of store and forward buffers for the IP protocol on this NI.
167	CLAS0001	A store and forward packet requiring fragmentation was discarded because an internal error occurred on a call to SM4'GET (PARM = SM4'GET result code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-5. IP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
168	CLAS0003	A store and forward packet requiring fragmentation was discarded because no store and forward buffers were available (PARM = BFMGETBUFNOW result code).	If this occurs frequently, increase the number of store and forward buffers for the IP protocol on this NI.
169	CLAS0001	An internal error occurred on a call to BFMFREEBUF (PARM = BFMFREEBUF result code).	See "Submitting an SR" at the beginning of this manual.
170	CLAS0001	An internal error occurred on a call to SM4'REL (PARM = SM4'REL result code).	See "Submitting an SR" at the beginning of this manual.
171	CLAS0001	An internal error occurred on a call to BFMBUFFERINFO (PARM = BFMBUFFERINFO result code).	See "Submitting an SR" at the beginning of this manual.
172	CLAS0001	An internal error occurred on a call to BFMGETBUFNOW (PARM = BFMGETBUFNOW result code).	See "Submitting an SR" at the beginning at this manual.
173	CLAS0001	An internal error occurred on a call to BFMREADBUF (PARM = BFMREADBUF result code).	See "Submitting an SR" at the beginning of this manual.
174	CLAS0001	An internal error occurred on a call to BFMWRITEBUF (PARM = BFMWRITEBUF result code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-6. IPU LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action (if any)
1	CLAS0001	Received a port message containing an invalid format code or an invalid function code (PARM = complete function code).	See "Submitting an SR" at the beginning of this manual.
2	CLAS0001	Received a port message containing an invalid sub-function code of the Control function (PARM = sub-function code).	See "Submitting an SR" at the beginning of this manual.
3	CLAS0004	Log port initiation.	Informative.
10	CLAS0001	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).	See "Submitting an SR" at the beginning of this manual.
11	CLAS0001	Encountered a buffer manager error attempting to return the buffer passed in a DCN Start message (PARM = FREEBUF result code).	See "Submitting an SR" at the beginning of this manual.
12	CLAS0002	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).	Shut down the transport (NETCONTROL STOP). Check the configuration file for a disparity between networks configured and maximum DCNs specified.
13	CLAS0001	Encountered a buffer manager error attempting to get the length of the buffer passed in a DCN Start message (PARM = BUFFERINFO result code).	See "Submitting an SR" at the beginning of this manual.
14	CLAS0002	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).	Shut down the transport (NETCONTROL STOP). Check the configuration file for a disparity between the number of networks configured and maximum networks specified.

TABLE 4-6. IPU LOGGING LOCATION CODES cont'd

Loc. Code	Logging Class	Explanation	Action (if any)
15	CLAS0002	Network number in a Stop Net message not found in the DCN table (never started).	Error probably occurred when starting the network. See error at log location 12 above.
16	CLAS0006	Log statistics prior to port termination (PARM unused).	Informative.
18	CLAS0001	Encountered buffer manager error attempting to return the buffers on message queues before terminating the port (PARM = FREEBUF result code).	See "Submitting an SR" at the beginning of this manual.
19	CLAS0004	Log the port terminate.	Informative message.
20	CLAS0002	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).	Reconfigure to increase maximum networks on the IP Update protocol screen.
25	CLAS0002	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).	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	Could not process a network routing update because there was not enough room in an internal gateway index table (PARM unused).	Reconfigure to increase the number of gateway nodes per network on the IP Update protocol screen.
28	CLAS0002	Could not process a network start routing update because there was not enough room in the distance matrix table (PARM unused).	Reconfigure to increase the maximum number of networks in the catenet on the IP Update protocol screen.

TABLE 4-6. IPU LOGGING LOCATION CODES cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
29	CLAS0002	Could not process a network start routing update because the count of networks in the routing update exceeded configured maximum networks.	Reconfigure to increase the maximum networks in the catenet in the IP Update protocol screen.
30	CLAS0001	Encountered an internal error attempting to return a routing update buffer (PARM = BFMFREEBUF result code).	See "Submitting an SR" at the beginning of this manual.
31	CLAS0001	Received a port message containing an invalid sub-function code of the Data function (PARM = sub-function code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-7. NI LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action (If Any)
1	CLAS0001	PID table too small for number of protocols being started for the NI (PARM = Protocol ID of failing protocol, DEV = LOOP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
3	CLAS0002	Protocol ID in message has no match in PID table (PARM = Protocol ID, DEV = LOOP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
5	CLAS0002	Protocol ID in ADDLINK message has no match in PID table (PARM = Protocol ID).	See "Submitting an SR" at the beginning of this manual.
6	CLAS0002	Protocol ID for DELLINK message has no match in PID table (PARM = Protocol ID).	See "Submitting an SR" at the beginning of this manual.
9	CLAS0002	Bad or unexpected message received by NI Port (PARM = Message Function Code, NI = LOOP).	See "Submitting an SR" at the beginning of this manual.
10	CLAS0002	No room in buffer for IEEE 802 header (PARM = -Bytes short, DEV = LAN, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
11	CLAS0002	PD ID in message does not match PD ID in PD DST (PARM = PD ID in PD DST, DEV = LAN, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
12	CLAS0002	Protocol ID in message has no match in PID table (PARM = Protocol ID, DEV = LAN, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
13	CLAS0002	Protocol attempting to send multicast packet when disallowed by the NI (PARM = Protocol ID, DEV = LAN, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
16	CLAS0002	Protocol attempted to send data when no devices were active (PARM = Protocol ID, DEV = LAN, DIR = OUT).	Error should be preceded by other errors, if not then See "Submitting an SR" at the beginning of this manual.
17	CLAS0002	Received packet from Port Translator with unknown protocol ID (PARM = Protocol ID, DEV = LAN, DIR = IN).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-7. NI LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (If Any)
18	CLAS0002	IEEE802 message frame type was not a MUI or TEST frame (PARM = TRANP2 message frame type, DEV = LAN, DIR = IN).	See "Submitting an SR" at the beginning of this manual.
19	CLAS0002	Bad or unexpected message received by NI Port (PARM = Message Function Code, NI = GATE).	See "Submitting an SR" at the beginning of this manual.
22	CLAS0002	Port ID for Protocol in PID table is 0 (PARM = Protocol ID, DEV= LAN, DIR = IN).	See "Submitting an SR" at the beginning of this manual.
25	CLAS0002	Bad or unexpected message received by NI Port (PARM = message function code, NI = LAN).	See "Submitting an SR" at the beginning of this manual.
26	CLAS0002	No room in buffer to add Ethernet header in NI UBI (PARM = -bytes short, DEV = UBI, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
27	CLAS0002	Data offset on odd byte boundary, which is not allowed for this device (PARM = Protocol ID, DEV = UBI, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
28	CLAS0002	PD ID in message does not match PD ID in PD DST (PARM = PD ID in PD DST, DEV = UBI, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
29	CLAS0002	Protocol ID in message has no match in PID table (PARM = Protocol ID, DEV = UBI, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
30	CLAS0002	Protocol attempting to send multicast packet when disallowed by the NI (PARM = Protocol ID, DEV = UBI, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
33	CLAS0002	Protocol attempted to send data when no devices were active (PARM = Protocol ID, DEV = UBI, DIR = OUT).	Error should be preceded by other errors, if not then see "Submitting an SR" at the beginning of this manual.
34	CLAS0002	Protocol ID in message has no match in PID table (PARM = Protocol ID, DEV = UBI, DIR = IN).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-7. NI LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (If Any)
35	CLAS0002	No room in buffer for extended address (PARM = -Bytes short, DEV = INP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
38	CLAS0002	Port ID for Protocol in PID table is 0 (PARM = Protocol ID, DEV = UBI, DIR = IN).	See "Submitting an SR" at the beginning of this manual.
41	CLAS0002	Bad or unexpected message received by NI Port (PARM = Message Function Code, NI = UBI).	See "Submitting an SR" at the beginning of this manual.
42	CLAS0002	Data offset on odd byte boundary, which is not allowed for this device (PARM = Protocol ID, DEV = INP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
43	CLAS0002	PD ID in message does not match PD ID in PD DST (PARM = PD ID in PD DST, DEV = INP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
44	CLAS0002	Protocol ID in message has no match in PID table (PARM = Protocol ID, DEV = INP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
45	CLAS0002	Protocol attempting to send multicast packet when disallowed by the NI (PARM = Protocol ID, DEV = INP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
48	CLAS0002	Protocol attempted to send data when no devices were active (PARM = Protocol ID, DEV = INP, DIR = OUT).	Error should be preceded by other errors, if not then see "Submitting an SR" at the beginning of this manual.
49	CLAS0002	Protocol ID has no match in PID table (PARM = Protocol ID, DEV = INP, DIR = IN).	See "Submitting an SR" at the beginning of this manual.
53	CLAS0002	Port ID for Protocol in PID table is 0 (PARM = Protocol ID, DEV = INP, DIR = IN).	See "Submitting an SR" at the beginning of this manual.
54	CLAS0002	Attempt to write the IEEE802 address into the buffer failed (PARM = BFMWriteBuf result code, DEV = LAN, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-7. NI LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (If Any)
55	CLAS0002	Bad or unexpected message received by NI Port (PARM = Message Function Code, NI = CLEAF).	See "Submitting an SR" at the beginning of this manual.
56	CLAS0002	Bad or unexpected message received by NI Port (PARM = Message Function Code, NI = CCTL).	See "Submitting an SR" at the beginning of this manual.
63	CLAS0002	Writing multicast address to buffer failed (PARM = BFMWriteBuf result code, DEV = LAN, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
69	CLAS0002	Protocol attempted to send data when device was not active for that protocol (PARM = Protocol ID, DEV = INP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
70	CLAS0002	Protocol attempted to send data when device was not active for that protocol (PARM = Protocol ID, DEV = LAN, DIR = OUT).	Error should be preceded by other errors, if not then See "Submitting an SR" at the beginning of this manual.
71	CLAS0002	Protocol attempted to send data when device was not active for that protocol (PARM = Protocol ID, DEV = UBI, DIR = OUT).	Error should be preceded by other errors, if not then see "Submitting an SR" at the beginning of this manual.
75	CLAS0002	Protocol ID in Control Reply message has no match in PID table (PARM = Protocol ID).	See "Submitting an SR" at the beginning of this manual.
76	CLAS0002	Protocol ID in Control Request has no match in PID table (PARM = Protocol ID).	See "Submitting an SR" at the beginning of this manual.
78	CLAS0004	Network Interface Started.	None.
79	CLAS0004	Network Interface Stopped.	None.
80	CLAS0002	Protocol ID in message has no match in PID table (PARM = Protocol ID, DEV = RASP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
82	CLAS0002	No room in buffer to add RASP header (PARM = -Bytes short, DEV = RASP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-7. NI LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (If Any)
83	CLAS0002	PD ID in message does not match PD ID in PD DST (PARM = PD ID in PD DST, DEV = RASP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
84	CLAS0002	Protocol attempting to send multicast packet when disallowed by the NI (PARM = Protocol ID, DEV = RASP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
87	CLAS0002	Protocol attempted to send data when no devices were active (PARM = Protocol ID, DEV = RASP, DIR = OUT).	Error should be preceded by other errors, if not then See "Submitting an SR" at the beginning of this manual.
88	CLAS0002	Protocol attempted to send data when device was not active for that protocol (PARM = Protocol ID, DEV = RASP, DIR = OUT).	Error should be preceded by other errors, if not then See "Submitting an SR" at the beginning of this manual.
90	CLAS0002	Protocol ID in message has no match in PID table (PARM = Protocol ID in PD DST, DEV = RASP, DIR = IN).	See "Submitting an SR" at the beginning of this manual.
93	CLAS0002	Port ID for Protocol in PID table is 0 (PARM = Protocol ID, DEV = RASP, DIR = IN).	See "Submitting an SR" at the beginning of this manual.
96	CLAS0002	Bad or unexpected message received by NI Port (PARM = Message Function Code, NI = PC).	See "Submitting an SR" at the beginning of this manual.
97	CLAS0002	Data offset on odd byte boundary, which is not allowed for this device (PARM = Protocol ID, DEV = RASP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.
98	CLAS0002	No room in buffer for RASP header (PARM = -Bytes short, DEV = RASP, DIR = OUT).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-7. NI LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (If Any)
114	CLAS0002	Tried to add an IP-to-IEEE 802 mapping and received an error (PARM = Path Resolve Result Code, NI = LAN).	Check PARM. If PARM = 15 then configure a higher Maximum Number of Nodes, otherwise see "Submitting an SR" at the beginning of this manual.
115	CLAS0001	Configuration information send to NI is bad (PARM = Length of configuration buffer, NI = GATE).	See "Submitting an SR" at the beginning of this manual.
116	CLAS0002	Attempt to add/update an entry in the router mapping table failed (PARM = Path Result Return Code, NI = ROUTER).	If PARM = 25 Then dial request was outstanding -- retry update. If PARM = 27 then an update tried to disable an active entry. If PARM = 15 then the mapping table is full. Otherwise, see "Submitting an SR" at the beginning of this manual.
117	CLAS0002	Protocol ID in Protocol Stop message has no match in PID table (PARM = Protocol ID).	See "Submitting an SR" at the beginning of this manual.
118	CLAS0002	Dial Protocol owns device and another protocol attempted to send data (PARM = violating protocol ID, DEV = INP).	If this happens frequently, check configuration carefully and if there are no problems, See "Submitting an SR" at the beginning of this manual.
119	CLAS0002	Dial Protocol owns device and another protocol was sent data from the remote node (PARM = violating protocol ID, DEV = INP).	If this happens frequently, check the configurations on both the local and remote systems carefully. See "Submitting an SR" at the beginning of this manual.
120	CLAS0002	Dial Protocol owns device and another protocol attempted to send data (PARM = violating protocol ID, DEV = RASP).	If this happens frequently, check configuration carefully and if there are no problems, see "Submitting an SR" at the beginning of this manual.

TABLE 4-7. NI LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (If Any)
121	CLAS0002	Dial Protocol owns device and another protocol was sent data from the remote node (PARM = violating protocol ID, DEV = RASP).	If this happens frequently, check the configurations on both the local and remote systems carefully. If there are no problem see "Submitting an SR" at the beginning of this manual..
122	CLAS0002	Bad or unexpected message received by NI Port (PARM = Message Function Code, NI = X25)	See "Submitting an SR" at the beginning of this manual.
125	CLAS0005	Device was idle for configured Idle Timeout and timer was enabled for this device. Device will be disconnected (PARM = device ldev).	None.

TABLE 4-8. PATH RESULT CODES

Result Code	Explanation	Action
0	Path resolved, path descriptor returned.	None. Informative message.
1	Path was added, path descriptor returned.	None. Informative message.
2	Path was verified path descriptor returned.	None. Informative message.
3	Path resolution has been deferred.	Wait for reply message on reply port.
4	Destination Internet address unreachable.	Try again, or check destination IP address is correct.
5	Internal resource error.	See "Submitting an SR" at the beginning of this manual.
6	Internal error encountered.	See "Submitting an SR" at the beginning of this manual.
7	Path result was reachable, no path descriptor returned.	None. Informative message.
11	Destination network not in routing table.	See "Submitting an SR" at the beginning of this manual.
12	Not directly connected to network. Network not started or IP address is incorrect.	Check destination IP address is correct and that network is started.
13	Format error in path report.	See "Submitting an SR" at the beginning of this manual.
14	No suitable path reports.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-8. PATH RESULT CODES (cont'd)

Result Code	Explanation	Action
15	Mapping table full.	Increase the Number of Nodes in Network value for the NI data screen of the Netxport branch using NMMGR. If this fails, see "Submitting an SR" at the beginning of this manual.
16	Out of path descriptors.	See "Submitting an SR" at the beginning of this manual.
17	Attempted loopback send without loopback network interface started.	See "Submitting an SR" at the beginning of this manual.
18	Probe failure.	See "Submitting an SR" at the beginning of this manual.
19	Could not get a semaphore.	See "Submitting an SR" at the beginning of this manual.
21	Dial request was rejected by the operator.	None.
22	Error detected on link device.	Refer to the section on investigating link problems in the "Introduction" of this manual.
23	Busy/no answer/wrong number.	Determine why the remote system could not be dialed. The remote system could be down or the remote link could already be in use by another system.

TABLE 4-8. PATH RESULT CODES (cont'd)

Result Code	Explanation	Action
24	Device was closed as requested by NETCONTROL or the Dial ID protocol.	Re-enable the link via :NETCONTROL ADDLINK.
25	Dial request pending, please wait and try again.	Re-attempt connection after dial-up has completed for the other user.
26	An error occurred on a dial link. This causes any existing connections that were using the link to be aborted.	Re-establish the connection(s) via REMOTE HELLO, DSCOPY.
27	Update of the on-line router configuration entry failed because either the entry was active and the update entry was disabled, or changing the adjacency or non-adjacency of an entry was attempted.	Check configuration.
28	An outgoing phone call was requested, but the configuration does not allow outgoing calls to that destination.	Check the destination attempted against the configuration.

TABLE 4-9. PROBE LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action (if any)
7	CLAS0001	Bad or unexpected message received by PROBE Port (PARM = Message Function Code).	See "Submitting an SR" at the beginning of this manual.
12	CLAS0002	Could not get a path descriptor for Proxy Reply (PARM = Request ID).	See "Submitting an SR" at the beginning of this manual.
14	CLAS0002	Retransmission timeout is faster than packet can be sent out node (PARM = Timer value in 1/10 seconds).	See "Submitting an SR" at the beginning of this manual.
15	CLAS0002	Reply received after request has timed out (PARM = Sequence number from PROBE Address Reply Packet).	Can happen from time to time. If excessive, then increase retransmission timeout or retry count in Probe Protocol Configuration screen in NMMGR and see "Submitting an SR" at the beginning of this manual.
16	CLAS0002	Reply received after request has timed out (PARM = Sequence number from PROBE Name Reply Packet).	Can happen from time to time. If excessive, then increase retransmission timeout or retry count in the Probe Protocol Configuration screen and see "Submitting an SR" at the beginning of this manual.
17	CLAS0002	DictSend to name server port failed on Proxy Name Request (PARM = DictSend result code).	See "Submitting an SR" at the beginning of this manual.
18	CLAS0002	Could not get a Path Descriptor for Name Reply (PARM = Sequence number from PROBE Name Request).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-9. PROBE LOGGING LOCATION CODES(cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
19	CLAS0002	Could not get Path Descriptor for Probe Address Reply (PARM = Sequence number from PROBE Address Request).	See "Submitting an SR" at the beginning of this manual.
20	CLAS0002	Reply received after request has timed out (PARM = Request ID).	Can happen from time to time. If excessive, then increase retransmission timeout or retry count in the Probe Protocol Configuration screen and see "Submitting an SR" at the beginning of this manual.
21	CLAS0002	Room allocated for node name and path report is too small (PARM = number of bytes short).	See "Submitting an SR" at the beginning of this manual.
22	CLAS0002	Timer popped which has no request outstanding (PARM = Timer request ID).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-9. PROBE LOGGING LOCATION CODES(cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
23	CLAS0002	Received Gateway Reply message, which is not supported (PARM = Probe message type).	See "Submitting an SR" at the beginning of this manual.
24	CLAS0002	Late reply came in when cleaning up Proxy.	See "Submitting an SR" at the beginning of this manual.
25	CLAS0002	Could not get a Path Descriptor for Probe Gateway Reply (PARM = Sequence number from Gateway Request).	See "Submitting an SR" at the beginning of this manual.
28	CLAS0005	Retransmission has occurred (PARM = -Retries until exhausted).	Informative message.
29	CLAS0002	Attempt to cache node name failed (PARM = Length of Name).	See "Submitting an SR" at the beginning of this manual.
30	CLAS0002	Attempt to cache node name failed (PARM = Length of Name).	See "Submitting an SR" at the beginning of this manual.
31	CLAS0002	Received Probe Proxy Name Request when proxy node disabled (PARM = Probe message type).	See "Submitting an SR" at the beginning of this manual.
32	CLAS0002	Attempt to map addresses failed (PARM = Path resolve error code).	Increase the Maximum Number of Nodes in the LAN 802.3 Network Interface screen in NMMGR. If error reoccurs then see "Submitting an SR" at the beginning of this manual.

TABLE 4-9. PROBE LOGGING LOCATION CODES(cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
33	CLAS0002	Attempt to map addresses failed (PARM = Path resolve error code).	See "Submitting an SR" at the beginning of this manual.
34	CLAS0002	Attempt to free buffer failed (PARM = BFMFreebuf Result Code).	See "Submitting an SR" at the beginning of this manual.
35	CLAS0004	PROBE Protocol Started.	Informative message.
36	CLAS0004	PROBE Protocol Stopped.	Informative message.
37	CLAS0004	PROBE Protocol Stopped (Delayed with Proxy).	None.
38	CLAS0005	Probe Unsolicited Request made (PARM = Sequence number allocated for request).	Informative message.
39	CLAS0005	Probe Name Request made (PARM = Sequence number allocated for request).	Informative message.
40	CLAS0005	Probe Address Request made (PARM = Sequence number allocated for request).	Informative message.
46	CLAS0005	Probe Node Down Request made (PARM = Sequence number allocated from request).	None.
47	CLAS0002	Error in trying to delete node name from path cache after receiving a Probe Node Down message.	See "Submitting an SR" at the beginning of this manual.

Note: The PXP header is contained in the message frame logged on inbound packets. The header begins at word 18 of the message frame.

TABLE 4-10. PXP PM LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action (if any)
0	CLAS0001	Received an invalid NS format message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
1	CLAS0001	Received a port message before receiving the CP initialization message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
2	CLAS0001	Received an invalid SIP message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
3	CLAS0001	Received an invalid BFM message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
4	CLAS0001	Received an invalid NetIPC message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
5	CLAS0001	Received an invalid message of unknown format (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
6	CLAS0005	A PXP PM has been activated.	Informative message
7	CLAS0002	An error result was returned on a DICTadd call The PXP PM was therefore not started (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.
8	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-10. PXP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
9	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
10	CLAS0001	A PXP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
11	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
12	CLAS0001	A PXP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
13	CLAS0002	An error result was returned on an NMclosetrace call for NetIPC tracing (PARM = NM error code).	See "Submitting an SR" at the beginning of this manual.
14	CLAS0003	An inbound packet has been discarded due to a checksum error.	Repeated checksum errors indicate a possible link problem. Refer to the <i>LAN/3000 Diagnostic & Troubleshooting Guide</i> .
15	CLAS0003	An inbound packet was discarded due to a protocol header violation.	See "Submitting an SR" at the beginning of this manual.
16	CLAS0003	An error packet could not be generated due to pending I/O.	Informative message
17	CLAS0003	An inbound packet was discarded due to a protocol header violation.	See "Submitting an SR" at the beginning of this manual.
18	CLAS0003	A PXP request packet has been retransmitted (PARM = number of retransmissions performed).	Repeated retransmissions suggest possible link or configuration problems. See PXP error code explanations.
19	CLAS0003	PXP request failed. Retransmission-retry maximum exceeded. Possible link or configuration problems.	See error 10 in the "Network Transport Protocol Errors" table of this manual.
20	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-10. PXP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
21	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
22	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
23	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
24	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
25	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
26	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
27	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
28	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
29	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
30	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
31	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
32	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-10. PXP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
33	CLAS0003	An inbound request packet was discarded due to a lack of receive resources.	None.
34	CLAS0002	An inbound request packet was discarded due to a Path error.	See "Submitting an SR" at the beginning of this manual.
35	CLAS0003	A PXP error packet was received.	Informative message
36	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
37	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
38	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
39	CLAS0003	A duplicate reply has been discarded.	Informative message
40	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
41	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
42	CLAS0001	An error result was returned on a BFMgetbufnowr call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-10. PXP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
43	CLAS0002	An error result was returned on a BFMgetbufnowr call This error indicates a possible problem in the outbound buffer pool configuration. (PARM = BMF error code).	Ensure proper buffer configuration. See IEEE 802 NI Data configuration screen. If properly configured, then see "Submitting an SR" at the beginning of this manual.
44	CLAS0001	An error result was returned on a BFMbufgranted message (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
45	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
46	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
47	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
48	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
49	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
50	CLAS0003	An inbound packet was discarded as part of the shutdown sequence.	Informative message
51	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
52	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
53	CLAS0002	An error result was returned on an NMclosetrace call for NetIPC tracing (PARM = NM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-10. PXP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
54	CLAS0005	A PXP PM has been deactivated.	Informative message
55	CLAS0006	Statistic summary for a deactivated PXP PM.	Statistical information.
56	CLAS0002	A PXP error packet could not be generated due to a PATH error.	See "Submitting an SR" at the beginning of this manual.
57	CLAS0001	An error result was returned on a BFMerasebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
58	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
59	CLAS0003	An error result was returned on a PATH'get call (PARM = PATH error code).	See PATH error explanations listed elsewhere in this section.
60	CLAS0003	An error result was returned on a PATH'get call (PARM = PATH error code).	See PATH error explanations listed elsewhere in this section.
61	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
62	CLAS0001	A PXP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
63	CLAS0001	A PXP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
64	CLAS0001	An error result was returned on a SM4'get call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
65	CLAS0001	A PXP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-10. PXP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
66	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
67	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
68	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.

Logging Location Codes

Note: The PXP header is contained in the message frame logged on inbound packets. The header begins at word 18 of the message frame.

TABLE 4-11. PXP SIP LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action (if any)
0	CLAS0001	Received a port message before receiving the CP initialization message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
1	CLAS0001	Received an invalid CP message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
2	CLAS0001	Received an invalid SIP message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
3	CLAS0001	Received an invalid NS format message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
4	CLAS0001	Received an invalid NetIPC message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
5	CLAS0001	Received an invalid message of unknown format (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
6	CLAS0002	An error result was returned on a DICTadd call The PXP SIP was therefore not started (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.
7	CLAS0001	An error result was returned on a DICTadd call The PXP SIP was therefore not started (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-11. PXP SIP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
8	CLAS0004	The PXP SIP has been started.	None. Informational message.
9	CLAS0002	A socket could not be opened due to a port create failure (PARM = error code).	See "Submitting an SR" at the beginning of this manual.
10	CLAS0002	A socket could not be opened due to a CREATEPORT' failure (PARM = PORT error code).	See "Submitting an SR" at the beginning of this manual.
11	CLAS0001	A PXP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
12	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
13	CLAS0001	A PXP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
14	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
15	CLAS0001	A PXP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
16	CLAS0001	An error result was returned on a DICTdelete call (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.
17	CLAS0003	An inbound packet was discarded as part of SIP shutdown clean-up.	None. Informational message.
18	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
19	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-11. PXP SIP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
20	CLAS0006	Statistic summary for the deactivated PXP SIP.	None. Statistical information.
21	CLAS0004	The PXP SIP has been deactivated.	None. Nodal information.
22	CLAS0003	An inbound packet has been discarded because the destination PXP socket is not open.	None.
23	CLAS0003	A PXP error packet was not generated because the inbound packet was a reply or error packet.	None.
24	CLAS0002	A PXP error packet was not generated due to a PATH failure.	See "Submitting an SR" at the beginning of this manual.
25	CLAS0003	A PXP error packet was not generated due to a SM4 error (PARM = SM4 error code).	Repeated occurrences? See "Submitting an SR" at the beginning of this manual.
26	CLAS0003	A PXP error packet was not generated due to a PATH failure (PARM = PATH error code).	See PATH error explanations.
27	CLAS0001	An error result was returned on a BFMerasebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
28	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
29	CLAS0001	An error result was returned on a BFMcompactbuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
30	CLAS0003	A Probe error result was returned. (PARM = PROBE error code).	See Probe error explanations.
31	CLAS0003	A PXP error packet could not be sent due to a SM4 error (PARM = SM4 error code).	Repeated occurrences? See "Submitting an SR" at the beginning of this manual.

TABLE 4-11. PXP SIP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
32	CLAS0003	An error result was returned on a PATH'get call (PARM = PATH error code).	See PATH error explanations.
33	CLAS0001	A PXP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
34	CLAS0002	A PXP socket could not be opened because the maximum number configured has been reached.	Increase the number of PXP sockets configured. Use the PXP Data screen.
35	CLAS0003	The PXP SIP received an ICMP message from the IP module (PARM=ICMP type word).	None.
36	CLAS0002	An error result was returned on an NMADDEENTRY call (PARM=NM entry error code).	See "Submitting an SR" at the beginning of this manual.
37	CLAS0002	An error result was returned on an NMDELEENTRY call (PARM=NMentry error code).	See "Submitting an SR" at the beginning of this manual.

Logging Location Codes

These results are integers returned to the "SEMAPHORE" and "PARM=" sections of the transport logging messages.

TABLE 4-12. SEMAPHORE RESULT CODES

Result Code	Explanation	Action (if any)
0	Successful completion	None.
1	Queued request. There were no semaphores immediately available, so the request was queued for a semaphore.	Wait for semaphore to receive message.
3	No queue elements available. The caller issued a semaphore get with the wait flag set, and there were no queue elements available to queue the request.	Up to the caller.
4	Would have had to queue for semaphore. The caller issued a semaphore get with the no-wait flag set and there were no semaphores immediately available.	Up to the caller.
5	Semaphore Key (DST) not found in semaphore table. The semaphore DST number was not found in the table.	Either add the DST number to the table with SM4'Add'DST or correct DST number on SM4'Get Call
6	DST Table full. Could not add another semaphore bank to the table.	None.
7	Maximum request types and/or DSTs is greater than maximum allowed.	Changed either or both parameters to be <= 8.
8	Maximum number of Queue Elements in SM4'Make'Table exceeded.	Change so that the total of queue elements for all request types <= 256.
9	Attempting to add a DST semaphore bank which has been previously added.	Up to the caller.
10	Creating the Port DST failed.	Check size of data segments on system with size of table created from parms from SM4'Make'Table.

TABLE 4-12. SEMAPHORE RESULT CODES (cont'd)

Result Code	Explanation	Action (if any)
11	Could not lock data segment.	Check memory for fragments or too much memory pressure.
12	CreatePort failed.	None.
13	Invalid Semaphore ID. Caller attempted to release semaphore which did not exist.	Either semaphore ID needs to be corrected, or the DST semaphore bank got deleted before all semaphores were returned.

Note: The TCP header is contained in the message frame logged on inbound packets. The header begins at word 18 of the message frame. SEQ # is defined as the low order 16 bits of the TCP packet sequence number.

TABLE 4-13. TCP PM LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action (if any))
0	CLAS0001	Received a port message before receiving the PM initialization message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
1	CLAS0001	Received an invalid SIP message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
2	CLAS0001	Received an invalid NS format message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
3	CLAS0005	A TCP PM (connection-half) has been activated.	None. Informational message.
4	CLAS0001	An invalid BFM message has been received (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
5	CLAS0001	An invalid IPC message has been received (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
6	CLAS0001	An invalid message of unknown type has been received (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
7	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
8	CLAS0001	An error result was returned on a NMclosetrace call for NetIPC tracing (PARM = NM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
9	CLAS0003	An inbound packet with a bad checksum has been discarded (PARM = seq #).	Checksum errors indicate data corruption. If you have received TCP SIP logging messages 20 and 21, then reconfigure checksum; otherwise see "Submitting an SR" at the beginning of this manual.
10	CLAS0001	A packet has been received when TCP is in an invalid state.	See "Submitting an SR" at the beginning of this manual.
11	CLAS0001	A packet has been received when TCP is in an invalid state.	See "Submitting an SR" at the beginning of this manual.
12	CLAS0003	A checksum error has been detected in a connection establishment packet.	If this repeatedly occurs, prohibiting the connection from being established, it is likely that one side is violating the checksum optioning handshake.
13	CLAS0003	An invalid inbound packet has been discarded Case 1 of state SYN ^S SENT (PARM = seq #).	* A large number of "packet discard state" log events may signify deteriorating communication conditions or poorly synchronized TCP communications.
14	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BMF error code).	See "Submitting an SR" at the beginning of this manual.
15	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BMF error code).	See "Submitting an SR" at the beginning of this manual.
16	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BMF error code).	See "Submitting an SR" at the beginning of this manual.
17	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BMF error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
18	CLAS0003	An invalid inbound packet has been discarded Case 6 of state SYN ['] SENT (PARM = seq #).	None. Occasional occurrence is normal. However, if message appears frequently see "Submitting an SR" at the beginning of this manual.
19	CLAS0003	An invalid inbound packet has been discarded Case 8 of state SYN ['] SENT (PARM = seq #).	None.
20	CLAS0003	An invalid inbound packet has been discarded	None.
21	CLAS0001	A packet has been received when TCP is in an invalid state.	See "Submitting an SR" at the beginning of this manual.
22	CLAS0003	An invalid inbound packet has been discarded Case 0 of state SYN ['] RECVD (PARM = seq #).	None.
23	CLAS0003	An invalid inbound packet has been discarded Case 1 of state SYN ['] RECVD (PARM = seq #).	None.
24	CLAS0003	An invalid inbound packet has been discarded Case 3 of state SYN ['] RECVD (PARM = seq #).	None.
25	CLAS0001	An error result was returned on a SM4 ['] rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
26	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
27	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
28	CLAS0003	An invalid inbound packet has been discarded Case 1 of state ESTABLISHED (PARM = seq #).	None.
29	CLAS0003	An invalid inbound packet has been discarded Case 3 of state ESTABLISHED (PARM = seq #).	None.
30	CLAS0003	An invalid inbound packet has been discarded Case 4 of state ESTABLISHED (PARM = seq #).	None.
31	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
32	CLAS0003	An invalid inbound packet has been discarded Case 0 of state LAST'ACK (PARM = seq #).	None.
33	CLAS0003	An invalid inbound packet has been discarded Case 1 of state LAST'ACK (PARM = seq #).	None.
34	CLAS0003	An invalid inbound packet has been discarded Case 3 of state LAST'ACK (PARM = seq #).	None.
35	CLAS0003	An invalid inbound packet has been discarded Case 4 of state LAST'ACK (PARM = seq #).	None.
36	CLAS0003	An invalid inbound packet has been discarded Case 5 of state LAST'ACK (PARM = seq #).	None.
37	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
38	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
39	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
40	CLAS0002	An error result was returned on a DICTadd call to the port dictionary. The connection was therefore not established (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.
41	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
42	CLAS0001	An error result was returned on a BFMgetbufnowr call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
43	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
44	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
45	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
46	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
47	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
48	CLAS0002	An error result was returned on a BFMgetbufnowr call This error indicates a possible problem in the outbound buffer pool configuration (PARM = BFM error code).	Ensure proper buffer configuration, check the IEEE802 NI Data configuration screen of the NetXPort branch. If fine: See "Submitting an SR" at the beginning of this manual.
49	CLAS0001	An invalid BFM message has been received (PARM = message function).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
50	CLAS0003	A connection has been shutdown, but the TCP PM must wait for pending I/O to complete before it can delete itself. No reference to the PM exists in any XPORT or NetIPC tables at this point (PARM = TCP I/O flags).	None.
51	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
52	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
53	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
54	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
55	CLAS0003	An inbound packet has been discarded as part of connection shutdown (PARM = seq #).	"Packet discard clean-up" indicates that a packet was received after the IPCshutdown call but before the TCP connection was fully deleted. This may happen when user applications have a poor shutdown handshake or an application is aborted. Revise your application accordingly.
56	CLAS0002	An error result was returned on a NMclosetrace call for NetIPC tracing (PARM = NM error code).	See "Submitting an SR" at the beginning of this manual.
57	CLAS0005	A TCP PM has been deactivated. (PARM = TCP termination code as returned by IPCCHECK).	None. Informational message.
58	CLAS0001	An error result was returned on a BFMbufferinfo call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
59	CLAS0003	A TCP packet was to have been retransmitted but the original packet has not yet been successfully transmitted by Layer (link layer). The retransmission timer has been restarted but the packet has not actually been re-sent (PARM = seq #).	Repeated retransmissions of this type suggest a possible outbound link problem.
60	CLAS0001	An error result was returned on a BFMsharebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
61	CLAS0003	A TCP packet has been retransmitted (PARM = seq #).	Repeated retransmissions suggest possible link or configuration problems. See error code 10 in the "Network Transport Protocol Errors" Table of this manual.
62	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
63	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
64	CLAS0003	A TCP packet has been retransmitted following a path update (PARM = seq #).	Repeated retransmissions suggest possible link or configuration problems. See error code 10 in the "Network Transport Protocol Errors" table of this manual.
65	CLAS0001	An error result was returned on a BFMreadbuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
66	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
67	CLAS0003	A duplicate inbound packet has been discarded (PARM = seq #).	None. Informational message.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
68	CLAS0003	A duplicate inbound packet has been discarded (PARM = seq #).	None. Informational message.
69	CLAS0003	An inbound packet has been discarded due to lack of reassembly resources.	None. Informational message.
70	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
71	CLAS0001	An error result was returned on a BFMappendbuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
72	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
73	CLAS0001	An error result was returned on a BFMappendbuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
74	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
75	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
76	CLAS0001	An error result was returned on a SM4'get call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
77	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
78	CLAS0001	An error result was returned on a DICTdelete call to the port dictionary (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
79	CLAS0003	An error result was returned on a PROBE reply message (PARM = PROBE error code).	See PROBE error code explanations listed in this section.
80	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
81	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
82	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
83	CLAS0003	A TCP PM has deactivated with a non-normal termination code (PARM = TCP termination code as returned by IPCCHECK).	See the "PARM=" value listed in the "Network Transport Protocol Errors" Table in Section 2.
84	CLAS0003	An error result was returned on a PATH'get call (PARM = PATH error code).	See PATH error code explanations.
85	CLAS0003	An error result was returned on a PATH'get call (PARM = PATH error code).	See PATH error code explanations.
86	CLAS0006	Statistic summary for a deactivated TCP PM (PARM = TCP termination code as returned by IPCCHECK).	See "PARM=" value in "Network Transport Protocol Errors" Table in Section 2.
87	CLAS0001	A TCP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any))
88	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
89	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
90	CLAS0003	An invalid inbound packet has been discarded Case 0 of state ESTABLISHED (PARM = seq #).	None.
91	CLAS0001	An invalid message of unknown type has been received.	See "Submitting an SR" at the beginning of this manual.
92	CLAS0001	An invalid timer message has been received.	See "Submitting an SR" at the beginning of this manual.
93	CLAS0001	An invalid timer message has been received	See "Submitting an SR" at the beginning of this manual.
94	CLAS0001	An invalid timer message has been received	See "Submitting an SR" at the beginning of this manual.
95	CLAS0001	An invalid timer message has been received	See "Submitting an SR" at the beginning of this manual.
96	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
97	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action (if any)
98	CLAS0001	A TCP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
99	CLAS0001	A TCP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
100	CLAS0001	A TCP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
101	CLAS0001	A TCP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
102	CLAS0001	A TCP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODES cont'd)

Loc. Code	Logging Class	Explanation	Action
103	CLAS0002	An error result was returned on a BFMSETBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
104	CLAS0002	An error result was returned on a BFMSETBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
105	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
106	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
107	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
108	CLAS0003	A DATA packet with invalid sequence number has been discarded in close'wait state (RST not on).	None. Informational message.
109	CLAS0003	A DATA packet with invalid sequence number has been discarded in close'wait state (RST on).	None. Informational message.
110	CLAS0003	An ACK packet with ack status "none" has been discarded in close'wait state.	None. Informational message.
111	CLAS0003	An ACK packet with ack status "invalid" has been discarded in close'wait state.	None. Informational message.
112	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
113	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODED (cont'd)

Loc. Code	Logging Class	Explanation	Action
114	CLAS0003	A DATA packet with invalid sequence number has been discarded in closing state (RST not on).	None. Informational message.
115	CLAS0003	A DATA packet with invalid sequence number has been discarded in closing state (RST on).	None. Informational message.
116	CLAS0003	An ACK packet with ack status "none" has been discarded in closing state.	None. Informational message.
117	CLAS0003	An ACK packet with ack status "invalid" has been discarded in closing state.	None. Informational message.
118	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
119	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
120	CLAS0003	A DATA packet with invalid sequence number has been discarded in fin'wait1 state (RST not on).	None. Informational message.
121	CLAS0003	A DATA packet with invalid sequence number has been discarded in fin'wait1 state (RST on).	None. Informational message.
122	CLAS0003	An ACK packte with ack status "none" has been discarded in fin'wait1 state.	None. Informational Message.
123	CLAS0003	An ACK packet with ack status "invalid" has been discarded in fin'wait1 state.	None. Informational message.

TABLE 4-13. TCP PM LOGGING LOCATION CODED (cont'd)

Loc. Code	Logging Class	Explanation	Action
124	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
125	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
126	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
127	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
128	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
129	CLAS0003	A DATA packet with invalid sequence number has been discarded in fin'wait2 state (RST not on).	None. Informational message.
130	CLAS0003	A DATA packet with invalid sequence number has been discarded in fin'wait2 state (RST on).	None. Informational message.
131	CLAS0003	An ACK packet with ack status "none" has been discarded in fin'wait2 state.	None. Informational message.
132	CLAS0003	An ACK packet with ack status "invalid" has been discarded in fin'wait2 state.	None. Informational message.
133	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
134	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-13. TCP PM LOGGING LOCATION CODED (cont'd)

Loc. Code	Logging Class	Explanation	Action
135	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
136	CLAS0003	A DATA packet with invalid sequence number has been discarded in time'wait state (RST not on).	None. Informational message.
137	CLAS0003	A DATA packet with invalid sequence number has been discarded in time'wait state (RST on).	None. Informational message.
138	CLAS0003	An ACK packet with ack status "none" has been discarded in time'wait state.	None. Informational message.
139	CLAS0003	An ACK packet with ack status "invalid" has been discarded in time'wait state.	None. Informational message.
140	CLAS0003	An ACK packet with ack status "valid" has been discarded in time'wait state.	None. Informational message.
141	CLAS0001	A TCP internal error has been encountered - a time'wait timer elapsed message has been received when such a timer was not active.	See "Submitting an SR" at the beginning of this manual.
142	CLAS0001	An error result was returned on a BFMSHAREBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
143	CLAS0005	A TCP connection received a source quench message from the IP module via the TCP SIP. This forces the connection to limit the number of outstanding packets to the remote node for given a period of time. In essence, it tells the connection to "slow down" the sending of packets.	None.

TABLE 4-13. TCP PM LOGGING LOCATION CODED (cont'd)

Loc. Code	Logging Class	Explanation	Action
144	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
145	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
146	CLAS0001	An error result was returned on a BFMSHAREBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
147	CLAS0001	An error result was returned on a BFMFREEBUF call (PARM=BFM error code).	See "Submitting an SR" at the beginning of this manual.
148	CLAS0003	An error result was returned on a BFMAPPENDBUF call. Retry connection.	None. Informational message.

Logging Location Codes

Note: The TCP header is contained in the message frame logged on inbound packets. The header begins at word 18 of the message frame. SEQ # is defined as the low order 16 bits of the TCP packet sequence number.

TABLE 4-14. TCP SIP LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action
0	CLAS0001	Received a port message before receiving the CP initialization message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
1	CLAS0001	Received an invalid CP message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
2	CLAS0001	Received an invalid SIP message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
3	CLAS0001	Received an invalid NS format message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
4	CLAS0001	Received an invalid NetIPC message (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
5	CLAS0001	Received an invalid message of unknown format (PARM = message function).	See "Submitting an SR" at the beginning of this manual.
6	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
7	CLAS0002	An error result was returned on a DICTadd call The TCP SIP was therefore not started (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-14. TCP SIP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
8	CLAS0001	An error result was returned on a DICTadd call The TCP SIP was therefore not started (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.
9	CLAS0002	An inbound connection could not be opened because the maximum number configured has been reached.	Increase the number of TCP connections configured.
10	CLAS0004	The TCP SIP has been started.	None. Informational message.
11	CLAS0002	An error result was returned on a DICTadd call The user's call socket was therefore not opened (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.
12	CLAS0001	An error result was returned on a DICTdelete call (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.
13	CLAS0002	An error result was returned on a CREATEPORT call. The TCP connection was therefore not opened (PARM = PORT error code).	See "Submitting an SR" at the beginning of this manual.
14	CLAS0001	An error result was returned on a DICTdelete call (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.
15	CLAS0001	A TCP internal error has been encountered.	See "Submitting an SR" at the beginning of this manual.
16	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
17	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
18	CLAS0001	An error result was returned on a DICTdelete call (PARM = DICT error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-14. TCP SIP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
19	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
20	CLAS0003	An inbound connection request packet has been discarded because of a checksum error (PARM = seq #).	Repeated checksum errors on connection request packets indicate a possible incompatibility in the TCP checksum handshake. Examine the TCP configuration screen to ensure that checksum is the same on both nodes.
21	CLAS0003	An inbound packet has been discarded because of a checksum error (PARM = seq #).	Repeated checksum errors indicate a possible link problem.
22	CLAS0003	An invalid inbound packet has been discarded. Case 1 of state CLOSED (PARM = seq #).	A large number of "packet discard state" log events may signify poorly synchronized TCP communications.
23	CLAS0003	An invalid inbound packet has been discarded. Case 0 of state LISTEN (PARM = seq #).	None. Informational message.
24	CLAS0003	An invalid inbound packet has been discarded. Case 5 of state LISTEN (PARM = seq #).	None. Informational message.
25	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
26	CLAS0003	An error result was returned on a PATHget call (PARM = PATH error code).	See PATH error explanations listed elsewhere in this section.
27	CLAS0003	An inbound connection request packet was discarded because the maximum connection requests were already pending to the call socket (PARM = seq #).	Check status of process which owns the call socket.

TABLE 4-14. TCP SIP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
28	CLAS0002	An inbound connection could not be created due to a port create failure (PARM = error code).	See "Submitting an SR" at the beginning of this manual.
29	CLAS0002	An inbound connection could not be created due to a CREATEPORT' failure (PARM = PORT error code).	See "Submitting an SR" at the beginning of this manual.
30	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
31	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
32	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
33	CLAS0001	An error result was returned on a BFMgetbufnowr call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
34	CLAS0001	An error result was returned on a BFMbufgranted message (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
35	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
36	CLAS0001	An error result was returned on a BFMwritebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
37	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
38	CLAS0001	An error result was returned on a SM4'get call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
39	CLAS0001	An error result was returned on a BFMfreebuf call (PARM = BFM error code).	See "Submitting an SR" at the beginning of this manual.
40	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-14. TCP SIP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
41	CLAS0002	An outbound connection could not be created due to a port create failure (PARM = error code).	See "Submitting an SR" at the beginning of this manual.
42	CLAS0006	Statistic summary for the deactivated TCP SIP.	None. Statistical information.
43	CLAS0004	The TCP SIP has been deactivated.	None. Nodal information.
44	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
45	CLAS0001	An error result was returned on a SM4'rel call (PARM = SM4 error code).	See "Submitting an SR" at the beginning of this manual.
46	CLAS0001	A TCP internal resource error has been encountered.	See "Submitting an SR" at the beginning of this manual.
47	CLAS0002	An error result was returned on an NMdelentry call (PARM = NMENTRY error code).	See "Submitting an SR" at the beginning of this manual.
48	CLAS0003	An outbound packet could not be sent due to a SM4 error (PARM = SM4 error code).	Repeated occurrences? See "Submitting an SR" at the beginning of this manual.
49	CLAS0003	An outbound packet could not be sent due to a path error (PARM = PATH error code).	See PATH error explanations.
50	CLAS0003	An outbound packet could not be sent due to a path error (PARM = PATH error code).	See PATH error explanations.
51	CLAS0002	An error result was returned on an NMaddentry call (PARM = NMENTRY error code).	See "Submitting an SR" at the beginning of this manual.
52	CLAS0002	An error result was returned on an NMaddentry call (PARM = NMENTRY error code).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-14. TCP SIP LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
53	CLAS0002	An error result was returned on an NMDelentry call (PARM = NMENTRY error code).	See "Submitting an SR" at the beginning of this manual.
54	CLAS0002	An error result was returned on a BFMgetbufnowr call This error indicates a possible problem in the outbound buffer pool configuration. (PARM = BFM error code).	Ensure proper buffer configuration , check the IEEE802 NI Data configuration screen. If fine: See "Submitting an SR" at the beginning of this manual.
55	CLAS0002	A call socket could not be opened because the maximum number configured has been reached.	Increase the number of TCP call sockets configured with the TCP Data configuration screen.
56	CLAS0002	An outbound connection could not be opened because the maximum number configured has been reached.	Increase the number of TCP connections configured with the TCP Data configuration screen. Also check for proper IPCSHUTDOWN procedures in any user applications.
57	CLAS0005	The TCP SIP received an ICMP message from the IP module (PARM=ICMP type word).	None.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action
1	CLAS0001	A port message was received containing an invalid function code (PARM=function code).	See "Submitting an SR" at the beginning of this manual.
2	CLAS0004	Dial ID protocol started.	Informational message.
3	CLAS0002	The room allocated for the node name and path report is too small (PARM=required number of bytes needed).	See "Submitting an SR" at the beginning of this manual.
4	CLAS0002	The packet received was not a valid Dial ID message type. The packet is discarded (PARM=message type of received packet).	Enable data trace for the Dial ID protocol while this log message is generated. See "Submitting an SR" at the beginning of this manual.
5	CLAS0001	The sending of a 'dial' message to the Control Process using DICTSEND failed (PARM=result code of DICTSEND call).	See "Submitting an SR" at the beginning of this manual.
6	CLAS0004	Dial ID protocol stopped.	Informational message.
7	CLAS0002	A port timer message was received with no matching request (PARM=timer request id).	Informational message.
8	CLAS0003	Retransmission has occurred (PARM=index of device over which retransmission has occurred).	Informational message.
9	CLAS0001	The sending of a link shut message to the Control Process using DICTSEND failed (PARM=result code of DICTSEND call).	See "Submitting an SR" at the beginning of this manual.
10	CLAS0002	The status returned from the Control Process attempting to download the phone number to the device (PARM=result of NMLINKDIAL call).	Verify that the phone number is correct in the configuration file. See "Submitting an SR" at the beginning of this manual.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
11	CLAS0001	A port message was received on the timer subqueue but was not a timer message (PARM=function code of received message).	See "Submitting an SR" at the beginning of this manual.
12	CLAS0001	A call to BFMWRITEBUF failed while writing the header for a request packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
13	CLAS0001	A call to BFMWRITEBUF failed while writing the node name for a request packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
14	CLAS0001	A call to BFMWRITEBUF failed while writing the path report for a request packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
15	CLAS0001	A call to BFMWRITEBUF failed while writing the security string for a request packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
16	CLAS0002	The maximum number of retransmissions has occurred over a link (PARM=index of the device that retransmission had occurred).	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	A Dial ID transaction has been initiated over a device from the local node (PARM=index of the device).	Informational message.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
18	CLAS0005	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).	Informational message.
19	CLAS0002	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.	Verify that there is a valid mapping entry in the configuration file for the remote node.
20	CLAS0002	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.	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.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
21	CLAS0002	A packet was received that did not contain a correct value for the version in the Dial ID header (PARM=version of received packet).	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 "Submitting an SR" at the beginning of this manual.
22	CLAS0002	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.	Initiate the connections either over separate links or at separate times.
23	CLAS0005	A Dial ID transaction has been initiated over a device from a remote node (PARM=index of the device).	Informational message.
24	CLAS0002	A call to BFMREADBUF failed while reading the node name from a request packet. A reply rejecting the request is sent to the remote node (PARM=result of BFMREADBUF).	Either the packet has a bad format or has been corrupted in transit.
25	CLAS0002	A call to BFMREADBUF failed while reading the Path Report from a request packet (PARM=result of BFMREADBUF).	Either the packet has a bad format or has been corrupted in transit.
26	CLAS0002	A call to BFMREADBUF failed while reading the Security String from a request packet (PARM=result of BFMREADBUF).	Either the packet has a bad format or has been corrupted in transit.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
27	CLAS0002	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). A acknowledgment rejecting the reply is sent to the remote node (PARM=result of BFMREADBUF).	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.
28	CLAS0001	A call to BFMWRITEBUF failed while writing the header for a reply packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
29	CLAS0001	A call to BFMWRITEBUF failed while writing the node name for a reply packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
30	CLAS0001	A call to BRMWRITEBUF failed while writing the path report for a reply packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
31	CLAS0001	A call to BFMWRITEBUF failed while writing the security string for a reply packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
32	CLAS0001	A call to BFMWRITEBUF failed while writing the header for an acknowledgment packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
33	CLAS0002	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).	See "Submitting an SR" at the beginning of this manual.
34	CLAS0002	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).	See "Submitting an SR" at the beginning of this manual.
35	CLAS0002	A call BFMREADBUF failed while reading the node name from a reply packet. An acknowledgment rejecting the reply is sent to the remote node (PARM=result of BFMREADBUF).	Either the packet has a bad format or has been corrupted in transit.
36	CLAS0002	A call to BFMREADBUF failed while reading the Path Report from a reply packet. (An acknowledgment rejecting the reply is sent to the remote node (PARM=result of BFMREADBUF).	Either the packet has a bad format or has been corrupted in transit.
37	CLAS0002	A call to BFMREADBUF failed while reading security string from a reply packet. An acknowledgment rejecting the reply is sent to the remote node (PARM=result of BFMREADBUF).	Either the packet has a bad format or has been corrupted in transit.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
38	CLAS0002	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.	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	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).	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	The status field of a Dial ID acknowledgment packet was non-zero meaning the remote node has rejected the local node's reply 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 address contained in the Path Report was invalid; (4) Rejected for unknown reasons).	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	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).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
42	CLAS0002	The sequence number of an acknowledgment packet does not match sequence number sent in the reply packet. Either the ack 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).	See "Submitting an SR" at the beginning of this manual.
43	CLAS0006	Dial ID is logging statistics prior to its port termination.	Informational message.
44	CLAS0002	There is no matching internal Dial ID queue element for the device in which an acknowledgment packet was just received (PARM=index of device).	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 "Submitting an SR" at the beginning of this manual.
45	CLAS0002	There is no matching internal Dial ID queue for the device in which a reply packet was just received (PARM=index of device).	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 "Submitting an SR" at the beginning of this manual.
46	CLAS0002	A call to the internal procedure PDX'NAME'CACHE failed.	None.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
47	CLAS0002	The security string contained in the remote node's reply packet does not match any of the strings configured at the local node.	Verify that a security strings configured under the Dial ID protocol at the local node math the one sent by the remote node.
48	CLAS0002	The security string contained in the remote node's request packet does not match any of the strings configured at the local node.	Verify that 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	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).	Either the packet was corrupted in transit or the remote node is not transmitting packets correctly. If thought to be the latter case see "Submitting an SR" at the beginning of this manual.
50	CLAS0002	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).	Reconfigure so that the link is larger than the value contained in the PARM.
51	CLAS0002	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).	Either the packet was corrupted in transit or the remote node is not transmitting packets correctly. If thought to be the latter case see "Submitting an SR" at the beginning of this manual.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
52	CLAS0001	A port message was received on the getbuf reply subqueue but was not a getbuf reply message (PARM=function code of received message).	See "Submitting an SR" at the beginning of this manual.
53	CLAS0001	A call to BFMWRITEBUF failed while writing the Header for an ack-ack packet (PARM=result of BFMWRITEBUF).	See "Submitting an SR" at the beginning of this manual.
54	CLAS0002	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).	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 "Submitting an SR" at the beginning of this manual.
55	CLAS0002	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).	See "Submitting an SR" at the beginning of this manual.
56	CLAS0002	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).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
57,58,62 63,64,65 66,67,68 69,70,71 72,73,74 75,76,78 80,81,87	CLAS0001	A call to BFMFREEBUF failed (PARM=result code returned from BFMFREEBUF).	See "Submitting an SR" at the beginning of this manual.
59	CLAS0002	A call to BFMREADBUF failed when reading the buffer containing the node name and path report (PARM=result code returned from BFMREADBUF).	See "Submitting an SR" at the beginning of this manual.
60	CLAS0002	A call to BFMBUFFERINFO on the buffer containing the node name and path report failed (PARM=result code returned from BFMBUFFERINFO).	See "Submitting an SR" at the beginning of this manual.
61	CLAS0002	A call to BFMUSERINFO failed during startup (PARM=result code returned from BFMUSERINFO).	See "Submitting an SR" at the beginning of this manual.
77	CLAS0002	A call to BFMREADBUF failed while reading the Path Report from a Dial ID packet. A rejection packet is sent to the remote node (PARM=result of BFMREADBUF).	Either the packet has a bad format or has been corrupted in transit.
79	CLAS0002	A call to BFMBUFFERINFO failed on the buffer containing a packet to be retransmitted (PARM=result code returned from BFMBUFFERINFO).	See "Submitting an SR" at the beginning of this manual.
82	CLAS0002	A call to BFMSHAREBUF failed.	None.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
83	CLAS0002	A call to SM4'REL failed.	See "Submitting an SR" at the beginning of this manual.
84	CLAS0002	A call to BFMREADBUF failed while reading the header from a Dial ID packet from a remote node (PARM=result of BFMREADBUF).	See "Submitting an SR" at the beginning of this manual.
85	CLAS0002	A call to BFMGETBUF failed when attempting to get an outbound buffer for a request packet (PARM=result of BFMGETBUF).	See "Submitting an SR" at the beginning of this manual.
86	CLAS0002	A remote node is attempting connection by sending a Dial ID request packet but the local node thinks that the node is already connected. The request packet is discarded.	Determine why the remote node is attempting connection when the connection has already been made. It may be necessary to hang up the link between the two nodes and re-establish connection.
88	CLAS0002	A call to BFMGETBUF failed when attempting to get an outbound buffer for a reply packet (PARM=result of BFMGETBUF).	See "Submitting an SR" at the beginning of this manual.
89	CLAS0002	A call to BFMGETBUF failed when attempting to get an outbound buffer for an acknowledgment packet (PARM=result of BFMGETBUF).	See "Submitting an SR" at the beginning of this manual.
90	CLAS0002	A call to BFMGETBUF failed when attempting to get an outbound buffer for an ack-ack packet (PARM=result of BFMGETBUF).	See "Submitting an SR" at the beginning of this manual.

TABLE 4-15. DIAL ID LOGGING LOCATION CODES (cont'd)

Loc. Code	Logging Class	Explanation	Action
91	CLAS0002	The Dial ID protocol has waited for approximately five minutes for transmission of a packet. The connection attempt is aborted.	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.

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 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.

TABLE 4-16. ICMP TYPE/CODE WORDS

Parm Value	Explanation	Action
001400	Destination Unreachable. 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.	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.
001401	Destination Unreachable. 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.	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.

TABLE 4-16. ICMP TYPE/CODE WORDS (cont'd)

Parm Value	Explanation	Action
001402	<p>Destination Unreachable. 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.</p>	<p>This ICMP message should not occur in normal network operation between HP nodes. Contact your HP representative for assistance.</p>
001403	<p>Destination Unreachable. 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.</p>	<p>This ICMP message should not occur in normal network operation between HP nodes. Contact your HP representative for assistance.</p>
001404	<p>Destination Unreachable. 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.</p>	<p>This ICMP message should not occur in normal network operation between HP nodes. Contact your HP representative for assistance.</p>
001405	<p>Destination Unreachable. 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.</p>	<p>This ICMP message should not occur in normal network operation between HP nodes.</p>
005400	<p>Time Exceeded. 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.</p>	<p>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.</p>

TABLE 4-16. ICMP TYPE/CODE WORDS (cont'd)

Parm Value	Explanation	Action
005401	<p>Time Exceeded. 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.</p>	<p>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.</p>
006000	<p>Parameter Problem. 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.</p>	<p>This ICMP message should not occur in normal network operation between HP nodes. Contact your HP representative for assistance.</p>
002000	<p>Source Quench. Several things can trigger source quench messages:</p> <p>(1) A gateway, intermediate router node or destination node was unable to forward or deliver the IP datagram because of lack of resources (eg. buffers).</p> <p>(2) A gateway, intermediate router node or destination node was unable to forward or deliver the IP datagram because the capacity limit of resource (eg. 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.</p>	<p>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 might be wiser to review the traffic patterns and perhaps alter the routing information so that a better path is chosen.</p>

TABLE 4-16. ICMP TYPE/CODE WORDS (cont'd)

Parm Value	Explanation	Action
002400	<p>Redirect. 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.</p>	<p>Reception of this ICMP message can occur in normal network operation. Depending on the cause of the Redirect message different actions should be taken.</p> <p>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.</p> <p>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, G1 may, depending on the topology, possibly misroute packets in 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.</p>

NETWORK SERVICES LOGGING MESSAGES

TABLE 4-17. CX LOGGING ERRORS

Error No.	Logging Class	Explanation	Action
1	CLAS0003	The NS keyword table was not allocated during system startup prior to an NS command execution.	See "Submitting an SR" at the beginning of this manual.
2	CLAS0003	The NS global data segment was not allocated during system startup, or has been lost.	See "Submitting an SR" at the beginning of this manual.
3	CLAS0003	Bad format in the ASCAT.NET.SYS catalog.	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	The NS keyword table is not large enough to contain all keywords from the ASCAT.NET.SYS catalog.	See "Submitting an SR" at the beginning of this manual.
6	CLAS0002	The NS keyword table extra data segment could not be allocated because of insufficient memory or free DSTs.	Contact your system manager; increase the number of configured DSTs or obtain more memory.
7	CLAS0003	The port used for communication between the CI and the VT server could not be added to the MPE port dictionary.	See "Submitting an SR" at the beginning of this manual.
8	CLAS0003	The VT service request could not be sent to the DSDAD process port.	See "Submitting an SR" at the beginning of this manual.
9	CLAS0003	The start VT port message could not be sent to the VT server process.	See "Submitting an SR" at the beginning of this manual.
10	CLAS0002	A port for communication between the CI and VT server process could not be created.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-17. CX LOGGING ERRORS (cont'd)

Error No.	Logging Class	Explanation	Action
12	CLAS0003	The VT service could not be initiated.	See "Submitting an SR" at the beginning of this manual.
11	CLAS0002	A port DST entry could not be allocated for the port between the CI and VT server.	See "Submitting an SR" at the beginning of this manual.
13	CLAS0003	A port message with an unexpected function code was received from the VT server process.	See "Submitting an SR" at the beginning of this manual.
14	CLAS0002	The VT server process could not be created.	If the DSSERVER.NET.SYS program is missing, restore it from the NS product tape. 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.) See "Submitting an SR."
15	CLAS0002	The local VT service (VTL) has not been started via an :NSCONTROL command.	Issue :NSCONTROL START or :NSCONTROL START=VTL to start the local VT service, or wait until the service is started. (Only users with NM capability, who have been ALLOWed, can use the :NSCONTROL command.)

TABLE 4-17. CX LOGGING ERRORS (cont'd)

Error No.	Logging Class	Explanation	Action
16	CLAS0003	An :NSCONTROL ABORT has been issued.	Issue :NSCONTROL START, or wait until the service is started. (Only users with NM capability, who have been ALLOWed, can use the :NSCONTROL command.)
18	CLAS0002	A port message with the remote command could not be sent from the CI to the VT server process.	See "Submitting an SR" at the beginning of this manual.
19	CLAS0003	A port message send to DSDAD failed.	See "Submitting an SR" at the beginning of this manual.
21	CLAS0003	The DSLINE JCW, set to the DSLINE number by the NS software, could not be found.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-18. DSDAD LOGGING ERRORS

Error No.	Logging Class	Explanation	Action
1	CLAS0003	Buffer space for DSDAD's global data structure could not be created.	See "Submitting an SR" at the beginning of this manual.
2	CLASS0003	Header for the DSDAD data structure could not be created.	See "Submitting an SR" at the beginning of this manual.
3	CLAS0003	DSDAD log buffer could not be created.	See "Submitting an SR" at the beginning of this manual.
4	CLAS0002	Entry for a server type could not be created.	See "Submitting an SR" at the beginning of this manual.
5	CLAS0003	Server type number not found.	See "Submitting an SR" at the beginning of this manual.
6	CLAS0002	A port message buffer could not be allocated.	See "Submitting an SR" at the beginning of this manual.
7	CLAS0002	A port or socket wait entry could not be allocated.	See "Submitting an SR" at the beginning of this manual.
8	CLAS0005	IPCREVCN on a socket failed.	See "Submitting an SR" at the beginning of this manual.
9	CLAS0005	Attempt to disable timeout on a socket failed.	See "Submitting an SR" at the beginning of this manual.
10	CLAS0005	Attempt to make socket nowait failed.	See "Submitting an SR" at the beginning of this manual.
11	CLAS0005	Attempt to create a socket failed.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-18. DSDAD LOGGING ERRORS (cont'd)

Error No.	Logging Class	Explanation	Action
12	CLAS0003	Attempt to add a port name to the port dictionary failed.	See "Submitting an SR" at the beginning of this manual.
13	CLAS0002	Could not get an AFT entry for the port.	See "Submitting an SR" at the beginning of this manual.
14	CLAS0002	Could not create an iowait port.	See "Submitting an SR" at the beginning of this manual.
15	CLAS0002	Could not get a port data segment entry.	See "Submitting an SR" at the beginning of this manual.
16	CLAS0002	Server entry could not be allocated.	See "Submitting an SR" at the beginning of this manual.
17	CLAS0002	For Qual Error 4: system table limits exceeded for PCBs or DSTs. For Qual Error 16: Hard load error (usually out of virtual memory).	Configure more PCBs, DSTs, or virtual memory.
18	CLAS0002	Server could not be created because maximum number exceeded.	Change maximum number of servers with :NSCONTROL SERVER=servername, max; or wait until servers become available.
19	CLAS0003	Wait entry for a nowait completion could not be found.	See "Submitting an SR" at the beginning of this manual.
20	CLAS0003	An iowait failed to complete.	See "Submitting an SR" at the beginning of this manual.
21	CLAS0005	Attempt to give a new connection to a server failed.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-18. DSDAD LOGGING ERRORS (cont'd)

Error No.	Logging Class	Explanation	Action
22	CLAS0003	Request for a server initiation could not be satisfied because of an invalid port message.	See "Submitting an SR" at the beginning of this manual.
23	CLAS0003	Server startup request contained an invalid server id number.	See "Submitting an SR" at the beginning of this manual.
24	CLAS0003	Request to stop a server contained an invalid server id number.	See "Submitting an SR" at the beginning of this manual.
25	CLAS0003	A ServerDead message contained an invalid server id number.	See "Submitting an SR" at the beginning of this manual.
26	CLAS0003	DSDAD request function code is incorrect.	See "Submitting an SR" at the beginning of this manual.
27	CLAS0003	Control option number for processing NSCONTROL is bad.	See "Submitting an SR" at the beginning of this manual.
28	CLAS0005	Socket could not be shutdown.	See "Submitting an SR" at the beginning of this manual.
29	CLAS0003	Port name could not be deleted from the port dictionary.	See "Submitting an SR" at the beginning of this manual.
30	CLAS0003	Could not add the process id for DSDAD to the NMMON process.	See "Submitting an SR" at the beginning of this manual.
31	CLAS0003	ServerInSession request could not be handled because server entry was not found.	See "Submitting an SR" at the beginning of this manual.
32	CLAS0002	Logoff entry could not be allocated.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-19. DSSERVER LOGGING ERRORS

Error No.	Logging Class	Explanation	Action
1	CLAS0003	DSSERVER stack log buffer could not be allocated.	See "Submitting an SR" at the beginning of this manual.
2	CLAS0003	DSSERVER header for data structures could not be allocated.	See "Submitting an SR" at the beginning of this manual.
3	CLAS0003	Stack buffer space for DSSERVER data structures could not be created.	See "Submitting an SR" at the beginning of this manual.
4	CLAS0002	Port message buffer could not be allocated.	See "Submitting an SR" at the beginning of this manual.
5	CLAS0002	Wait entry for a port could not be allocated.	See "Submitting an SR" at the beginning of this manual.
6	CLAS0002	Could not get an AFT entry for a port.	See "Submitting an SR" at the beginning of this manual.
7	CLAS0002	Could not create a port.	See "Submitting an SR" at the beginning of this manual.
8	CLAS0002	Could not get a data segment entry to create a port.	See "Submitting an SR" at the beginning of this manual.
9	CLAS0003	Could not add a port to the port dictionary.	See "Submitting an SR" at the beginning of this manual.
10	CLAS0003	Could not find a wait entry for nowait I/O which completed.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-19. DSSERVER LOGGING ERRORS (cont'd)

Error No.	Logging Class	Explanation	Action
11	CLAS0003	No I/O pending when a nowait I/O completed.	See "Submitting an SR" at the beginning of this manual.
12	CLAS0003	VT service reported an error.	Repair the VT error, if possible.
13	CLAS0003	RFA service reported an error.	Repair the RFA error, if possible.
14	CLAS0003	PTOP service reported an error.	See "Submitting an SR" at the beginning of this manual.
15	CLAS0005	Attempt to get an existing IPC connection failed.	See "Submitting an SR" at the beginning of this manual.
16	CLAS0003	Invalid server info number in the port message.	See "Submitting an SR" at the beginning of this manual.
17	CLAS0003	Function number in port message request is bad.	See "Submitting an SR" at the beginning of this manual.
18	CLAS0003	Number of services counter for a server is not 1.	See "Submitting an SR" at the beginning of this manual.
19	CLAS0003	Attempt to adopt server process under DSDAD failed.	See "Submitting an SR" at the beginning of this manual.
20	CLAS0003	RPM service reported an error.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-20. DSUTIL LOGGING LOCATION CODES

Loc. Code	Logging Class	Explanation	Action
8	CLAS0002	System has 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.	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 "Submitting an SR" at the beginning of this manual.

TABLE 4-21. ENV LOGGING ERRORS

Error No.	Logging Class	Explanation	Action
1	CLAS0002	Buffer space for DSLINE table could not be created.	Increase the number of configured DSTs.
2	CLAS0003	Trace file for an NS service could not be opened.	See "Submitting an SR" at the beginning of this manual.
3	CLAS0003	Trace file for an NS service could not be closed.	See "Submitting an SR" at the beginning of this manual.
4	CLAS0003	Item missing in call to get or set the environment table.	See "Submitting an SR" at the beginning of this manual.
5	CLAS0003	Item number missing in call to get or set the environment table.	See "Submitting an SR" at the beginning of this manual.
6	CLAS0003	Use count for an environment is negative.	See "Submitting an SR" at the beginning of this manual.
7	CLAS0002	Not enough stack space to set critical while modifying the environment table.	See "Submitting an SR" at the beginning of this manual.
8	CLAS0002	Important parameter missing in a call to get or set environment table.	See "Submitting an SR" at the beginning of this manual.
9	CLAS0003	Non-zero session id was not able to be created in 10 iterations of a random number generator.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-21. ENV LOGGING ERRORS (cont'd)

Error No.	Logging Class	Explanation	Action
10	CLAS0002	Extra data segment not available to create the session id table.	Increase the number of configured DSTs.
11	CLAS0003	No NS global table could be found.	See "Submitting an SR" at the beginning of this manual.
12	CLAS0002	Unable to get an entry in the session id table.	See "Submitting an SR" at the beginning of this manual.
13	CLAS0003	Session id table could not be found.	See "Submitting an SR" at the beginning of this manual.
14	CLAS0003	Session count for a session id table entry is negative.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-22. NFT LOGGING LOCATION CODES

Loc. Code	Logging Clas	Explanation	Action
1	CLAS0002	Attempt to open file NFTCAT2 failed. Logging entry will also contain a file system error.	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.
10	CLAS0003	Incompatible version of NFTCAT2 installed.	System manager should obtain correct version of NFTCAT2; then install it on NET.SYS.
6	CLAS0003	NFTCAT2 contains invalid configuration values.	System manager should obtain a version of NFTCAT2 which has valid configuration values; then install it in NET.SYS. Another recourse is to change the configuration values in the existing NFTCAT2 file; however HP does not recommend this procedure.

If any other internal errors (CLAS0000) are logged for the NFT Module of the Network Services subsystem, see "Submitting an SR" at the beginning of this manual.

TABLE 4-23. PTOP LOGGING ERROR CODES

Error No.	Log Class	Explanation	Action
1	CLAS0003	Port Creation failed in response to a POPEN intrinsic.	See "Submitting an SR" at the beginning of this manual.
2	CLAS0003	Internal error. Buffer Manager error. Port not allocated.	See "Submitting an SR" at the beginning of this manual.
3	CLAS0005	Socket connection failure.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-24. RFA LOGGING ERROR CODES

Error Range	Log Class	Subsystem	General Description
0-5	CLAS0003	BFM	Resource problems. Internal error in BFM.
6-15	CLAS0003	NetIPC Socket	NetIPC intrinsic returned an error. Possible unanticipated connection abort.
16-20	CLAS0003	ENV	Error in :DSLIME environment access routines.
21-23	CLAS0003	PORT	Error in PORT-related procedures.
24	CLAS0003	DSSERVER	Probable stack data corruption. Internal Error in DSSERVER.
25	CLAS0003	File System	Error in no wait Remote File Access.
26-30	CLAS0003	RFA	Internal Remote File Access error.

These general categories describe the type of errors logged by the RFA module in the Network Services subsystem of NS3000/V. In all cases where an RFA internal error (CLAS0003) is logged, see "Submitting an SR" at the beginning of this manual.

TABLE 4-25. RPM LOGGING ERRORS

Error No.	Logging Class	Explanation	Action
1	CLAS0002	Data segment for RPM table could not be allocated.	See "Submitting an SR" at the beginning of this manual.
2	CLASS0002	Insufficient stack space to set critical.	See "Submitting an SR" at the beginning of this manual.
3	CLAS0003	NS global data segment does not exist.	See "Submitting an SR" at the beginning of this manual.
4	CLAS0002	RPM table is full.	Decrease the number of active RPM processes.
5	CLAS0003	RPM table does not exist.	See "Submitting an SR" at the beginning of this manual.
6	CLAS0002	An RPM table entry could not be allocated.	Decrease the number of active RPM processes.
7	CLAS0003	A port message could not be sent to the server process.	See "Submitting an SR" at the beginning of this manual.
8	CLAS0003	RPM buffers could not be allocated in the server's stack.	See "Submitting an SR" at the beginning of this manual.
9	CLASS002	A buffer for an RPM string could not be allocated.	Decrease the number of RPM strings waiting to be transferred.
10	CLAS0003	An invalid RPM message has been received.	See "Submitting an SR" at the beginning of this manual.
11	CLAS0005	Send of an RPM Length message failed.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-25. RPM LOGGING ERRORS (cont'd)

Error No.	Logging Class	Explanation	Action
12	CLAS0005	Receive of an RPM Length Reply message failed.	See "Submitting an SR" at the beginning of this manual.
13	CLAS0005	Send of an RPM Create Request message failed.	See "Submitting an SR" at the beginning of this manual.
14	CLAS0005	Receive of an RPM Create Reply message failed.	See "Submitting an SR" at the beginning of this manual.
15	CLAS0005	Connection could not be opened during an RPMCREATE.	See "Submitting an SR" at the beginning of this manual.
16	CLAS0005	Send of an RPM Kill Request failed.	See "Submitting an SR" at the beginning of this manual.
17	CLAS0005	Receive of an RPM Kill Reply failed.	See "Submitting an SR" at the beginning of this manual.
18	CLAS0005	Connection could not be opened during an RPMKILL.	See "Submitting an SR" at the beginning of this manual.
19	CLAS0005	Initial receive for an RPM message in a server failed.	See "Submitting an SR" at the beginning of this manual.
20	CLAS0005	Send of an RPM Create Reply message failed.	See "Submitting an SR" at the beginning of this manual.
21	CLAS0005	Receive of an RPM Kill Request message failed.	See "Submitting an SR" at the beginning of this manual.
22	CLAS0005	Send of an RPM Kill Reply message failed. Invalid port message.	See "Submitting an SR" at the beginning of this manual.

TABLE 4-25. RPM LOGGING ERRORS

Error No.	Logging Class	Explanation	Action
23	CLAS0005	Send of an RPM Length Reply message failed.	See "Submitting an SR" at the beginning of this manual.
24	CLAS0005	Receive of an RPM Create Request failed.	See "Submitting an SR" at the beginning of this manual.
25	CLAS0005	Maximum send size could not be set.	See "Submitting an SR" at the beginning of this manual.
26	CLAS0005	Maximum receive size could not be set.	See "Submitting an SR" at the beginning of this manual.
27	CLAS0005	Connection between RPM father and RPM server was lost.	See "Submitting an SR" at the beginning of this manual.
28	CLAS0003	Session created by RPM could not be aborted.	See "Submitting an SR" at the beginning of this manual.

NETWORK IPC LOGGING ERRORS

TABLE 4-26. NETWORK IPC LOGGING ERRORS

Error No.	Log Class	Explanation	Action
0	CLAS0000	Invalid port message.	Examine "Info" section of log record. See "Submitting an SR" at the beginning of this manual.
1	CLAS0000	Internal Error. Unable to create port in data segment table.	See "Submitting an SR" at the beginning of this manual.
2	CLAS0000	Internal Error. Unable to locate known entry in the name registry.	See "Submitting an SR" at the beginning of this manual.
3	CLAS0000	Internal Error. Received unsolicited PXP reply message.	See "Action" for Error No. 0.
4	CLAS0000	Internal Error. Buffer Manager Error.	See "Action for Error No. 0.
5	CLAS0000	Internal Error. Trace error.	See "Submitting an SR" at the beginning of this manual.
6	CLAS0000	Internal Error. Socket registry process reported a socket error.	See "Submitting an SR" at the beginning of this manual.
7	CLAS0000	Internal Error. Socket registry was unable to build a socket path report from the node's path report.	See "Submitting an SR" at the beginning of this manual.
0	CLAS0001	Socket name registry full.	Call IPCNAMERASE to open slots in the socket name registry.
1	CLAS0001	Socket Give Table full.	Call IPCGET to open slots in the socket give table.
2	CLAS0001	Port DST Table full (the <i>Port</i> DST (Data Segment Table) is a data structure internal to the NetIPC subsystem, not to be confused with MPE DST entries).	Wait until fewer NetIPC applications are running on your system; try again.

OVERVIEW

The NS links include software line tests that are used to test proper operation of NS3000/V services and links. Error messages for the XPT and IPC Line Tests appear in this section. The XPT and IPC Line Tests, both interactive, use the NetIPC intrinsics to verify that the Network Transport is working correctly. The IPC Line Test utilizes the Remote Process Management Network Service to test the Network Transport subsystem of the NS links software components.

Use these troubleshooting tests only after you have gone through the problem-resolution process described in the introduction to this manual. Specifically, you should take the appropriate action listed for any error message returned. Other steps recommended in the introduction include issuing the SHOWCOM command and then inspecting the output, examining the log files for useful information, and testing the NS links.

These line tests are documented in the "Software and Line Verification" section in Volume II of the *NS3000/V Network Manager Reference Manual*.

IPC AND XPT LINE TEST ERROR MESSAGES

Error messages for the IPC and XPT line tests appear in inverse video at the system console. Some errors allow the test to continue, so they may scroll off the top of the terminal screen. Copy the error message information for further diagnosis.

Line Test Error Categories

Errors from the the IPC and XPT Line Tests fall into the following categories:

- RPM Errors
- Packet Verification Errors
- Send and Receive Failures
- Socket Creation Failures
- Checksum Errors
- Miscellaneous Errors

The XPT test examines the Network Transport; the IPC test examines the Network Transport via the RPM Network Service. Since the XPT test does not use the higher-level RPM Network Service, RPM errors are returned only by the IPC Line Test. Other error types are returned by both tests.

Software Line Test Errors

RPM Errors

RPM errors are usually user errors. Your usual repair action is to correct logons, passwords, and node names. You may have to re-logon to the local session, or shut down the Network Transport and properly restart the subsystem.

RPM error numbers are returned with an RPM error. These error numbers, along with their cause and action, are listed in the "Remote Process Management" table in Section 2 of this manual. Also returned with every RPM error is a Protocol Module error. Protocol Module error numbers are listed in the "Network Transport Protocol Errors" table, also in Section 2 of this manual. The following are the RPM Errors returned by the IPC Line Test.

Local Node Errors

RPM CREATE FAILED
RPM ERROR NUMBER *nn*
Protocol Module error: 0

CAUSE

Test halted, probably due to user error. This error occurs only at the beginning of testing.

ACTION

Follow "Action" for RPM error number listed in Section 2 of this manual; correct any user errors. Retry test. If all else fails, see "Submitting an SR" at the beginning of this manual.

RPMGETSTRING #1 FAILED Remote Node Errors. Will Use Default Node Name: NODE2

CAUSE

RPM intrinsic failed. User-supplied node name must match the node name in the configuration file you specified.

ACTION

If node name you supplied was not "NODE2" then use :ABORTJOB to terminate the remote and local tests. Rerun test.

RPMGETSTRING #1 FAILED Default is no Options

CAUSE

RPM intrinsic failed. User-supplied options will not be used for this test.

ACTION

If you wish to use tracing, abort the local and remote tests. Rerun test.

RPMGETSTRING #2 FAILED. Socket Named SOCK

CAUSE

RPM intrinsic failed. User-supplied socket name not assigned to local process.

ACTION

If you did not assign the socket name "SOCK" to the local process, then abort both tests. Rerun test.

RPMGETSTRING #3 FAILED. Remote Socket is:SOCK

CAUSE

RPM intrinsic failed. User-supplied socket name not assigned to remote process.

ACTION

If you did not assign the socket name "SOCK" to the remote process, then abort both tests. Rerun test.

RPMKILL FAILED

CAUSE

RPM intrinsic failed. Remote process may still be operating.

ACTION

Examine the remote system. Use the :ABORTJOB command to terminate the remote session if it still exists.

Packet Verification Errors

Packet verification errors indicate problems with either the packet size or the character received. Packet verification errors will not abort the IPC or XPT Line Tests. Their error messages may scroll off the top of the console terminal screen, preceding a "PXP TEST FAILED" or "TCP TEST FAILED" console message. Packet verification errors are listed below:

RECEIVE PACKET IS INCORRECT SIZE

Expected *nn* Bytes. Received *mm* Bytes.

CAUSE

Either message packet was partially lost, or "send" and "receive" are not synchronized.

ACTION

Usually packets will resynchronize with the start of the next segment of the test. However if errors continue for each packet, check surrounding errors, then rerun the test. If problems continue, see "Submitting an SR" at the beginning of this manual.

RECEIVED PACKET NOT VERIFIED

First Byte not verified is: *xx* Should be: *y*, received: *z*

CAUSE

Either byte in packet has changed (bit error) or packets are unsynchronized.

ACTION

Usually packets will resynchronize with the start of the next segment of the test. However if errors continue for each packet, check surrounding errors, then rerun the test. If problems continue, see "Submitting an SR" at the beginning of this manual.

Send and Receive Failures

Most Send and Receive Failures are timing-related. They usually do not abort the tests. Listed below are the Send and Receive Failures which do not abort the tests:

PXP RECEIVE REQUEST FAILED PACKET #	{Remote}
PXP SEND REPLY FAILED PACKET #	{Remote}
TCP MESSAGE RECEIVE FAILED PACKET #	{Remote}
IPCSSEND FAILED PACKET #	{Remote}
DATA RECEIVE FAILED PACKET #	{Remote, Local}
NO REPLY TO PXP PACKET #	{Local}
PXP SEND FAILED PACKET #	{Local}
1ST MASTER SEND FAILED	{Local}
SEND FAILED PACKET #	{Local}

Summary Messages:

```
PXP TEST FAILED
TCP TEXT FAILED
LOCAL: SEND FROM LOCAL TO REMOTE FAILED
LOCAL: RECEIVE FROM REMOTE TEST FAILED
LOCAL: SEND AND RECEIVE FAILED
REMOTE: RECEIVE FROM LOCAL FAILED
REMOTE: SEND TO LOCAL FAILED
REMOTE: RECEIVE AND SEND BACK FAILED
```

Note the location in the program where the error occurred. For each error, examine the SOCKERR numbers and the Protocol Module numbers returned. Save the error information. Follow the "Actions" for the Protocol Module or NetIPC SOCKERRs, both listed in Section 2 of this manual.

Socket Creation Failures

Socket Creation Failures and Network IPC Connection errors cause a test to terminate. Listed below are Socket Errors which abort the tests:

UNABLE TO CREATE PXP SOCKET	{Local & Remote}
UNABLE TO NAME SOCKET	{Remote}
UNABLE TO CREATE SOCKET	{Local & Remote}
IPCLOOKUP FAILED	{Local}
CONNECTION REQUEST FAILED	{Remote}
RESPONSE TO CONNECTION FAILED	{Remote}
IPCNAME FAILED	{Local}
LOCAL IPCRECVN FAILED	{Local}

Following these errors on the console screen are a SOCKERR and a Protocol Module error. Copy the error messages on the user and system console terminals. Follow the "Action" described for the SOCKERR and PM errors, respectively listed in the "Network Interprocess Communication Errors" and "Network Transport Protocol Errors" tables in Section 2 of this manual.

Software Line Test Errors

Checksum Errors

Both the IPC and XPT software line tests enable checksum in the PXP and TCP protocols of the Network Transport subsystem. (see the "Network Transport Configuration" section of the *NS3000/V Network Manager Reference Manual* for details. "Checksum" errors may be returned to either console. If "Checksum" errors appear along with "Send and Receive Failures" listed above, then your system may have link hardware problems; see "Investigate the Link" at the beginning of this manual.

Miscellaneous Test Errors

Certain errors may appear in all software line tests which do not fit in the categories described above. They are listed below.

IPCERRMSG FAILED (SOCKERR #)

CAUSE

Error message could not be acquired from the message catalogue CATALOG.PUB.SYS.

ACTION

Ensure that the message catalog exists. Examine errors returned to the console before and after this error.

IPCSHUTDOWN FAILED

CAUSE

Socket could not be closed.

ACTION

Examine errors returned to the console before this error. Take action for appropriate SOCKERR.

General Test Suggestions

If the following SOCKERRs appear together, then the Network may be "too busy" - that is, coordinating too many processes - to permit proper operation of the IPC and XPT tests:

REMOTE ABORTED THE CONNECTION
SOCKET TIMEOUT

with

CONNECTION REQUEST FAILED
RESPONSE TO CONNECTION FAILED
LOCAL IPCRECVN FAILED

Wait until network activity lessens to execute the tests.

If errors precede a "PXP TEST COMPLETED" message, or if the PXP test failed, then examine Protocol Module errors regarding the PXP entity. Otherwise, examine the Protocol Module errors regarding the TCP entity. Protocol Module errors are listed in the "Network Transport Protocol Errors" table in Section 2 of this manual.

If many Packet Verification and Send and Receive errors occur, then perhaps the test is sharing a socket of the same name with another process. Try rerunning the test with different socket names.

CS ERROR MAPPING

NS3000/V uses a range of CI error numbers different than those used by DS/3000. Therefore, the CI and DS errors produced by DSLINE and REMOTE commands may change when a system has been upgraded from DS/3000 to NS3000/V. UDCs and job streams that use specific CI errors may need to be modified to incorporate applicable error numbers.

There are two cases to consider when upgrading from DS/3000 to NS3000/V. First, there are DSLINE and REMOTE commands issued for DS-Compatible nodes. NS3000/V continues to use DS/3000 to communicate with these nodes, so most of the DS/3000 CI errors will be reported as before. However, there will be some minor differences in the errors reported because NS3000/V preprocesses the commands before passing them to DS/3000.

The second case is when the commands are issued for NS3000/V nodes. In this case, only NS3000/V will be used to execute the commands, and the CI errors reported will all be in the NS3000/V CI error range (5000-5100). These errors are explained in Section 1 of this manual.

Table A-1 maps CI errors reported by DS/3000 into the CI errors reported by NS3000/V for non-LAN and LAN nodes. Most of the CI errors are the same for DS/3000 and the non-LAN NS3000/V. In many cases the error condition does not exist for commands to LAN nodes (for instance, a syntax error in a DSLINE option no longer supported by NS). In the table, these are marked Not Applicable (N/A) for the LAN nodes. In some cases, a DS error is reported along with a CI error; this is denoted by *dserr/cierr*.

Table A-1. CI Error Mapping

DS	DS-Compatible	NS
1300	1300	1300
1301	5041	5041
1302	623/5041	623/5041
1303	5006 or 623/5041	5006 or 623/5041
1304	624/5041	624/5041
1305	5027	5027
1306	1306	depends on option
1307	1307	5016
1308	1308	N/A
1309	1309	N/A
1310	5041	5041
1311	1311	N/A
1312	1312	N/A
1313	1313	N/A
1314	1314	N/A
1315	1315	N/A
1316	227/1316	5082 or 5038
1317	624/5041	N/A
1318	1318	N/A
1319	DS Error 625	625/5041

Table A-1. CI Error Mapping (cont'd.)

DS	DS-Compatible	NS
1320	1320	no error
1321	1321	N/A
1322	N/A	N/A
1323	623/5041	623/5041
1324	N/A	N/A
1325	N/A	N/A
1326	N/A	N/A
1389	1389	N/A
1390	1390	N/A
1391	N/A	N/A
1392	1392	N/A
1393	1393	N/A
1394	5023 or 5024	5023 or 5024
1395	1395	5043
1396	1396	N/A
1397	5027	5027
1398	1398	NO ENVIRONMENTS
1399	depends on option	depends on option

DS ERROR MAPPING

Table A-2 shows the DS errors reported for DS/3000, DS-Compatible and NS3000/V. As the table indicates, most service-related errors like PTO errors return the same codes no matter which kind of connection links the nodes. The numbers of DS error generated by DS links are the same for DS/3000 and DS-Compatible links, but the errors are not applicable (N/A) for NS3000/V.

Table A-2. DS Error Mapping

DS	DS-Compatible	NS
201	201	N/A
202	202	N/A
203	203	CI error 5072
204	204	varies by service
205	205	varies by service
206	206	206
207	207	207
208	208	208
209	209	209
210	210	210
211	211	211
212	212	212
213	213	N/A
214	623	623

Table A-2. DS Error Mapping (cont'd.)

DS	DS-Compatible	NS
215	215	not an error
216	216	N/A
217	217	varies by service
218	218	218
219	219	219
220	220	220
221	221	N/A
222	222	222
223	223	223
224	224	224
225	225	225
226	226	226
227	227	CI error 1402
228	228	N/A
231	231	N/A
232	232	N/A
233	233	N/A
234	234	N/A
235	235	N/A
236	236	N/A
237	237	N/A

Table A-2. DS Error Mapping (cont'd.)

DS	DS-Compatible	NS
238	238	N/A
239	239	N/A
240	240	N/A
240	240	N/A
241	241	N/A
242	242	N/A
243	243	varies with service
244	244	N/A
245	245	N/A
246	246	N/A
247	247	N/A
248	248	N/A
249	249	N/A
250	250	N/A
251	251	N/A
252	252	N/A
253	253	N/A
254	254	N/A
255	255	N/A

As an example of the change in CI and DS errors, suppose you execute a REMOTE HELLO that fails for some reason (the user or account is wrong, the session limit on the remote node has been exceeded, etc). DS/3000 and a node that has a DS-Compatible link will report a DS error 227 and a CI error 1316. NS3000/V reports a CI error of 5082. If a job or UDC checked for the CI error 1316 after a REMOTE HELLO to see if the logon succeeded, it would have to be modified to check for the 5082. However, if the job or UDC just checked for any CI error, it would not have to be changed.

NFT ERROR MAPPING

NS/3000 NFT uses a different error message catalog than DS/3000 NFT. Error numbers reported by NS NFT may not coincide with those reported by DS NFT. Therefore, when upgrading from DS/3000 to NS/3000 those job streams, UDCs or programs which depend on the error number returned by DSCOPY may need to be modified.

Table A-3 maps the error numbers generated by DS NFT to numbers generated by NS NFT. The first column contains the DS error number. The second column contains the NS error number and a prefix. The third column represents the number which is returned by the DSCOPY intrinsic in the result parameter or the value of the JCW set by NS NFT (NFTERR) when DSCOPY is invoked interactively.

The method used to determine the number found in the third column involves the error number and its prefix. If the prefix of the number is "NFT/3000 ERR" then add 8192 to the error number to obtain the number returned by DSCOPY. If the prefix is "NS/NFTERR" then the error number is the number returned by DSCOPY.

For example:

- NFT/3000 ERR 20 yields the number 8212 (8192+20)
- NS/NFTERR 20 yields the number 20

Table A-3. DS to NS Error Number Mapping

DS	NS	DSCOPY result NFTERR JCW
NFTERR 4	NFT/3000 ERR 4	8196
NFTERR 5	NFT/3000 ERR 3	8195
NFTERR 6	NFT/3000 ERR 2	8194
NFTERR 7	NFT/3000 ERR 5	8197
NFTERR 13	NFT/3000 ERR 14	8206
NFTERR 14	NFT/3000 WARN 36-39	8228-8231
NFTERR 16	NFT/3000 ERR 63	8255
NFTERR 18	NS/NFTERR 31	31
NFTERR 19	NS/NFTERR 32	32
NFTERR 21	NS/NFTERR 5,6	5,6
NFTERR 24	NS/NFTERR 34,35	34,35
NFTERR 25	NS/NFTERR 4,9	4,9
NFTERR 26	NS/NFTERR 33	33
NFTERR 27	NS/NFTERR 5,6	5,6
NFTERR 28	N/A	N/A
NFTERR 29	NS/NFTERR 26,27	26,27
NFTERR 33	NFT/3000 ERR 10	8202
NFTERR 36	CIWARN 5107	CIERROR = 5107
NFTERR 38	N/A	N/A
NFTERR 39	N/A	N/A
NFTERR 40	NS/NFTERR 19	19
NFTERR 41	Situation Dependent	

Table A-3. DS to NS Error Number Mapping (cont'd)

DS	NS	DSCOPY <i>result</i> NFTERR JCW
NFTERR 43	N/A	N/A
NFTERR 44	NS/NFTERR 19	19
NFTERR 45	NS/NFTERR 19	19
NFTERR 46	NS/NFTERR 19	19
NFTERR 80	NFTERR 80	-80*
NFTERR 81	NFTERR 81	-81*
NFTERR 82	NFTERR 82	-82*
NFTERR 83	NFTERR 83	-83*
NFTERR 84	NFTERR 84	-84*
NFTERR 85	NFTERR 85	-85*
NFTERR 86	NFTERR 86	-86*
NFTERR 101	NS/NFTERR 1	1
NFTERR 103	N/A	N/A
NFTERR 105	NS/NFTERR 1	1
NFTERR 106	N/A	N/A
NFTERR 107	N/A	N/A
NFTERR 108	N/A	N/A
NFTERR 109	NFT/3000 ERR 75	8267
NFTERR 110	NS/NFTERR 7,8	7,8
NFTERR 111	NFT/3000 ERR 6	8198
NFTERR 112	N/A	N/A

*This error is returned only in the "result" parameter of the intrinsic interface to DSCOPY. The number is negative to allow DSCOPYMSG to retrieve the correct error message.

A

Asynchronous 3000/V Link Problems, 1-15
Asynchronous 3000/V Link, 1-1

C

configuration file
 incompatible version, 1-19
 insufficient values, 1-19
corrupt configuration files, 1-19
corrupt network directory file, 1-19
CIERR Messages, 2-1
Configuration File Version Control and Conversion Messages, 3-130
Configuration validation messages, 3-138
Control Process Logging Location Codes, 4-14
CX Logging Errors, 4-109

D

Dial ID Logging Location Codes, 4-92
DS-Compatible errors, Network File Transfer, 2-28
DS-Compatible Errors, Miscellaneous, 2-17
DS-Compatible Link problems, 1-16
DS-Compatible
 errors, 2-2, 2-17
DSCOPY Errors, 2-28, 2-30, 2-40
DSDAD Logging Errors, 4-112
DSERR Messages (651-660), 3-135
DSERR Messages, Program-to-Program Communication Errors, 2-21
DSERR Messages, Miscellaneous, 2-17
DSSERVER Logging Errors, 4-115
DSUTIL Network Services Logging Codes, 4-117

E

environment ids, errors, 2-24
error messages, Network Services, 2-1
errors
 DS-Compatible, 2-2, 2-17
 Network File Transfer, 2-28
 Network InterProcess Communication, 2-50
 Network Services CI, 2-1
 Network Services Environment, 2-24
 Program-to-Program Communication, 2-21
 Remote Process Management, 2-76
 Transport Protocol, 2-87

Index

- :DSLIN, 2-1
- :REMOTE HELLO, 2-1
- ENV Logging Errors, 4-118
- Error Information Screen, 3-26

F

- FPARSE Error Messages, 2-89

I

- incompatible configuration file version, 1-19
- insufficient configuration file values, 1-19
- insufficient MPE resources, 1-19
- invalid software installation, 1-18
- ICMP Type/Code Word, 4-105
- IEEE 802.3 links, 1-1
- IEEE 802.3 Link problems, 1-14
- IP Logging Location Codes, 4-23
- IPC Line Test , PXP errors, 2-87
- IPC Line Test, PM errors, 2-87
- IPC Lines Test, TCP errors, 2-87
- IPCCHECK, errors returned to, 2-87
- IPU Logging Location Codes, 4-40

L

link problems

- Asynchronous 3000/V Link Problems, 1-15
- DS-Compatible, 1-16
- IEEE 802.3, 1-14
- NS Point-to-Point, 1-15

- Link Manager, NMERR Messages, 3-53

Logging Codes

- Network Services CX Logging Errors, 4-109
- Network Transport Dial ID Logging Location Codes, 4-92
- Network Transport IP Logging Location Codes, 4-23
- Network Transport IPU Logging Location Codes, 4-40
- Network Transport NI Logging Location Codes, 4-43
- Network Transport PATH Result Codes, 4-50
- Network Transport Probe Logging Location Codes, 4-53
- Network Transport PXP PM Logging Locatin Codes, 4-57
- Network Transport PXP SIP Logging Location Codes, 4-64
- Network Transport SEMAPHORE Result Codes, 4-68
- Network Transport TCP PM Logging Location Codes, 4-70
- Network Transport TCP S.P Logging Location Codes, 4-86

- Logging Format, 4-1

- Logging Location Codes, Overview, 4-1

- Logging Subsystems, 4-2

Logging

- Informative and Non-Critical Errors, 4-9

- Internal Errors, 4-9
- NetIPC Subsystem, 4-8
- Network Services Subsystem, 4-6
- Network Transport Control Process Location Codes, 4-14
- Network Transport Parameter, 4-4
- Network Transport Subsystem, 4-3
- Network Transport TCP and PXP Errors, 2-87
- NMS Link Manager Subsystem, 4-8
- Non-Critical Error Example, 4-9
- Statistics Example, 4-10
- Using Log Files, 4-9

LOGGING CODES

- Network IPC Logging Errors, 4-126
- Network Services DSDAD Logging Errors, 4-112
- Network Services DSSERVER Logging Errors, 4-115
- Network Services DSUTIL Module, 4-117
- Network Services ENV Logging Errors, 4-118
- Network Services NFT Logging Location Codes, 4-120
- Network Services PTOP Logging Error Codes, 4-121
- Network Services RFA Logging Error Codes, 4-122
- Network Services RPM Logging Errors, 4-123

M

- Message Catalogue Errors, NMERR Messages, 3-61

N

- network directory file, corrupt, recovery, 1-19
- node names, errors, 2-24
- NDIERR errors, 3-117
- Network Directory (NDIERR) Errors, 3-117
- Network File Transfer
 - DS-Compatible errors, 2-28
 - errors, 2-28
 - NFT/3000 Errors, 2-40
 - NS/NFTERR Messages, 2-30
- Network InterProcess Communication, errors, 2-50
- Network IPC Logging Errors, 4-126
- Network IPC Subsystem Logging, 4-8
- Network Services error codes, 2-1
- Network Services Links
 - Asynchronous 3000/V Link, 1-1
 - IEEE 802.3 links, 1-1
 - Point-to-Point 3000/V Link, 1-1
 - StarLAN Link, 1-1
 - ThickLAN, 1-1
 - ThinLan/3000 Link, 1-1
- Network Services Subsystem Logging, 4-6
- Network Services
 - CX Logging Errors, 4-109
 - DSDAD Logging Errors, 4-112

Index

- DSSERVER Logging Errors, 4-115
- DSUTIL Logging Codes, 4-117
- ENV Logging Errors, 4-118
- NFT Logging Location Codes, 4-120
- PTOP Logging Error Codes, 4-121
- RFA Errors, 2-74
- RFA Logging Error Codes, 4-122
- RPM Logging Errors, 4-123
- User Information Messages, 2-73
- Network Transport Dial Id Logging Location Codes, 4-92
- Network Transport Logging
 - Internal Errors, 4-9
 - Non-Critical Error Example, 4-9
 - PM Deactivated Errors, 2-87
 - Statistics Example, 4-10
- Network Transport Subsystem Logging, 4-3
- Network Transport
 - Control Process Logging Location Codes, 4-14
 - IP Logging Location Codes, 4-23
 - IPU Logging Location Codes, 4-40
 - NI Logging Location Codes, 4-43
 - Parameter of Logging Records, 4-4
 - PATH Result Codes, 4-50
 - Probe Logging Location Codes, 4-53
 - PXP PM Logging Location Codes, 4-57
 - PXP SIP Logging Location Codes, 4-64
 - SEMAPHORE Result Codes, 4-68
 - TCP PM Logging Location Codes, 4-70
 - TCP SIP Logging Location Codes, 4-86
- NetworkTransport Protocol, errors, 2-85
- NETCONTROL Errors, 3-2
- NETXPORT (Netcontrol) Errors, 3-2
- NFT Logging Location Codes, 4-120
- NFT/3000 ERRORS, 2-40
- NFTERR Messages, 2-28
- NI Logging Location Codes, 4-43
- NMCNERR Messages, 3-9
- NMDUMPERR Messages, 3-15
- NMERR Messages, 3-28
 - Link Executor Errors (160-167), 3-60
 - Link Manager Errors (130-149), 3-53
 - Message Catalogue Errors (200-210), 3-61
 - PC Link Manager Errors (250-265), 3-66
 - Procedural Errors (210-301), 3-65
 - Procedural Errors, 3-28
 - Version Control Errors (100-107), 3-49
- NMFS Error Messages, 3-71
- NMGRVER Messages, 3-130
- NMMGR Error Messages, 3-77
- NMMGR, Error Information Screen, 3-26
- NMMGRVER program, 1-19
- NMS Link Manager Subsystem Logging, 4-8
- Node Management File System Errors, 3-71
- Node Management Services

Link Executor Errors, 3-60
 Link Manager Errors, 3-53
 Network Directory Errors, 3-117
 PC Link Manager Errors, 3-66
 NS Point-to-Point 3000/V Link Problems, 1-15
 NS/NFTERR Messages, 2-30
 NSCONTROL errors, 3-135
 NSCONTROL Errors, 3-135

P

PATH Result Codes, 4-50
 PC Link Manager errors, 3-66
 PC Link Manager, 4-8
 PMERR parameter, errors returned in, 2-87
 Point-to-Point 3000/V Link, 1-1
 Procedural Errors (cont'd), NMERR Messages, 3-65
 Procedural Errors, NMERR Messages, 3-28
 Program-to-Program Communication Errors, 2-21
 Program-to-Program Communication, errors, 2-21
 Probe Logging Location Codes, 4-53
 PTOP Logging Error Codes, 4-121
 PXP PM Logging Location Codes, 4-57
 PXP SIP Logging Location Codes, 4-64
 PXP, errors, 2-87

R

result parameter, NetIPC Errors returned in, 2-50
 result parameter, RPM Errors returned in, 2-76
 Remote File Access Errors, 2-74
 Remote File Access, FPARSE Error Messages, 2-89
 Remote Process Management, errors, 2-76
 RFA Logging Error Codes, 4-122
 RPM Logging Errors, 4-123
 RPMCREATE Errors, 2-78
 RPMGETRSTRING Errors, 2-78
 RPMKILL Errors, 2-78

S

Service Request, submittal, 1-23
 SEMAPHORE Result Codes, 4-68
 Software Line Test Errors, 5-1
 RPM Errors, 5-2
 Software Line Test
 Checksum Errors, 5-6
 Send and Receive Failures, 5-5
 Socket Creation Failures, 5-5
 Software Line Tests, Packet Verification Errors, 5-4
 SOCKERR Messages, 2-50

Index

SR, submittal, 1-23
StarLAN Link, 1-1

T

type/code word, ICMP, 4-105
TCP PM Logging Location Codes, 4-70
TCP SIP Logging Location Codes, 4-86
TCP, errors, 2-87
ThickLAN, 1-1
ThinLan/3000 Link, 1-1

U

Using Log Files, 4-9

V

Validation messages, 3-138
Version Control, NMERR Messages, 3-49
Virtual Terminal Error Messages, 2-63
VT error messages, 2-63

X

XPT Line Test , PXP errors, 2-87
XPT Line Test, PM errors, 2-87
XPT Lines Test, TCP errors, 2-87

SALES & SUPPORT OFFICES

Arranged alphabetically by country

1

Product Line Sales/Support Key

- **Key Product Line**
- **Analytical**
- **Components**
- **Computer Systems**
- **Electronic Instruments & Measurement Systems**
- **Medical Products**
- **Personal Computation Products**
- **Sales only for specific product line**
- **Support only for specific product line**

IMPORTANT: These symbols designate general product line capability. They do not insure sales or support availability for all products within a line, at all locations. Contact your local sales office for information regarding locations where HP support is available for specific products.

HEADQUARTERS OFFICES

If there is no sales office listed for your area, contact one of these headquarters offices.

ASIA

Hewlett-Packard Asia Ltd.
7/F, 26 Harbour Rd.,
Tsimshai, **HONG KONG**
P.O. Box 863, Hong Kong
Tel: 5-8330833
Telex: 76793 HPA HX
Cable: HPASIAL TD

CANADA

Hewlett-Packard (Canada) Ltd.
377 Goreway Drive
ISSISSAUGA, Ontario L4V 1M8
Tel: (416) 678-9430
Telex: 069-8644

EASTERN EUROPE

Hewlett-Packard Ges.m.b.h.
Ebelgasse 1
O.Box 72
A-1222 **VIENNA**, Austria
Tel: (222) 250-0
Telex: 13 4425 HEPA A

NORTHERN EUROPE

Hewlett-Packard S.A.
D. Hooplaan 241
O.Box 999
NL-118 LN 15 **AMSTELVEEN**
The Netherlands
Tel: 20 5479999
Telex: 18919 hpner

SOUTH EAST EUROPE

Hewlett-Packard S.A.
World Trade Center
10 Avenue Louis-Casali
CH-15 Cointrin, **GENEVA**, Switzerland
Tel: (022) 98 96 51
Telex: 27225 hpser
Mail Address:
O. Box
CH-1217 Meyrin 1
GENEVA
Switzerland

MIDDLE EAST AND CENTRAL AFRICA

Hewlett-Packard S.A.
Middle East/Central
Africa Sales H.Q.
rue du Bois-du-Lan
O. Box 364
CH-1217 Meyrin 1
GENEVA
Switzerland
Tel: (022) 83 12 12
Telex: 27835 hmea ch
lefax: (022) 83 15 35

UNITED KINGDOM

Hewlett-Packard Ltd.
Nine Mile Ride
WOKINGHAM
Berkshire, RG113LL
Tel: 0344 773 100
Telex: 848805/848814/848912

UNITED STATES OF AMERICA

Customer Information Center
(800) 752-0900
6:00 AM to 5 PM Pacific Time

EASTERN USA

Hewlett-Packard Co.
4 Choke Cherry Road
ROCKVILLE, MD 20850
Tel: (301) 948-6370

MIDWESTERN USA

Hewlett-Packard Co.
5201 Tollview Drive
ROLLING MEADOWS, IL 60008
Tel: (312) 255-9800

SOUTHERN USA

Hewlett-Packard Co.
2000 South Park Place
ATLANTA, GA 30339
Tel: (404) 955-1500

WESTERN USA

Hewlett-Packard Co.
5161 Lankershim Blvd.
NORTH HOLLYWOOD, CA 91601
Tel: (818) 505-5600

OTHER INTERNATIONAL AREAS

Hewlett-Packard Co.
Intercontinental Headquarters
3495 Deer Creek Road
PALO ALTO, CA 94304
Tel: (415) 857-1501
Telex: 034-8300
Cable: HEWPACK

ALGERIA

Hewlett-Packard Trading S.A.
Bureau de Liaison Alger
Villa des Lions
9, Hai Galloul
DZ-BORDJ EL BAHRJ
Tel: 76 03 36
Telex: 63343 dliion dz

ANGOLA

Telectra Angola LDA
Empresa Técnica de Equipamentos
16 rue Cons. Julio de Vilhema
LUANDA
Tel: 35515,35516
Telex: 3134
E,P

ARGENTINA

Hewlett-Packard Argentina S.A.
Montaneses 2140/50
1428 **BUENOS AIRES**
Tel: 541-11-1441
Telex: 22796 HEW PAC-AR
A,C,E,P
Biotron S.A.C.I.M.e.I.
Av. Paso Colon 221, Piso 9
1399 **BUENOS AIRES**
Tel: 541-333-490,
541-322-587
Telex: 17595 BIONAR
M

Laboratorio Rodriguez
Corswant S.R.L.
Misiones, 1156 - 1876
Bernal, Oeste
BUENOS AIRES
Tel: 252-3958, 252-4991
A

Intermaco S.R.L.
Florida 537/71
Galeria Jardin - Local 28
1005 **BUENOS AIRES**
Tel: 393-4471/1928
Telex: 22796 HEW PAC-AR
P (Calculators)
Argentina Esanco S.R.L.
A/ASCO 2328
1416 **BUENOS AIRES**
Tel: 541-58-1981, 541-59-2767
Telex: 22796 HEW PAC-AR
A
All Computers S.A.
Montaneses 2140/50 5 Piso
1428 **BUENOS AIRES**
Tel: 781-4030/4039/783-4886
Telex: 18148 Ocmre
P

AUSTRALIA

Adelaide, South Australia Office
Hewlett-Packard Australia Ltd.
153 Greenhill Road
PARKSIDE, S.A. 5063
Tel: 61-8-272-5911
Telex: 82536
Cable: HEWPARD Adelaide
A.C.C.M.E.P

Brisbane, Queensland Office

Hewlett-Packard Australia Ltd.
10 Payne Road
THE GAP, Queensland 4061
Tel: 61-7-300-4133
Telex: 42133
Cable: HEWPARD Brisbane
A.C.C.M.E.M.P

Canberra, Australia Capital Territory Office

Hewlett-Packard Australia Ltd.
Thynne Street, Fern Hill Park
BRUCE, A.C.T. 2617
P.O. Box 257,
JAMISON, A.C.T. 2614
Tel: 61-62-80-4244
Telex: 62650
Cable: HEWPARD Canberra
C.C.M.E.P

Melbourne, Victoria Office

Hewlett-Packard Australia Ltd.
31-41 Joseph Street
P.O. Box 221
BLACKBURN, Victoria 3130
Tel: 61-3-895-2895
Telex: 31-024
Cable: HEWPARD Melbourne
A.C.C.M.E.M.P

Perth, Western Australia Office

Hewlett-Packard Australia Ltd.
Herdsman Business Park
CLAREMONT, W.A. 6010
Tel: 61-9-383-2188
Telex: 93859
Cable: HEWPARD Perth
C.C.M.E.P

Sydney, New South Wales Office

Hewlett-Packard Australia Ltd.
17-23 Talavera Road
P.O. Box 308
NORTH RYDE, N.S.W. 2113
Tel: 61-2-888-4444
Telex: 21561
Cable: HEWPARD Sydney
A.C.C.M.E.M.P

AUSTRIA

Hewlett-Packard Ges.m.b.h.
Verkaufsbuero Graz
Grottenhofstrasse 94
A-8052 **GRAZ**
Tel: 43-316-291-5660
Telex: 312375
C,E

Hewlett-Packard Ges.m.b.h.
Lieblgasse 1
P.O. Box 72
A-1222 **VIENNA**
Tel: 43-222-2500
Telex: 134425 HEPA A
A.C.C.M.E.M.P

BAHRAIN

Green Salon
P.O. Box 557
MANAMA
Tel: 255503-250950
Telex: 84419
P

Wael Pharmacy
P.O. Box 648
MANAMA
Tel: 256123
Telex: 8550 WAEL BN
E,M
Zayani Computer Systems
218 Shaik Mubarak Building
Government Avenue
P.O. Box 5918
MANAMA
Tel: 276278
Telex: 9015 plans bn
P

BELGIUM

Hewlett-Packard Belgium S.A./N.V.
Blvd de la Woluwe, 100
Woluwedal
B-1200 **BRUSSELS**
Tel: (02) 32-2-761-31-11
Telex: 23494 hewpac
A.C.C.M.E.M.P

BERMUDA

Applied Computer Technologies
Atlantic House Building
P.O. Box HM 2091
Par-La-Ville Road
HAMILTON 5
Tel: 295-1616
Telex: 380 3589/ACT BA
P

BOLIVIA

Arrellano Ltda
Av. 20 de Octubre #2125
Casilla 1383
LA PAZ
Tel: 368541
M

BRAZIL

Hewlett-Packard do Brasil S.A.
Alameda Rio Negro, 750-I. **AND.**
ALPHAVILLE
06400 Barueri SP
Tel: (011) 421.1311
Telex: (011) 71351 HPBR BR
Cable: HEWPACK Sao Paulo
C.M.E
Hewlett-Packard do Brasil S.A.
Praia de Botafago 228-A-614
6. **AND.-CONJ. 601**
Edificio Argentina - Ala A
22250 **RIO DE JANEIRO, RJ**
Tel: (021) 552-6422
Telex: 21905 HPBR BR
Cable: HEWPACK Rio de Janeiro
E

Van Den Cientifica Ltda.
Rua Jose Bonifacio, 458
Todos os Santos
20771 **RIO DE JANEIRO, RJ**
Tel: (021) 593-8223
Telex: 33487 EGLB BR
A

ANAMED I.C.E.I. Ltda.
Rua Vergueiro, 360
04012 **SAO PAULO, SP**
Tel: (011) 572-1106
Telex: 24720 HPBR BR
M

Datatronix Electronica Ltda.
Av. Pacaembu 746-C11
SAO PAULO, SP
Tel: (118) 260111
CM

BRUNEI

Komputer Wisman Sdn Bhd
G6, Chandrawaseh Cmplx,
Jalan Tutong
P.O. Box 1297,

BANDAR SERI BEGAWAN
NEGARA BRUNI DARUSSALAM
Tel: 673-2-2000-70/26711
C,E,P

CAMEROON

Beriac

B. P. 23

DOUALA

Tel: 420153

Telex: 5351

C,P

CANADA**Alberta**

Hewlett-Packard (Canada) Ltd.
3030 3rd Avenue N.E.

CALGARY, Alberta T2A 6T7

Tel: (403) 235-3100

A,C,CM,E*,M,P*

Hewlett-Packard (Canada) Ltd.

11120-178th Street

EDMONTON, Alberta T5S 1P2

Tel: (403) 486-6666

A,C,CM,E,M,P

British Columbia

Hewlett-Packard (Canada) Ltd.

10691 Shellbridge Way

RICHMOND

British Columbia V6X 2W8

Tel: (604) 270-2277

Telex: 610-922-5059

A,C,CM,E*,M,P*

Hewlett-Packard (Canada) Ltd.

121 - 3350 Douglas Street

VICTORIA, British Columbia V8Z 3L1

Tel: (604) 381-6616

C

Manitoba

Hewlett-Packard (Canada) Ltd.

1825 Inkster Blvd.

WINNIPEG, Manitoba R2X 1R3

Tel: (204) 694-2777

A,C,CM,E,M,P*

New Brunswick

Hewlett-Packard (Canada) Ltd.

814 Main Street

MONCTON, New Brunswick E1C 1E6

Tel: (506) 855-2841

C

Nova Scotia

Hewlett-Packard (Canada) Ltd.

Suite 111

900 Windmill Road

DARTMOUTH, Nova Scotia B3B 1P7

Tel: (902) 469-7820

C,CM,E*,M,P*

Ontario

Hewlett-Packard (Canada) Ltd.

3325 N. Service Rd., Unit W03

BURLINGTON, Ontario L7N 3G2

Tel: (416) 335-8644

C,M*

Hewlett-Packard (Canada) Ltd.

552 Newbold Street

LONDON, Ontario N6E 2S5

Tel: (519) 686-9181

A,C,CM,E*,M,P*

Hewlett-Packard (Canada) Ltd.

6877 Goreway Drive

MISSISSAUGA, Ontario L4V 1M8

Tel: (416) 678-9430

Telex: 069-83644

A,C,CM,E,M,P

Hewlett-Packard (Canada) Ltd.

2670 Queensview Dr.

OTTAWA, Ontario K2B 8K1

Tel: (613) 820-6483

A,C,CM,E*,M,P*

Hewlett-Packard (Canada) Ltd.

3790 Victoria Park Ave.

WILLOWDALE, Ontario M2H 3H7

Tel: (416) 499-2550

C,E

Quebec

Hewlett-Packard (Canada) Ltd.

17500 Trans Canada Highway

South Service Road

KIRKLAND, Quebec H9J 2X8

Tel: (514) 697-4232

Telex: 058-21521

A,C,CM,E,M,P*

Hewlett-Packard (Canada) Ltd.

1150 rue Claire Fontaine

QUEBEC CITY, Quebec G1R 5G4

Tel: (418) 648-0726

C

Hewlett-Packard (Canada) Ltd.

130 Robin Crescent

SASKATOON, Saskatchewan S7L 6M7

Tel: (306) 242-3702

C

CHILE

ASC Ltda.

Austria 2041

SANTIAGO

Tel: 223-5946, 223-6148

Telex: 392-340192 ASC CK

C,P

Jorge Calcagni y Cia

Av. Italia 634 Santiago

Casilla 16475

SANTIAGO 9

Tel: 9-011-562-222-0222

Telex: 392440283 JCYCL CZ

CM,E,M

Metrolab S.A.

Monjitas 454 of. 206

SANTIAGO

Tel: 395752, 398296

Telex: 340866 METLAB CK

A

Olympia (Chile) Ltda.

Av. Rodrigo de Araya 1045

Casilla 256-V

SANTIAGO 21

Tel: 225-5044

Telex: 340892 OLYMP

Cable: Olympiachile Santiagochile

C,P

CHINA, People's Republic of

China Hewlett-Packard Co., Ltd.

47/F China Resources Bldg.

26 Harbour Road

HONG KONG

Tel: 5-8330833

Telex: 76793 HPA HX

Cable: HP ASIA LTD

A*,M*

China Hewlett-Packard Co., Ltd.

P.O. Box 9610, Beijing

4th Floor, 2nd Watch Factory Main

Shuang Yu Shou, Bei San Huan Road

Hai Dian District

BEIJING

Tel: 33-1947 33-7426

Telex: 22601 CTSHP CN

Cable: 1920 Beijing

A,C,CM,E,M,P

China Hewlett-Packard Co., Ltd.

CHP Shanghai Branch

23/F Shanghai Union Building

100 Yan An Rd. East

SHANG-HAI

Tel: 265550

Telex: 33571 CHPSB CN

Cable: 3416 Shanghai

A,C,CM,E,M,P

COLOMBIA

Instrumentación

H. A. Langebaek & Kier S.A.

Carrera 4A No. 52A-26

Apartado Aereo 6287

BOGOTA 1, D.E.

Tel: 212-1466

Telex: 44400 INST CO

Cable: AARIS Bogota

CM,E,M

Nefromedicas Ltda.

Calle 123 No. 9B-31

Apartado Aereo 100-958

BOGOTA D.E., 10

Tel: 213-5267, 213-1615

Telex: 43415 HEGAS CO

A

Compumundo

Avenida 15 # 107-80

BOGOTA D.E.

Tel: 57-214-4458

Telex: 39645466 MARCO

P

Carvajal, S.A.

Calle 29 Norte No. 6A-40

Apartado Aereo 46

CALI

Tel: 9-011-57-3-621888

Telex: 39655650 CUJCL CO

C,E,P

CONGO

Seric-Congo

B. P. 2105

BRAZZAVILLE

Tel: 815034

Telex: 5262

COSTA RICA

Cientifica Costarricense S.A.

Avenida 2, Calle 5

San Pedro de Montes de Oca

Apartado 10159

SAN JOSÉ

Tel: 9-011-506-243-820

Telex: 3032367 GALGUR CR

CM,E,M

O. Fischel R. Y. Cia. S.A.

Apartados 434-10174

SAN JOSE

Tel: 23-72-44

Telex: 2379

Cable: OFIR

A

CYPRUS

Telerexa Ltd.

P.O. Box 1152

Valentine House

8 Stassandrou St.

NICOSIA

Tel: 45 628, 62 698

Telex: 5845 tirx cy

E,M,P

DENMARK

Hewlett-Packard A/S

Kongevejen 25

DK-3460 BIRKEROD

Tel: 45-02-81-6640

Telex: 37409 hpas dk

A,C,CM,E,M,P

Hewlett-Packard A/S

Rolighedsvej 32

DK-8240 RISSKOV, Aarhus

Tel: 45-06-17-6000

Telex: 37409 hpas dk

C,E

DOMINICAN REPUBLIC

Microprog S.A.

Juan Tomás Mejía y Cotes No. 60

Arroyo Hondo

SANTO DOMINGO

Tel: 565-6268

Telex: 4510 ARENTA DR (RCA)

P

ECUADOR

CYEDE Cia. Ltda.

Avenida Eloy Alfaro 1749

y Belgica

Casilla 6423 CCI

QUITO

Tel: 9-011-593-2-450975

Telex: 39322548 CYEDE ED

E,P

Medtronics

Valladolid 524 Madrid

P.O. 9171, QUITO

Tel: 2-238-951

Telex: 2298 ECUAME ED

A

Hospitalar S.A.

Robles 625

Casilla 3590

QUITO

Tel: 545-250, 545-122

Telex: 2485 HOSPTEL ED

Cable: HOSPITALAR-Quito

M

Ecuador Overseas Agencies C.A.

Calle 9 de Octubre #818

P.O. Box 1296, Guayaquil

QUITO

Tel: 306022

Telex: 3361 PBCGYE ED

M

EGYPT

Sakro Enterprises

P.O. Box 259

ALEXANDRIA

Tel: 802908, 808020, 805302

Telex: 54333

C

SALES & SUPPORT OFFICES

Arranged alphabetically by country

3

RANCE (Cont'd)

Hewlett-Packard France
13 Rue de la République
Boite Postale 503
5026 **BESANÇON CEDEX, FRANCE**

Tel: (81) 83-16-22
Telex: 361157
C,E*

Hewlett-Packard France
A Kergaradec
Rue Fernand Forest
-29239 **GOUESNOU**
Tel: (98) 41-87-90

Hewlett-Packard France
Bureau des Moulles
Boite Postale 162
3131 **ECULLY Cedex (Lyon)**
Tel: 33-78-33-8125
Telex: 310617F
C,E,M,P*

Hewlett-Packard France
arc d'activités du Bois Briard
Avenue du Lac
-91040 **EVRY Cedex**
Tel: 3311/6077 9660
Telex: 692315F

Hewlett-Packard France
Application Center
1, avenue Raymond Chanas
8320 **EYBENS (Grenoble)**
Tel: (76) 62-57-98
Telex: 980124 HP GRENOB EYBE

Hewlett-Packard France
Rue Fernand Forest
A. Kergaradec
9239 **GOUESNOU**
Tel: (98) 41-87-90

Hewlett-Packard France
arc Club des Tanneries
Batiment B4
1, Rue de la Faisanderie
7381 **LINCOLSHEIM**
(Strasbourg)
Tel: (88) 76-15-00
Telex: 890141F
C,E*,M*,P*

Hewlett-Packard France
Centre d'affaires Paris-Nord
Batiment Ampère
Rue de la Commune de Paris
Boite Postale 300
3153 **LE BLANC-MESNIL**
Tel: (1) 865-44-52
Telex: 211032F
C,E,M

Hewlett-Packard France
arc d'activités Cadéra
Quartier Jean-Mermoz
Avenue du Président JF Kennedy
3700 **MÉRIGNAC (Bordeaux)**
Tel: 33-56-34-0084
Telex: 550105F
C,E,M

Hewlett-Packard France
3, Rue Graham Bell
BP 5149
57074 **METZ Cedex**
Tel: (87) 36-13-31
Telex: 860602F
C,E

Hewlett-Packard France
Miniparc-ZIRST
Chemin du Vieux Chêne
38240 **MEYLAN (Grenoble)**
Tel: (76) 90-38-40
980124 HP Grenoble
C

Hewlett-Packard France
Bureau vert du Bois Briard
Chemin de la Garde
- CP 212 212
44085 **NANTES Cedex**
Tel: (40) 50-32-22
Telex: 711085F
A,C,E,CM*,P

Hewlett-Packard France
125, Rue du Faubourg Bannier
45000 **ORLÉANS**
Tel: 33-38-62-2031
E,P*

Hewlett-Packard France
Zone Industrielle de Courtaboeuf
Avenue des Tropiques
91947 **LES ULIS Cedex (Orsay)**
Tel: 33-6-907 7825
Telex: 600048F
A,C,CM,E,M,P**

Hewlett-Packard France
15, Avenue de L'Amiral-Bruix
75782 **PARIS Cedex 16**
Tel: 33-15-02-1220
Telex: 613663F
C,P*

Hewlett-Packard France
242 Ter, Ave J Mermoz
64000 **PAU**
Tel: 33-59-80-3802
Telex: 550365F
C,E*

Hewlett-Packard France
6, Place Sainte Croix
86000 **POITIERS**
Tel: 33-49-41-2707
Telex: 792335F
C, E*

Hewlett-Packard France
47, Rue de Chativiesle
51100 **REIMS**
Tel: 33-26-88-6919
C, P*

Hewlett-Packard France
Parc d'activités de la Poterie
Rue Louis Kerautel-Botmel
35000 **RENNES**
Tel: 33-99-51-4244
Telex: 740912F
A*,C,E,M,P*

Hewlett-Packard France
98 Avenue de Bretagne
76100 **ROUEN**
Tel: 33-35-63-5766
Telex: 770035F
C,E

Hewlett-Packard France
4, Rue Thomas-Mann
Boite Postale 56
67033 **STRASBOURG Cedex**
Tel: (88) 28-56-46
Telex: 890141F
C,E,M,P*

Hewlett-Packard France
Le Péripole III
3, Chemin du Pigeonnier de la Cèpière
31081 **TOULOUSE Cedex**
Tel: 33-61-40-1112
Telex: 531639F
A,C,E,M,P*

Hewlett-Packard France
Les Cardoulines
Batiment B2
Route des Dolines
Parc d'activité de Valbonne
Sophia Antipolis
06560 **VALBONNE (Nice)**
Tel: (93) 65-39-40
C

Hewlett-Packard France
9, Rue Baudin
26000 **VALENCE**
Tel: 33-75-42-7616
C**

Hewlett-Packard France
Carolor
ZAC de Bois Briard
57640 **VIGY (Metz)**
Tel: (8) 771 20 22
C

Hewlett-Packard France
Parc d'activité des Prés
1, Rue Papin Cedex
59658 **VILLENEUVE D'ASCO**
Tel: 33-20-91-4125
Telex: 160124F
C,E,M,P

Hewlett-Packard France
Parc d'activités Paris-Nord 11
Boite Postale 60020
95971 Roissy Charles de Gaulle
VILLEPINTE
Tel: (1) 48 63 80 80
Telex: 211032F
C,E,M,P*

GABON

Sho Gabon
P.O. Box 89
LIBREVILLE
Tel: 721 484
Telex: 5230

GERMAN FEDERAL REPUBLIC

Hewlett-Packard GmbH
Vertriebszentrum Mitte
Hewlett-Packard-Strasse
D-6380 **BAD HOMBURG**
Tel: (06172) 400-0
Telex: 410 844 hpbhg
A,C,E,M,P

Hewlett-Packard GmbH
Geschäftsstelle
Keithstrasse 2-4
D-1000 **BERLIN 30**
Tel: (030) 21 99 04-0
Telex: 018 3405 hpbld
A,C,E,M,P

Hewlett-Packard GmbH
Verbindungsstelle Bonn
Friedrich-Ebert-Allee 26
5300 **BONN**
Tel: (0228) 234001
Telex: 8869421

Hewlett-Packard GmbH
Vertriebszentrum Südwest
Schickardstrasse 2
D-7030 **BÖBLINGEN**
Postfach 1427
Tel: (07031) 645-0
Telex: 7265 743 hep
A,C,CM,E,M,P

Hewlett-Packard GmbH
Zentralbereich Mktg
Herrenberger Strasse 130
D-7030 **BÖBLINGEN**
Tel: (07031) 14-0
Telex: 7265739 hep

Hewlett-Packard GmbH
Geschäftsstelle
Schleefstr. 28a
D-4600 **DORTMUND-41**
Tel: (0231) 45001
Telex: 822858 hepdd
A,C,E

Hewlett-Packard GmbH
Reparaturzentrum Frankfurt
Bernier Strasse 117
6000 **FRANKFURT/MAIN 60**
Tel: (069) 500001-0
Telex: 413249 hpffm

Hewlett-Packard GmbH
Vertriebszentrum Nord
Kapstadtring 5
D-2000 **HAMBURG 60**
Tel: 49-40-63-804-0
Telex: 021 63 032 hphh d
A,C,E,M,P

Hewlett-Packard GmbH
Geschäftsstelle
Heidering 37-39
D-3000 **HANNOVER 61**
Tel: (0511) 5706-0
Telex: 092 3259 hphan
A,C,CM,E,M,P

Hewlett-Packard GmbH
Geschäftsstelle
Rosslauer Weg 2-4
D-6800 **MANNHEIM**
Tel: 49-0621-70-05-0
Telex: 0462105 hpmhm
A,C,E

Hewlett-Packard GmbH
Geschäftsstelle
Messerschmittstrasse 7
D-7910 **NEU ULM**
Tel: 49-0731-70-73-0
Telex: 0712816 HP ULM-D
A,C,E*

Hewlett-Packard GmbH
Geschäftsstelle
Emmericher Strasse 13
D-8500 **NÜRNBERG 10**
Tel: (0911) 5205-0
Telex: 0623 860 hpnbg
C,CM,E,M,P

Hewlett-Packard GmbH
Vertriebszentrum Ratingen
Berliner Strasse 111
D-4030 **RATINGEN 4**
Postfach 31 12
Tel: (02102) 494-0
Telex: 589 070 hprad
A,C,E,M,P

Hewlett-Packard GmbH
Vertriebszentrum Muchen
Eschenstrasse 5
D-8028 **TAUFKIRCHEN**
Tel: 49-89-61-2070
Telex: 0524985 hpmch
A,C,CM,E,M,P
Hewlett-Packard GmbH
Geschäftsstelle
Ermilisallee
7517 **WALDBRONN 2**
Postfach 1251
Tel: (07243) 602-0
Telex: 782 838 hep
A,C,E

GREAT BRITAIN

See United Kingdom

GREECE

Hewlett-Packard A.E.
178, Kifissias Avenue
6th Floor
Halandri-**ATHENS**
Greece
Tel: 301116473 360, 301116726 090
Telex: 221 286 HPHLGR
A,C,CM**,E,M,P
Kostas Karayannis S.A.
8, Omirou Street
ATHENS 133
Tel: 32 30 303, 32 37 371
Telex: 215962 RKAR GR
A,C*,CM,E
Impexin
Intelec Div.
209 Mesogion
11525 **ATHENS**
Tel: 6474481/2
Telex: 216286
P

Haril Company
38, Mihalakopoulou
ATHENS 612
Tel: 7236071
Telex: 218767
M*
Hellamco
P.O. Box 87528
18507 **PIRAEUS**
Tel: 4827049
Telex: 241441
A

GUATEMALA

IPESA DE GUATEMALA
Avenida Reforma 3-48, Zona 9
GUATEMALA CITY
Tel: 316627, 317853,66471/5
9-011-502-2-316627
Telex: 3055765 IPESA GU
A,C,CM,E,M,P

HONG KONG

Hewlett-Packard Hong Kong, Ltd.
G.P.O. Box 795

5th Floor, Sun Hung Kai Centre
30 Harbour Road, Wan Chai

HONG KONG

Tel: 852-5-832-3211

Telex: 66678 HEWPA HX

Cable: HEWPACK HONG KONG
E,C,P

CET Ltd.

10th Floor, Hua Asia Bldg.

64-66 Gloucester Road

HONG KONG

Tel: (5) 200922

Telex: 85148 CET HX

CM

Schmidt & Co. (Hong Kong) Ltd.

18th Floor, Great Eagle Centre

23 Harbour Road, Wanchai

HONG KONG

Tel: 5-8330222

Telex: 74766 SCHMC HX

A,M

ICELAND

Hewlett-Packard Iceland

Hoefdabakka 9

112 REYKJAVIK

Tel: 354-1-67-1000

Telex: 37409

A,C,CM,E,M,P

INDIA

Computer products are sold through
Blue Star Ltd. All computer repairs
and maintenance service is done
through Computer Maintenance Corp.

Blue Star Ltd.

B. D. Patel House

Near Sardar Patel Colony

AHMEDABAD 380 014

Tel: 403531, 403532

Telex: 0121-234

Cable: BLUE FROST

A,C,CM,E

Blue Star Ltd.

40/4 Lavelle Road

BANGALORE 560 001

Tel: 57881, 867780

Telex: 0845-430 BSLBIN

Cable: BLUESTAR

A,C*,CM,E

Blue Star Ltd.

Band Box House

Prabhadevi

BOMBAY 400 025

Tel: 4933101, 4933222

Telex: 011-71051

Cable: BLUESTAR

A,M

Blue Star Ltd.

Sahas

414/2 Vir Savarkar Marg

Prabhadevi

BOMBAY 400 025

Tel: 422-6155

Telex: 011-71193 BSSS IN

Cable: FROSTBLUE

A,CM,E,M

Blue Star Ltd.

Kalyan, 19 Vishwas Colony

Alkapuri, **BORODA**, 390 005

Tel: 65235, 65236

Cable: BLUE STAR

A

Blue Star Ltd.

7 Hare Street

P.O. Box 506

CALCUTTA 700 001

Tel: 230131, 230132

Telex: 031-61120 BSNF IN

Cable: BLUESTAR

A,M,C,E

Blue Star Ltd.

133 Kodambakkam High Road

MADRAS 600 034

Tel: 472056, 470238

Telex: 041-379

Cable: BLUESTAR

A,M

Blue Star Ltd.

13 Community Center

New Friends Colony

NEW DELHI 110 065

Tel: 682547

Telex: 031-2463

Cable: BLUEFROST

A,C*,CM,E,M

Blue Star Ltd.

15/16 C Wellesley Rd.

PUNE 411 011

Tel: 22775

Cable: BLUE STAR

A

Blue Star Ltd.

2-2-47/1108 Bolarum Rd.

SECUNDERABAD 500 003

Tel: 72057, 72058

Telex: 0155-459

Cable: BLUEFROST

A,C,E

Blue Star Ltd.

T.C. 7/603 Poornima

Maruthunkuzhi

TRIVANDRUM 695 013

Tel: 65799, 65820

Telex: 0884-259

Cable: BLUESTAR

E

Computer Maintenance Corporation
Ltd.

115, Sarojini Devi Road

SECUNDERABAD 500 003

Tel: 310-184, 345-774

Telex: 031-2960

C**

INDONESIA

BERCA Indonesia P.T.

P.O.Box 496/Jkt.

Jl. Abdul Muis 62

JAKARTA

Tel: 21-373009

Telex: 46748 BERSAL IA

Cable: BERSAL JAKARTA

P

BERCA Indonesia P.T.

P.O.Box 2497/Jkt

Antara Bldg., 12th Floor

Jl. Medan Merdeka Selatan 17

JAKARTA-PUSAT

Tel: 21-340417

Telex: 46748 BERSAL IA

A,C,E,M,P

BERCA Indonesia P.T.

Jalan Kutai 24

SURABAYA

Tel: 67118

Telex: 31146 BERSAL SB

Cable: BERSAL-SURABAYA

A*,E,M,P

IRAQ

Hewlett-Packard Trading S.A.

Service Operation

Al Mansour City 9B/3/7

BAGHDAD

Tel: 551-49-73

Telex: 212-455 HEPAIRAQ IK

C

IRELAND

Hewlett-Packard Ireland Ltd.

Temple House, Temple Road

Blackrock, Co. **DUBLIN**

Tel: 88/333/99

Telex: 30439

C,E,P

Hewlett-Packard Ltd.

75 Belfast Rd, Carrickfergus

Belfast BT38 8PH

NORTHERN IRELAND

Tel: 09603-67333

Telex: 747626

M

ISRAEL

Eidan Electronic Instrument Ltd.

P.O.Box 1270

JERUSALEM 91000

16, Ohaliav St.

JERUSALEM 94467

Tel: 533 221, 553 242

Telex: 25231 AB/PAKRD IL

A,M

Computation and Measurement

Systems (CMS) Ltd.

11 Masad Street

67060

TEL-AVIV

Tel: 388 388

Telex: 33569 Motil IL

C,CM,E,P

ITALY

Hewlett-Packard Italiana S.p.A.

Traversa 99C

Via Giulio Petroni, 19

I-70124 **BARI**

Tel: (080) 41-07-44

C,M

Hewlett-Packard Italiana S.p.A.

Via Emilia, 51/C

I-40011 **BOLOGNA** Anzola Dell'Emilia

Tel: 39-051-731061

Telex: 511630

C,E,M

Hewlett-Packard Italiana S.p.A.

Via Principe Nicola 43G/C

I-95126 **CATANIA**

Tel: (095) 37-10-87

Telex: 970291

C

Hewlett-Packard Italiana S.p.A.

Via G. di Vittorio 10

20094 **CORSICO** (Milano)

Tel: 39-02-4408351

Hewlett-Packard Italiana S.p.A.

Viale Brigata Bisagno 2

16129 **GENOVA**

Tel: 39-10-541141

Telex: 215238

Hewlett-Packard Italiana S.p.A.

Viale G. Modugno 33

I-16156 **GENOVA PEGLI**

Tel: (010) 68-37-07

Telex: 215238

C,E

Hewlett-Packard Italiana S.p.A.

Via G. di Vittorio 9

I-20063 **CERNUSCO SUL**

NAVIGLIO

(Milano)

Tel: (02) 923691

Telex: 334632

A,C,CM,E,M,P

Hewlett-Packard Italiana S.p.A.

Via Nuova Rivoltana 95

20090 **LIMITO** (Milano)

Tel: 02-92761

Hewlett-Packard Italiana S.p.A.

Via Nuova San Rocco a

Capodimonte, 62/A

I-80131 **NAPOLI**

Tel: (081) 7413544

Telex: 710698

A**,C,E,M

Hewlett-Packard Italiana S.p.A.

Via Orazio 16

80122 **NAPOLI**

Tel: (081) 7611444

Telex: 710698

Hewlett-Packard Italiana S.p.A.

Via Pellizzo 15

35128 **PADOVA**

Tel: 39-49-664-888

Telex: 430315

A,C,E,M

Hewlett-Packard Italiana S.p.A.

Viale C. Pavese 340

I-00144 **ROMA EUR**

Tel: 39-65-48-31

Telex: 610514

A,C,E,M,P*

Hewlett-Packard Italiana S.p.A.

Via di Casellina 57/C

500518 **SCANDICCI-FIRENZE**

Tel: 39-55-753863

C,E,M

Hewlett-Packard Italiana S.p.A.

Corso Svizzera, 185

I-10144 **TORINO**

Tel: 39-11-74-4044

Telex: 221079

A*,C,E

IVORY COAST

S.I.T.E.L.

Societe Ivoirienne de

Telecommunications

Bd. Giscard d'Estaing

Carrefour Marcory

Zone 4.A.

Boite postale 2580

ABIDJAN 01

Tel: 353600

SALES & SUPPORT OFFICES

Arranged alphabetically by country

5

APAN (Cont'd)

okogawa-Hewlett-Packard Ltd.
huo Bldg., 5-4-20 Nishi-Nakajima
-20 Nishinakajima, 5 Chome,
odogawa-ku
SAKA, 532
el: (06) 304-6021
elex: YHPOSA 523-3624
.CM,E,M,P*

okogawa-Hewlett-Packard Ltd.
-27-15, Yabe
AGAMHARA Kanagawa, 229
el: 0427 59-1311

okogawa-Hewlett-Packard Ltd.
amamtsu Motoshiro-Cho Daichi
eimei Bldg 219-21, Motoshiro-Cho
amamatsu-shi
HIZUOKA, 430
el: (0534) 56 1771
.E

okogawa-Hewlett-Packard Ltd.
hinjuku Daiichi Seimei Bldg.
-7-1, Nishi Shinjuku
hinjuku-ku, **TOKYO** 163
el: 03-348-4611
.E,M

okogawa Hewlett-Packard Ltd.
-1, Takakura-cho
achioji-shi, **TOKYO**, 192
el: 81-426-42-1231
.E

okogawa-Hewlett-Packard Ltd.
-29-21 Takaido-Higashi, 3 Chome
uginami-ku **TOKYO** 168
el: (03) 331-6111
elex: 232-2024 YHPTOK
.CM,E,P*

okogawa Hokushin Electric
orporation
hinjuku-NS Bldg. 10F
-1 Nishi-Shinjuku 2-Chome
hinjuku-ku
OKYO, 163
el: (03) 349-1859
elex: J27584

okogawa Hokushin Electric Corp.
-32 Nokacho 2 Chome
lusashino-shi
OKYO, 180
el: (0422) 54-1111
elex: 02822-421 YEW MTK J

okogawa-Hewlett-Packard Ltd.
leiji-Seimei
tsunomiya Odori Building
-5 Odori, 2 Chome
TSUNOMIYA, Tochigi 320
el: (0286) 33-1153
.E

okogawa-Hewlett-Packard Ltd.
asuda Seimei Nishiguchi Bldg.
0-4 Tsuruya-cho, 3 Chome
anagawa-ku, **YOKOHAMA** 221
el: (045) 312-1252
.CM,E

JORDAN

Scientific and Medical Supplies Co.
P.O. Box 1387
AMMAN
Tel: 24907, 39907
Telex: 21456 SABCO JO
C,E,M,P

KENYA

ADCOM Ltd., Inc., Kenya
P.O.Box 30070
NAIROBI
Tel: 331955
Telex: 22639
E,M

KOREA

Samsung Hewlett-Packard Co. Ltd.
Dongbang Yeoeuido Building
12-16th Floors
36-1 Yeoeuido-Dong
Youngdeungpo-Ku

SEOUL
Tel: 784-4666, 784-2666
Telex: 25166 SAMSAN K
C,CM,E,M,P

Young In Scientific Co., Ltd.
Youngwha Building
547 Shinsa Dong, Kangnam-Ku
SEOUL 135
Tel: 546-7771
Telex: K23457 GINSCO
A

Dongbang Healthcare
Products Co. Ltd.
Suite 301 Medical Supply Center
Bldg. 1-31 Dongsungdong
Jong Ro-gu, **SEOUL**
Tel: 764-1171, 741-1641
Telex: K25706 TKBKO
Cable: TKBEEKO
M

KUWAIT

Al-Khaldiya Trading & Contracting
P.O. Box 830
SAFAT
Tel: 424910, 411726
Telex: 22481 AREEG KT
Cable: VISCOUNT
E,M,A

Gulf Computing Systems
P.O. Box 25125
SAFAT
Tel: 435969
Telex: 23648
P

Photo & Cine Equipment
P.O. Box 270
SAFAT
Tel: 2445111
Telex: 22247 MATIN KT
Cable: MATIN KUWAIT
P

W.J. Towell Computer Services
P.O. Box 5897
SAFAT
Tel: 2462640/1
Telex: 30336 TOWELL KT
C

LEBANON

Computer Information Systems S.A.L.
Chammas Building
P.O. Box 11-6274 Dora
BEIRUT
Tel: 89 40 73
Telex: 42309 chaxis le
C,E,M,P

LIBERIA

Unichemicals Inc.
P.O. Box 4509
MONROVIA
Tel: 224282
Telex: 4509
E

LUXEMBOURG

Hewlett-Packard Belgium S.A./N.V.
Blvd de la Woluwe, 100
Woluwedal
B-1200 **BRUSSELS**
Tel: (02) 762-32-00
Telex: 23-494 paloben br
A,C,CM,E,M,P

MADAGASCAR

Technique et Precision
12, rue de Nice
P.O. Box 1227
101 **ANTANANARIVO**
Tel: 22090
Telex: 22255
P

MALAYSIA

Hewlett-Packard Sales (Malaysia)
Sdn. Bhd.
9th Floor
Chung Khiaw Bank Building
46, Jalan Raja Laut
50736 **KUALA LUMPUR, MALAYSIA**
Tel: 03-2986555
Telex: 310111 HPSM MA
A,C,E,M,P*

Protel Engineering
P.O.Box 1917
Lot 6624, Section 64
23/4 Pending Road
Kuching, **SARAWAK**
Tel: 36299
Telex: 70904 PROMAL MA
Cable: PROTELENG
A,E,M

MALTA

Philip Toledo Ltd.
Kirkirkara P.O. Box 11
Notabile Rd.
MRIEHEL
Tel: 447 47, 455 66, 4915 25
Telex: Media MW 649
E,M,P

MAURITIUS

Blanche Birger Co. Ltd.
18, Jules Koening Street
PORT LOUIS
Tel: 20828
Telex: 4296
P

MEXICO

Hewlett-Packard de Mexico,
S.A. de C.V.
Rio Nio No. 4049 Desp. 12
Fracc. Cordoba
JUAREZ
Tel: 161-3-15-62
P

Hewlett-Packard de Mexico,
S.A. de C.V.
Condominio Kadereyta
Circuito del Mezon No. 186 Desp. 6
COL. DEL PRADO - 76030 Qro.
Tel: 463-6-02-71
P

Hewlett-Packard de Mexico,
S.A. de C.V.
Monti Morelos No. 299
Fraccionamiento Loma Bonita 45060
GUADALAJARA, Jalisco
Tel: 36-31-48-00
Telex: 0684 186 ECOME
P

Microcomputadoras
Hewlett-Packard, S.A.
Monti Pelvoux 115
LOS LOMAS, Mexico, D.F.
Tel: 520-9127
P
Microcomputadoras Hewlett-Packard,
S.A. de C.V.
Monte Pelvoux No. 115
Lomas de Chapultepec, 11000
MEXICO, D.F.

Telex: 520-9127
P
Hewlett-Packard de Mexico,
S.A. de C.V.
Monte Pelvoux No. 111
Lomas de Chapultepec
11000 **MEXICO, D.F.**

Telex: 5-40-62-28, 72-66, 50-25
Telex: 17-74-507 HEWPACK MEX
A,C,CM,E,M,P
Hewlett-Packard De Mexico (Polanco)
Avenida Ejercito Nacional #579
2da y 3ra piso
Colonia Granada 11560
MEXICO D.F.
Tel: 254-4433
P

Hewlett-Packard de Mexico,
S.A. de C.V.
Czda. del Valle
409 Ote. 4th Piso
Colonia del Valle
Municipio de Garza
Garcia Nuevo Leon
66220 **MONTERREY**, Nuevo Leon
Tel: 83-78-42-40
Telex: 382410 HPMY
C

Infograficas y Sistemas
del Noreste, S.A.
Rio Orinoco #171 Oriente
Despacho 2001
Colonia Del Valle
MONTERREY
Tel: 559-4415, 575-3837
Telex: 483164
A,E

Hewlett-Packard de Mexico,
S.A. de C.V.
Blvd. Independencia No. 2000 Ote.
Col. Estrella
TORREON, COAH.
Tel: 171-18-21-99
P

MOROCCO

Etablissement Hubert Dolbeau & Fils
81 rue Karatchi
B.P. 11133
CASABLANCA
Tel: 3041-82, 3068-38
Telex: 23051, 22822
E

Gerep
2, rue Agadir
Boite Postale 156
CASABLANCA 01
Tel: 272093, 272095
Telex: 23 739
P

Sema-Maroc
Dept. Seric
6, rue Lapebie
CASABLANCA
Tel: 260980
Telex: 21641
C,P

NETHERLANDS

Hewlett-Packard Nederland B.V.
Startbaan 16
NL-1187 XR **AMSTELVEEN**
P.O. Box 667
NL-1180 AR **AMSTELVEEN**
Tel: (020) 547-6911
Telex: 13 216 HEPA NL
A,C,CM,E,M,P

Hewlett-Packard Nederland B.V.
Bongerd 2
P.O. Box 41
NL 2900AA **CAPELLE A/D IJSSEL**
Tel: 31-20-51-6444
Telex: 21261 HEPAC NL
C,E

Hewlett-Packard Nederland B.V.
Pastoor Petersstraat 134-136
P.O. Box 2342
NL 5600 CH **EINDHOVEN**
Tel: 31-40-32-6911
Telex: 51484 hepae nl
C,E,P

NEW ZEALAND

Hewlett-Packard (N.Z.) Ltd.
5 Owens Road
P.O. Box 26-189
Epsom, **AUCKLAND**
Tel: 64-9-687-159
Cable: HEWPAK Auckland
C,CM,E,P*

Hewlett-Packard (N.Z.) Ltd.
184-190 Willis Street
WELLINGTON
P.O. Box 9443
Courtenay Place, **WELLINGTON 3**
Tel: 64-4-887-199
Cable: HEWPAK Wellington
C,CM,E,P

Northrop Instruments & Systems Ltd.
369 Khyber Pass Road
P.O. Box 8602
AUCKLAND
Tel: 794-091
Telex: 60605
A,M

Northrop Instruments & Systems Ltd.
110 Mandeville St.
P.O. Box 8388
CHRISTCHURCH
Tel: 488-873
Telex: 4203
A,M

Northrop Instruments & Systems Ltd.
Sturdee House
85-87 Ghuznee Street
P.O. Box 2406
WELLINGTON
Tel: 850-091
Telex: NZ 3380
A,M

NIGERIA

Eimeco Nigeria Ltd.
45 Saka Tirubu St.
Victoria Island
LAGOS
Tel: 61-98-94
Telex: 20-117
E

NORTHERN IRELAND See United Kingdom

NORWAY

Hewlett-Packard Norge A/S
Folke Bernadottes vei 50
P.O. Box 3558
N-5033 **FYLLINGSDALEN** (Bergen)
Tel: 0047/5/16 55 40
Telex: 76621 hpnas n
C,E,M

Hewlett-Packard Norge A/S
Osterdalen 16-18
P.O. Box 34
N-1345 **OEËSTERAAS**
Tel: 47-2-17-1180
Telex: 76621 hpnas n
A,C,CM,E,M,P

Hewlett-Packard Norge A/S
Boehmergt. 42
Box 2470
N-5037 **SOLHEIMSVIK**
Tel: 0047/5/29 00 90

OMAN

Khimijil Ramdas
P.O. Box 19
MUSCAT/SULTANATE OF OMAN
Tel: 795 901
Telex: 3489 BROKER MB MUSCAT
P

Suhail & Saud Bahwan
P.O. Box 169
MUSCAT/SULTANATE OF OMAN
Tel: 734 201-3
Telex: 5274 BAHWAN MB
E

Imtac LLC
P.O. Box 9196
MINA AL FAHAL/SULTANATE OF OMAN
Tel: 70-77-27, 70-77-23
Telex: 3865 Tawoos On
A,C,M

PAKISTAN

Mushko & Company Ltd.
House No. 16, Street No. 16
Sector F-6/3
ISLAMABAD
Tel: 824545
Telex: 54001 Muski Pk
Cable: FEMUS Islamabad
A,E,P*

Mushko & Company Ltd.
Oosman Chambers
Abdullah Haroon Road
KARACHI 0302
Tel: 524 131, 524 132
Telex: 2894 MUSKO PK
Cable: COOPERATOR Karachi
A,E,P*

PANAMA

Electronico Balboa, S.A.
Calle Samuel Lewis, Ed. Alfa
Apartado 4929
PANAMA CITY
Tel: 9-011-507-636613
Telex: 368 3483 ELECTRON PG
CM,E,M,P

PERU

Cia Electro Médica S.A.
Los Flamencos 145, Ofc. 301/2
San Isidro
Casilla 1030
LIMA 1
Tel: 9-011-511-4-414325, 41-3705
Telex: 39425257 PE PB SIS
CM,E,M,P

SAMS S.A.

Arenidia Republica de Panama 3534
San Isidro, **LIMA**
Tel: 9-011-511-4-229332/413984/
413226
Telex: 39420450 PE LIBERTAD
A,C,P

PHILIPPINES

The Online Advanced Systems Corp.
2nd Floor, Electra House
115-117 Esteban Street
P.O. Box 1510
Legaspi Village, Makati
Metro **MANILA**
Tel: 815-38-10 (up to 16)
Telex: 63274 ONLINE PN
A,C,E,M,P

PORTUGAL

Mundinter Intercambio
Mundial de Comércio S.A.R.L.
Av. Antonio Augusto Aguiar 138
Apartado 2761
LISBON
Tel: (19) 53-21-31, 53-21-37
Telex: 16691 munter p
M

Soquimica
Av. da Liberdade, 220-2
1298 **LISBOA** Codex
Tel: 56-21-82
Telex: 13316 SABASA
A

Telectra-Empresa Técnica de
Equipamentos Eléctricos S.A.R.L.
Rua Rodrigo da Fonseca 103
P.O. Box 2531
LISBON 1

Tel: (19) 68-60-72
Telex: 12598
CM,E
C.P.C.S.I.
Rua de Costa Cabral 575
4200 **PORTO**
Tel: 499 174/495 173
Telex: 26054
C,P

PUERTO RICO

Hewlett-Packard Puerto Rico
101 Muñoz Rivera Av
Esu. Calle Ochoa
HATO REY, Puerto Rico 00918
Tel: (809) 754-7800
A,C,CM,M,E,P

QATAR

Computer Arabia
P.O. Box 2750
DOHA
Tel: 428555
Telex: 4806 CHPARB
P

Nasser Trading & Contracting
P.O. Box 1563

DOHA

Tel: 422170
Telex: 4439 NASSER DH
M

SAUDI ARABIA

Modern Electronics Establishment
Hewlett-Packard Division
P.O. Box 281
Thuobah
AL-KHOBAR 31952
Tel: 895-1760, 895-1764
Telex: 671 106 HPMEEK SJ
Cable: ELECTA AL-KHOBAR
C,E,M

Modern Electronics Establishment
Hewlett-Packard Division
P.O. Box 1228
Redec Plaza, 6th Floor
JEDDAH
Tel: 644 96 28

Telex: 4027 12 FARNAS SJ
Cable: ELECTA JEDDAH
A,C,CM,E,M,P

Modern Electronics Establishment
Hewlett-Packard Division
P.O. Box 22015
RIYADH 11495
Tel: 491-97 15, 491-63 87
Telex: 202049 MEERYD SJ
C,E,M

Abdul Ghani El Ajou Corp.
P.O. Box 78

RIYADH

Tel: 40 41 717
Telex: 200 932 EL AJOU
P

SCOTLAND See United Kingdom

SENEGAL

Societe Hussein Ayad & Cie.
76, Avenue Georges Pompidou
B.P. 305
DAKAR
Tel: 32339
Cable: AYAD-Dakar
E
Moneger Distribution S.A.
1, Rue Parent
B.P. 148
DAKAR
Tel: 215 671
Telex: 587
P

Systeme Service Conseil (SSC)
14, Avenue du Parachois

DAKAR ETOILE

Tel: 219976
Telex: 577
C,P

SINGAPORE

Hewlett-Packard Singapore (Sales)
Pte. Ltd.
1150 Depot Road
SINGAPORE, 0410
Tel: 4731788
Telex: 34209 HPSGSO RS
Cable: HEWPACK, Singapore
A,C,E,M,P

Dynamar International Ltd.
Unit 05-11 Block 6
Kolam Ayer Industrial Estate
SINGAPORE 1334
Tel: 747-6188
Telex: 26283 RS
CM

SOUTH AFRICA

Hewlett-Packard So Africa (Pty.) Ltd.
P.O. Box 120
Howard Place, **CAPE PROVINCE**
7450 South Africa
Tel: 27 121153-7954
Telex: 57-20006
A,C,CM,E,M,P
Hewlett-Packard So Africa (Pty.) Ltd.
2nd Floor Juniper House
92 Overport Drive
DURBAN 4067
Tel: 27-31-28-4178
Telex: 6-22954
C

Hewlett-Packard So Africa (Pty.) Ltd.
Shop 6 Linton Arcade
511 Cape Road
Linton Grange
PORT ELIZABETH 6001
Tel: 27141130 1201
Telex: 24-2916
C

Hewlett-Packard So Africa (Pty.) Ltd.
Fountain Center
Kalkoen Str.
Monument Park Ext 2
PRETORIA 0105
Tel: (012) 45 5725
Telex: 32163
C,E

Hewlett-Packard So Africa (Pty.) Ltd.
Private Bag Wendywood
SANDTON 2144
Tel: 27-11-802-5111, 27-11-802-5125
Telex: 4-20877 SA
Cable: HEWPACK Johannesburg
A,C,CM,E,M,P

SPAIN

Hewlett-Packard Española, S.A.
Calle Entenza, 321
E-BARCELONA 29
Tel: 3/322 24 51, 321 73 54
Telex: 52603 hpbee
A,C,E,M,P

Hewlett-Packard Española, S.A.
Calle San Vicente S/N
Edificio Albia II-7B
48001 BILBAO
Tel: 4/423 83 06
A,C,E,M

Hewlett-Packard Española, S.A.
Ctra. N-VI, Km. 16, 400
Las Rozas
E-MADRID
Tel: (1) 637.00.11
Telex: 23515 HPE
C,M

Hewlett-Packard Española, S.A.
Avda. S. Francisco Javier, S/N
Planta 10. Edificio Sevilla 2
E-SEVILLA 5, SPAIN
Tel: 54/64 44 54
Telex: 72933
A,C,M,P

Hewlett-Packard Española, S.A.
Isabel La Católica, 8
E-46004 VALENCIA
Tel: 34-6-361 1354
Telex: 63435
C,P

Hewlett-Packard Española, S.A.
Av. de Zugazarte, 8
Las Arenas-Guecho
E-48930 VIZCAYA
VIZCAYA
Tel: 34-423-83 06
Telex: 33032

SWEDEN

Hewlett-Packard Sverige AB
Östra Tullgatan 3
S-20011 **MALMÖ**
Box 6132
Tel: 46-40-702-70
Telex: (854) 17886 (via Spånga office)
C,P

Hewlett-Packard Sverige AB
Elementvagen 16
S-7022 7 **ÖREBRO**
Tel: 49-019-10-4820
Telex: (854) 17886 (via Spånga office)
C

Hewlett-Packard Sverige AB
Skalholtsgatan 9, Kista
P.O. Box 19
S-16393 **SPÅNGA**
Tel: (08) 750-2000
Telex: (854) 17886
Telefax: (08) 7527781
A,C,CM,E,M,P

Hewlett-Packard Sverige AB
Box 266
Topasgatan 1A
S-42123 **VÄSTRA-FRÖLUNDA**
(Gothenburg)
Tel: 46-031-89-1000
Telex: (854) 17886 (via Spånga office)
A,C,CM,E,M,P

SUDAN

Mediterranean Engineering
& Trading Co. Ltd.
P.O. Box 1025
KHARTOUM
Tel: 41184
Telex: 24052
C,P

SWITZERLAND

Hewlett-Packard (Schweiz) AG
Clarastrasse 12
CH-4058 BASEL
Tel: 41-61-33-5920
A,C,E,P
Hewlett-Packard (Schweiz) AG
7, rue du Bois-du-Lan
Case postale 365-1366
CH-1217 MEYRIN 1
Tel: (0041) 22-83-11-11
Telex: 27333 HPAG CH
A,C,CM,E,M,P

SALES & SUPPORT OFFICES

Arranged alphabetically by country

SWITZERLAND (Cont'd) TOGO

ewlett-Packard (Schweiz) AG
Ilmend 2
H-8967 **WIDEN**
el: 41-57-31-2111
elex: 53933 hpag ch
able: HPAG CH
,C,CM,E,M,P

ewlett-Packard (Schweiz) AG
chwamendingenstrasse 10
H-8050 **ZURICH**
el: 41-1-315-8181
elex: 823 537 HPAG CH
,P

YRIA

eneral Electronic Inc.
uri Basha Ahnaf Ebn Kays Street
,O. Box 5781

AMASCUS

el: 33-24-87
elex: 44-19-88
able: ELECTROBOR DAMASCUS

iddle East Electronics

.O.Box 2308
bu Rumaneh

AMASCUS

el: 33 45 92
elex: 411 771 Meesy
I

AIWAN

ewlett-Packard Taiwan Ltd.
HM Office

, Huan Nan Road
HUNG LI, Taoyuan
el: (034) 929-666

ewlett-Packard Taiwan Ltd.

aohsiung Office
1/F, 456, Chung Hsiao 1st Road

AOHSIUNG

el: (07) 2412318
,E

ewlett-Packard Taiwan Ltd.

th Floor, Hewlett-Packard Building
37 Fu Hsing North Road

AIPEI

el: (02) 712-0404
elex: 24439 HEWPACK
able:HEWPACK Taipei
,C,CM,E,M,P

ig Lih Trading Co.

rd Floor, No. 7, Sect. 2

an Ai Road

AIPEI 100

el: (02) 394-8191
elex: 22894 SANKWANG

HAILAND

nimesa Co. Ltd.

D Patpong Ave., Suriwong

ANGKOK 5,

el: 235-5727, 234-0991/3
elex: 84439 Simonco TH
able: UNIMESA Bangkok
,C,E,M

angkok Business Equipment Ltd.

/C-6 Dejo Road

ANGKOK

el: 234-8670, 234-8671
elex: 87699-BEQUIPT TH
able: BUSIQUIPT Bangkok

Societe Africaine De Promotion

Immeuble Sageb
Rue d'Atakpame
P.O. Box 4150

LOME

Tel: 21-62-88
Telex: 5357
P

TRINIDAD & TOBAGO

Caribbean Telecoms Ltd.
Corner McAllister Street &
Eastern Main Road, Laventille
P.O. Box 732

PORT-OF-SPAIN

Tel: 624-4213
Telex: 22561 CARTEL WG
Cable: CARTEL, PORT OF SPAIN
CM,E,M,P

Computer and Controls Ltd.

P.O. Box 51
1 Taylor Street

PORT-OF-SPAIN

Tel: (809) 622-7719/622-7985
Telex: 38722798 COMCON WG
LOGGO AGENCY 1264

A,P

Feral Assoc.

8 Fitzgerald Lane

PORT-OF-SPAIN

Tel: 62-36864, 62-39255
Telex: 22432 FERALCO
Cable: FERALCO
M

TUNISIA

Tunisie Electronique S.A.R.L.
31 Avenue de la Liberte
TUNIS

Tel: 280-144
C,E,P

Tunisie Electronique S.A.R.L.

94, Av. Jugurtha, Mutuelleville
1002 **TUNIS-BELVEDERE**

Tel: 280144

Telex: 13238

C,E,P

Corema S.A.

1 ter. Av. de Carthage

TUNIS

Tel: 253-821
Telex: 12319 CABAM TN
M

TURKEY

E.M.A

Mediha Eldem Sokak No. 41/6

Yenisehir

ANKARA

Tel: 319175
Telex: 42321 KTX TR
Cable: EMATRADE ANKARA
M

Teknim Company Ltd.

Iran Caddesi No. 7

Karakliidere

ANKARA

Tel: 275800
Telex: 42155 TKNM TR
C,E

Kurt & Kurt A.S.

Mithatpasa Caddesi No. 75

Kat 4 Kizilay

ANKARA

Tel: 318875/6/7/8
Telex: 42490 MESR TR
A

Saniva Bilgisayar Sistemleri A.S.

Buyukdere Caddesi 103/6

Gayrettepe

ISTANBUL

Tel: 1673180
Telex: 26345 SANI TR
C,P

Best Inc.

Esentepe, Gazeteciler Sitesi

Keskin Kalem

Sokak 6/3, Gayrettepe

ISTANBUL

Tel: 172 1328, 173 3344
Telex: 42490
A

UNITED ARAB EMIRATES

Emitac Ltd.

P.O. Box 1641

SHARJAH

Tel: 591181

Telex: 68136 EMITAC EM

Cable: EMITACH SHARJAH

E,C,M,P,A

Emitac Ltd.

P.O. Box 2711

ABU DHABI

Tel: 820419-20

Cable: EMITACH ABUDHABI

Emitac Ltd.

P.O. Box 8391

DUBAI,

Tel: 377591

Emitac Ltd.

P.O. Box 473

RAS AL KHAIMAH

Tel: 28133, 21270

UNITED KINGDOM ENGLAND

Hewlett-Packard Ltd.

Miller House

The Ring, **BRACKNELL**

Berks RG12 1XN

Tel: 44/344/424-898

Telex: 848733

E

Hewlett-Packard Ltd.

Elstree House, Elstree Way

BOREHAMWOOD, Herts WD6 1SG

Tel: 01 207 5000

Telex: 8952716

C,E

Hewlett-Packard Ltd.

Oakfield House, Oakfield Grove

Clifton **BRISTOL**, Avon BS8 2BN

Tel: 44-272-736 806

Telex: 444302

C,E,P

Hewlett-Packard Ltd.

9 Bridewell Place

LONDON EC4V 6BS

Tel: 44-01-583-6565

Telex: 298163

C,P

Hewlett-Packard Ltd.

Pontefract Road

NORMANTON, West Yorkshire WF6 1RN

Tel: 44/924/895 566

Telex: 557355

C,P

Hewlett-Packard Ltd.

The Quadrangle

106-118 Station Road

REDHILL, Surrey RH1 1PS

Tel: 44-737-686-55

Telex: 947234

C,E,P

Hewlett-Packard Ltd.

Avon House

435 Stratford Road

Shirley, **SOLIHULL**, West Midlands

B90 4BL

Tel: 44-21-745-8800

Telex: 339105

C,E,P

Hewlett-Packard Ltd.

Heathside Park Road

Cheadle Heath, Stockport

SK3 ORB, United Kingdom

Tel: 44-061-428-0828

Telex: 668068

A,C,E,M,P

Hewlett-Packard Ltd.

Harmon House

No. 1 George Street

UXBRIDGE, Middlesex UX8 1YH

Tel: 895 720 20

Telex: 893134/5

C,CM,E,M,P

Hewlett-Packard Ltd.

King Street Lane

Winnersh, **WOKINGHAM**

Berkshire RG11 5AR

Tel: 44/734/784774

Telex: 8471789

A,C,E,M,P

NORTHERN IRELAND

Hewlett-Packard (Ireland) Ltd.

Carrickfergus Industrial Centre

75 Belfast Road, Carrickfergus

CO. ANTRIM BT38 8PM

Tel: 09603 67333

C,E

Cardiac Services Company

95A Finaghy Road South

BELFAST, BT10 OBY

Tel: 0232-625566

Telex: 747626

M

SCOTLAND

Hewlett-Packard Ltd.

1/3 Springburn Place

College Milton North

EAST KILBRIDE, G74 5NU

Tel: 041-332-6232

Telex: 779615

C,E

Hewlett-Packard Ltd.

West Lothian, EH30 9TG

Tel: 031 331 1188

Telex: 72682 HPSQFYG

C,CM,E,M,P

UNITED STATES

Hewlett-Packard Co.

Customer Information Center

Tel: (800) 752-0900

Hours: 6:00 AM to 5:00 PM

Pacific Time

Alabama

Hewlett-Packard Co.

2100 Riverchase Center

Building 100 - Suite 118

BIRMINGHAM, AL 35244

Tel: (205) 988-0547

A,C,M,P*

Hewlett-Packard Co.

420 Wynn Drive

HUNTSVILLE, AL 35805

Tel: (205) 830-2000

C,CM,E,M*

Alaska

Hewlett-Packard Co.

4000 Old Seward Highway

Suite 101

ANCHORAGE, AK 99503

Tel: (907) 563-8855

C,E

Arizona

Hewlett-Packard Co.

8080 Pointe Parkway West

PHOENIX, AZ 85044

Tel: (602) 273-8000

A,C,CM,E,M,P

Hewlett-Packard Co.

3400 East Britannia Dr.

Bldg. C, Suite 124

TUCSON, AZ 85706

Tel: (602) 573-7400

C,E,M**

California

Hewlett-Packard Co.

99 South Hill Dr.

BRISBANE, CA 94005

Tel: (415) 330-2500

C

Hewlett-Packard Co.

1907 North Gateway Blvd.

FRESNO, CA 93727

Tel: (209) 252-9652

C,M

Hewlett-Packard Co.

Hewlett-Packard Co.
5725 W. Las Positas Blvd.
PLEASANTON, CA 94566
Tel: (415) 460-0282
C

Hewlett-Packard Co.
4244 So. Market Court, Suite A
SACRAMENTO, CA 95834
Tel: (916) 929-7222
A*,C,E,M

Hewlett-Packard Co.
9606 Aero Drive
SAN DIEGO, CA 92123
Tel: (619) 279-3200
C,CM,E,M

Hewlett-Packard Co.
3003 Scott Boulevard
SANTA CLARA, CA 95054
Tel: (408) 988-7000
Telex: 910-338-0586
A,C,CM,E

Hewlett-Packard Co.
2150 W. Hillcrest Dr.
THOUSAND OAKS, CA 91320
(805) 373-7000
C,CM,E

Colorado
Hewlett-Packard Co.
2945 Center Green Court South
Suite A
BOULDER, CO 80301
Tel: (303) 499-6655
A,C,E

Hewlett-Packard Co.
24 Inverness Place, East
ENGLEWOOD, CO 80112
Tel: (303) 649-5000
A,C,CM,E,M

Connecticut
Hewlett-Packard Co.
500 Sylvan Av.
BRIDGEPORT, CT 06606
Tel: (203) 371-6454
C,E

Hewlett-Packard Co.
47 Barnes Industrial Road South
WALLINGFORD, CT 06492
Tel: (203) 265-7801
A,C,CM,E,M

Florida
Hewlett-Packard Co.
2901 N.W. 62nd Street
FORT LAUDERDALE, FL 33309
Tel: (305) 973-2600
C,E,M,P*

Hewlett-Packard Co.
6800 South Point Parkway
Suite 301
JACKSONVILLE, FL 32216
Tel: (904) 636-9955
C*,M**

Hewlett-Packard Co.
255 East Drive, Suite B
MELBOURNE, FL 32901
Tel: (305) 729-0704
CM,E

Hewlett-Packard Co.
6177 Lake Ellenor Drive
ORLANDO, FL 32809
Tel: (305) 859-2900
A,C,CM,E,P*

Hewlett-Packard Co.
4700 Bayou Blvd.
Building 5
PENSACOLA, FL 32503
Tel: (904) 476-8422
A,C,M

Hewlett-Packard Co.
5550 W. Idlewild, #150
TAMPA, FL 33614
Tel: (813) 884-3282
C,E,M,P

Georgia
Hewlett-Packard Co.
2015 South Park Place
ATLANTA, GA 30339
Tel: (404) 955-1500
Telex: 810-766-4890
A,C,CM,E,M,P*
Hewlett-Packard Co.
3607 Parkway Lane
Suite 300
NORCROSS, GA 30092
Tel: (404) 448-1894
C,E,P

Hawaii
Hewlett-Packard Co.
Pacific Tower
1001 Bishop St.
Suite 2400
HONOLULU, HI 96813
Tel: (808) 526-1555
A,C,E,M

Idaho
Hewlett-Packard Co.
11309 Chinden Blvd.
BOISE, ID 83714
Tel: (208) 323-2700
C

Illinois
Hewlett-Packard Co.
2205 E. Empire St.
P.O. Box 1607
BLOOMINGTON, IL 61702-1607
Tel: (309) 662-9411
A,C,E,M**

Hewlett-Packard Co.
525 W. Monroe, #1308
CHICAGO, IL 60606
Tel: (312) 930-0010
C

Hewlett-Packard Co.
1200 East Diehl Road
NAPERVILLE, IL 60566
Tel: (312) 357-8800
C

Hewlett-Packard Co.
5201 Tollview Drive
ROLLING MEADOWS, IL 60008
Tel: (312) 255-9800
Telex: 910-687-1066
A,C,CM,E,M

Indiana
Hewlett-Packard Co.
11911 N. Meridian St.
CARMEL, IN 46032
Tel: (317) 844-4100
A,C,CM,E,M

Hewlett-Packard Co.
111 E. Ludwig Road
Suite 108
FT. WAYNE, IN 46825
Tel: (219) 482-4283
C,E

Iowa
Hewlett-Packard Co.
4070 22nd Av. SW
CEDAR RAPIDS, IA 52404
Tel: (319) 390-4250
C,E,M

Hewlett-Packard Co.
4201 Corporate Dr.
WEST DES MOINES, IA 50265
Tel: (515) 224-1435
A**,C,M**

Kansas
Hewlett-Packard Co.
North Rock Business Park
3450 N. Rock Rd.
Suite 300
WICHITA, KS 67226
Tel: (316) 684-8491
C,E

Kentucky
Hewlett-Packard Co.
305 N. Hurstbourne Lane,
Suite 100
LOUISVILLE, KY 40223
Tel: (502) 426-0100
A,C,M

Louisiana
Hewlett-Packard Co.
160 James Drive East
ST. ROSE, LA 70087
P.O. Box 1449
KENNER, LA 70063
Tel: (504) 467-4100
A,C,E,M,P

Maryland
Hewlett-Packard Co.
3701 Koppers Street
BALTIMORE, MD 21227
Tel: (301) 644-5800
Telex: 710-862-1943
A,C,CM,E,M

Hewlett-Packard Co.
2 Choke Cherry Road
ROCKVILLE, MD 20850
Tel: (301) 948-6370
A,C,CM,E,M

Massachusetts
Hewlett-Packard Co.
1775 Minuteman Road
ANDOVER, MA 01810
Tel: (617) 682-1500
A,C,CM,E,M,P*
Hewlett-Packard Co.
29 Burlington Mall Rd
BURLINGTON, MA 01803-4514
Tel: (617) 270-7000
C,E

Michigan
Hewlett-Packard Co.
4326 Cascade Road S.E.
GRAND RAPIDS, MI 49506
Tel: (616) 957-1970
C,M

Hewlett-Packard Co.
39550 Orchard Hill Place Drive
NOVI, MI 48050
Tel: (313) 349-9200
A,C,E,M
Hewlett-Packard Co.
560 Kirks Rd.
Suite 101
TROY, MI 48084
Tel: (313) 362-5180
C

Minnesota
Hewlett-Packard Co.
2025 W. Larpenteur Ave.
ST. PAUL, MN 55113
Tel: (612) 644-1100
A,C,CM,E,M

Missouri
Hewlett-Packard Co.
1001 E. 101st Terrace Suite 120
KANSAS CITY, MO 64131-3368
Tel: (816) 941-0411
A,C,CM,E,M

Hewlett-Packard Co.
13001 Hollenberg Drive
BRIDGETON, MO 63044
Tel: (314) 344-5100
A,C,E,M

Nebraska
Hewlett-Packard
11626 Nicholas St.
OMAHA, NE 68154
Tel: (402) 493-0300
C,E,M

New Jersey
Hewlett-Packard Co.
120 W. Century Road
PARAMUS, NJ 07652
Tel: (201) 265-5000
A,C,CM,E,M

Hewlett-Packard Co.
20 New England Av. West
PISCATAWAY, NJ 08854
Tel: (201) 562-6100
A,C,CM,E

New Mexico
Hewlett-Packard Co.
7801 Jefferson N.E.
ALBUQUERQUE, NM 87109
Tel: (505) 823-6100
C,E,M

Hewlett-Packard Co.
1362-C Trinity Dr.
LOS ALAMOS, NM 87544
Tel: (505) 662-6700
C,E

New York
Hewlett-Packard Co.
5 Computer Drive South
ALBANY, NY 12205
Tel: (518) 458-1550
A,C,E,M

Hewlett-Packard Co.
9600 Main Street
CLARENCE, NY 14031
Tel: (716) 759-8621
C,E,M

Hewlett-Packard Co.
200 Cross Keys Office Park
FAIRPORT, NY 14450
Tel: (716) 223-9950
A,C,CM,E,M

Hewlett-Packard Co.
7641 Henry Clay Blvd.
LIVERPOOL, NY 13088
Tel: (315) 451-1820
A,C,CM,E,M

Hewlett-Packard Co.
No. 1 Pennsylvania Plaza
55th Floor
34th Street & 7th Avenue
MANHATTAN NY 10119
Tel: (212) 971-0800
C,M*

Hewlett-Packard Co.
15 Myers Corner Rd.
Hollowbrook Park, Suite 2D
WAPPINGERS FALLS, NY 12590
Tel: (914) 298-9125
CM,E

Hewlett-Packard Co.
2975 Westchester Ave
PURCHASE, NY 10577
Tel: (914) 935-6300
C,CM,E

Hewlett-Packard Co.
3 Crossways Park West
WOODBURY, NY 11797
Tel: (516) 682-7800
A,C,CM,E,M

North Carolina
Hewlett-Packard Co.
305 Gregson Dr.
CARY, NC 27511
Tel: (919) 467-6600
C,CM,E,M,P*

Hewlett-Packard Co.
9401 Arrow Point Blvd
Suite 100
CHARLOTTE, NC 28217
Tel: (704) 527-8780
C*

Hewlett-Packard Co.
5605 Roanne Way
GREENSBORO, NC 27420
Tel: (919) 852-1800
A,C,CM,E,M,P*

Ohio
Hewlett-Packard Co.
2717 S. Arlington Road
AKRON, OH 44312
Tel: (216) 644-2270
C,E

Hewlett-Packard Co.
4501 Erskine Road
CINCINNATI, OH 45242
Tel: (513) 891-9870
C,M

Hewlett-Packard Co.
15885 Sprague Road
CLEVELAND, OH 44136
Tel: (216) 243-7300
A,C,CM,E,M

Hewlett-Packard Co.
9080 Springboro Pike
MIAMISBURG, OH 45342
Tel: (513) 433-2223
A,C,CM,E*,M

Hewlett-Packard Co.
One Maritime Plaza, 5th Floor
720 Water Street
TOLEDO, OH 43604
Tel: (419) 242-2200
C

Hewlett-Packard Co.
675 Brooksedge Blvd.
WESTERVILLE, OH 43081
Tel: (614) 891-3344
C,CM,E*

Oklahoma
Hewlett-Packard Co.
3525 N.W. 56th St.
Suite C-100
OKLAHOMA CITY, OK 73112
Tel: (405) 946-9499
C,E*,M

SALES & SUPPORT OFFICES

Arranged alphabetically by country

9

UNITED STATES (Cont'd)

Hewlett-Packard Co.
6655 South Lewis,
Suite 105
TULSA, OK 74136
Tel: (918) 481-6700
A**,C,E,M*,P*

Oregon

Hewlett-Packard Co.
9255 S. W. Pioneer Court
WILSONVILLE, OR 97070
Tel: (503) 682-8000
A,C,E*,M

Pennsylvania

Hewlett-Packard Co.
Heatherwood Industrial Park
50 Dorchester Rd.
Route 22
HARRISBURG, PA 17112-2799
Tel: (717) 657-5900
C

Hewlett-Packard Co.
111 Zeta Drive
PITTSBURGH, PA 15238
Tel: (412) 782-0400
A,C,E,M

Hewlett-Packard Co.
2750 Monroe Boulevard
VALLEY FORGE, PA 19482
Tel: (215) 666-9000
A,C,CM,E,M

South Carolina

Hewlett-Packard Co.
Brookside Park, Suite 122
1 Harbison Way
COLUMBIA, SC 29212
Tel: (803) 732-0400
C,M

Hewlett-Packard Co.
545 N. Pleasantburg Dr.
Suite 100
GREENVILLE, SC 29607
Tel: (803) 232-8002
C

Tennessee

Hewlett-Packard Co.
One Energy Centr. Suite 200
Pellissippi Pkwy.
KNOXVILLE, TN 37932
Tel: (615) 966-4747
A,C,E,M,P

Hewlett-Packard Co.
3070 Directors Row
Directors Square
MEMPHIS, TN 38131
Tel: (901) 346-8370
A,C,E,M

Hewlett-Packard Co.
44 Vantage Way,
Suite 160
NASHVILLE, TN 37228
Tel: (615) 255-1271
A,C,E,M,P

Texas

Hewlett-Packard Co.
1826-P Kramer Lane
AUSTIN, TX 78758
Tel: (512) 835-6771
C,E,P*

Hewlett-Packard Co.
5700 Cromo Dr
EL PASO, TX 79912
Tel: (915) 833-4400
C,E*,M**

Hewlett-Packard Co.
3952 Sandshell Drive
FORT WORTH, TX 76137
Tel: (817) 232-9500
C

Hewlett-Packard Co.
10535 Harwin Drive
HOUSTON, TX 77036
Tel: (713) 776-6400
A,C,E,M,P*

Hewlett-Packard Co.
3301 West Royal Lane
IRVING, TX 75063
Tel: (214) 869-3377
C,E

Hewlett-Packard Co.
109 E. Toronto, Suite 310
McALLEN, TX 78501
Tel: (512) 630-3030
C

Hewlett-Packard Co.
930 E. Campbell Rd.
RICHARDSON, TX 75081
Tel: (214) 231-6101
A,C,CM,E,M,P*

Hewlett-Packard Co.
1020 Central Parkway South
SAN ANTONIO, TX 78232
Tel: (512) 494-9336
A,C,E,M,P*

Utah

Hewlett-Packard Co.
3530 W. 2100 South St.
SALT LAKE CITY, UT 84119
Tel: (801) 974-1700
A,C,E,M

Virginia

Hewlett-Packard Co.
840 Greenbrier Circle
Suite 101
CHESAPEAKE, VA 23320
Tel: (804) 424-7105
C,E,M
Hewlett-Packard Co.
4305 Cox Road
GLEN ALLEN, VA 23060
Tel: (804) 747-7750
A,C,E,M,P*

Hewlett-Packard Co.
Tanglewood West Bldg.
Suite 240
3959 Electric Road
ROANOKE, VA 24018
Tel: (703) 774-3444
C,E,P

Washington

Hewlett-Packard Co.
15815 S.E. 37th Street
BELLEVUE, WA 98006
Tel: (206) 643-4004
A,C,CM,E,M

Hewlett-Packard Co.
1225 Argonne Rd
SPOKANE, WA 99212
Tel: (509) 922-7000
C

West Virginia

Hewlett-Packard Co.
501 56th Street
CHARLESTON, WV 25304
Tel: (304) 925-0492
A,C,M

Wisconsin

Hewlett-Packard Co.
Hewlett-Packard Co.
109 E. Corporate Dr.
BROOKFIELD, WI 53005
Tel: (414) 784-8800
A,C,E*,M

URUGUAY

Pablo Ferrando S.A.C. e l.
Avenida Italia 2877
Casilla de Correo 370
MONTEVIDEO
Tel: 59-82-802-586
Telex: 398802586
A,CM,E,M

Olympia de Uruguay S.A.
Maquines de Oficina
Avda. del Libertador 1997
Casilla de Correos 6644
MONTEVIDEO
Tel: 91-1809, 98-3807
Telex: 6342 OROU UY
P

VENEZUELA

Hewlett-Packard de Venezuela C.A.
3A Transversal Los Ruices Norte
Edificio Segre 2 & 3
Apartado 50933
CARACAS 1050
Tel: (582) 239-4133
Telex: 251046 HEWPACK
A,C,CM,E,M,P

Hewlett-Packard de Venezuela, C.A.
Centro Ciudad Comercial Tamanaco
Nivel C-2 (Nueva Etapa)
Local 53H05
Chua, **CARACAS**
Tel: 928291
P

Albis Venezolana S.R.L.
Av. Las Marias, Ota. Alix,
El Pedregal
Apartado 81025
CARACAS 1080A
Tel: 747984, 742146
Telex: 24009 ALBIS VC
A

Tecnologica Medica del Caribe, C.A.
Multicentro Empresarial del Este
Ave. Libertador
Edif. Libertador
Nucleo "C" - Oficina 51-52
CARACAS
Tel: 339867/333780
M

Hewlett-Packard de Venezuela C.A.
Residencias Tia Betty Local 1
Avenida 3 y con Calle 75
MARACAIBO, Estado Zulia
Apartado 2646
Tel: 58-2-617-5669
Telex: 62464 HPMAR
C,E*

Hewlett-Packard de Venezuela C.A.
Urb. Lomas de Este
Torre Trebol - Piso 11
VALENCIA, Estado Carabobo
Apartado 3347
Tel: (5841) 222992
C,P

YUGOSLAVIA

Do Hermes
General Zdanova 4
YU-11000 **BEOGRAD**
Tel: (011) 342 641
Telex: 11433
A,C,E,M,P

Do Hermes
Celovska 73
YU-61000 **LJUBLJANA**
Tel: (061) 553 170
Telex: 31583
A,C,E,M,P
Elektrotehna
Titova 51
YU-61000 **LJUBLJANA**
CM

Do Hermes
Kralja Tomislava 1
YU-71000 **SARAJEVO**
Tel: (071) 35 859
Telex: 41634
C**,P

ZAIRE

Computer & Industrial Engineering
25, Avenue de la Justice
B.P. 12797
KINSHASA, Gombe
Tel: 32063
Telex: 21552
C,P

ZAMBIA

R.J. Tilbury (Zambia) Ltd.
P.O. Box 32792
LUSAKA
Tel: 215590
Telex: 40128
E

ZIMBABWE

Field Technical Sales (Private) Limited
45, Kelvin Road North
P.O. Box 3458
SALISBURY
Tel: 705 231
Telex: 4-122 RH
E,P

September 1987

Part No. 32344-90005
Printed in U.S.A. 05/87
E0587

