Using the Node Management Services (NMS) Utilities

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Preface

This is the reference manual for users of the Node Management Services Utilities. These utilities are:

- The Node Management Services Configuration Manager (NMMGR).
- The Node Management Maintenance Utility (NMMAINT).
- The Node Management Services Trace/Log File Analyzer (NMDUMP).
- The Node Management Services Conversion Utility (NMMGRVER).
- The Node Management Services Validation Utility (NMMGRVAL).

The major part of this manual covers the NMMGR program. It includes information common to all the subsystems that use NMMGR to create or modify a configuration file. Information that is subsystem-specific is located in the manuals for that subsystem. NMMGR is used to configure any or all of the following subsystems on a network:

- SNA (for HP e3000-IBM data communications)
- BSC (for HP e3000-IBM data communications)
- NS 3000/iX (for HP e3000-HP e3000 data communications)
- Distributed terminal subsystem (for HP e3000-terminal communications)

Special Note

MPE/iX, Multiprogramming Executive with Integrated POSIX, is the latest in a series of forward-compatible operating systems for the HP 3000 line of computers.

In HP documentation and in talking with HP e3000 users, you will encounter references to MPE XL, the direct predecessor of MPE/iX. MPE/iX is a superset of MPE XL. All programs written for MPE XL will run without change under MPE/iX. You can continue to use MPE XL system documentation, although it may not refer to features added to the operating system to support POSIX (for example, hierarchical directories).

Chapter 1 , "Introduction," provides a brief description of each of the NMS utilities.

Chapter 2 , "Basics of NMMGR," describes the basic functions of the Node Management Configuration Manager (NMMGR) in detail. Use this chapter to gain an understanding of how NMMGR works and how to navigate through NMMGR screens.

Chapter 3 , "Using NMMGR in Screen Mode," tells you how to use NMMGR's screen mode interface to begin the configuration process for your system's terminal connections or networking products. It includes step-by-step instructions for getting started in NMMGR and for navigating the top-level screens.

Chapter 4 , "Using NMMGR Utility Screens," describes how to use the NMMGR utility screens to list, maintain, and validate configuration files.

Chapter 5 , "Using NMMGR in Maintenance Mode," tells you how to use NMMGR's maintenance mode interface to manage network directory and configuration files and to generate stream jobs to update remote network directory and configuration files. Each command is described along with its purpose, syntax, parameters, and an example.

Chapter 6 , "NMMAINT," describes the Node Management Services Maintenance Utility (NMMAINT), used to display version numbers for software modules.

Chapter 7 , "NMDUMP," describes the Node Management Services Trace/Log File Analyzer, which provides a means of decoding and formatting logging records and trace messages. Information on running NMDUMP is included.

Chapter 8 , "NMMGRVER," describes the Node Management Services Conversion Utility (NMMGRVER), which enables earlier versions of subsystems to be used with the current version of NMMGR.

Appendix A , "NMS Error Messages," provides a listing of error messages that may be returned while running NMMGR. Each message includes probable causes and actions.

Related Publications

The following manuals may be of interest to you when working with products that use the Node Management Services.

For the Distributed Terminal Subsystem

Configuring Systems for Terminals, Printers, and Other Serial Devices

Troubleshooting Terminals, Printers, and Serial Device Connections

Customizing Terminal and Printer Type Files With the Workstation Configurator

Using HP OpenView DTC Manager

For NS 3000/iX Links and Services

HP e3000/iX Network Planning and Configuration Guide

NS 3000/iX NMMGR Screens Reference Manual

NS 3000/iX Operations and Maintenance Reference Manual

Using NS 3000/iX Network Services

NS 3000/iX Error Messages Reference Manual

NetIPC 3000/XL Programmer's Reference Manual

LAN Cable and Accessories Installation Manual

Central Bus Programmable Serial Interface Installation and Reference Manual

1 Introduction

This chapter introduces you to the Node Management Services Utilities for MPE/iX systems. These programs, installed on your HP e3000 system as part of the **fundamental operating system (FOS)**, allow you to perform various functions related to the configuration of networking and terminal communications.

A brief overview of each of the following is provided in this chapter:

- The Node Management Configuration Manager (NMMGR), used to create or modify configuration and network directory files for a system.
- NMMAINT, used to list individual modules and version numbers of networking software
- NMDUMP, used to format log and trace files.
- NMMGRVER, used to upgrade a configuration file for use with a later version of the operating system.
- NMMGRVAL, used to check if the configuration file has been validated.

NMMGR

The **Node Management Configuration Manager (NMMGR)** is the utility used to create or update configuration and network directory files. These files define the configuration for terminal and serial printer connections and networked connections for HP e3000 computers. Use NMMGR to configure each of the following subsystems:

- The distributed terminal subsystem (DTS), which defines connections for terminals, printers, and other serial devices that will be able to communicate with the system.
- The Network Services (NS) subsystem, which defines the operation of NS links and services between HP e3000 systems.
- The BSC subsystem, which defines BSC communication links between HP e3000 and IBM systems.
- The SNA subsystem, which defines SNA communication links between HP e3000 and IBM systems.

Configuration File

NMMGR stores configuration information in a special MPE **configuration file** that contains the data needed by the system for networking and terminal-to-system communications. The file has the MPE file code NCONF and may contain three kinds of data:

- Standard software operating parameters, such as limits on using MPE resources.
- Node-specific information, such as the name of the local computer and its network address.
- Information needed by the network software in order to communicate with other nodes to which the local node is connected.

The configuration file must be named `NMCONFIG.PUB.SYS` in order to be recognized and used by the system. You may, however, create a configuration file using any valid MPE file name and rename it as `NMCONFIG.PUB.SYS` when you are ready for the system to use the configuration information it contains.

`NMCONFIG.PUB.SYS` *must* reside on LDEV1 in order to be recognized. The system does not have access to other LDEVs at startup and the configuration file is needed at that time.

With a few exceptions, the changes you make to the `NMCONFIG.PUB.SYS` file take effect only when the system is rebooted. In most cases, you should avoid making changes to an active configuration file (one that the system is currently using). There are some changes, however, that may be made while the network is operating. Refer to the

product-specific manuals for details on changes that can be made online.

Backup Configuration File

Specify a backup configuration file name whenever you open or create a configuration file. The default backup configuration file name is NMCBACK.group.account, where *group* and *account* are the logon group and account. Change the name of the file by typing a new name in place of the default. The backup file also has the file type NCONF. Each time a subsystem is successfully validated, the backup file is automatically updated with the configuration information. In the event that something should occur to cause the active configuration file to be corrupted, rename the backup file and avoid having to recreate NMCONFIG.PUB.SYS from scratch.

Sample Configuration File

Hewlett-Packard provides a sample configuration file with every HP e3000 system. This file contains some basic configuration information for the link, NRJE, SNANODE, IMF, DTS and logging subsystems. It can be used as a template to help you when creating a new system configuration. The sample file is named NMSAMP1.PUB.SYS. To use the sample file, make sure you copy it to a new name, then run NMMGR and modify the copy that was just created so that it contains your system's configuration information.

NOTE Check "Copying a Configuration File" in Chapter 3 , "Using NMMGR in Screen Mode," for important information about this procedure.

Network Directory File

NMMGR stores network directory information for the NS subsystem in a second special file called the **network directory file**. This file, of file type NDIR, contains information required for one node to communicate with another node in an internetwork (network of networks).

The network directory file must be named NSDIR.NET.SYS but, like the configuration file, you may create a directory file under another name and rename it when you are ready for the system to use the directory information it contains.

NOTE A network directory uses a KSAM file pair. Therefore, if copying a directory, be sure to copy both the data file and the key file. If the file name you create is NSDIR.NET.SYS, the KSAM pair of the file will be named NSDIRK.NET.SYS, and its file type will be KSAMK.

Operating Modes

NMMGR includes two interfaces thatcan be used to enter or modify data:

- The **screen interface**, a VPLUS block-mode interface, presents a series of screens that you can use to display or modify existing configuration data or enter new data. When using this interface, you are operating NMMGR in screen mode.
- The **maintenance interface**, a character interface, is used primarily from within batch jobs to update configuration data. This interface may also be run interactively from within NMMGR. The maintenance interface includes commands that let you manage network directories and configuration files. When using this interface to run NMMGR, you are operating in maintenance mode.

NMMAINT

The **Node Management Services Maintenance Utility (NMMAINT)**, lists individual modules and version numbers of the NS and SNA links and services installed on the HP e3000 system on which it is run.

Each software module within a subsystem has its own version ID number. If the version, update, and fix levels of these modules do not match, the subsystem will not work correctly. NMMAINT helps diagnose system problems by detecting missing or invalid software modules. The information provided by NMMAINT must be included in any change request (CR) submitted to HP.

See Chapter 6 , “NMMAINT,” of this manual for details on the function and use of NMMAINT.

NMDUMP

The **Node Management Services Trace/Log File Analyzer (NMDUMP)** is the NMS utility that you use to format files created by the logging and tracing facilities. NMDUMP translates the log and trace files into a format that is easier to read.

Logging and tracing are diagnostic and debugging services provided by NMS.

Tracing

Tracing records subsystem calls and/or the sequences of module execution. Tracing is provided at both the user level and at an internal level. User-level tracing provides a record of data communications subsystem intrinsic calls. Internal level tracing records internal state transitions and the sequences of module execution within data communications subsystems. It should only be used on the recommendation of an HP service representative.

Logging

Logging records subsystem events for all data communications links. It records the usage of the communications network resources and serves as a tool in resolving network problems.

Logging can be performed at three levels: network logging, event logging, and link level logging. You choose the level of logging for a particular system through the NMMGR configuration for that system.

For information on using logging and tracing for NS 3000/iX products, see the *NS 3000/iX Operations and Maintenance Reference Manual*. For information on using logging and tracing for HP-to-IBM products, see the *Node Manager's Guide* for each product. For more information on NMDUMP, see Chapter 7 , “NMDUMP,” of this manual.

NMMGRVER

The **Node Management Services Conversion Utility (NMMGRVER)** is a program that converts configuration files created with NMMGR from an earlier version to the latest format. NMMGRVER helps provide a migration path for configuration files developed using one version of the software so that you can more easily move to a later version. The ability to convert the major part of network configuration files eliminates the need for you to reenter sometimes complex configuration and network directory values.

See Chapter 8 , “NMMGRVER,” of this manual for more information on NMMGRVER and its use in the migration process.

NMMGRVAL

This utility checks to see if the configuration file has been validated. It can be included in a shutdown UDC or command script to check whether the DTC subsystem has been validated before attempting to shut down the system.

The syntax is:

```
:run nmmgrval;parm=1
```

```
END OF PROGRAM
:showjcw
VALDTS = 0
VALNETXPORT = 0
VALIBM = 0
VALOSI = 0
:
```

2 Basics of NMMGR

This chapter describes the basic functions of the Node Management Configuration Manager (NMMGR) in detail. Use this chapter to gain an understanding of how the utility works and how to navigate through NMMGR screens.

The following topics are discussed:

- NMMGR screens, including a discussion of common screen elements and function keys.
- Moving between screens in NMMGR.
- Getting help about the function of NMMGR, the use of individual screens, or the specific configuration values to be entered at a particular screen.
- Getting information about error messages generated by the NMMGR utility.

NMMGR Screens

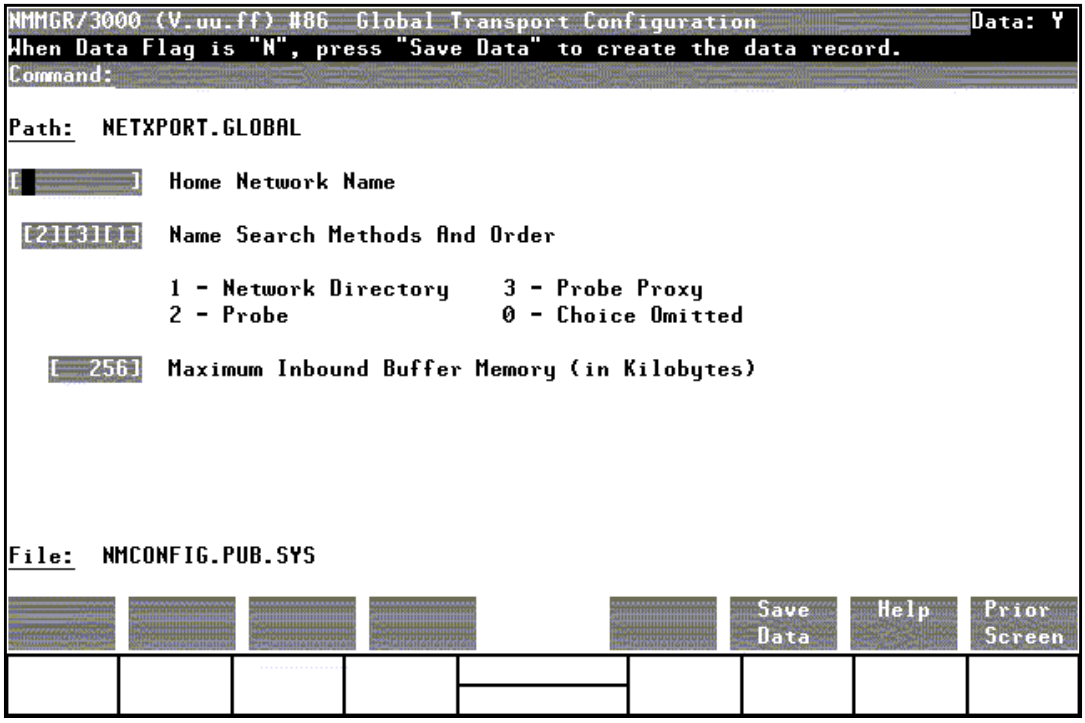
Each NMMGR screen may have multiple purposes. Some screens provide menus of items for selecting a subbranch of screens that you will be moving through. Some screens present a selection of configured items and allow you to either choose items you want to modify or add new items to the list. Still other NMMGR screens allow you to enter data to define configuration values for a selected item. If running the latest version of NMMGR, some screens serve more than one of these purposes.

It is not important that you be able to distinguish one type of screen from another. There are, however, certain basic elements that are common to all screens that it is helpful to understand.

Common Screen Elements

The screen shown in Figure 2-1 illustrates the common elements found in NMMGR screens. Each of these elements are described here.

Figure 2-1 Common Screen Elements



Header

The screen header is located at the top of the screen (the top three lines), and contains five elements, each of which is described here. The five elements are:

- Program name (NMMGR/3000) and version number
- Screen number and title
- Data flag
- Message field
- Command window

Program Name and Version Number

The program name and version number are always displayed in a protected field at the top of the screen. (Protected means that information cannot be typed into the field.)

Screen Number and Title

To the right of the program name and version number is the screen number followed by the screen title. Each screen number is unique for that screen. There is no significance to the order of the numbers. They are strictly for convenience in referencing information about a screen in various reference documents.

Screen titles are also unique for each screen and will generally indicate the purpose and content of the screen.

Data Flag

The data flag is a Yes or No indicator located in the upper-right corner of screens that contain data entry fields. The data flag indicates whether or not a data record has already been created for the screen.

The data flag is an important indicator in cases where default information is supplied in the fields of a screen when a new configuration file is created. The information in the fields has not yet been saved, even though it may appear that the information on the screen is complete. If you want the information on the screen to become a part of the configuration, you must press the **[Save Data]** function key to create the actual data record. The data flag will change from N to Y, verifying that the data has been made part of the configuration file.

Once a data record has been created for a screen, the data flag is set to Y whenever you return that screen.

Message Field

The message field is the second line of the header and may contain one of two types of information:

- The action that this screen requires
- An NMMGR error message

This line is a full-bright inverse video line that is used only for displaying information. You can obtain more information about the errors that may appear in this field by using the Error Information screen, which is described later in this chapter.

Command Window

Each screen includes a field labeled Command: that is located below the message field. This field, called the **command window**, accepts commands rather than accepting data. This is an unprotected field and is displayed in half-bright inverse video. You can enter the following types of commands in this window:

- NMMGR commands. The valid screen mode commands and their meanings are shown in Table 2-1. You can enter each command using the full command name or you can abbreviate the command by

entering only the portion to the left of the bracket as shown in the table.

- MPE commands.
- NMMGR path commands. Direct path branching and brother branching are described in this chapter.

To enter a command, position the cursor at the `Command:` window by pressing the **[Home]** key (the key on your terminal with the diagonal arrow or the word "Home" on it). You can also use the **[TAB]** or cursor (arrow) keys to move the cursor to the command window. Once you are there, type in the command and press **[ENTER]**.

NOTE You must press **[ENTER]**, not **[RETURN]**, to execute the command.

When there is a command in the command window, pressing **[ENTER]** executes only the command in the window. It will not send other data on the screen to the computer.

Some NMMGR commands transfer you directly to other screens.

The NMMGR command set includes the colon (:). You can execute any programmatically executable MPE command from the command window by prefacing it with a colon. For example, you could type `:LISTF` and press **[ENTER]**. When MPE is finished processing your command, it prompts you to press **[RETURN]** to return to the screen interface.

You can process only one command in the command window at a time.

Table 2-1 NMMGR Screen Mode Commands

NMMGR Command	Action
`@path`	Branches to the screen whose path name is given in path.
`:MPECommand`	Executes MPECommand. MPECommand must be a programmatically executable MPE command.
`COM[PRESS]`	Transfer to the Compress screen.
`CON[FIGURATION]` or `@`	Transfers to the Main screen.
`COP[YSUB]`	Transfers to the Configuration Subtree Copy screen.
`ER[RORS]`	Displays the Error Information screen.
`EX[IT]`	Exits from NMMGR (same as QUIT).
`H[ELP] or ?`	Calls up help function. (See "Getting Help" in this chapter.)
`M[AIN]`	Transfers to the Main screen.

Table 2-1 NMMGR Screen Mode Commands

NMMGR Command	Action
NET[DIR](NS Only)	Transfers to the Network Directory Main screen. (You must already have opened the network directory file.) Refer to the NS manuals for more information.
NEX[T]	Transfers to a brother screen. (See “Branching” in this chapter.)
NIG[UIDE] (NS Only)	Transfers to the Guided HP Configuration screen. Refer to the NS manuals for more information.
NIU[PDATE] (NS Only)	Transfers to the Guided HP Configuration screen. Refer to the NS manuals for more information.
NM[MGRCMD]	Transfers to the maintenance mode interface.
OP[EN]	Transfers to the Open Configuration/Directory File screen.
OU[TPUT]	Transfers to the Output Configuration File screen.
P[RIOR]	Returns to the previous screen. Same as pressing **[Prior Screen]**.
Q[UIT]	Exits from NMMGR (same as EXIT).
R[EFRESH]	Refreshes the current screen.
ST[OP]	Stops the guided configuration process.
SU[BGUIDE] (NS Only)	Transfers to the Guided HP Configuration screen. Refer to the NS manuals for more information.
U[TILITY]	Transfers to the Utility screen.
VA[LIDATE]	Transfers to the Validate Configuration File screen.
VE[RSION]	Displays version information.

Main Window

The major portion of each screen lists menu choices, displays information and selection choices, and presents fields for entering or displaying information. With the exception of data entry fields, the information on the screen is protected against modification.

Path Name

On most screens that can be reached by direct path branching, the **path name** used to reach the screen is displayed in the upper-left corner of the main screen window. The path name consists of all the screen names between the root (top of the structure) and the current screen, with the names separated by periods.

Data Fields and Menu Choices

Data can be entered only into unprotected fields. For screens with more than one unprotected field, the cursor automatically moves to the next unprotected field when you reach the end of the present field or if you press **[TAB]**.

Generally, the **[TAB]** key is used to step through the fields from the top of the screen to the bottom. If you need to back up to a previous field, use the **[SHIFT][TAB]** key combination. For more information, consult you *Terminal Reference Manual*.

When menu choices are presented on the screen, they are usually associated with one of the function keys at the bottom of the screen. To select the menu item, press the function key that corresponds to the item.

Other screens, sometimes referred to as **select screens**, present a list of configured items in protected data fields. They also contain a data entry field into which you can type the name of one of the configured items and select it for modification. Alternatively, you can type in a new name for an item to be added to the list. Press a function key that lets you perform an action on the selected item (add, modify, delete, rename). Pressing the function key will cause the action to be performed and often will cause a new screen to be displayed, allowing you to modify or define the selected item.

Configuration File Name

NMMGR displays the name of the configuration file that you are working on in the area called `File:` at the bottom of each screen. This name is shown as `filename.group.acct` in Figure 2-1. On an actual screen, the name of the file you created or opened at the Open Configuration/Directory File screen is displayed at this location on the screen. The file name is not an input field; to change the working file, use the Open Configuration/Directory File screen.

Function Keys

Each NMMGR screen has a set of eight softkeys, or **function keys**, which vary in function from screen to screen. Some screens may use only a few function keys, while others have functions assigned to all eight keys. The **[Prior Screen]** and **[Help]** function keys are present in nearly all screens. Other softkeys are also present, depending on the purpose of the screen you are viewing. Some of the more common function keys are described here. For many screens, you can find information on that screen's function keys in the Help information associated with the screen.

Prior Screen Key

Except for a limited number of screens, such as the Error Information screen and the Guided Configuration screen, the **[Prior Screen]** key is the right-most function key, **[f8]**.

With a few exceptions (as listed), the screen displayed when **[Prior Screen]** is pressed will always be the screen most recently visited prior to the current screen, regardless of the manner in which you reached the current screen. In order to show the correct screen, NMMGR maintains a **prior screen list**, which is a sequential list of the screens that have been displayed. Pressing **[Prior Screen]** displays the most recent screen in the prior screen list and removes that screen from the list.

The most recent screen in the list is the screen that was visited just prior to the current screen, with five exceptions:

- When you display the Error Information screen, NMMGR does not put this screen in your prior screen list. Thus, pressing **[Prior Screen]** never transfers you to the Error Information screen, even if it was the latest screen you displayed.
- After reaching the Validate screen in guided configuration, the prior screen becomes the screen with which you began the guided configuration.
- If you use the command window to return to a screen already visited, NMMGR drops any screens visited after this screen from the prior screen list.
- If you use the **[Help]** key to display a help information screen, the help screen will not appear in the prior screen list.
- Using the NEXT command does not update the prior screen list.

Help Key

Most NMMGR screens have a **[Help]** key as the second key from the right. Pressing this key displays a help information screen. The help information relates specifically to the screen from which you pressed the **[Help]** key. It describes screen usage, parameters, and function key operation for that screen. See “Getting Help” in this chapter for more information on the NMMGR Help system.

Save Data Key

Screens with data entry fields have a **[Save Data]** key, usually as the third key from the right-hand side. Pressing this key creates or modifies the data record and causes the data entered in the screen to be transferred to the configuration file. If the Data Flag is “N”, pressing **[Save Data]** will cause the Data Flag to change to “Y”.

"Go To" Keys

Some keys take you to a specific screen. There may be one or more keys on the screen that tell NMMGR to "go to" a new screen. For example, the **[Go to OUTPUT]** key on the Utility screen takes you directly to the Output Configuration File screen.

Next Page/Prev Page Keys

Some NMMGR screens contain data or display sets of items that will not fit in a single screen. When this occurs, the screen data is continued on one or more "pages". The screens will include function keys that allow you to move back and forth between the pages of the screen. **[Next Page]** moves you to the subsequent page of data. **[Prev Page]** moves you to the prior page of data. Some multiple page screens also include **[First Page**] and **[Last Page]** keys, that take you to the first or last page of the data.

Refreshing the Screen

If you have entered data or changed values on a data screen and decide not to make the changes before you have entered them into the configuration file, you can refresh the screen to return it to the state it was in before you made the changes. Simply enter REFRESH (or the abbreviation R) in the command window and press **[ENTER]**. NMMGR will warn you that the screen has changed since you last updated it. Enter REFRESH again; NMMGR refreshes the screen and shows its current configuration file data. In addition, refreshing the screen resets the terminal strap settings.

You can also use the REFRESH command to "clean up" the screen after a "TELL" message or other interference has appeared on the screen.

Entering Data

Enter data into NMMGR by typing the appropriate information in the data entry fields on a screen and pressing the **[Save Data**] key. (The **[ENTER]** key can be used, if the command window is blank.) This causes the data in the fields to be included in the configuration file, as a data record. NMMGR confirms that you have updated the configuration file by printing the following message in the message field:

```
Configuration data updated.
```

NOTE The data from the screen is immediately included into the configuration file. NMMGR does not wait until you exit the program to save the new information. You should be very careful to change only certain information in an active configuration file.

If you enter data in a field and then try to transfer to another screen (by pressing a function key or by using the command window) before saving the data, NMMGR will print the following message:

```
Warning: Screen changed. Use UPDATE to save data. (NMGRWARN7)
```

This warning cautions you against unintentionally leaving a data screen before you have updated the configuration file. If you decide you do not want to update the configuration file with the data on the screen, you can ignore the warning and repeat the action to transfer to another screen.

If you enter the wrong type of data in any field and try to update the configuration file, NMMGR prints an error message that corresponds to the first field with invalid data. NMMGR highlights and underlines the fields with invalid data and positions the cursor at the first field with invalid data. For example, suppose you enter an alphabetic character in a location that must contain an integer. When you try to update the file, NMMGR may print:

```
The field can contain only digits.
```

Moving Between Screens

There are two ways to move from one NMMGR screen to another. One way is to use the function keys present on one screen to select and move to another screen in a progression. The second way is to enter a path name in the command window to move directly to a specified screen.

Moving with Function Keys

When creating a configuration file, you will generally traverse downward on one of the configuration branches until you have completed configuration for a subsystem.

Normally, you will make selections or enter data into the lowest level data screens of a branch before moving to another branch. You may need to transfer only to screens directly above or below your current screen in the structure. This is generally accomplished by pressing the appropriate function key.

Branching

Branching is a method you can use to go directly to a particular screen, rather than traveling through every screen in a branch to get to that screen.

Direct Path Branching

Use **direct path branching** to transfer from any NMMGR screen to any screen having a path name in one of the subsystem branches. To use this feature, you must be familiar with the tree structure of the configuration file. You enter `@pathname` in the command window to cause NMMGR to transfer you to the screen at the end of the specified path name. For example, when configuring SNA, you could enter `@SNANODE.PU3000E` in the command window to see the LUs configured for the node PU3000E. The path name for each subsystem configuration screen is displayed in the Path field of each screen.

Brother Branching

Screens that share a common parent screen are referred to as brothers. If you are working in a screen with one or more brothers, you can use the `NEXT` command to transfer to the next brother screen. This feature is called **brother branching**.

For example, the unguided NS configuration screen called `NETXPORT` Configuration has three subscreens, or children, referred to here by their path names:

`NETXPORT.GLOBAL`,

NETXPORT.GPROT, and

NETXPORT.NI.

These three screens are **brothers**. To transfer directly from one of these screens to its brother without going back through the parent screen you would simply type NEXT in the command window and press **[ENTER]**.

The command would look like this:

```
Command: NEXT
```

The screens are visited in the order their names appear on the parent screen. Typing NEXT in the command window will transfer you to the next brother as long as one exists. When the last brother screen is reached, typing NEXT will transfer you to the first brother screen. Typing NEXT has no effect on the prior screen list.

Getting Help

Help is available for many of the NMMGR screens you will be using. It is available for all unguided NS configuration screens. It is also available for the screens used to configure the distributed terminal subsystem and those used for guided NS configuration. You can also get help on general topics and NMMGR commands.

Getting Help on Screens

The simplest way to use the help facility is to press the **[Help]** function key while at the screen for which you need information. (Entering `HELP` in the command window also presents you with the help information for the current screen.) You will immediately be presented with text that describes the screen, each parameter configured using the screen, and the operation associated with each of the screen's function keys.

Help messages are provided as an aid to configuration and are not intended to be a complete reference. They provide only the information that is immediately needed to understand how to use a screen. If you need more detailed information than is provided by a help message, refer to the configuration guide for the link you are configuring.

Entering Help Mode

You can also access the NMMGR help system by entering a ? in the command window. This puts you into help mode, and presents you with a list of available help topics. One of these topics, Index, provides a list of parameters and the screens on which they are configured. Path branching information is included where appropriate. You can browse through the topics until you terminate help mode by typing `end`, `exit`, or `:`. Terminating help mode returns you to the screen where you entered help mode.

Getting Help on Specific Topics

You can use the `HELP` command followed by a keyword to get help on a list of specific topics. The following are the available help keywords:

- Enter `HELP OVERVIEW` to see a brief explanation of the operation of NMMGR.
- Enter `HELP ROADMAP` to see a map of the screen structure of NMMGR. You will also receive a list of additional keywords, consisting of the subsystems supported by NMMGR. Each of these subsystem names, such as `LINKCONF`, can be used as a help message qualifier to obtain a map of the screens pertaining to the listed subsystem. A qualifier, which also is considered a keyword, must follow the main keyword with a comma separating the two

keywords. For example, if you wanted to see a map of LINKCONF screens, you would enter HELP ROADMAP,LINKCONF in the command window. Every screen name shown in these screen maps is also a keyword and can be used with the HELP command and the FIELDS qualifier. For example, if you wanted to see field descriptions for the screen called LAN, you would enter HELP LAN,FIELDS in the command window.

- Enter HELP COMMANDS to obtain a list of commands available from within the screen interface. For information about a specific command, enter the name of the command as a keyword following the word HELP in the command window.
- Enter HELP MAINT to see a list of commands available within maintenance mode. For information about a specific command, enter the name of the command as a keyword following the word HELP in the command window. When you obtain information about a specific command, the help text will list any qualifiers, such as PARMS, OPERATION, EXAMPLE, and ALL. You then could enter the command again, this time followed by a comma and a qualifier, to obtain even more information.

Getting Help with Errors

When NMMGR encounters an error, it displays a brief message in the message field of the current screen. In most cases, these messages provide enough information for you to correct the error and continue operation. Occasionally, however, you may encounter a more serious error or the cause of an error may not be readily apparent. You may then need additional information to understand the cause of the error.

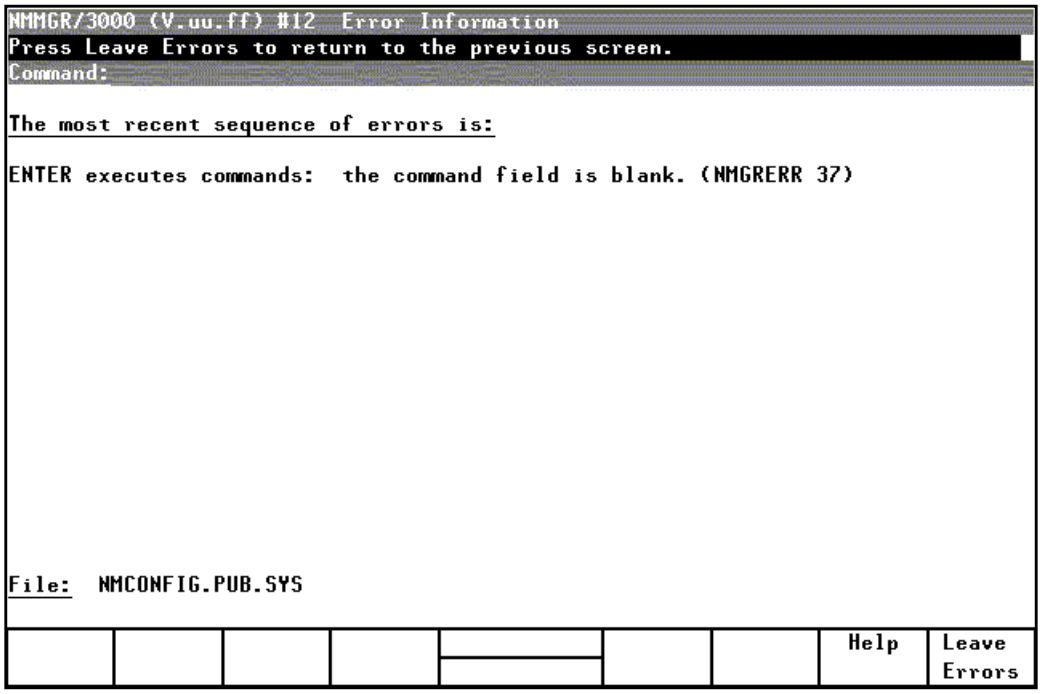
Error Information Screen

The Error Information screen displays the latest error that NMMGR encountered and associated error messages, if any. To display the Error Information screen, type ERRORS in the command window of any screen and press **[ENTER]**.

Note that as many as five levels of error messages can be displayed in the Error Information screen, depending on where the error occurred in the software. However, it does not display the prompts that are a result of entering invalid data types in fields.

Figure 2-2 shows an example of the error messages displayed on the Error Information screen. In this case, a user who was not the creator of the configuration file, tried to compress the file. This action is not allowed. Note the hierarchy of the errors returned as shown in the example. The top level is the NMMGR error message; the other levels come from software accessed by NMMGR.

Figure 2-2 Error Information Screen



NMMGR Error Messages

Error messages associated with the NMMGR program are listed in Appendix A , “NMS Error Messages,” of this manual. Each error message is listed with at least one possible cause and a recommended action for each cause. You also may need to refer to the MPE file system and operating system manuals for explanations of any MPE error messages that may appear on the Error Information screen.

3 Using NMMGR in Screen Mode

This chapter tells you how to use NMMGR's screen mode interface to begin the configuration process for your system's terminal connections or networking products. It includes step-by-step instructions for getting started in NMMGR and for navigating the top-level screens. Those screens are described here along with their purpose.

This chapter describes the following topics in detail:

- What you need before you start NMMGR.
- How to start NMMGR in screen mode.
- How to open or create a configuration file or a directory file.
- How to choose a subsystem for configuration from the Main screen, NMMGR's top-level menu. An overview of the configuration tasks performed for each subsystem is included.

NOTE This chapter does not take you through the configuration process. For detailed information on configuring a specific subsystem, refer to the configuration guide for that subsystem. For detailed information on the unguided configuration screens for the Network Services subsystem, refer to the *NS 3000/iX NMMGR Screens Reference Manual*.

Before You Start

There are a number of requirements that you need to be aware of before you attempt to run NMMGR:

- You must have MPE Node Manager (NM) or Network Administrator (NA) capability to run NMMGR.
- Your terminal must have block mode capability to run NMMGR in screen mode. All terminals supported by MPE/iX have this capability.
- An NMMGR screen is 24 lines long. If your terminal screen is longer than 24 lines, the NMMGR function key labels on some (older) screens appear to be four lines tall with blank labels on the bottom two lines. These lines are blank because the functions assigned by NMMGR clear any existing functions, although blank labels may still appear on the screen. The function keys on more recently added NMMGR screens, which store their function key information in a different way, will appear as normal softkeys, on two lines.

Starting NMMGR

To start NMMGR's screen mode interface, enter the following command at the MPE prompt:

```
:RUN NMMGR.PUB.SYS
```

After MPE accepts the run command, NMMGR displays the following banner:

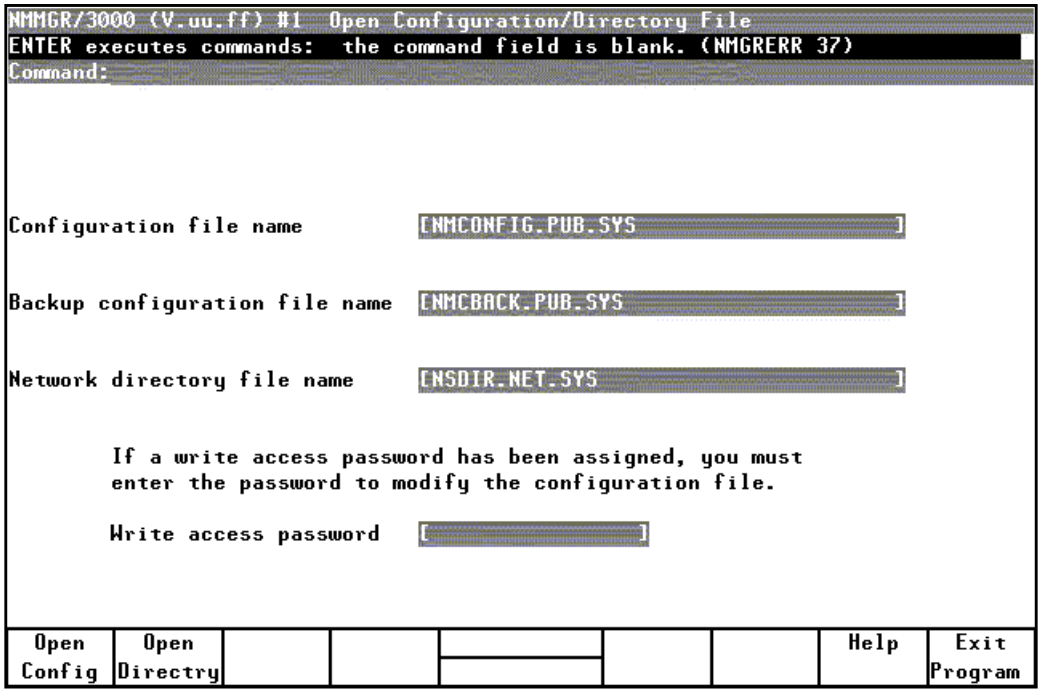
```
NM Configuration Manager 32098-20016 V.uu.ff (C) Hewlett
Packard Co. 1994
```

NMMGR then clears the terminal screen and displays the Open Configuration/Directory File screen.

Opening a Configuration or Directory File

The Open Configuration/Directory File screen shown in Figure 3-1 is the first screen you see when you start NMMGR in screen mode.

Figure 3-1 Open Configuration/Directory File Screen



From this screen you can:

- Create a new configuration file
- Open an existing configuration file
- Create a new network directory file
- Open an existing network directory file
- Specify a name for the backup configuration file

The instructions that follow describe how to do each of these tasks. See Chapter 1 , “Introduction,” for more information about configuration files and network directory files.

Creating a New Configuration File

If you want to create a new configuration file (one that does not exist), follow these steps. At the Open Configuration/Directory File screen:

Step 1. Enter the name of the file you want to create in the Configuration file name field.

The name must be a valid MPE file name. If you do not specify a group or account, NMMGR will qualify the file name with your logon group and account.

The default file name is NMCONFIG.PUB.SYS. You may use the default if no NMCONFIG.PUB.SYS file currently exists.

Step 2. If a write access password has been assigned, you must enter the password in the Write access password field in order to create a new file. If no write access password has been enabled, leave this field blank.

Step 3. Press the **[Open Config]** key. NMMGR will ask you to press the key again to verify that you want to create a new file. Press the key again. The Main screen will appear and you can proceed with subsystem configuration.

NOTE Instead of creating a new, and therefore empty, configuration file, you may want to use the sample configuration file provided by Hewlett-Packard for use as a configuration template. Refer to the instructions for "Copying a Configuration File".

Copying a Configuration Files

Most new configuration files are created from existing ones, rather than from scratch. You can copy an existing file from the same system or from a different system on your network. Note that if you are copying the file to NMCONFIG.PUB.SYS there are certain rules which must be followed or the new file may not be found or run when the system is booted.

The steps that follow show how to copy the sample configuration file provided by Hewlett-Packard, NMSAMP1.PUB.SYS, to NMCONFIG.PUB.SYS. The sample file is provided for use as a template when you are configuring a system with no existing configuration.

1. Purge or rename any existing NMCONFIG.PUB.SYS. (Take care when doing this that you do not destroy useful configuration information.)
2. Create a file equation similar to the following example:

   ```
   :FILE CONFIG = NMCONFIG.PUB.SYS; DEV = 1; DISC = 2048,1,1
   ```

   The configuration file must reside on LDEV1, because the system does not have access to other LDEVs at startup and the configuration file is needed at that time. Only one file extent is allowed.
3. Copy the appropriate sample file into the empty CONFIG file. The following is a sample "copy" command:

   ```
   FCOPY FROM = NMSAMP1.PUB.SYS; TO = *CONFIG; NEW; NOUSER
   LABELS
   ```

4. When you are ready to proceed with configuration, run NMMGR and open the configuration file you just created. Refer to the instructions for “Opening a Configuration File.”

You may choose to copy your source file to a name other than NMCONFIG.PUB.SYS first, modify that file using NMMGR, then rename the file as NMCONFIG.PUB.SYS when you are ready for it to be used by the system.

Changing the Backup File Name

NMMGR automatically generates a backup configuration file that is updated each time the configuration is successfully validated. By default, the backup file name is NMCBACK.*group*.*account*. You can change the name that will be used for the backup file by typing a new name in the Backup configuration file name field on the Open Configuration/Directory File screen.

The file name you enter must be a valid MPE file name. If you do not enter a group or account name, NMMGR will qualify the file name with your logon group and account.

It is a good idea to change the name that will be used for the backup file if you are modifying an alternate configuration or one that will be used on a different system. By changing the backup file name you can avoid writing over a backup file that you want to maintain.

Opening an Existing Configuration File

If you want to open an existing configuration file to modify the configuration, follow these steps.

At the Open Configuration/Directory File screen:

Step 1. Enter the name of the file you want to open in the Configuration file name field.

In most cases, you want to make sure that the file you plan to open is *not* the active configuration file.

If you do not specify a group or account, NMMGR will assume that the file resides in your logon group and account.

Step 2. If a write access password has been assigned, you must enter the password in the Write access password field in order to open the file in write mode. (If you do not enter an assigned password, you can still access the file in read-only mode.) If no write access password has been enabled, leave this field blank.

Step 3. Press the **[Open Config]** key. The Main screen will appear and you can proceed with subsystem configuration. The fields on each screen show the values currently entered for the configuration file you opened.

Creating a Network Directory File

If you want to create a new network directory file (one that does not exist), follow these steps.

At the Open Configuration/Directory File screen:

Step 1. Enter the name of the file you want to create in the Network directory file name field.

The name must be a valid MPE file name. If you do not specify a group or account, NMMGR will qualify the file name with your logon group and account.

The default file name is `NSDIR.NET.SYS`. You may use the default if no `NSDIR.NET.SYS file` currently exists.

Step 2. If a write access password has been assigned, you must enter the password in the Write access password field in order to create a new file. If no write access password has been enabled, leave this field blank.

Step 3. Press the **[Open Directry]** key. NMMGR will ask you to press the key again to verify that you want to create a new file. Press the key again. The Network Directory Main screen displays and you can proceed with directory configuration. (See the *Configuration Guide* for the subsystem you are configuring for more information on configuring the network directory.)

Opening an Existing Network Directory

If you want to open an existing network directory file to modify its directory information, follow these steps.

At the Open Configuration/Directory File screen:

Step 1. Enter the name of the file you want to open in the Network directory file name field. If you do not specify a group or account, NMMGR will assume that the file resides in your logon group and account.

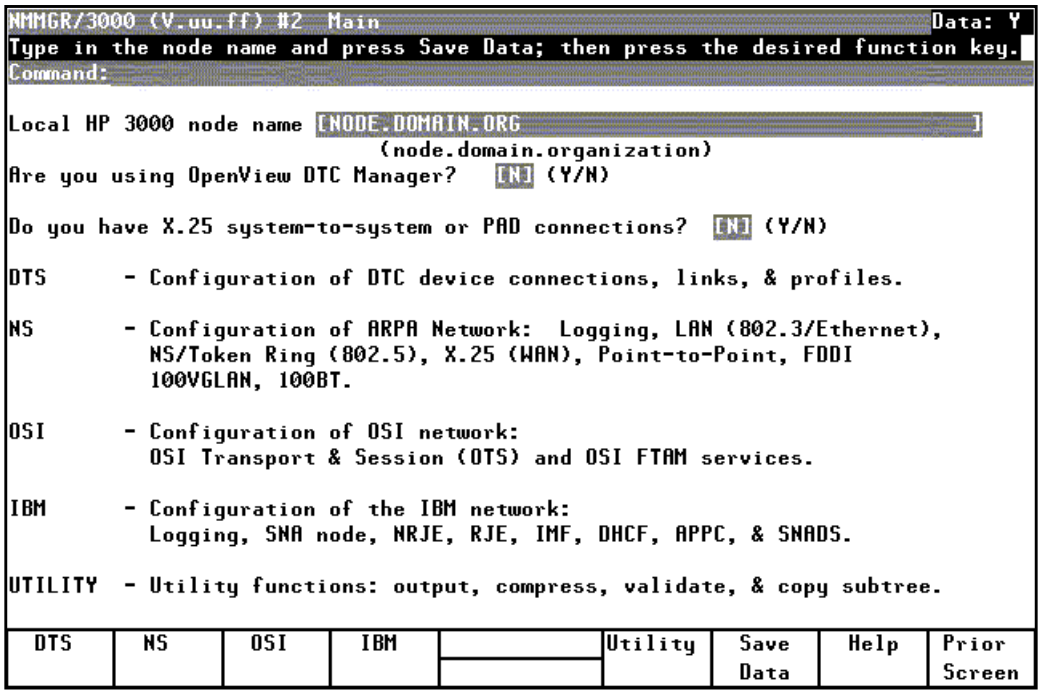
Step 2. If a write access password has been assigned, you must enter the password in the Write access password field in order to open the file in write mode. (If you do not enter an assigned password, you can still access the file in read-only mode.) If no write access password has been enabled, leave this field blank.

Step 3. Press the **[Open Directry]** key. The Network Directory Main screen appears and you can proceed to modify the network directory information. The fields on each screen will show the values currently entered for the network directory file you have opened. (See the *Configuration Guide* for the subsystem you are configuring for more information on configuring the network directory.)

Selecting a Configuration Path

Once a configuration file is successfully opened or created, NMMGR displays the Main screen, shown in Figure 3-2. This screen presents a menu from which you select the group of NMMGR screens you need to configure the appropriate subsystem.

Figure 3-2 Main Screen



The main screen also contains three data fields that must be completed in order to configure the local node name and determine which type of network configuration is appropriate for the node.

The following steps describe the action that should be taken at the Main screen:

Step 1. Enter the node name of the system you are configuring in the local node name field (if it is not already present).

Step 2. In the field next to the question `Are you using OpenView DTC Manager?`, enter a "Y" if you are using PC-based network management for this node, enter an "N" if you are using host-based network management. If you are using PC-based network management, an OpenView workstation must be present on the network.

Step 3. In the field next to the question `Do you have X.25 system-to-system or PAD connections?`, enter a "Y" to indicate you will be configuring a DTC/X.25 Network Access card for this node, otherwise, enter an "N".

Step 4. Press the **[Save Data]** key to save the node name in the configuration file (create the data record). The Data flag will be set to "Y" when the data record exists.

Step 5. Proceed to one of the NMMGR configuration subbranches by pressing the appropriate function key.

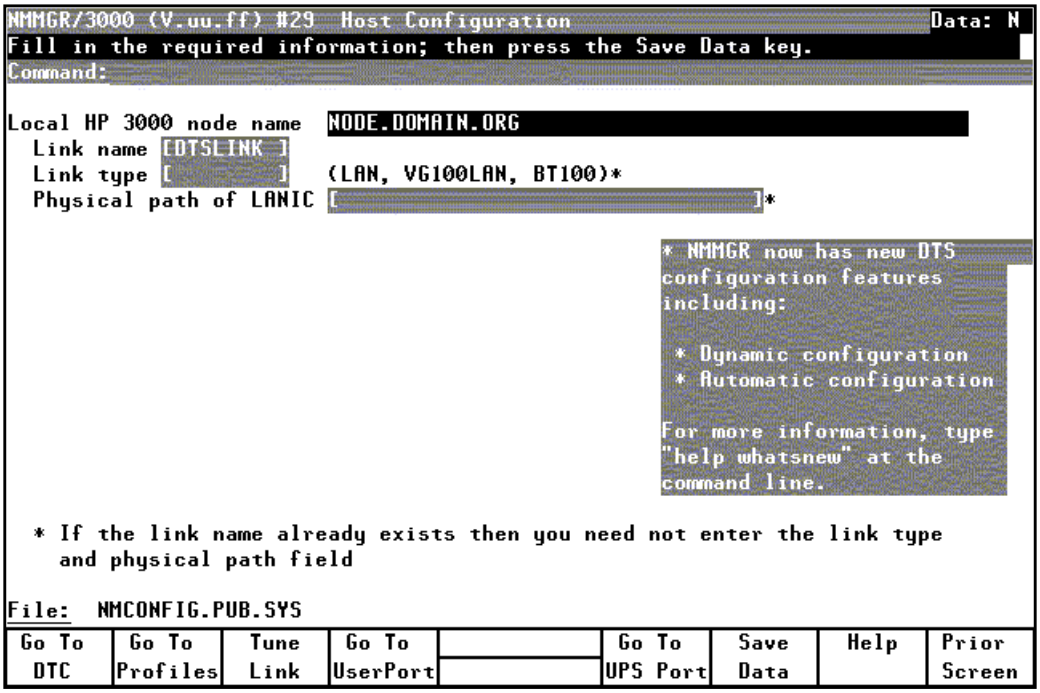
Each of the configuration subbranches are described.

Configuring Terminals, Printers, and Other Serial Devices

Terminals, printers, and other serial devices are connected to HP e3000 computers through a device called the Datacommunications and Terminal Controller (DTC). In order to connect to a device, the system's configuration file must contain information that makes it possible for the DTC, as well as the devices attached to the DTC, to establish communications with the system. DTCs and their devices are configured through NMMGR's distributed terminal subsystem (DTS) configuration.

If you press the key labeled **[DTS]** at the Main screen, you will be taken to the Host Configuration screen (Figure 3-3), the first screen in a progression that lets you configure DTS for Host-based network management only. The PC-based management screen will vary slightly.

Figure 3-3 Host Configuration Screen



You will perform a number of tasks using these screens, including the following:

- Define the DTS link configuration for the system.
- Define connection capabilities for terminals, printers, and other serial devices that will be able to communicate with the system.
- Define terminal, printer, and other serial device profiles specifying sets of characteristics that can be applied to various terminals, printers, or other serial devices connected to the system and associate the profiles with individual devices. The screen in Figure 3-4 reflects PC-based network management only. The Host-based management screen will vary slightly.

See the following manuals for more information on configuring DTCs and serial devices:

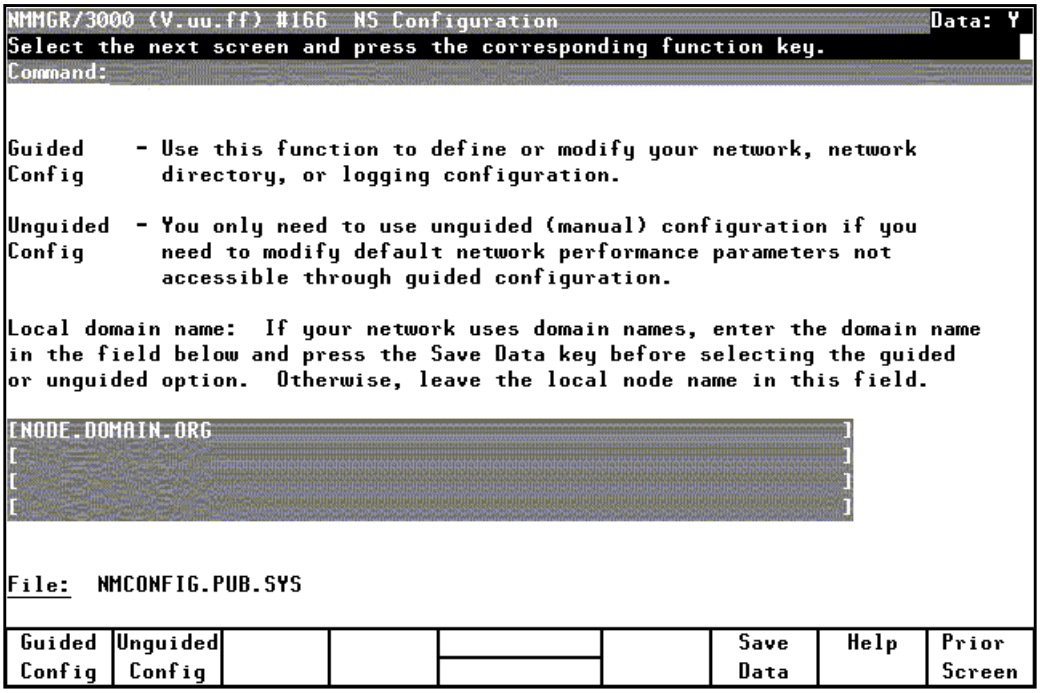
- *Configuring Systems for Terminals, Printers, and Other Serial Devices*.
- (Host-based X.25 configuration only) *Configuring and Managing Host-Based X.25 Links*.
- (PC-based configuration only) *Using the OpenView DTC Manager*.

Configuring NS 3000/iX

The NS 3000/iX product consists of NS 3000/iX Network Services and NS 3000/iX links. NS 3000/iX Network Services contain software that allows you to access data, initiate processes, and exchange information between all the systems on a network. NS 3000/iX links provide connections between systems (either HP e3000s or personal computers) in a network. To use NS 3000/iX Network Services, the systems must be connected by an NS 3000/iX link and each link must be properly configured through NMMGR.

If you press the key labeled **[NS]** at the Main screen, you are taken to the NS Configuration screen (Figure 3-4), the first screen in a progression that lets you configure NS.

Figure 3-4 NS Configuration Screen



NMMGR provides two methods of creating or updating configuration information for an NS link. The methods are referred to as **Guided Configuration** and **Unguided Configuration** respectively. You determine which method you will use by making a choice at the NS Configuration screen.

You also use this screen to configure a domain name for the node you are configuring if using domain names for network access. To configure a domain name, replace the local node name in the field at the bottom of the screen and press the **[Save Data]** key. (If you are not using domain names, leave the local node name as is.)

- To perform guided configuration, press the key labeled **[Guided Config]** and refer to the *HP e3000/iX Network Planning and Configuration Guide* for information.
- To perform unguided (manual) configuration, press the key labeled **[Unguided Config]** and refer to the *NS 3000/iX NMMGR Screens Reference Manual* for information.

NOTE Hewlett-Packard strongly recommends using guided configuration whenever you need to initially configure a network interface. You can also take advantage of its convenience later for most network maintenance and updating. Guided configuration supplies many default values for your configuration and requires that you visit a minimal number of screens. Use unguided configuration only if you need to modify configuration values that are not available on the guided screens.

Guided Configuration

If you press the key labeled **[Guided Config]** at the NS Configuration screen, you will be taken to the Network Transport Configuration screen shown in Figure 3-5. From this screen, you choose the specific task you want to perform using guided NS configuration. These tasks include configuring or modifying a network interface, modifying logging parameters, and fine tuning global or network transport configuration parameters.

Figure 3-5 Network Transport Configuration Screen

```
NMMGR/3000 (V.uu.ff) #42  Network Transport Configuration
Enter the information required; then press the desired function key.
Command:


Config      - To create or modify a network
Network         Enter a network interface:  [          ]
                Enter a network type:       [  ]      1 = LAN   2 = Pt-Pt
                                                      3 = X.25
                                                      5 = Gateway Half
                                                      6 = Token Ring
                                                      7 = FDDI


                Then press the Config Network key.

Modify      - To modify default logging configuration:
Logging         Press the Modify Logging key (note that logging is
                created with defaults when the first network type
                is configured).

File:  NMCONFIG.PUB.SYS

| Config Network | Modify Logging |  |  |  | List Networks |  | Help | Prior Screen |
```

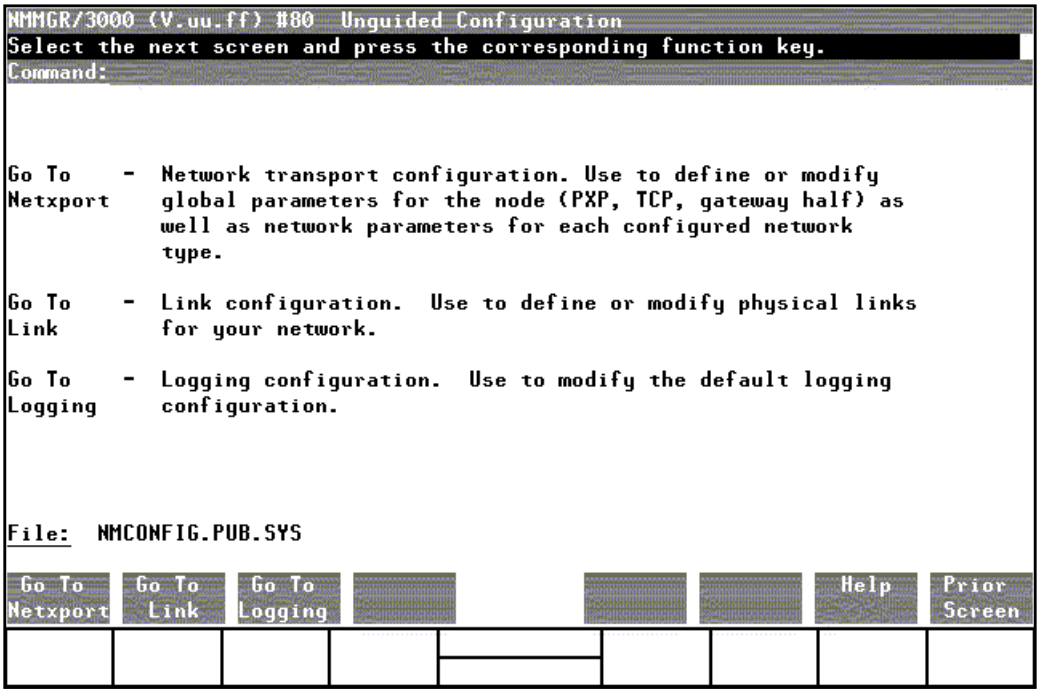
Guided configuration is a procedure that automates part of the configuration process. It "guides" you through the configuration screens for a specific task. It assumes and supplies default values wherever possible to furnish most of the configuration file's data.

When you run guided configuration, you use only a minimal number of configuration screens. You will normally use fewer screens than you would if you were performing the same task using unguided configuration. Many of these screens are different from those used for unguided configuration.

Unguided Configuration

If you press the key labeled **[Unguided Config]** at the NS Configuration screen (#166), you will be taken to the Unguided Configuration screen shown in Figure 3-6.

Figure 3-6 Unguided Configuration Screen



From this screen, you can move to the screens that let you:

- Configure or modify a network interface.
- Configure or modify an NS link.
- Configure or modify logging parameters.
- Configure or modify a network interface.

If you choose to create or modify an NS configuration using unguided (manual) configuration, you must take care that you know which screens you need to use to completely create or modify a configuration. The unguided nature of manual configuration makes it possible to get “lost” or to miss some necessary screens entirely.

Under most circumstances, HP recommends that you use guided configuration. Unguided configuration can be useful, however, if you only need to use a few screens and you know exactly which screens you need.

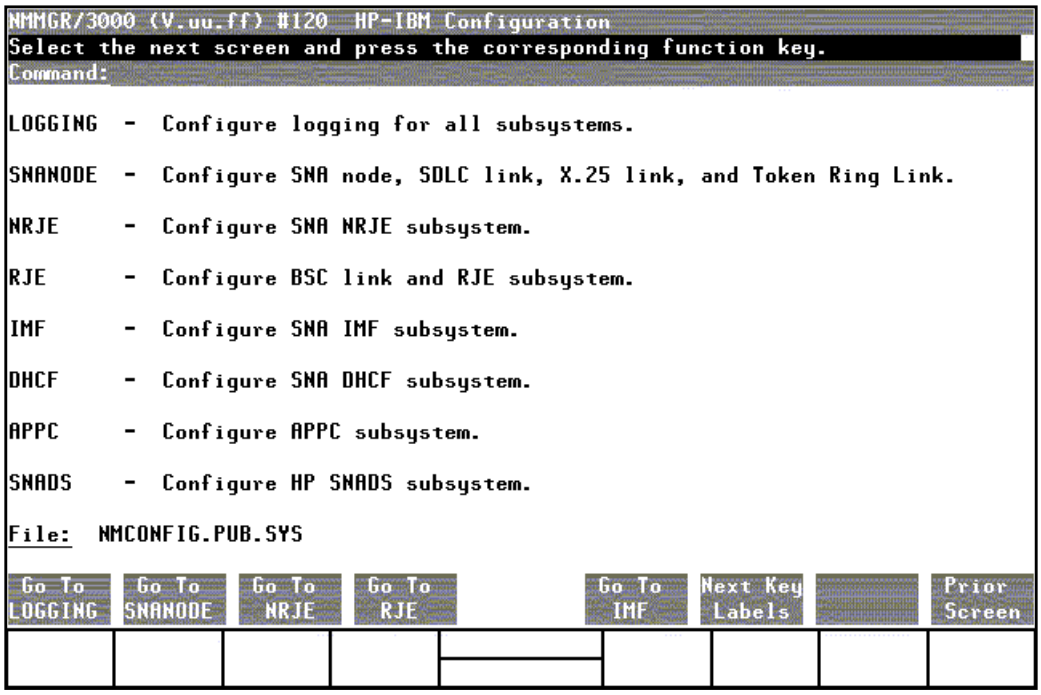
Refer to the *NS 3000/iX Screens Reference Manual* for information on the unguided NS configuration screens.

Configuring HP-IBM Connections

Hewlett-Packard provides a number of networking products that make it possible to establish communication links between HP e3000 and IBM mainframe computers.

If you press the key labeled **[IBM]** at the Main screen, you are sent to the HP-IBM Configuration screen shown in Figure 3-7.

Figure 3-7 HP-IBM Configuration Screen



From this screen, you can choose any of the IBM subsystems for configuration by pressing the appropriate function key. You can also choose to configure logging for all of the IBM subsystems, or you can choose SNANODE configuration (SNA node, SDLC link, X.25 link, and token ring link).

The HP-IBM Configuration screen presents you with more choices than there are available function keys. For this reason, the screen includes a **[Next Key Labels]** function key that lets you toggle between two sets of function key choices. If the choice you want does not currently appear on any of the **[Go to]** function keys, press the **[Next Key Labels]** key. You can then make the choice you need to configure the HP-IBM subsystem you want to configure.

For more information on configuring any of the HP-IBM products, see the *Node Manager's Guide* for that product. For information on HP-IBM subsystem logging or SNANODE configuration, see the *SNA Link/iX Node Manager's Guide*.

4 Using NMMGR Utility Screens

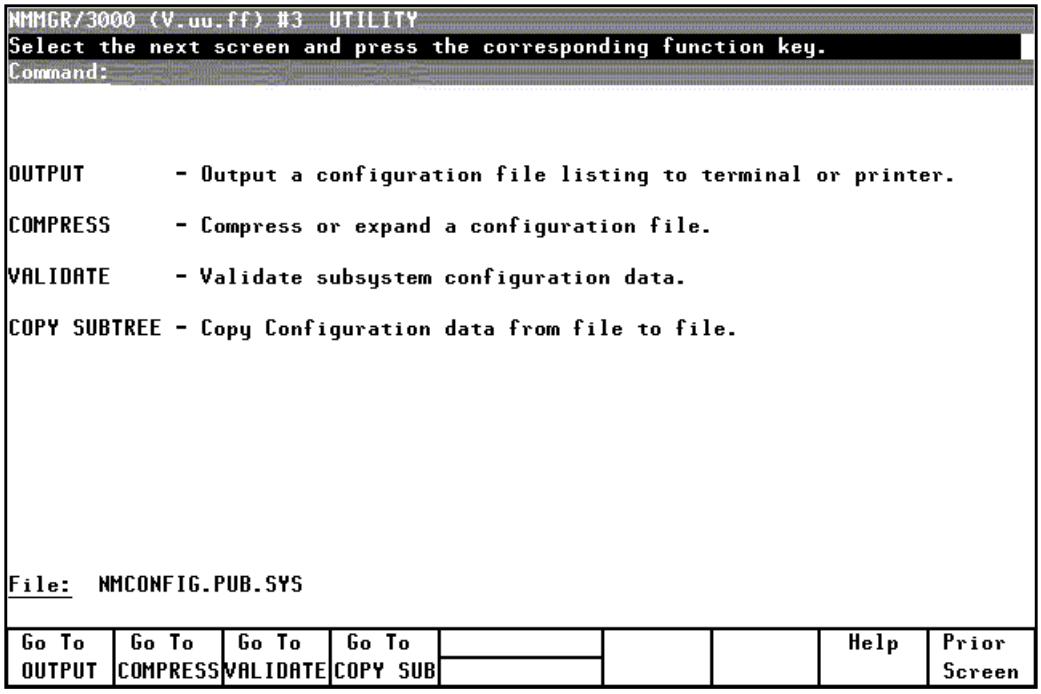
This chapter describes how to use the NMMGR utility screens to list, maintain, and validate configuration files. The following topics are discussed in detail:

- Displaying or printing the configuration file tree structure or the data screens associated with a configuration file using the Output screen.
- Compressing or expanding a configuration file using the Compress screen.
- Validating a configuration file using the Validate screen.
- Copying a configuration subtree using the Configuration Subtree Copy screen.

The Utility Screen

The Utility screen shown in Figure 4-1 lets you select the utility function that you want to perform. To display the Utility screen, press **[Go To Utility]** from the Main screen or type UTILITY in the command window of any screen and press **[ENTER]**.

Figure 4-1 Utility Screen

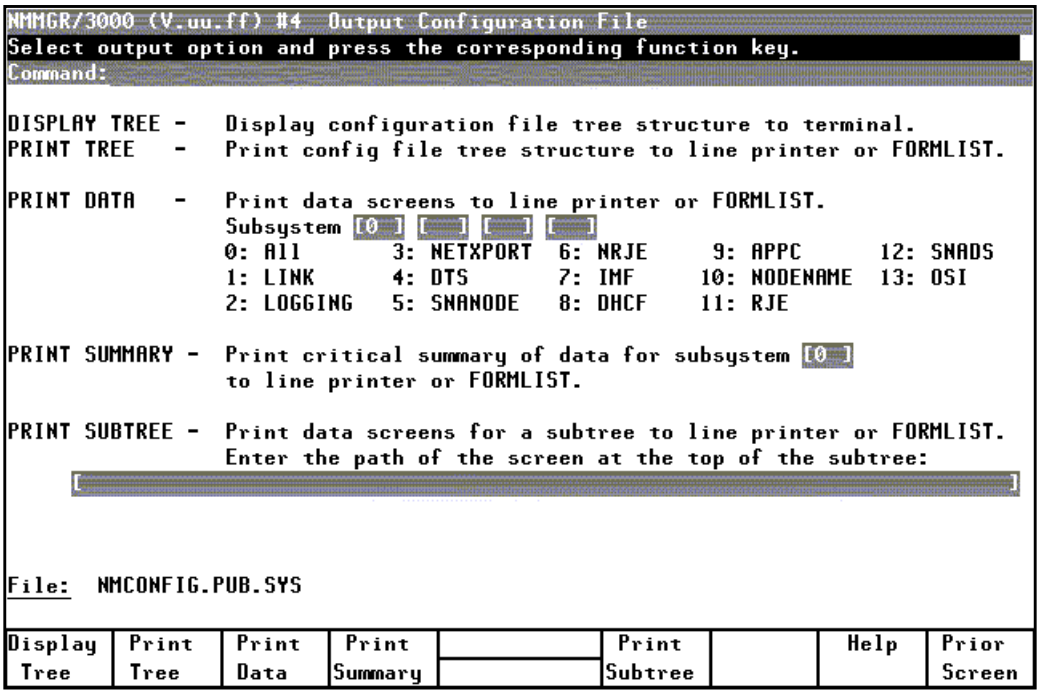


Select the utility function you want to perform and press the corresponding function key.

Output Configuration File Screen

The Output Configuration File screen shown in Figure 4-2 allows you to list or print the configuration file tree structure, to print the NMMGR data screens associated with a configuration file, and to print a critical summary of the configuration file data. You reach this screen by pressing **[Go To OUTPUT]** at the Utility screen.

Figure 4-2 Output Configuration File Screen



By default, the printed output for each of this screen's print functions is sent directly to the line printer. You may want to redirect the output by issuing a file equation for the output file FORMLIST (the formal file designator of the output file). You can do so by entering the file equation in the command window of the screen. For example, you could type the following:

```
:FILE FORMLIST;DEV=PP
```

and then press **[ENTER]**

If you then pressed **[Print Data]**, the output would be sent to the device PP.

If you wanted to send the output to a disk file, you could enter:

```
:FILE FORMLIST;DEV=DISC;SAVE
```

If you then pressed **[Print Data]**, the output would be stored on disk under the file name FORMLIST.

Display Tree

If you press the **[Display Tree]** key, NMMGR will display the tree structure of the configuration file at your terminal. Figure 4-3 shows a section of a listing obtained by pressing **[Display Tree]** at the Output Configuration File screen.

The tree structure shows the identifiers for each screen that contains configured data but does not show any of the actual data that is configured. The level of each screen (how far down it is in the tree structure) is printed on the left, in square brackets. The listing shows the names of the screens and items configured, indented according to their level in the tree structure.

This listing is useful for finding out which identifiers are already configured in a file. You can also refer to it for guidance in direct path branching.

To generate a printout of the actual data screens, use the **[Print Data]** or the **[Print Summary]** key to print just a listing of all the data. Both are described later in this chapter.

Figure 4-3 Display Tree Listing

```
NM Configuration Manager 32022-20016 V.uu.ff (C) Hewlett Packard Co. 1990


MON, APR 9, 1990, 3:48 PM

CONFIGURATION FILE NAME: NMCONFIG.PUB.SYS

[1]     LINK
[2]          DTSLINK
[2]          LANLINK
[1]     LOGGING
.
.
.
[1]     SNADS
[2]          CLUSTER
[2]          MAPPER
[1]     LOGGING
.
.
.
[1]     SNADS
[2]          CLUSTER
[2]          MAPPER
[1]     SNANODE
[1]     IMF
[1]     DHCF
[1]     APPC
[1]     NODENAME
[1]     NETXPORT
[2]          GPROT
[3]               PXP
[3]               TCP
[2]          NI
[3]               LOOP
[3]               LANNI
[4]                    PROTOCOL
[5]                         IP
[5]                         PROBE
[5]                         ARP
[4]                    LINK
[5]                         LANLINK
.
```

Print Tree

The **[Print Tree]** key generates a printed listing of the tree structure as displayed by the **[Display Tree]** key (Figure 4-3). By default, output is sent to the device LP. You can redirect the output by using a file equation for the formal file designator FORMLIST.

Print Data

The **[Print Data]** key generates a printed copy of the data screens associated with the configuration file. By default, output is sent to the device LP. You can redirect the output by using a file equation for the formal file designator FORMLIST.

You can select the data screens you want to list by entering one or more selections in the print data subsystem selection fields on the Output

Configuration File screen. These are four data entry fields that allow you to enter a number corresponding to the configurable subsystems, as listed on the screen (see Figure 4-2).

For example, to obtain a printed listing of the configured screens for both logging and for NETXPORT configuration, enter a 2 (for logging) in one of the fields and a 3 (for NETXPORT) in another of the fields. If these are the only screens you want printed, leave the other two fields blank. When you have made your selections, press the **[Print Data]** key.

If you want all screens to print, enter a 0 in one of the selection fields (the default).

Figure 4-4 is an example of a data screen as printed by the **[Print Data]** key. Because data has been entered for this screen in the configuration file, the actual data is shown and the data flag is set to Y. If no data had been entered, the printout would show the default values and the data flag would be set to N.

Figure 4-4 Print Data Output Example

```
NM Configuration Manager 32098-20016 B.07.00 (C) Hewlett Packard Co. 1992
 WED, MAR 28, 2001, 11:20 PM CONFIGURATION FILE NAME: NMCONFIG.PUB.SYS
 Subsystems: [1] LINK
 NMMGR/3000 (V.uu.ff) #306 100BaseT Link Configuration Data: Y Command:
Path: LINK.BTLINK
Physical path of device adapter [0/0/0/0 ]
Use factory-configured local station address? [Y] (Y/N) Local station address
[FF-FF-FF-FF-FF-FF] (Hex)
When auto-negotiation is enabled, the system can only properly configure the link if
the hub also auto-negotiates. Use auto-negotiation to determine link settings? [Y]
(Y/N) If 'N': Link speed [100 ] (100 or 10 MBits/sec) Full Duplex mode [N] (Y/N;
N=Half)
Trace at startup? [N] (Y/N) Note : Trace reduces Trace filename [ ] performance.
File: NMCONFIG.PUB.SYS
 Save Help Prior Data Screen
```

Print Summary

The **[Print Summary]** key allows you to print all the configuration data for the chosen subsystem on the Output Configuration File menu. This is a listing of information that is contained in your configuration file. By default, output is sent to the device LP. You can redirect the output by using a file equation for the formal file designator FORMLIST.

To print a critical summary, choose the number corresponding to the subsystem for which you want the report. Enter the number in the field

to the right of "Print Summary" and press the **[Print Summary]** key. (The numbers for the subsystems are the same as those that you would use to select subsystems for the **[Print Data]** key.)

The example shown in Figure 4-5 is the first part of a critical summary for a full-gateway node that has been configured with a point-to-point (router) network interface (NI) and a LAN NI.

Figure 4-5 Sample Page of Critical Summary Report

```
NM Configuration Manager 32098-20016 V.uu.ff (C) Hewlett Packard Co. 1990


                    CRITICAL SUMMARY - NETXPORT CONFIGURATION


TUE, APR 10, 1990, 11:07 AM

CONFIGURATION FILE NAME: NMCONFIG.PUB.SYS

NODE NAME: FLAGSTAFF.ROUTE66.USA

  TRANSPORT GLOBAL CONFIGURATION:
    name Search Method: 1.  Probe
                        2.  Probe Proxy
                        3.  Network Directory
    Maximum Directly Connected Nodes:  1024
    Maximum Outbound Destinations:     360
    Maximum Inbound Destinations:      360

PACKET EXCHANGE PROTOCOL (PXP) CONFIGURATION:
    Retransmission Interval (Secs):     10
    Maximum Retransmissions Per Request: 4

TRANSMISSION CONTROL PROTOCOL (TCP) CONFIGURATION:
    Maximum Numbre of Connections:                    128
    Retransmission Interval Upper Bound (Secs):       180
    Retransmission Interval Lower Bound (Secs):       4
    Initial Retransmission Interval:                  5
    Maximum Number of Retransmissions:                4
    Connection Assurance Interval:                    600
    Maximum Connection Assurance Retransmissions:     4
.
.
.
```

Print Subtree

The **[Print Subtree]** key allows you to print the NMMGR data screens for a specified subtree. By default, output is sent to the device LP. You can redirect the output by using a file equation for the formal file designator FORMLIST.

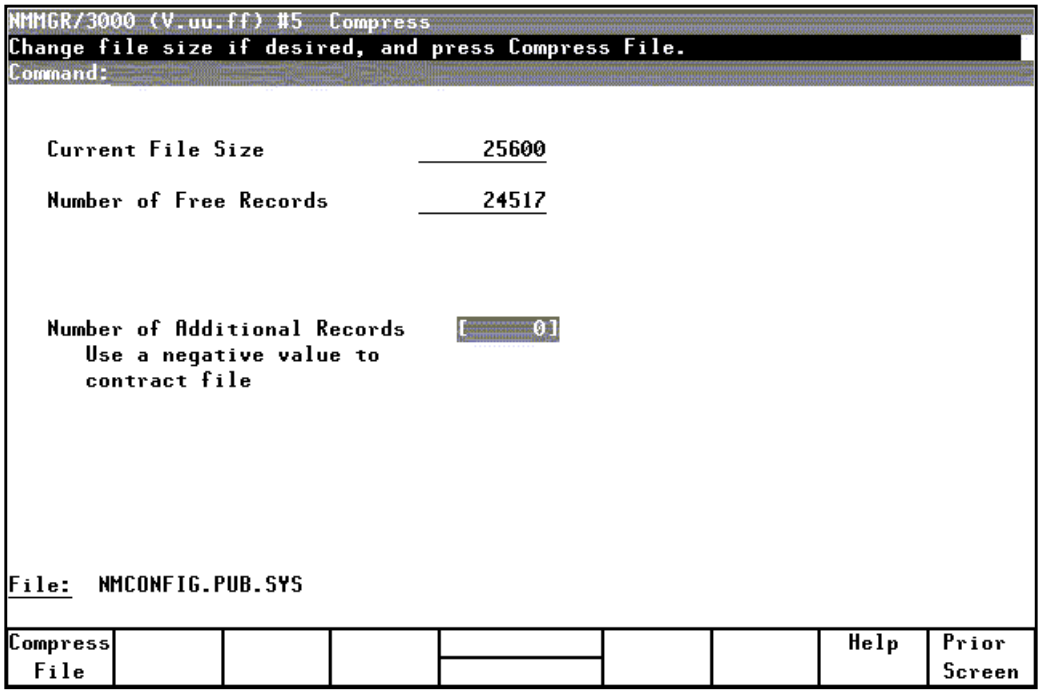
To define the subset of screens that you want to print, enter the path name of the topmost screen of the subtree you are selecting in the field provided under "Print Subtree." Press the **[Print Subtree]** key.

Compress Screen

The Compress screen shown in Figure 4-6 allows you to compress or expand the configuration file. To perform these functions, you must be the creator of the file. (You can also use the COMPRESSCONF maintenance mode command to perform these functions. See Chapter 5 , “Using NMMGR in Maintenance Mode,” for more information on maintenance mode commands.)

You reach this screen by pressing the **[Go To Compress]** key at the Utility screen.

Figure 4-6 Compress Screen



Description

As your configuration grows, you may find it necessary to compress or expand your configuration file.

Configuration files initially contain 2,048 32-byte records. As you configure items in a file, records are used sequentially from the beginning of the file. As the file size increases, the number of free records at the end of the file decreases.

If you delete items from a configuration file, the records are not immediately recovered, so the middle of your file may contain some unused records. Unused records in the middle of the file are not reflected in the number of free records count and are not available for reuse. By compressing the file, you cause all data to be stored in a contiguous block of records and all unused records to be located at the end of the file. Thus, compressing a file enables you to determine the actual number of free records in a file before adding or deleting records.

To compress a file, enter a 0 in the Number of Additional Records field and press **[Compress File]**

You can also use this function to add records to the file or to delete unused records from the file. To do so, enter a number in the Number of Additional Records field. A positive number causes records to be added (up to the file size limit of 65,535 records). A negative number causes that number of free records to be deleted from the file. After you have entered the number of records to be added or deleted, press the **[Compress File]** key.

When you press **[Compress File]**, NMMGR begins compressing the file immediately. The terminal is locked to indicate that NMMGR is not available until finished. When the compression is completed, NMMGR prints the following message in the message field:

```
Configuration file compressed.
```

NOTE Compress time depends on the number of entries in the file. For a file that contains a small amount of data, compression usually takes fewer than 30 seconds. However, compressing a file that contains a lot of data can take several minutes.

Fields

`Current File Size`

(Display only.) Size of the file, in 32-byte records.

`Number of Free Records`

(Display only.) Number of free records at the end of the configuration file.

Number of Additional Records

Enter the number of records that you want to add to the file (positive integer) or the number of unused records that you want to delete from the file (negative integer). To simply compress the file, enter 0 (zero). If you are adding records, the file cannot end up containing more than 65,535 records.

Default: 0

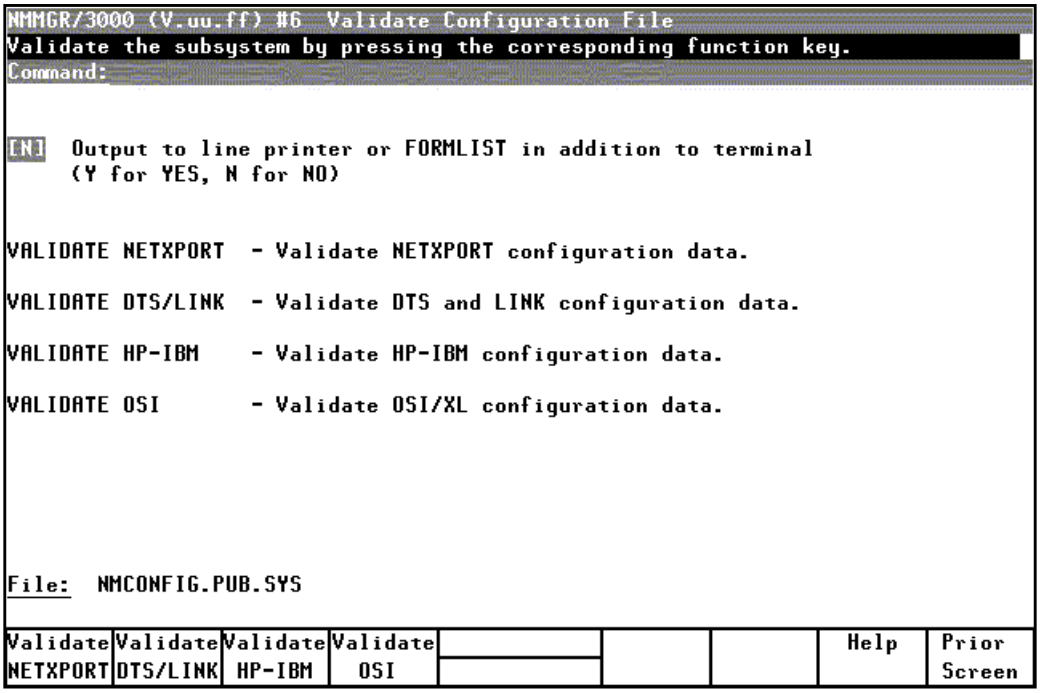
Range: -32768 to 32767

Validate Configuration File Screen

The Validate Configuration File screen shown in Figure 4-7 allows you to test the validity of a specified subsystem configuration. (The VALIDATECONF maintenance mode command can be used to perform this function. See Chapter 5 , “Using NMMGR in Maintenance Mode,” for more information on the maintenance mode commands.)

This screen can be reached by pressing the **[Go To VALIDATE]** key at the Utility screen.

Figure 4-7 Validate Configuration File Screen



The purpose of the validation process is to ensure that your configuration data is syntactically and logically correct before you activate the node.

NOTE The distributed terminal subsystem (DTS) cannot be brought up and configured unless validation is complete. The link configuration must be complete before you attempt to validate the network transport configuration. This is because the network transport validation process uses link configuration data.

To begin validation for a subsystem, press the function key that corresponds to the subsystem you wish to validate. For example, to validate your NS network transport configuration, press the **[Validate NETXPORT]** function key. After checking various aspects of your

configuration, the validation process creates a listing of error messages to help you pinpoint invalid items. One possible message, for instance, states that a phone number has not been configured for a dial-type link in your NS configuration.

When you press one of the validation function keys, you enter character mode. Any validation error messages are listed at your terminal. If you want the error message listing to be sent to a device in addition to your terminal, enter a Y in the box next to "Output to line printer or FORMLIST in addition to terminal" on the Validate Configuration File screen. You can have the listing sent to disk or a printer by setting a file equation or you can have it routed to the default device, which is `$STDLIST`.

After viewing the validation messages, if any, press **[RETURN]** to return to the Validate Configuration File screen. The message in the message line of the screen tells you if the validation process completed and, if so, whether the configuration is valid. You must see the following message to be sure that your configuration file is valid:

```
Validation completed; configuration of the selected subsystem
is valid.
```

When validated, the contents of the configuration are automatically copied to the backup file specified on the open screen.

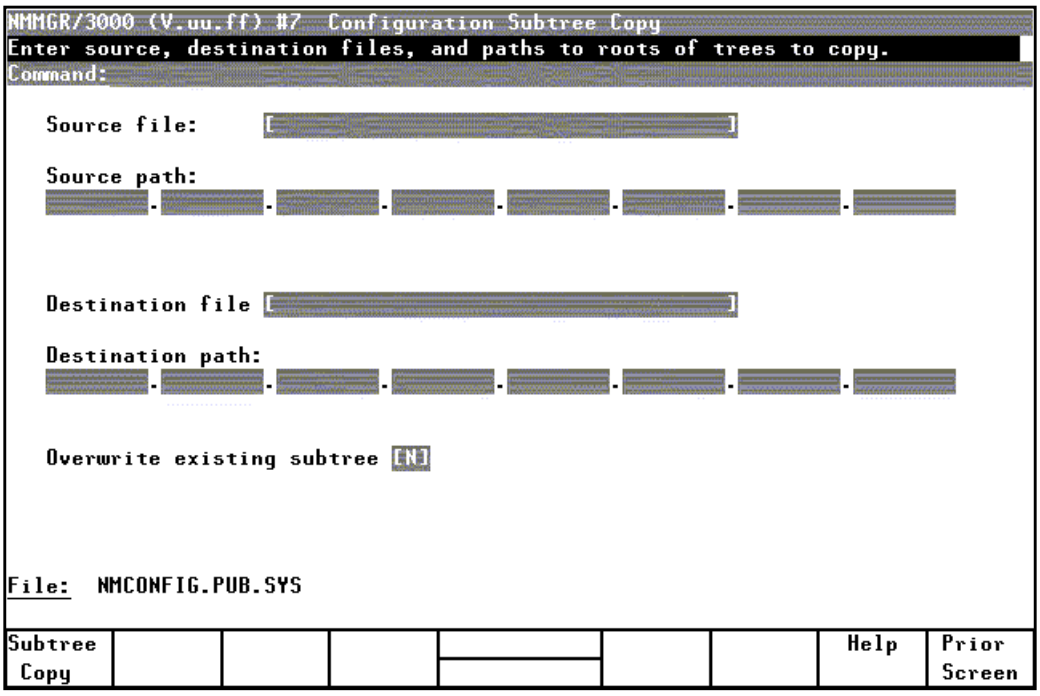
If a message other than the one above appears, refer to the *MPE/iX Error Messages Manual* (for DTS errors) or to the manual that contains error messages for the subsystem you are configuring or the *Configuring Systems for Terminals, Printers and Other Serial Devices Manual* for DTS errors. If you encounter errors that you cannot resolve, notify your HP representative.

Configuration Subtree Copy Screen

The Configuration Subtree Copy screen in Figure 4-8 allows you to copy specified parts of a configuration subtree into either the same configuration file or a different configuration file. This feature can save you a lot of time when you are configuring multiple nodes or subsystems in the same way. Note that the source or target file can be on a remote node in the network. (You can also use the COPYCONF maintenance mode command to perform this function. See Chapter 5 , "Using NMMGR in Maintenance Mode," for more information on the maintenance mode commands.)

This screen can be reached by pressing the **[Go To COPY SUB]** key at the Utility screen.

Figure 4-8 Validate Configuration File Screen



Description

Use the Configuration Subtree Copy screen to copy a contiguous set of screens called a subtree from one configuration file to another or within the same configuration file. To copy a subtree, enter the name of the source file and path and the destination file and path in the fields provided and press the **[Subtree Copy]** key.

The source file is the name of the file that the data will be copied from. If you are copying a subtree from the current configuration file to another location within the same file, you can leave both the Source file and the Destination file fields blank.

The source path specifies the path name of the topmost screen in the subtree that you want to copy. All screens below the top screen will be copied.

The destination file is the name of the file that data will be copied to. This can be the same file that you are copying from, which provides a convenient way to configure two links that are very similar. After configuring the first link, you can simply copy all the screens in the link's configuration and modify the new link configuration as needed.

The destination path specifies the point in the destination file below which the copied screens will be added.

Fields

`Source file`

This field contains the name of the file that configuration data will be copied from. If left blank, the current configuration file is assumed.

If the file is on a remote node, you must use a file equation and prefix the file name with an asterisk (*). You may use an MPE command from the command window to set a file equation without having to leave NMMGR.

`Source path`

(**Required field.**) The source path contains the path name associated with the topmost screen in the subtree being copied. The field is composed of eight NMMGR path identifier slots. Enter one path identifier in each slot, leaving blanks at the end of each identifier. Leave any unused identifier slots empty. For example, the source path "NETXPORT.NI.LAN1.INTERNET" would be entered as:

```
NETXPORT.NI     .LAN1    .INTERNET.       .
.         .
```

`Destination file`

This field contains the name of the file the configuration data will be copied to. If this field is left blank, the current configuration file is assumed.

If the file is on a remote node, you must use a file equation and prefix the file name with an asterisk (*).

`Destination path`

Like the source path, the destination path is composed of eight path identifiers. You need to enter only those identifiers that are different from the source path. To copy data from the source file to the identical location in the destination file, leave this field blank. If, for example, you wish to change the fifth path identifier, then the fifth slot in the destination path should contain data. Only those parts of the path name that were designated by the user can differ among corresponding identifiers in the source and destination paths. User-selected types must match. For example, if the source file includes a direct connect link, the corresponding identifier in the destination path must also be a direct connect link.

`Overwrite existing subtree`

(**Required field.**) This field indicates whether or not existing data in the destination configuration file is to be overwritten when the copy is performed. A `Y` will purge all the existing data in the destination subtree and insert the data from the source subtree; an `N` will not allow the copy to continue if data exists where the destination subtree starts. The default is `N`.

In this example, a subtree copy is being performed from node A to node B. Since the copy is being made to a remote node, the user must make a `DSLINE` connection to node B and set up a file equation to represent node B's configuration file. This is done by entering the commands shown below:

Example

```
:REMOTE HELLO MGR.PUB.SYS;DSLINE=B

:FILE CONFIG=NMCONFIG.PUB.SYS;B,OLD
```

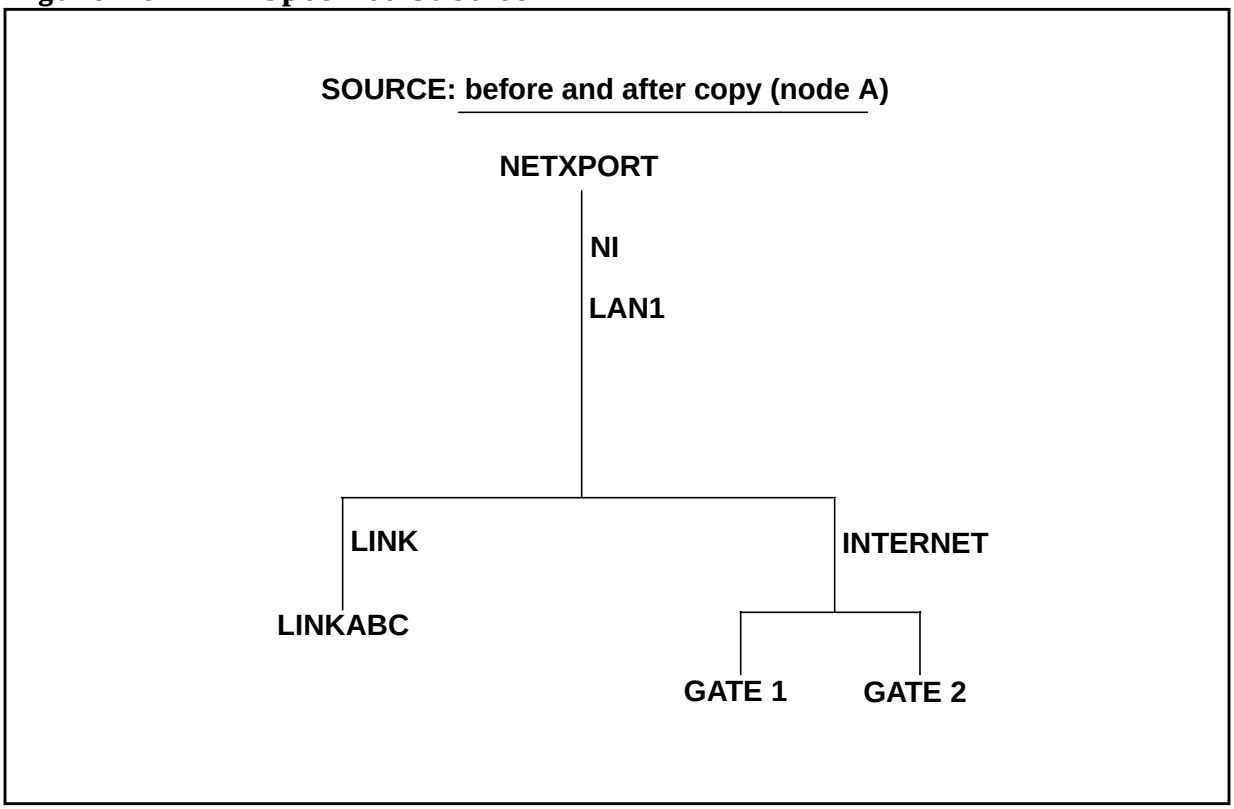
The source file and path on node A are entered into the source file and Source path fields. They appear here:

```
Source file:  [NMCONFIG.PUB.SYS]

Source path:  NETXPORT.NI     .LAN1    .INTERNET.      .
.        .
```

The diagram in Figure 4-9 shows the subtree specified by this path.

Figure 4-9 Specified Subtree

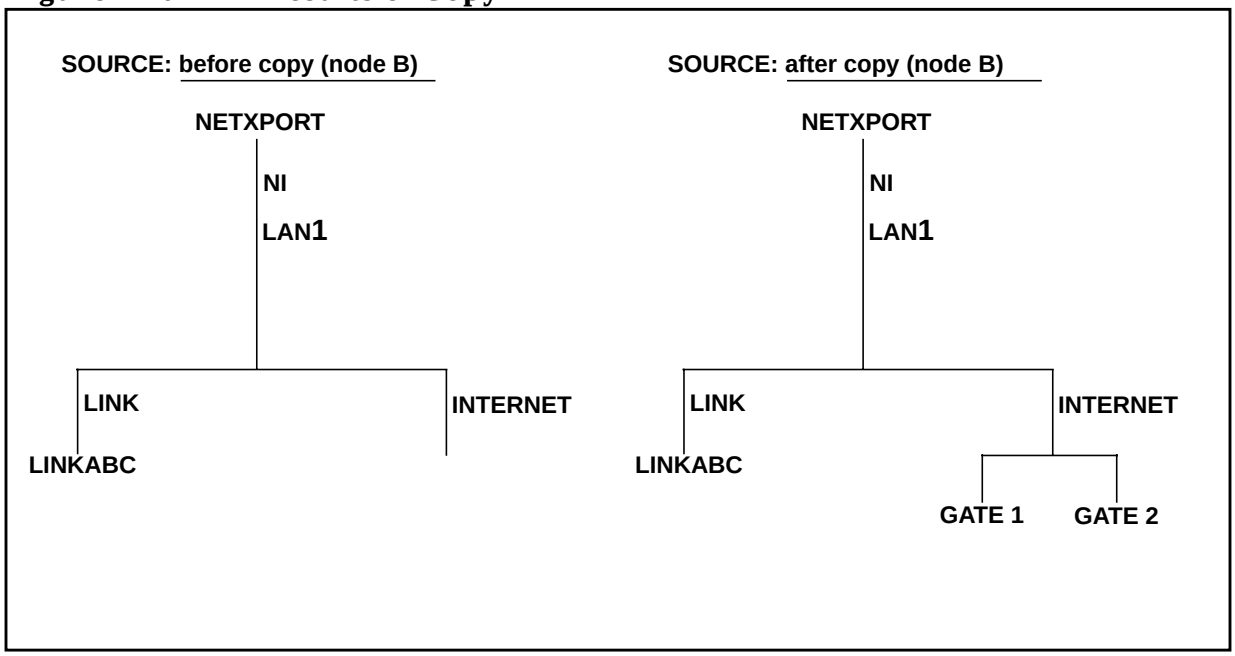


For this copy, the destination file and path were specified as:

```
Destination file:  [*CONFIG              ]
Destination path:        .      .LAN2   .    <~>  .       .
.        .
```

The diagram in Figure 4-10 illustrates the results of the copy.

Figure 4-10 Results of Copy



NOTE When subtrees contain several records, copies that occur over DSLINE connections will take considerably longer than copies between two local configuration files. It is several times faster to DSCOPY the configuration file to the destination node, then perform the subtree copy between two local configuration files.

5 Using NMMGR in Maintenance Mode

This chapter tells you how to use NMMGR's **maintenance mode** interface to manage network directory and configuration files. It allows you to also generate stream jobs to update remote network directory and configuration files. It includes descriptions of the following:

- Entering NMMGR maintenance mode from the screen mode interface or from a batch job.
- Each of the maintenance mode commands, including:
  - The purpose and syntax of the command.
  - A description of each of the command's parameters.
  - An example of using the command.

Using Maintenance Mode

NMMGR's **maintenance mode** is a character mode interface used to manage both network directory and configuration files. It can be used interactively, from within the screen mode interface, or as a set of commands entered via a batch job.

Maintenance mode can generate a job stream to sequentially update directories on a list of NS nodes. This feature saves you from manually changing the network directory files of every node on a network when you make a configuration change. You define the list of nodes to be updated by this automated process. Additionally, the process provides logging information and is recoverable.

Maintenance mode commands are read from the formal file designator NMMGRCMD, which defaults to $STDINX. You can redirect the input to come from a standard ASCII file by using a file equation for NMMGRCMD.

Entering Maintenance Mode from Screen Mode

You can access maintenance mode from within screen mode, execute one or more maintenance mode commands, and return to screen mode. There are two methods you can use to enter the maintenance interface from screen mode. The two methods are as follows:

- Enter the screen mode command NM[MGRCMD] in the command window of any screen and press **[ENTER]**.
- Press the **[Maint Mode]** function key from the Network Directory Main screen.

When you use either method, a screen appears with the maintenance mode prompt:

```
NMMGR>
```

When you enter maintenance mode from screen mode the interface is interactive. You can enter any appropriate maintenance mode commands at the prompt. In some cases, a command will prompt you for additional input which you can enter by typing a response to the new command prompt. When each command has completed execution, you will be returned to the maintenance mode prompt shown above.

When you are finished entering maintenance mode commands, type EXIT at the prompt to leave the maintenance mode interface and return to screen mode.

Running Maintenance Mode from a Batch Job

You can also access maintenance mode directly from a batch job by running NMMGR from a stream job or by running NMMGR with a file

equation for the formal designator NMMGRCMD set to a command file. An example of such an equation is:

```
:FILE NMMGRCMD=CMDFILE
```

Command input is echoed to $STDLIST if you are running NMMGR from within a stream job or when the input is read from a command file.

You can run NMMGR in the maintenance mode interactively. Enter the file equation NMMGRCMD= $STDINX. You will get the banner for NMMGR and the prompt: MMGR>

You can create a command file using any editor that is capable of generating straight ASCII output. Blank command lines may be entered freely.

Updating Remote Directories

You can use the maintenance mode MAKESTREAM command to generate a stream job that, when executed, logs on to a list of selected nodes and executes the set of commands contained in a command file. In this way, you can update the network directory of every node in a network without having to manually log on to every node and run NMMGR.

Two files must be generated before using the MAKESTREAM command. One is a list of node names of the nodes to be updated, the other is a list of commands to be executed. Both can be generated with any ASCII text editor.

As NMMGR logs onto each node named in the node list and applies the commands contained in the command file, the success or failure status of each nodal update is recorded in the node list file, along with the date and time of the event. The node list “control” file may be used again to retry updates of failed nodes, after the source of the failure has been determined and corrected.

In order for NMMGR maintenance mode to log onto each remote node, the local node’s network directory must contain an entry for the node whose directory you wish to update. Without an entry, it is not possible to log on to the remote node because there is no connection information for the node. For this reason, the MAKESTREAM process is generally used for updating directories on existing nodes rather than to create a directory on a new node. However, it is possible to use these commands to create a new directory. To accomplish this, the node manager of the new node would have to verbally notify you of the node’s existence. You then would have to enter the new node’s connection information into your network directory. Once this information is entered into your directory, you will be able to log on to the new node and merge your entire directory to create a version of this directory on the new node.

Maintenance Mode Commands

Table 5-1 lists the NMMGR maintenance mode commands and the actions they perform. Each of these commands is described in detail later in this chapter.

Table 5-1 NMMGR Maintenance Mode Commands

Command	Action
:MPECommand	Executes MPECommand. MPECommand must be a programmatically executable MPE command.
ADDCONF	Adds subtree of empty records to the configuration file.
ADDLDEV	Adds LDEVs to a DTC card.
ADDLU	Adds LUs to the SNA node transport screen.
ADDNODE	Adds or updates a node in the current network directory.
ADDVC	Adds a virtual circuit address key to the network directory and to the configuration file.
CARDCONF	Sets the current DTC card number for the READALLCONF, READCONF, UPDATECONF, and WRITECONF commands.
COMPRESSCONF	Compresses or expands the current configuration file.
CONTINUE	Prevents NMMGR from terminating in a job because of a maintenance mode error
COPYCONF	Copies a configuration subtree.
DELETECONF	Deletes a subtree from the current configuration file.
DELETENODE	Deletes an entry from the network directory.
EXIT	Exits from maintenance mode.
EXITVALIDATE	Validates a subsystem's configuration, if needed, when exiting from NMMGR.
EXITWARN	Warns the user that a subsystem needs to be validated before exiting NMMGR.
EXPANDDIR	Increases the capacity of a network directory file.
HELP	Calls up the help function.
LISTDIR	Lists the contents of a network directory.
LISTLDEV	Lists LDEVs for a DTC card in a format compatible with ADDLDEV.
LISTLU	Lists LUs in a format compatible with ADDLU.

Table 5-1 NMMGR Maintenance Mode Commands

Command	Action
MAKESTREAM	Creates a job stream used to perform network directory or configuration file updates on remote nodes.
MERGEDIR	Merges entries from another network directory or configuration file into the current network directory.
NICONF	Sets up paths to add or update NETXPORT NI configurations.
OPENCONF	Opens a nodal configuration file and makes it the current configuration file.
OPENDIR	Opens a network directory file and makes it the current directory.
PAGECONF	Sets the page number for multipage data screens.
PASSWORD	Sets the password. Validates the NETXPORT subsystem configuration. Changes the password to allow write access on the OPEN screen.
PATHCONF	Sets the current path in the current configuration file.
PURGECONF	Deletes the subtrees of records from the configuration file.
PURGELDEV	Purges LDEVs from the DTC card.
PURGELU	Purges LUs from the SNA node transport screen
PURGENI	Purges a network interface from the configuration file and performs cleanup.
PURGEVC	Deletes a virtual circuit address key from the network directory and the configuration file.
READALLCONF	Reads all data from the current configuration record.
READCONF	Reads selected data from the current configuration record.
SUMMARYCONF	Prints a report for one or more communications subsystems.
UPDATECONF	Updates the current path in the configuration file.
VALIDATECONF	Validates subsystem configuration.
VERSIONCONF	Checks whether the specified version number matches NMMGR's current version number.
WRITECONF	Writes data to individual fields of the current path in the configuration file.

NOTE

Subsystem break (**[CTRL]Y**) may be used to interrupt the operation of the COPYCONF, DELETENODE, HELP, LISTDIR, MAKESTREAM and MERGEDIR commands. The EXPANDDIR command cannot be interrupted.

The VERSIONCONF command must be used before the PATHCONF command, which must be used before the READCONF, READALLCONF, WRITECONF, and UPDATECONF commands to define the current path.

ADDCONF

Adds subtree of empty records to the configuration file.

Syntax

```
ADDCONF pathname [type]
```

Parameters

pathname The name of a path in the configuration file that describes the location of the desired subtree. It is composed of one to eight path identifiers separated by periods. The format for the pathname is:

`pathid.pathid.pathid...`

The last pathid specified must not exist in the configuration file. The second to last pathid must exist.

`type` A one to eight character path type identifier. This identifier must match one of the selections on the "type select" screen for the "pathname". For example, the type "LAN" is a valid choice for the path "NETXPORT.NI.MYLAN".

Description

ADDCONF is used to add a tree of empty records to the configuration file. It is used in conjunction with PATHCONF, WRITECONF, and UPDATECONF to create and update configuration records. ADDCONF functions exactly like the ADD function key on screens (like the NETXPORT.NI screen) which allow you to select or create a configuration subtree, then take you to the top screen for that subtree. Note that ADDCONF sets the current record to the root node (named by the supplied pathname) of the tree it creates. A PATHCONF command to modify this record immediately after the ADDCONF is not required.

See also READCONF, READALLCONF, PURGECONF, VERSIONCONF, WRITECONF, and UPDATECONF.

Example

```
NMMGR> ADDCONF netxport.ni.newname lan

NMMGR> WRITECONF outbuf,256

NMMGR> UPDATECONF
```

ADDLDEV

Adds LDEVs to a DTC card.

Syntax

```
          {dtcname}
ADDLDEV   {dtc-nodename}     [filename]
          {station-address}
```

Parameters

`dtcname`	The NMMGR nametag for the DTC being accessed. The nametag is the last name in the pathname of the DTC. For example, the dtcname is `DTC01` in the pathname `DTS.DTC.SELECT.DTC01`. The dtcname in a one to eight character alphanumeric string.
`dtc-nodename`	The nodename of the DTC that has been configured at the DTC nametag path. The name must conform to the `NODENAME.ORGANIZATION.DOMAIN` format. The name is a five to fifty character alphanumeric string.
`station-address`	The hexadecimal station of the DTC being accessed.
`filename`	A text file that contains the LDEVs to be added or purged. The file name's format is: `filename[.groupname[.accountname]]` A file lockword may not be specified. The contents of the file must be formatted as described here.

Description

This command adds LDEVs to the cards in the DTC's configuration. The first DTC found that matches the selection criteria will be operated on. For example, this could occur if more than one DTC is configured with the same station-address.

LDEVs for one of more cards can be entered on each invocation of this command. If the filename is not specified you will be prompted with the `ADDLDEV>` prompt. The format for each entry depends on the card type. The formats for these card types are as follows:

- For direct connect or modem cards:

  ```
  LDEV[,] cardno[,] portno[,] profilename[,]
  ```

- For X.25 PAD cards:

```
LDEV[,] cardno[,] profilename[,] device-name[,] x25address[,] [CUG] [;]
```

All text following the number sign “#” will be interpreted as a comment.

For X.25 cards the LDEV will be added to the first available line on the first available page of LDEVs shown on the PAD screen mode.

See also LISTLDEV and PURGELDEV.

Example

```
NMMGR> ADDLDEV dtc01.ind.hp

    Enter LDEVs;

   For M or D type cards: ldev#, card#, port#, profile#;

   For x type cards: ldev#, card#, profile, device, address [, CUG];

ADDLDEV> 100, 1, 1, tr10d96;                    #jack’s terminal
ADDLDEV> 101, 1, 2, tr10d96;                    #jill’s terminal
ADDLDEV> 102, 1, 3, tr10d96                     #building 43U,R6
ADDLDEV> 201, 2, tr10d96, pad1, 123456789012301  #building 41U,A7
NMMGR>
```

ADDLU

Adds LUs to the SNA node transport screen.

Syntax

```
ADDLU SNAnodename [filename]
```

Parameters

`SNAnodename` A one to eight character alphanumeric name that identifies the SNA node to be modified.

`filename` A text file that contains the LU name and number for each LU to be added to the configuration file. The file name's format is:

`filename[.groupname[.accountname]]`

A file lockword may not be specified. The contents of the file must be formatted as described below.

Description

If the filename is not specified you will be prompted with the ADDLU> prompt. The format for each interactive or filename is:

`LUName [,] [[LUNumber]] [;]`

The `LUName` is a one to eight character alphanumeric name that must be unique for the SNA node.

The `LUNumber` must be a number from 1–256 as defined on the SNA node screen. The `LUNumber` must be left blank if the SNA node is a type 2.1 node. If specified, the `LUNumber` must be unique.

See also `LISTLU` and `PURGELU`.

Example

```
NMMGR> ADDLU SNAnode1
Enter LU names (luname [, lunumber]:)
ADDLU> lu1,1;
ADDLU> lu2,2;
ADDLU> lu3,3;
ADDLU> lu4,4;
ADDLU>
NMMGR>
```

ADDNODE

Adds or updates a node in the current network directory.

Syntax

```
ADDNODE [filename]
```

Parameters

`filename` The name of a text file that contains node name and address information for each node to be added or updated in the network directory. The format for the file name is:

`filename[.groupname[.accountname]]`

A file lockword may not be specified. The contents of the file must be formatted as described here.

Description

ADDNODE adds or updates nodes in the network directory. New nodes are automatically created when they are entered. New path reports (IP address/additional address pairs) can be added to new or existing nodes. Path reports on existing nodes can be modified.

The directory file must be opened either via the Open Configuration/Directory File screen or via the `OPENDIR` maintenance mode command before `ADDNODE` can be used.

This command can be run interactively, by entering maintenance mode from screen mode and typing the command, or it can be run from a batch job.

When the command is run interactively and no filename is specified, you are prompted to enter parameters for each node. When the command is run interactively and a filename is specified, or when the command is run from a job, parameters for each node name entry are formatted as follows:

```
nodename[,] “IP address”[,] [additional address type[,][additional address]]
[;]
```

The description of each parameter that must be defined when the command is run from a job or with a filename specified is as follows:

`nodename` The name of a node to be added or updated with new path report data. The format is:

`nodename.domain.organization`

Each of the three names may be from one to sixteen characters long, must begin with a letter, and may contain letters, digits, underscores, or dashes.

If the nodename does not exist, it will be created. If it does exist, the IP address and additional address (if any) will be added to its path report list in the directory.

`IP address` The IP address of the remote node. A node may have several IP addresses, one for each path report. The format of the address is the same as the IP address in the Network Directory Data screen. It must be enclosed in quotes (“ ”) if it is not entered interactively.

`additional address type`

The numerical type associated with each type of additional address on the Network Directory Data screen. If there is no additional address associated with the node you are adding, enter a 1 (the default). If there is an additional address, enter the number corresponding to the type of the address. The types are as follows:

1	No additional address (default, IP address only)
2	LAN/IEEE802.3
3	X.25
4	NS/SNA
5	LAN/ETHERNET

`additional address`

The additional address, if any, to be associated with the IP address specified for the node name. If the address is of type LAN/IEEE802.3 or LAN/ETHERNET, then the additional address is an IEEE802.3 or ETHERNET address with the format *xx-xx-xx-xx-xx-xx*, where *x* is a hexadecimal digit (0–9, or A–F). If the address type is X.25, then an X.25 address key name must be specified here.

Example

To interactively add a path report for the node named `NODE1.XLNET.ACCTG` (user input is italicized):

```
NMMGR> OPENDIR NSDIR.NET.SYS

NMMGR> ADDNODE

Enter node name (or press return to exit):

ADDNODE> NODE1.XLNET.ACCTG

Enter IP address:

ADDNODE> C 192.000.001 002

Enter additional address type,
```

```
(1-IP, 2-LAN/IEEE802.3, 3-X.25, 4-NS/SNA, 5-LAN/ETHERNET,
(default is 1):

ADDNODE> 2

Enter additional address:

ADDNODE> 11-22-33-44-55-66

NODE1.XLNET.ACCTG saved.

Enter node name (or press return to exit):

ADDNODE> [RETURN]

NMMGR>
```

ADDVC

Adds an X.25 virtual circuit address key to the network directory and to the configuration file.

Syntax

```
ADDVC [filename]
```

Parameters

`filename` The name of a text file that contains X.25 address information for each remote node to be added to the configuration file and directory. The format for the file name is:

```
filename[.groupname[.accountname]]
```

A file lockword may not be specified. The contents of the file must be formatted as described below.

Description

ADDVC updates both the local network directory and the configuration file with X.25 address information. It uses the address key specified for the network directory to relate the remote node name to an IP address, local NI name, and an X.25 address.

The directory and configuration files must be opened either via the Open Configuration/Directory File screen or via the `OPENDIR` and `OPENCONF` maintenance mode command before ADDVC is invoked.

This command can be run interactively, by entering maintenance mode from screen mode and typing the command, or it can be run from a batch job.

When `ADDVC` is used interactively and no filename is specified, the user is prompted to enter address parameters for each remote node. When `ADDVC` is run interactively and a filename *is* specified, or when the command is run from a job, each entry is defined as a set of positional parameters delimited by spaces or a comma. An unspecified parameter must be delimited by a comma, or by a semicolon if it occurs at the end of the entry.

For switched virtual circuits, the format is:

```
nodename[,] “IP address”[,] address key[,] NI name[,] Y[,] svc address[,]
[facility set][,] [security class][;]
```

For permanent virtual circuits, the format is:

```
nodename[,] “IP address”[,] address key[,] NI name[,] N[,] circuit number[;]
```

The description of each parameter that must be defined when the command is run from a job or with a filename specified is as follows:

`nodename` The name of a node to which the address key is to be added. The format is:

nodename.domain.organization

Each of the three names may be from one to sixteen characters long, must begin with a letter, and may contain letters, digits, underscores, or dashes.

If the nodename does not exist, it will be created. If it does exist, the IP address and additional address (if any) will be added to its path report list in the directory.

IP address The IP address of the remote node whose X.25 address is to be added to the configuration. The format of the address is the same as the IP address in the Network Directory Data screen. It must be enclosed in quotes (“ ”) if it is not entered interactively.

address key The name tag used to relate a node name and IP address from the network directory, with a switched or permanent virtual circuit address, configured under an X.25 NI in the local configuration file. The name may contain a maximum of eight alphanumeric characters.

NI name The name of the local X.25 NI. The name may contain a maximum of eight alphanumeric characters.

Y or N A Y or an N must be entered after the NI name parameter to indicated whether the virtual circuit being added is a switched virtual circuit (Y) or a permanent virtual circuit (N).

svc address The address associated with an X.25 node. The address can be a maximum of 15 digits and is supplied with the network subscription or assigned by the network administrator.

facility set

The name of the facility set to be used when the switched virtual circuit connection is created with the remote node. The name may contain a maximum of eight alphanumeric characters. The default is STDSFSET, which is supplied when the NI is created using NS guided configuration.

security class

The security class to be associated with switched virtual circuit connections established with the remote node. The choices are:

IO	Initiate outbound and accept inbound connections.
IN	Accept inbound connections only.

OU	Initiate outbound connections only.
LK	Do not permit inbound or outbound connections (placeholder entry).

`circuit number`

The permanent virtual circuit number supplied with your network subscription or assigned by your network administrator.

Example

To interactively add a switched virtual circuit for the node named NODE1.XLNET.ACCTG to the NI named X25 (user input is italicized):

```
NMMGR> OPENCONF NMCONFIG
NMMGR> OPENDIR NSDIR.NET.SYS
NMMGR> ADDVC
Enter node name (or press return to exit):
ADDVC> NODE1.XLNET.ACCTG
Enter IP address:
ADDVC> C 192.000.001 001
Enter address key:
ADDVC> NODE1
Enter NI name:
ADDVC> X25
Is the X.25 address a switch VC (Y/N)?
ADDVC> Y
Enter X.25 address:
ADDVC> 123456789012345
Enter facility set name (press return for STDSFSET):
ADDVC> [RETURN]
Enter security class (IO,IN,OU,LK):
ADDVC> IO
Address key NODE1 added.
Enter node name (or press return to exit):
ADDVC> [RETURN]
NMMGR>
```

CARDCONF

Sets the current DTC card number so that the correct card is displayed or updated by the READALLCONF, READCONF, UPDATECONF, and WRITECONF commands.

Syntax

```
CARDCONF cardno
```

Parameters

cardno	A number corresponding to the slot number of the DTC that contains the DTC card to be acted on. The number must be between 0 and 5.

Description

CARDCONF sets the current card number for a path referencing a DTC card screen. If the current path identifies a DTC configuration, the commands READALLCONF, READCONF, UPDATECONF, and WRITECONF operate on data associated with a specific card in the DTC, as identified by the CARDCONF command.

The CARDCONF command must be specified before a PATHCONF command for a DTC card screen.

Example

```
NMMGR> CARDCONF 1
```

(Sets the current DTC card number to 1.)

```
NMMGR> PATHCONF DTS.DTCPC.SELECT.DTC01.CARD012
```

(Sets the current path to the data screen that contains data for cards 0, 1, and 2 of DTC01.)

COMPRESSCONF

Compresses or expands the current configuration file.

Syntax

```
COMPRESSCONF numrecs
```

Parameters

`numrecs`	The number of additional records to be added to or subtracted from the configuration file. A positive value causes records to be added and a negative value causes records to be subtracted. The value must be from -32768 to 32767. A zero will remove unused records (compress them down to 0 bytes).

Description

COMPRESSCONF increases or decreases the capacity of the currently opened configuration file and regains unused but not “free” records. (You can also compress a configuration file and alter the file’s capacity using the NMMGR Compress screen in screen mode.)

Example

```
NMMGR> COMPRESSCONF 500
```

(Increases the current configuration file by 500 records.)

```
NMMGR> COMPRESSCONF -500
```

(Decreases the current configuration file by 500 records.)

```
NMMGR> COMPRESSCONF 0
```

(Compresses the current configuration without affecting its size.)

CONTINUE

Prevents NMMGR from terminating in a job because of a maintenance mode error.

Syntax

```
CONTINUE [ON or OFF]
```

Parameters

ON	Turn on continue so the NMMGR will not terminate for the rest of this job if a maintenance mode command returns a bad status.
OFF	Turn off continue mode.

Description

Stops NMMGR from terminating abnormally in a job because a single maintenance mode command terminated with an error. If no parameters are provided, the CONTINUE will be in effect for the next command only.

Example

```
NMMGR> ADDCONFnetxport.ni.newname lan
NMMGR> WRITECONF outbuf,256
NMMGR> UPDATECONF
NMMGR> CONTINUE
NMMGR> PURGECONF netxport.ni.oldname
```

COPYCONF

Copies a configuration subtree.

Syntax

```
COPYCONF srcpath[:srcfile][,[destpath][:destfile]] [;KEEP][;NOVERS]
```

Parameters

`srcpath` The name of a configuration path in the source file that describes the location of the subtree to copy (source path). It is composed of one to eight path identifiers separated by periods:

`pathid.pathid.pathid...`

`srcfile` The name of an NMMGR configuration file (NCONF file) that contains the subtree to be copied (source file). The format is:

`filename[.groupname[.accountname]]`

A file lockword may not be specified. A file equation may be employed through explicit use of the back-reference:

`*DESIGNATOR`

`destpath` The name of the path that describes where the subtree is to be placed in the destination file (destination path), in the same format as `srcpath`. Select and type-select path identifiers may be changed from the corresponding identifier in `srcpath` as long as the new identifier is type-compatible. If this parameter is not specified, the destination path is assumed to be the same as the path specified in `srcpath`.

`destfile` The name of an NMMGR configuration file that is to receive the copied data (destination file). The format is the same as `srcfile`. This file name may be the same as that specified in `srcfile`, which allows you to copy data from one location within a file to another location in the same file. If this parameter is not specified, the destination file is assumed to be the same as the source file.

`KEEP` Designates that if the `destpath` already exists in `destfile`, the operation will not be performed. The default (when `KEEP` is not specified) is to replace the destination subtree with the source path.

`NOVERS` Designates that no version check will be performed on the source or destination paths. The default is to

perform version checks.

Description COPYCONF allows data to be copied from one configuration file into another file, or into the same file in a different location. Source and destination paths are used to direct where a subtree is to come from and where it is to be copied to. (You can also copy a configuration subtree using the NMMGR Configuration Subtree Copy screen in screen mode.)

Example To copy data from one file into another file using the same path (the command must be entered in one line):

```
NMMGR> COPYCONF NETXPORT.NI.LAN1.INTERNET:FILEA,NETXPORT.NI.LAN1.INTERNET;FILEB
```

To copy data to a different path in the same file:

```
NMMGR> COPYCONF LINKCONF.LINK1:FILEA, LINKCONF.LINK2:FILEA
```

DELETECONF

Deletes a subtree from the current configuration file.

Syntax

```
DELETECONF path
```

Parameters

`path` The name of a configuration path in the configuration file that describes the location of the subtree to delete. It is composed of one to eight path identifiers separated by periods, as follows:

`pathid.pathid.pathid...`

The last identifier in the path must be a select or type select identifier.

Description

DELETECONF deletes the subtree of the specified path. All configuration records in the subtrees below the specified path are deleted. The configuration record identified by the specified path is also deleted.

Example

To delete all configuration records in the `NETXPORT.NI.LAN` subtree:

```
NMMGR> DELETECONF NETXPORT.NI.LAN
```

DELETENODE

Deletes an entry from the network directory.

Syntax

```
DELETENODE [nodename] [;LOCAL]
                      [;GLOBAL]
```

Parameters

nodename	The name of a node to delete from the directory in the format: nodename.domain.organization Each of the three names may be from one to sixteen characters long, must begin with a letter, and may contain letters, digits, underscores, or dashes. If omitted, then all entries of the selected class in the directory will be deleted.
LOCAL	Designates that only local entries in the directory are to be deleted.
GLOBAL	Designates that only global entries in the directory are to be deleted. This is the default class if neither keyword is specified.

Description

DELETENODE deletes a single entry or all entries from the currently opened network directory. If you issue this command from a session, and do not specify nodename, then you are prompted with a delete confirmation message and a yes/no response is solicited to verify that you really want to delete all entries from the directory.

Example

To delete a single node entry:

```
NMMGR> DELETENODE NODE2.XLNET.ACCTG ;LOCAL
```

To delete all global entries from a directory:

```
NMMGR> [RETURN]
Are you sure (Y/N)? Y
```

EXIT

Exits from maintenance mode.

Syntax

```
EXIT
```

Parameters

None.

Description

If you are running maintenance mode interactively, type EXIT at the NMMGR> prompt to return to screen mode. If you are running maintenance mode from a job, EXIT terminates the job.

Example

```
NMMGR> EXIT
```

EXITVALIDATE

Validates a subsystem's configuration, if needed, upon exit from NMMGR.

Syntax

```
EXITVALIDATE subsystem  [ON or OFF]
```

Parameters

`subsystem` The name of a configuration subsystem that is to be validated. Currently NETXPORT, DTS, or IBM is allowed.

`ON`	This is the default and need not be specified. It indicates that exit validation is to be enabled for the specified subsystem.
`OFF`	Indicates that exit validation is to be disabled for the specified subsystem.

Description

Automatically validates the selected configuration (if needed) when you attempt to exit NMMGR. NMMGR will note that validation is needed whenever a configuration is changed without being validated. Output is directed to the formal designator `FORMLIST`, which defaults to `$STDLIST`.

If the configuration is not valid NMMGR will return you back to screen mode instead of exiting. If you want to exit, use the `EXIT` command or press the **[EXIT]** function key (on the `OPEN` screen) again.

By default, exit validation is enabled for the DTS subsystem.

Example

```
NMMGR> EXITVALIDATE DTS
```

EXITWARN

Warns that a subsystem needs to be validated before exiting NMMGR.

Syntax

```
EXITWARN subsystem  [ON or OFF]
```

Parameters

`subsystem` The name of a configuration subsystem to which messages will be issued. Currently NETXPORT, DTS, or IBM is allowed.

`ON`	This is the default and need not be specified. It indicates that an exit message is to be enabled for the specified subsystem.
`OFF`	Indicates that an exit message is to be disabled for the specified subsystem.

Description

Automatically warns you that validation needs to be performed for the selected subsystem(s) when you attempt to exit NMMGR. NMMGR will note that validation is needed whenever a configuration is changed without being validated. Output is directed to the formal designator `FORMLIST`, which defaults to `$STDLIST`.

If the configuration is not validated, NMMGR will return you back to screen mode instead of exiting. If you want to exit, use the `EXIT` command or press the **[EXIT]** function key (on the `OPEN` screen) again.

By default, exit warning is enabled for the all subsystems.

Example

```
NMMGR> EXITWARN DTS
```

EXPANDDIR

Increases the capacity of a network directory file.

Syntax

```
EXPANDDIR numrecs
```

Parameters

`numrecs`	The number of additional records to be added to the directory. The value must be from 0 through 32767.

Description

EXPANDDIR increases the capacity of the currently opened directory file to allow additional entries to be added. Each entry in the directory requires one record, plus one for each network address referenced in the entry.

NOTE

You can use the EXPANDDIR command only if you have exclusive access to the network directory. Therefore, the network transport must be shut down. In addition, to enter this command you must be logged onto the same account where the directory file resides.

Example

To increase the current directory file by 500 records:

```
NMMGR> EXPANDDIR 500
```

HELP

Calls up the help function.

Syntax

```
HELP [keyword]
```

Parameters

`keyword` The NMMGR topic about which you are seeking help information. Help is available on the following topics:

`COMMANDS`	A list of the commands available.
`MAINT`	General help on the maintenance mode interface.
`OVERVIEW`	Overview of NMMGR operation.
`ROADMAP`	A map of NMMGR screens.
`INDEX`	An index of configuration parameters
`ALL`	All NMMGR help topics.

Description

If you are running maintenance mode interactively, type `HELP` to enter the NMMGR help mode. If you entered a keyword, you will be presented with the help information for that keyword. If you did not enter a keyword, you will be presented with the list of available help topics and allowed to select a topic. You can browse through the topics until you terminate help mode by typing `end`, `exit`, or `:`.

Example

To get an overview of NMMGR operation:

```
NMMGR> HELP OVERVIEW
```

LISTLDEV

Lists LDEVs for a DTC card in a format compatible with ADDLDEV.

Syntax

```
          (dtcname)
LISTLDEV  (dtc-nodename)    [filename]
          (station-address)
```

Parameters

`dtcname` The NMMGR nametag for the DTC being accessed. The nametag is the last name in the pathname of the DTC. For example, the dtcname is `DTC01` in the pathname `DTS.DTC.SELECT.DTC01`. The dtcname in a one to eight character alphanumeric string.

`dtc-nodename` The nodename of the DTC that has been configured at the DTC nametag path. The name must conform to the `NODENAME.ORGANIZATION.DOMAIN` format. The name is a five to fifty character alphanumeric string.

`station-address` The hexadecimal station of the DTC being accessed.

`filename` A text file that contains the LDEVs to be listed. The file name's format is:

`filename[.groupname[.accountname]]`

A file lockword may not be specified. The contents of the file must be formatted as described below.

Description

If the filename parameter is specified, the file is created and opened. If the file exists, its contents are purged before it is opened. When the filename is supplied, the file is updated with a list of all the LDEVs configured for the selected DTC in a format compatible with `ADDLDEV`. If the filename parameter is not supplied, the LDEVs are printed on the `$STDLIST`.

See also `ADDLDEV` and `PURGELDEV`.

Example

```
NMMGR> LISTLDEV dtc01.ind.hp

LISTLDEV> 100, 1, 1, tr10d96;

LISTLDEV> 101, 1, 2, tr10d96;

LISTLDEV> 102, 1, 3, tr10d96;

LISTLDEV> 201, 2, tr10d96, pad1, 123456789012301


NMMGR>
```

LISTDIR

Lists the contents of a network directory.

Syntax

```
LISTDIR [nodename]
```

Parameters

nodename — The name of a node to display from the directory in the format:

nodename.domain.organization

Each of the three names may be from one to sixteen characters long, must begin with a letter, and may contain letters, digits, underscores, or dashes.

If omitted, then all entries in the directory will be listed.

When both global and local entries exist with the same name, both will be listed.

Description

LISTDIR displays zero or more entries in the current network directory. A summary of information about the directory file itself is listed first, followed by individual entry listings sorted alphabetically by node name within entry class. Local entries precede global entries.

The summary includes the name of the network directory file, the date and time of last modification, the number of records available and used, and the directory's capacity shown as a percentage.

For each entry listed, the node name and classification is shown (LOCAL entries are followed by "(L)"). Next is a list of one to eight network addresses associated with the entry. For each network address, the type, additional address, and transport services (TCP, TCP Checksum setting, PXP) are shown where applicable.

The list file is directed to the formal designator FORMLIST, which defaults to $STDLIST.

Example

```
NMMGR> LISTDIR

          GLOBAL NETWORK DIRECTORY INFORMATION

     Directory File:          NSDIR.PUB.SYS

     Modification Date:       FRI, APR 20, 1990, 10:04 AM

     Modification Node:       CECIL.DCL.IND

     Records Used:            9

     Records Available:       991

     Capacity:                1% full
```

```
Node Name          IP Address              Net Type  Additional Addr  T  C  P
                                                                      C  H  X
                                                                      P  X  P

POGO.DCL.IND (L)   C 194.107.213 017 IP X           NONE                  X

ASTRO.MKTG.IND     C 194.107.213 009 IP             NONE             X    X

VENUS.FIN.IND      C 194.107.213 017 IP             NONE             X  X  X

                   B 145.140 062.193 IP/IEEE802.3 F1-B3-58-73-A3-09  X  X  X

ZIGGY.LAB.IND      C 194.107.213 086 IP             NONE             X    X
```

LISTLU

Lists LUs in a format compatible with ADDLU.

Syntax

```
LISTLU SNAnodename [filename]
```

Parameters

`SNAnodename` A one to eight character alphanumeric name that identifies the SNA node to be listed.

`filename` A text file that contains the LU name and number for each LU to be read from the configuration file. The file name's format is:

`filename[.groupname[accountname]]`

A file lockword may not be specified. The contents of the file must be formatted as described below.

Description

If the filename parameter is specified, the file is created and opened. If the file exists, its contents are purged before it is opened. If the filename is not specified the data will be printed to the $STDLIST.

See also ADDLU and PURGELU.

Example

```
NMMGR> LISTLU SNAnode1
LISTLU> lu1,1;
LISTLU> lu2,2;
LISTLU> lu3,3;
LISTLU> lu4,4;
LISTLU>
NMMGR>
```

MAKESTREAM

Creates a job stream that can then be used to perform network directory or configuration file updates on remote nodes.

Syntax

```
MAKESTREAM streamfile, nodefile, commandfile
```

Parameters

`streamfile` The name of a file to be created that will contain the job stream commands. The format is:

`filename[.groupname[.accountname]]`

The file must not already exist. The default allocation of 5000 variable length records may be overridden through a file equation.

`nodefile` The name of the file that contains a list of nodes to be updated. The format is the same as that for `streamfile`. This file may be generated by redirecting the output of the `LISTDIR` command into a file, which may then be submitted directly to `MAKESTREAM` or edited with a text editor such as TDP/3000. All node name entries must begin with an alphabetic character.

`commandfile` The name of a file that contains NMMGR maintenance mode commands. The format is the same as that for `streamfile`. The commands in this file are applied to each node listed in `nodefile`.

Description

MAKESTREAM generates a text file of job stream commands suitable for updating a group of nodes. The job stream is created based on a list of nodenames contained in the `nodefile` supplied. The `nodefile` acts as a control file. The update status of each node is recorded for review in the event of update failures such as transport problems or a network being inaccessible.

The standard logon is `NETADMIN.SYS,PUB`. Progress messages are sent to `OPERATOR.SYS`. These and other parts of the job stream may be customized using a text editor once the stream file is created. The commands executed on each node in the `nodefile` are taken from `commandfile`. Commands may be any NMMGR maintenance mode commands and are executed on the remote side of the connection established for each node being updated.

Only lines that begin with an alphabetic character in column one of the `nodefile` are considered node name entries.

Example

`nodefile` NLIST contains the following:

```
ASTRO.MKT.IND
```

```
POGO.DCL.IND
```

commandfile CMDS contains the following:

```
OPENDIR NSDIR.PUB.SYS
:FILE SRCDIR=NSDIR.PUB.SYS:$BACK
MERGEDIR *SRCDIR;NOKEEP
LISTDIR
EXIT
```

To generate and run a job stream, use the following commands:

```
NMMGR> MAKESTREAM SFILE, NLIST, CMDS
Generating job statements for node ASTRO.MKT.IND
Generating job statements for node POGO.DCL.IND
NMMGR> :STREAM SFILE
#J1072
After job completion, file NLIST contains the following:
   ASTRO.MKT.IND        UPDATED       04/20/90 11:09 AM
   POGO.DCL.IND         UPDATED       04/20/90 11:14 AM
```

MERGEDIR

Merges entries from another network directory or configuration file into the current network directory.

Syntax

```
                {otherdir  [,nodename]} [;LOCAL] [;KEEP      ]
MERGEDIR {configfile                }          [;NOKEEP    ]
                                       [;GLOBAL][;TIMESTAMP ]
```

Parameters

`otherdir` The name of another network directory file to merge one or more entries from. The format is:

`filename[.groupname[.accountname]]`

A file lockword may not be specified.

`nodename` The name of a single node entry to merge when the source file is a network directory. This parameter may not be specified if the source is a configuration file. The format is:

`nodename.domain.organization`

Each of the three names may be from one to sixteen characters long, must begin with a letter, and may contain letters, digits, underscores, or dashes.

`configfile` The name of an NMMGR configuration file (NCONF file) from which a single entry is to be extracted. The format of this filename is the same as that for `otherdir`.

`LOCAL` When the source file is a network directory, LOCAL indicates that only those entries classified as “local” will be merged into the current directory.

When the source is a configuration file, LOCAL specifies that the extracted entry will be classified as “local” in the current directory.

`GLOBAL` When the source file is a network directory, GLOBAL indicates that only those entries classified as “global” will be merged into the current directory.

When the source is a configuration file, GLOBAL specifies that the extracted entry will be classified as “global” in the current directory.

GLOBAL is the default classification when neither LOCAL nor GLOBAL is specified.

KEEP	Indicates that entries in the current directory are to be retained when duplicate entries exist in the source directory. This keyword is not applicable when the source is a configuration file.
NOKEEP	Indicates that entries in the current directory are to be overwritten with duplicate entries found in the source directory. This keyword is not applicable when the source is a configuration file.
TIMESTAMP	Indicates that duplicate entries found in both directories are to be compared, and the one that was created most recently will be stored in the current directory. This is the default action taken when neither KEEP, NOKEEP, nor TIMESTAMP is specified. This keyword is not applicable when the source is a configuration file.

Description

MERGEDIR takes entries from either another network directory or an NMMGR configuration file and merges them into the current directory.

Entries that do not exist in the current directory are unconditionally added to the current directory. Duplicate entries are handled differently depending upon the source file type. If the source file is a network directory, then duplicate entries are either ignored or replaced in the current directory depending on the KEEP, NOKEEP, or TIMESTAMP keyword used. If the source file is an NMMGR configuration file, then the duplicate entry is replaced in the current directory.

Example

To merge an entry from the system configuration file and store it as a local entry, enter the following command:

```
NMMGR> MERGEDIR NMCONFIG.PUB.SYS ;LOCAL
```

To merge all global entries from another network directory, overwriting any duplicates in the current directory, enter the following command:

```
NMMGR> MERGEDIR RMOTEDIR ;NOKEEP
```

NICONF

Sets up paths to add or update NETXPORT NI configurations.

Syntax

```
NICONF niname [nitype]
```

Parameters

niname	A one to eight alphanumeric character name that identifies the network interface to be added or modified.
nitype	The type of the network interface to be added. Valid types are: LAN, TOKEN, X25, SNA, GATEHALF, or ROUTER.

Description

NICONF is used in place of the PATHCONF command to set up internal data structures in NMMGR. Subsequent WRITECONF, READCONF, READALLCONF, and UPDATECONF commands will access the configuration file in a similar way to the guided configuration screen corresponding to the NI type for the NI name.

Example

```
NMMGR> NICONF lanni
NMMGR> WRITECONF ipaddress, “C 192.001.001.001”
NMMGR> UPDATECONF
```

OPENCONF

Opens a nodal configuration file and makes it the current configuration file.

Syntax

```
OPENCONF fileref
```

Parameters

`fileref` The name of a configuration file to access in the format:

`filename[.groupname[.accountname]]`

A file lockword may not be specified.

Description

OPENCONF closes any previously opened configuration file and opens the file named in `fileref` for shared, read/write access. If the configuration file does not exist, then a new file is created and opened.

Example

```
NMMGR> OPENCONF NMCONFIG.PUB.SYS
```

OPENDIR

Opens a network directory file and makes it the current directory.

Syntax

```
OPENDIR fileref
```

Parameters

`fileref` The name of a network directory file to access in the format:

`filename[.groupname[.accountname]]`

A file lockword may not be specified.

Description

OPENDIR closes any previously opened directory and opens the directory file named in `fileref` for shared, read/write access. If the directory file does not exist, than a new directory is created and opened.

Example

```
NMMGR> OPENDIR NSDIR.PUB.SYS
```

PAGECONF

Sets the page number for multipage data screens.

Syntax

```
PAGECONF pageno
```

Parameters

pageno	A positive integer identifying the page number to be accessed when the screen being accessed is a multipage data screen.

Description

PAGECONF sets the current page number for a path referencing a multipaged data screen. A multipaged data screen is used to store lists of data that cannot be entered on a single screen. If the current path identifies a multipaged data screen, the commands READCONF, READALLCONF, WRITECONF, and UPDATECONF operate on data in the current page, as set by the PAGECONF command. Otherwise, the page number is ignored.

The current page number is set to 1 when maintenance mode is entered.

The PAGECONF command may be specified before or after a PATHCONF command for a multipaged data screen.

Example

```
NMMGR> PAGECONF 9
```

PASSWORD

Changes the password to allow write access on the OPEN screen. Validates the NETXPORT subsystem configuration.

Syntax

```
PASSWORD [password]
```

Parameters

password	This sets a password. You must supply a maximum 16 alphanumeric character string on the OPEN screen to gain write access. When no password is supplied, the default is the null string. If a password is set up before the configuration file, you will need to enter the password at the open screen or you won't be able to create (write to) the configuration file.

Description

The password you supply on the OPEN screen is compared with the password string supplied here (or the default if no password command has been issued). If the user password does not match, you are only permitted to access the network directory or configuration file in BROWSE MODE.

Example

```
NMMGR> PASSWORD guess
```

PATHCONF

Sets the current path in the current configuration file.

Syntax

```
PATHCONF[=]path
```

Parameters

`path` The name of a path in the configuration file that describes the location of the desired record. It is composed of one to eight path identifiers separated by periods:

`pathid.pathid.pathid...`

The last identifier in the path must be a data identifier (must refer to a data screen).

Description

PATHCONF sets the current path in the configuration file; that is, it points to the specified configuration record. The current data in the current path is operated on by the READCONF, READALLCONF, WRITECONF, and UPDATECONF commands. You must call the VERSIONCONF command before using this command. The VERSIONCONF command needs to be called only once in a session.

Example

To set the current path in the configuration file to NETXPORT.NI.*niname* where *niname*=LANNI:

```
NMMGR> PATHCONF NETXPORT.NI.LANNI
```

PURGECONF

Deletes subtrees of records from the configuration file.

Syntax

```
PURGECONF [pathname]
```

Parameters

`pathname` The name of a path in the configuration file that describes the location of the desired subtree. It is composed of one to eight path identifiers separated by periods. The format for the pathname is:

```
pathid.pathid.pathid...
```

The last pathid specified must not exist in the configuration file. The second to last pathid must exist.

Description

PURGECONF purges records from the configuration file. It functions in the same way as the DELETE function key on screens (like the NETXPORT.NI screen) that require you to delete, rename, add, or modify a configuration subtree. Note that the subtree will be purged whether or not it contains data.

See also ADDCONF, READCONF, READALLCONF, VERSIONCONF, WRITECONF, and UPDATECONF.

Example

```
NMMGR> ADDCONF netxport.ni.newname lan
NMMGR> WRITECONF outbuf,256
NMMGR> UPDATECONF
NMMGR> PURGECONF netxport.ni.oldname
```

PURGELDEV

Purges LDEVs from a DTC card.

Syntax

```
                {dtcname}
PURGELDEV       {dtc-nodename}        [filename]
                {station-address}
```

Parameters

`dtcname` The NMMGR nametag for the DTC being accessed. The nametag is the last name in the pathname of the DTC. For example, the dtcname is `DTC01` in the pathname `DTS.DTC.SELECT.DTC01`. The dtcname in a one to eight character alphanumeric string.

`dtc-nodename` The nodename of the DTC that has been configured at the DTC nametag path. The name must conform to the `NODENAME.ORGANIZATION.DOMAIN` format. The name is a five to fifty character alphanumeric string.

`station-address` The hexadecimal station of the DTC being accessed.

`filename` A text file that contains the LDEVs to be added or purged. The file name's format is:

`filename[.groupname[.accountname]]`

A file lockword may not be specified. The contents of the file must be formatted as described below.

Description

This command purges the selected LDEVs from the cards in the DTC's configuration. The first DTC found that matches the selection criteria will be operated on. For example, this could occur if more that one DTC is configured with the same station-address.

LDEVs for one of more cards can be entered on each invocation of this command. If you don't specify a filename you will be prompted with the `ADDLDEV>` prompt. The format or each entry depends on the card type. The format for each entry is:

```
LDEV[,] cardno[,] [# my comment ]
```

All text following the options number sign "#" will be interpreted as a comment.

See also `ADDLDEV` and `LISTLDEV`.

Example

```
NMMGR> PURGELDEV dtc01.ind.hp
Enter LDEVs; (ldev, cardno)
PURGELDEV> 100, 1,;
PURGELDEV> 101, 1;
PURGELDEV> 102, 1;
PURGELDEV> 201, 2,
NMMGR>
```

PURGELU

Purges LUs from the SNA node transport screen.

Syntax

```
PURGELU SNAnodename [filename]
```

Parameters

`SNAnodename` A one to eight character alphanumeric name that identifies the SNA node to be purged.

`filename` A text file that contains the LU names to be purged from the configuration file. The file name's format is:

`filename[.groupname[accountname]]`

A file lockword may not be specified. The contents of the file must be formatted as described here.

Description

If the filename is not specified you will be prompted with the PURGELU> prompt. The format for each interactive or filename is:

LUName [;]

The SNA node name must be a one to eight character alphanumeric name. It identifies the SNA node to be purged. If SNA node name is not specified the current (last used) name will be used. If no current name exists then the first name configured will be selected.

The LUName is a one to eight character alphanumeric name that must be unique for the SNA node.

See also ADDLU and LISTLU.

Example

```
NMMGR> PURGELU SNAnode1
Enter LU names (luname [;]):
PURGELU> lu1;
PURGELU> lu2;
PURGELU> lu3;
PURGELU>
NMMGR>
```

PURGENI

Purges a network interface from the configuration file and performs cleanup.

Syntax

```
PURGENI [niname]
```

Parameters

`niname` A one to eight character alphanumeric name that identifies the network interface to be purged.

Description

Purges a network interface from the configuration file and purges all the links it refers to from under the `LINK` path.

Example

`NMMGR>` *`PURGENI lanni`*

PURGEVC

Purges an X.25 virtual circuit address key from the network directory and the configuration file.

Syntax

```
PURGEVC [filename]
```

Parameters

`filename` The name of a text file that contains X.25 address information for each remote node to be deleted from the configuration file and directory. The format for the file name is:

```
filename[.groupname[.accountname]]
```

A file lockword may not be specified. The contents of the file must be formatted as described below.

Description

PURGEVC removes an address key from both the local network directory and the configuration file. If there are multiple occurrences of the same address key under a single NI, all occurrences are purged. The directory node associated with the address key to be purged will be purged itself if it contains no other addresses.

The directory and configuration files must be opened either via the Open Configuration/Directory File screen or via the OPENDIR and OPENCONF maintenance mode command before ADDVC is invoked.

PURGEVC can be run interactively, by entering maintenance mode from screen mode and typing the command, or it can be run from a batch job.

When PURGEVC is used interactively and no filename is specified, the user is prompted to enter address parameters for each remote node. When PURGEVC is run interactively and a filename is specified, or when the command is run from a job, entries must be made in the following format:

```
nodename[,] address key[,] NI name [;]
```

The description of each address key parameter is as follows:

`nodename` The name of a node for which the address key is to be purged. The format is:

```
nodename.domain.organization
```

Each of the three names may be from one to sixteen characters long, must begin with a letter, and may contain letters, digits, underscores, or dashes.

`address key` The name tag used to relate a node name and IP address from the network directory with a switched or permanent virtual circuit address configured under an X.25 NI in the local configuration file. The name may

contain a maximum of eight alphanumeric characters.

`NI name` — The network interface name. The name of the local X.25 NI, (configured under the path `NETXPORT.NI`). The name may contain a maximum of eight alphanumeric characters.

Example

To purge a virtual circuit associated with the NI named X25 for the node named `NODE1.XLNET.ACCTG`:

```
NMMGR> OPENCONF NMCONFIG

NMMGR> OPENDIR NSDIR.NET.SYS

NMMGR> PURGEVC

Enter the node name (or press return to exit):

PURGEVC> NODE1.XLNET.ACCTG

Enter address key:

PURGEVC> NODE1

Enter NI name:

PURGEVC> X25

Address key NODE1 deleted.

Enter node name (or press return to exit):

NMMGR>
```

READALLCONF

Reads all data from the current configuration record.

Syntax

```
READALLCONF [;FORMAT]
```

Parameters

FORMAT	Designates output formatting. Output is formatted in a WRITECONF format so that it can be re-entered into NMMGR's maintenance mode. If the format option is omitted, data will be formatted with one field per line when writing to a file.

Description

READALLCONF reads and displays all the fields in the configuration record identified by the current path. If the current path is associated with a multipaged data screen, then all the pages of data associated with the screen are displayed, unless PAGECONF was used to set the current page.

Output is directed to the file defined in the file equation FORMLIST. If FORMLIST is not defined, output is sent to $STDLIST.

You must enter the CARDCONF, then the PATHCONF command before using the READALLCONF command. This defines the pathname of the record from which the data will be read. If you want READALLCONF to display the data written in the previous WRITECONF commands, you must first enter the UPDATECONF command.

If you are referencing a DTC card screen, you must use the CARDCONF command to set the current card number before issuing the READALLCONF command.

Example

To display all the fields in the NETXPORT.NI.GLOBAL screen:

```
NMMGR> PATHCONF NETXPORT.GLOBAL
```

(Sets the path to the screen.)

```
NMMGR> READALLCONF
```

Displays all the fields in the screen.)

```
NMMGR> PATHCONF NETXPORT.GLOBAL
```

(Sets the path to the screen.)

```
NMMGR> READALLCONF;FORMAT
```

(Displays all the fields in the screen.)

```
PATHCONF NETXPORT.GLOBAL
WRITECONF     HOMENET,   "NETNAME"
WRITECONF           F,   "2"
```

```
WRITECONF          G,   “3”
WRITECONF          H,   “1”
WRITECONF      INBUF,   “256”
UPDATECONF
NMMGR
```

READCONF

Reads selected data from the current configuration record.

Syntax

```
READCONF fieldname [;FORMAT]
```

Parameters

`fieldname` The field name associated with the current path.

Use READALLCONF;FORMAT to find the fieldnames in the current path.

`FORMAT` Designates output formatting. Output is formatted in a WRITECONF format so that it can be re-entered into NMMGR's maintenance mode. If the format option is omitted, data will be formatted with one field per line when writing to a file.

Description

READCONF reads and displays the selected field in the configuration record identified by the current path. If the current path is associated with a multipaged data screen, then the displayed value is from the current page set by PAGECONF.

You must enter the CARDCONF, then the PATHCONF command before using the READCONF command. This defines the pathname of the record from which the data will be read. If you want READCONF to display the data written in the previous WRITECONF commands, you must first enter the UPDATECONF command.

If you are referencing a DTC card screen, you must use the CARDCONF command to set the current card number before issuing the READCONF command.

Output is directed to the file defined in the file equation FORMLIST. If FORMLIST is not defined, output is sent to $STDLIST.

CAUTION

The output should first be sent to a file, then the entire file should be printed. Otherwise, if output is sent directly to a printer, each READCONF command will generate a separate spool file, resulting in only one field printed per page.

Example

To display the first field in the NETXPORT.NI.GLOBAL screen:

```
NMMGR> PATHCONF NETXPORT.GLOBAL
```

(Sets the path to the screen.)

```
NMMGR> READCONF HOMENET;FORMAT
```

(Reads and displays the named field.)

```
WRITECONF    homenet,    "netname"
nmmgr
```

SUMMARYCONF

Prints a summary report for one or more communications subsystems.

Syntax

```
SUMMARYCONF subsystem[, subsystem[, ...]]
```

Parameters

`subsystem` The name of the subsystem(s) for which the report will be generated. If more than one subsystem is entered, a report will be printed for each subsystem in the order given. If ALL is entered, a report will be printed for every subsystem. Valid entries are ALL, DTS, NETXPORT, SNANODE, NRJE, IMF, DHCF, APPC, and RJE.

Description

SUMMARYCONF displays a summary report for a particular subsystem. This command is identical to the Print Summary function in the NMMGR Output Configuration screen.

Output is directed to the file defined in the file equation FORMLIST. If FORMLIST is not defined, output is sent to $STDLIST.

When you use SUMMARYCONF to print a summary report for the distributed terminal subsystem (DTS), you can also specify a summary option to designate additional items in the DTS subsystem you wish to have reported. You do so in one of two ways. The first way is to enter the option on the same line as the command. For example:

```
SUMMARYCONF DTS,LINK
```

will cause a report to be generated for the DTS link configuration. You can use this method regardless of whether you entered maintenance mode from screen mode you are running a job to generate output.

You can use the second way to specify a summary option for the DTS subsystem only if you have entered maintenance mode from screen mode. This method is to enter SUMMARYCONF DTS at the NMMGR maintenance mode prompt, with no option specified. A new prompt will appear, as follows:

```
DTS Summary>
```

You can enter the DTS print option at this prompt. If you do not want to generate any additional DTS reports, enter **E[XIT]** at the prompt. You will be returned to the maintenance mode prompt.

The following DTS print summary options are available:

`ALL` Displays all DTS configuration information.

`DTC [dtcname]`

Displays the configuration for all DTCs or for the DTC whose name is specified in dtcname.

`DTS` Displays the DTS subsystem configuration parameters.

`E[XIT]` Leaves DTS Summary and returns you to the maintenance mode prompt.

`HELP` Displays the available DTS summary options.

`LDEV [ldev[/ldev]]`

Displays the configuration for all ldevs (logical devices), a single ldev, or a range of ldevs.

`LINK`

Displays the link configuration for the DTS.

`PORT [dtcname [card [port]]]`

Displays the configuration for all configured ports, all ports on a specified DTC, all ports on a specified DTC and card, or for a specific DTC, card, and port.

`PROFILE [profile]`

Displays the configuration for all profiles or for a specified profile.

`X.25 Card [card#[,option]]`

Displays the information about the Host-Based X.25 Card configuration.

OPTIONS:

`-LEVEL12` Display the level 1 and 2 configuration.

`-LEVEL14` Display the level 3 configuration miscellaneous configuration data.

`-PAD` Display the Nailed PAD data.

`-SEC` Display the PAD security data.

`-SYS` Display the System to System configuration data.

Example

To display the summary report for `NETXPORT`:

```
NMMGR> SUMMARYCONF NETXPORT
```

To display the summary report for profiles defined in the DTS subsystem:

```
NMMGR> SUMMARYCONF DTS,PROFILE
```

Or:

```
NMMGR> SUMMARYCONF DTS
DTS Summary> PROFILE
```

UPDATECONF

Updates the current path in the configuration file.

Syntax

```
UPDATECONF
```

Parameters

No parameters.

Description

UPDATECONF updates the current page of data for the current path in the configuration file. Data entered via previous WRITECONF commands is checked for VPLUS field edit errors. If all fields are correct, the data is stored.

The CARDCONF then the PATHCONF command must be issued before UPDATECONF to define the current path.

If you are referencing a DTC card screen, you must use the CARDCONF command to set the current card number before issuing the UPDATECONF command.

Example

```
NMMGR> OPENCONF NMCONFIG.PUB.SYS
```

(Opens the configuration file.)

```
NMMGR> VERSIONCONF OVERRIDE
```

(Checks the version number of NMMGR.)

```
NMMGR> PATHCONF NETXPORT.NODE.NAME
```

(Sets the path to the screen.)

```
NMMGR> WRITECONF 1, MY.LOCL.NODE
```

(Enters the data into the field.)

```
NMMGR> UPDATECONF
```

(Updates the configuration file.)

VALIDATECONF

Validates subsystem configuration.

Syntax

```
VALIDATECONF subsystem
```

Parameters

`subsystem` The name of a configuration subsystem to be validated. Valid subsystem names are:

`NETXPORT`

`DTS/LINK`

`HP-IBM`

Description

Validates the subsystem configuration. Output is directed to the formal designator `FORMLIST`, which defaults to `$STDLIST`.

Example

To validate the `NETXPORT` subsystem configuration:

```
NMMGR> VALIDATECONF NETXPORT
```

VERSIONCONF

Checks whether the specified version number matches NMMGR's current version number.

Syntax

```
VERSIONCONF version
```

Parameters

`version` The NMMGR version number that you are checking against the current version of NMMGR. The version string may be enclosed in double quotes (" "). The value "OVERRIDE" matches any version of NMMGR.

Description

VERSIONCONF matches the specified version number with the current number for NMMGR. NMMGR's version number is displayed in the banner line on the first line of the screen and when NMMGR is started. This command is required only if the user is also planning to issue a PATHCONF command. However, VERSIONCONF must be issued prior to PATHCONF.

Example

```
NMMGR> VERSIONCONF B.04.07
```

WRITECONF

Writes data to individual fields of the current path in the configuration file.

Syntax

```
WRITECONF fieldname, data
```

Parameters

`fieldname`	The field name associated with the current path.
`data`	The data to be written to the field. If the data contains embedded blanks, it must be enclosed in double quotes (“ ”).

Description

WRITECONF writes data to an internal buffer that initially contains the data associated with the current page of the current path in the configuration file. The file is updated when the UPDATECONF command is performed.

The CARDCONF command (used to set the current card values) must be specified before a PATHCONF command for any DTC card screen.

Once these commands are specified, the WRITECONF and UPDATECONF commands can be performed.

Example

To update the value of field 1 for the current path:

```
NMMGR> OPENCONF NMCONFIG.PUB.SYS
```

(Opens the configuration file.)

```
NMMGR> VERSIONCONF V.uu.ff
```

(Checks the version number of NMMGR.)

```
NMMGR> PATHCONF NODENAME
```

(Sets the path to the screen.)

```
NMMGR> WRITECONF NODENAME, “MY.LOCAL.NODE”
```

(Enters the data into the field.)

```
NMMGR> UPDATECONF
```

(Updates the configuration file.)

6 NMMAINT

This chapter describes the Node Management Services Maintenance Utility (NMMAINT). NMMAINT is a utility (optional) program you can use to display the individual and overall version numbers for the software modules and network link products configured through the node management services.

The following information is included in this chapter:

- An explanation of version numbers and how they work.
- How to run the NMMAINT utility.
- An example of the output provided by NMMAINT.
- An explanation of the features of the output provided by NMMAINT.

Software Version ID Numbers

Each data communications product consists of a variety of software modules. Each software module has an individual version number.

The software modules of all HP data communications products use a standard version stamp. This stamp has the format:

`vuuffiii`

where values represent the following:

`v`	The version number of the software. This corresponds to a major revision or a version for a new or revised system environment.
`u`	The update level of the software. This corresponds to a significant revision in product functionality.
`f`	The fix level of the software. This corresponds to a new, supported revision of the software.
`i`	The internal fix level of the software. This is for differentiating special releases of software that do not correspond to a normal release cycle. Under normal circumstances, you do not need to concern yourself with this field when you are determining the compatibility of a product.

A subsystem is a grouping of software modules. The software modules within each subsystem usually have a common or similar function. Each software module within a subsystem has its own version ID number. If the version, update, and fix levels of these modules do not match, the subsystem will not work correctly. You can use NMMAINT to determine if your software installation is valid. The information provided by NMMAINT must be included in any service request submitted to HP. Refer to the *NS 3000/iX Error Message and Recovery Manual* or to the *Node Manager's Guide* for any HP-IBM product for information about submitting change requests (CRs).

Getting Help

To get HELP on NMMAINT.

```
:NMMAINT;info=help
```

NMMAINT responds with the following:

```
NMS Maintenance Utility  32098-20014 v.uu.ff  (C) Hewlett Packard Co. 1984

TUE, JUL 25, 2006,  2:30 PM

- HELP
```

WARNING

The SHUTDOWN, RESTART, and other INFO of the NMMAINT program are unsupported interfaces designed for use by Hewlett Packard Support personnel only.

HP IS NOT LIABLE FOR DAMAGES RESULTING FROM UNAUTHORIZED USE

`:RUN NMMAINT [;PARM=n]`	Print version id's [subsys n].
`:NMMAINT BUILDVERS [;PARM=n]`	Same, allows file equates.

or

```
:RUN NMMAINT;INFO='BUILDVERS';PAMR=n
```

`:NMMAINT SHUTDOWN`	NMMON sends shutdown requests.

or

```
:RUN NMMAINT;INFO='SHUTDOWN'
```

`:NMMAINT RESTART`	Send NMMON a restart request.
`:NMMAINT RESTARTNOVERS`	Same, but no NMS version check .
`:NMMAINT CATSHUT; PARM=n`	Have NMCONSOL close msg catalog n.
`:NMMAINT DEBUG`	Call DEBUG at console.
`:NMMAINT VERSION`	Not used, for NMS version check.
`:NMMAINT HELP`	Print this display.
`:NMMAINT,-1`	For SUBSYSTEMID CHART.

Running NMMAINT

To run NMMAINT, enter the command:

```
:RUN NMMAINT.PUB.SYS
```

NMMAINT responds with the following:

```
NMS Maintenance Utility 32099-11018v.uu.ff (C) Hewlett Packard Co. 1984
```

NMMAINT then lists the version identification numbers for each software module and information for each subsystem. As shown in the example below, the NMMAINT utility displays version information for the subsystems of the products actually installed on your system. The node management services, link services, and network transport subsystems are displayed if an NS 3000/iX link product is installed. The Network Services subsystem is displayed if the NS 3000/iX services product is installed. The SNA Transport, SNA NRJE, RJE, SNA DHCF, APPC, HP SNADS, SNA/X.25, NS Over SNA, HP SNADS, and SNA IMF subsystems are displayed if the appropriate HP-to-IBM data communications products are installed on your system. PCI LAPB, PCI SDLC, LINK COMMON, PCI 100BASE-T LINK subsystems are displayed if appropriate PCI link products are installed on your system.

NMMAINT Output

This example of NMMAINT output shows a system with NS 3000/iX services and an IEEE 802.3 link installed. (The IPCVERSION module is port software. This is not part of the Network IPC user service, nor does it form a subsystem, but its individual version ID number is displayed by NMMAINT for your information.)

Notice that version ID numbers include version, update, fix levels, and an internal fix level in the format *vuuffiii*. For NMVERS00, the version ID number is B0011001. B is the version level, the next two digits 00 represent the update level, and the next two digits 11 are the fix level. The remaining numbers, 001, show the internal fix level, which is used only within Hewlett-Packard.

NOTE The version numbers shown in this example are not intended to be the same as the version numbers of your software.

Example

```
:RUN   NMMAINT.PUB.SYS

NMS Maintenance Utility 32098-20014B.00.08   (C) Hewlett Packard Co.

TUE, JUL 25, 2006, 2:30 PM
Datacom products build version: N.63.01

Subsystem version IDs:

Subsystem Number : 0

MPE/XL Node Management Services 32098-20014  module versions:
SL procedure:    NMVERS00                    Version:  B0010000
SL procedure:    NMVERSCSL                   Version:  B0010001
SL procedure:    NMVERS01                    Version:  B0010000
SL procedure:    NMLOGSLVERS                 Version:  B0010000
SL procedure:    NMLOGDATAVERS               Version:  B0010000
SL procedure:    NMVERS04                    Version:  B0010000
SL procedure:    NMWRITEVERS                 Version:  B0010000
NM program file: NMMAINT.PUB.SYS             Version:  B0010001
CM program file: NMFILE.PUB.SYS              Version:  B0010000
CM program file: NMTRCMON.PUB.SYS            Version:  B0010000
NM program file: NMLOGMON.PUB.SYS            Version:  B0010000
NM program file: NMCONSOL.PUB.SYS            Version:  B0010000
CM program file: NMINIT.PUB.SYS              Version:  B0010000
CM program file: NMDUMP.PUB.SYS              Version:  B0010000
Catalog file:    NMCAT.PUB.SYS               Version:  B0010000
NM program file: NMLOGICS.PUB.SYS            Version:  B0010000
SL procedure:    SUBSYS0FMTVERS              Version:  B0010000
SL procedure:    NMINTERVERS                 Version:  B0010000
SL procedure:    BFM'MOD'54'VERS             Version:  B0010000
NL procedure:    BMGR_MOD_51_VERS            Version:  B0010000
NL procedure:    BMGR_MOD_52_VERS            Version:  B0010000
NL procedure:    BMGR_MOD_53_VERS            Version:  B0010000
NL procedure:    NMVERS30                    Version:  B0010000
NL procedure:    NMVERS33                    Version:  B0010000
NL procedure:    NMVERS34                    Version:  B0010001
```

```
NL procedure:    NMVERS32                    Version:  B0010000

MPE/XL Node Management Services 32098-20014  overall version = B.00.10

Subsystem Number : 3

NS 3000/XL Transport 32098-20033  module versions:

NM program file: NETCP.NET.SYS               Version:  B0600001
Catalog file:    NMCAT3.NET.SYS              Version:  B0600000
NL procedure:    NET_CF_VERS                 Version:  B0600000
NL procedure:    NET_IPC_VERS                Version:  B0600000
NL procedure:    NET_IPC_VERS2               Version:  B0600001
NL procedure:    NET_IPC_VERS3               Version:  B0600000
NL procedure:    NET_IPC_VERS4               Version:  B0600000
NL procedure:    PIVERS                      Version:  B0600001
NL procedure:    SIVERS                      Version:  B0600001
Catalog file:    SOCKCAT.NET.SYS             Version:  B0600000
CM program file: SOCKREG.NET.SYS             Version:  B0600000
NL procedure:    NWTMVERS                    Version:  B0600002
NL procedure:    TI_T1_VERS                  Version:  B0600000
NM program file: PT2PNSTN.NET.SYS            Version:  B0600000
NM program file: SOCKINFO.NET.SYS            Version:  B0600001
CM program file: IPCINT.NET.SYS              Version:  B0600000
Catalog file:    NETMSG.NET.SYS              Version:  B0600000
SL procedure:    NET'UI'VERS                 Version:  B0600004
SL procedure:    NET'SL'VERS                 Version:  B0600001
NL procedure:    NET_NI_VERS                 Version:  B0600000
SL procedure:    NET'PROBE'VERS              Version:  B0600000
NL procedure:    NET_ARP_VERS                Version:  B0600000
SL procedure:    NET'DIAL'VERS               Version:  B0600000
NM program file: TCPSIP.NET.SYS              Version:  B0600000
SL procedure:    NET'STUB'VERS               Version:  B0600000
NL procedure:    NET_TCP_VERS                Version:  B0600004
```

```
NL procedure:    NET_UDP_VERS              Version:  B0600003
NL procedure:    NET_DICT_VERS             Version:  B0600000
SL procedure:    NET'PXP0'VERS             Version:  B0600000
SL procedure:    NET'PXP1'VERS             Version:  B0600000
NL procedure:    NET_IP_VERS               Version:  B0600001
NL procedure:    NET_IPU_VERS              Version:  B0600002
SL procedure:    NET'IPU'VERS              Version:  B0600000
NL procedure:    NET_X25_VERS              ** NOT INSTALLED  **
NM program file: X25STAT.NET.SYS           Version:  B0600001
CM program file: X25CHECK.NET.SYS          Version:  B0600000
CM program file: X25SERVR.NET.SYS          Version:  B0600000
SL procedure:    NET'PD'VERS               Version:  B0600000
NL procedure:    NET_PD_VERS               Version:  B0600000
NL procedure:    NET_MAP_VERS              Version:  B0600001
NL procedure:    NET_GLBL_VERS             Version:  B0600000
NL procedure:    NET_REG_VERS              Version:  B0600000
SL procedure:    NET'REG'CM'VERS           Version:  B0600000
SL procedure:    DCLDM_FMT_VERS            Version:  B0600000
NL procedure:    DCLDM_PS_VERS             Version:  B0600000
NL procedure:    DCLDM_CONF_VERS           Version:  B0600000
NL procedure:    NSLOPENLINK_VERS          Version:  B0600000
NL procedure:    RLM_SERVER_VERS           ** NOT INSTALLED  **
NL procedure:    RLM_CONFIG_VERS           ** NOT INSTALLED  **
NL procedure:    RLM_LOAD_TABLE_VERS       ** NOT INSTALLED  **
SL procedure:    RLM_FMT_VERS              Version:  B0600000
NL procedure:    NET_FC_VERS               Version:  B0600001
SL procedure:    SOCKIOVERS                Version:  B0600000
SL procedure:    SOCKACCESSVERS            Version:  B0600000
SL procedure:    SOCKMISC1VERS             Version:  B0600000
SL procedure:    SUBSYS3FMTVERS            Version:  B0600000
SL procedure:    SUBSYS5FMTVERS            Version:  B0600000
NL procedure:    LEVEL2_RESOLVE_VERS       Version:  B0600000
NM program file: ICMPSERV.NET.SYS          Version:  B0600000
NM program file: NETTOOL.NET.SYS           Version:  B0600003
```

```
NL procedure:    NETTMRVERS                  Version:  B0600000

NS 3000/XL Transport 32098-20033  overall version = B.06.00

Subsystem Number : 6

Network Services individual module versions:

NM Program:     DSDAD.NET.SYS               Version:   B0300043
SL procedure:   ASCXVERS                    Version:   B0300051
SL procedure:   ASBUFVERS                   Version:   B0300014
SL procedure:   ASENVVERS                   Version:   B0300050
SL procedure:   DSUTILVERS                  Version:   B0300003
SL procedure:   SUBSYS6FMTVERS              Version:   B0300015
Catalog file:   ASCAT.NET.SYS               Version:   B0300027
SL procedure:   VTSRVTVER                   Version:   B0300003
NL procedure:   VTS_LDMVER                  Version:   B0300020
NL procedure:   VTS_UTILVER                 Version:   B0300020
CM Program:     LOOPBACK.NET.SYS            Version:   B0300012
CM Program:     LOOPINIT.NET.SYS            Version:   B0300012
CM Program:     NSSTATUS.NET.SYS            Version:   B0300013
NL procedure:   NSSTATUSNMVERS              Version:   B0300014
NL procedure:   NSINFONMVERS                Version:   B0300017
CM Program:     CONFPROG.NET.SYS            Version:   B0300012
CM Program:     MASTMAKE.NET.SYS            Version:   B0300012
NL procedure:   VTS_SMVER                   Version:   B0300020
NL procedure:   NSUTILNMVERS                Version:   B0300003
NL procedure:   ASCXNMVERS                  Version:   B0300011
NL procedure:   ASENVNMVERS                 Version:   B0300014
NM Program:     RASERVER.NET.SYS            Version:   B0300034
NM Program:     VTSERVER.NET.SYS            Version:   B0300022
CM Program:     DSSERVER.NET.SYS            Version:   B0300013
SL procedure:   ASRFAVERS                   ** MODULE ERROR **
SL procedure:   ASPTOPVERS                  Version:   B0300015
```

```
CM Program:     NFT.NET.SYS                 Version:   B0300009
NL procedure:   NFTNMVERS                   ** MODULE ERROR **
Catalog file:   NFTCAT2.NET.SYS             Version:   B0300005
SL procedure:   ASRPMVERS                   Version:   B0300038
NL procedure:   RPMNMVERS                   Version:   B0300012
CM Program:     RPMDAD.NET.SYS              Version:   B0300002
NL procedure:   RFANMVERS                   ** MODULE ERROR **

Network Services overall subsystem version:   B.03.00
NS 3000/XL SERVICES:   36920B

Subsystem Number : 18

MPE/XL Link Support Services 32098-20015 module versions:

NL procedure:    TRACE_INT_VERS             Version:  C0300000
NM program file: TRACEMGR.PUB.SYS           Version:  C0300000
NL procedure:    TVPGEN00VERS               Version:  C0300000
SL procedure:    SUBSYS18FMTVERS            Version:  C0300000
XL procedure:    LSSLINKCONTROLVERS         Version:  C0300000
XL procedure:    LSSLINKCONTROLVERS01       Version:  C0300000
NL procedure:    LSSLKTBLVERS               Version:  C0300000
SL procedure:    LSSVERS00                  Version:  C0300000
NL procedure:    DCC_VERSION                Version:  C0300001
NL procedure:    DCC_VALID                  Version:  C0300002

MPE/XL Link Support Services 32098-20015 overall version = C.03.00

Subsystem Number : 24

MPE XL Node Management Configurator 32098-20016  module versions:

SL procedure:    NMCVERS                    Version:  B0601000
SL procedure:    NMVERS06                   Version:  B0601000
```

```
SL procedure:    NETDIRVERS                  Version:  B0601000
NL procedure:    NMNETDIRVERS                Version:  B0601000
NM program file: NMMGR.PUB.SYS               Version:  B0601001
CM program file: NMMGRVER.PUB.SYS            Version:  B0601001
CM program file: NMMGRVAL.PUB.SYS            Version:  B0601000
CM program file: NMSIG.PUB.SYS               Version:  B0601000
V+ forms file:   NMMGRF.PUB.SYS              Version:  B0601001
Catalog file:    NMMGRCAT.PUB.SYS            Version:  B0601001
Catalog file:    NMMGRHLP.PUB.SYS            Version:  B0601001
NM conf file:    NMSAMP1.PUB.SYS             Version:  B0601000
NM conf file:    NMAUX1.PUB.SYS              Version:  B0601001
NM conf file:    NMNOVA.PUB.SYS              Version:  B0601000

MPE XL Node Management Configurator 32098-20016  overall version = B.06.
01

Subsystem Number : 25

HP LAN / Console Driver         32098-20028  module versions:

NL procedure:    LAN_CONSOLE_DRIVER_VER      Version:  A0060002
NL procedure:    LAN_8023_WRITE_VER          Version:  A0060001
NL procedure:    LAN_STATION_ADDR_VER        Version:  A0060001
NL procedure:    LAN_MC_VER                  Version:  A0060001
NL procedure:    IEEE_MULTICAST_VER          Version:  A0060002
SL procedure:    IEEE'MCAST'CM'VER           Version:  A0060001
XL procedure:    SUBSYS_25_FMT_VER           Version:  A0060002
NL procedure:    LAN_LINKCONTROL_VER         Version:  A0060001

HP LAN / Console Driver         32098-20028  overall version = A.00.60

Subsystem Number : 26

DTC Code Download Files          module versions:
```

```
Download:        DTCCNF02.PUB.SYS            Version:  A1440000
Download:        DTCSWA02.PUB.SYS            Version:  A1440000
Download:        DTCSWB02.PUB.SYS            Version:  A1440000
Download:        DTCNPS02.PUB.SYS            Version:  A1440000
Download:        DTCSWC04.PUB.SYS            Version:  A1440000
Download:        DTCSWD04.PUB.SYS            Version:  A1440000
Download:        DTCSWE04.PUB.SYS            Version:  A1440000
Download:        DTCSWF04.PUB.SYS            Version:  A1440000
Download:        DTCCNF04.PUB.SYS            Version:  A1440000
Download:        DTCSWG04.PUB.SYS            Version:  A1440000
Download:        DTCSWH04.PUB.SYS            Version:  A1440000
Download:        DTCSWI04.PUB.SYS            Version:  A1440000
Download:        DTCSWJ04.PUB.SYS            Version:  A1440000
Download:        DTCSWK04.PUB.SYS            Version:  A1440000
Download:        DTCSWL04.PUB.SYS            Version:  A1440000
Download:        DTCSWM04.PUB.SYS            Version:  A1440000
Download:        DTCSWN04.PUB.SYS            Version:  A1440000

DTC Code Download Files          overall version = A.14.40

DTC ROM Code Files               module versions:

Download:        DTCROM72.DTS0000.TELESUP    Version:  A1400E00
Download:        DTCROM16.DTS0000.TELESUP    Version:  A1400E00

DTC ROM Code Files               overall version = A.14.00

MPE XL Terminal I/O 32022B       module versions:

NM program file: TERMDSM.DIAG.SYS            Version:  C0200000
CM program file: TTUTIL.PUB.SYS              Version:  C0200000
NL procedure:    TIO_ATSM_VER                Version:  C0200008
NL procedure:    TIO_APSM_VER                Version:  C0200001
```

```
NL procedure:    TIO_TLDM_VER                Version:  C0200001
NL procedure:    TIO_FIOM_VER                Version:  C0200021
NL procedure:    TIO_DIOM_VER                Version:  C0200057
NL procedure:    TIO_IIOM_VER                Version:  C0200016
NL procedure:    TIO_COMMON_VER              Version:  C0200026
NL procedure:    TIO_TRANSPORT_VER           Version:  C0200027
NL procedure:    TIO_NDM_VER                 Version:  C0200505
NL procedure:    TIO_INF_VER                 Version:  C0200100
NL procedure:    TIO_DTCM_VER                Version:  C0200504
XL procedure:    TIO_DTF_VER                 Version:  C0200002
NL procedure:    TIO_DTSM_VER                Version:  C0200307
NL procedure:    TIO_WSCM_VER                Version:  C0200002
XL procedure:    TIO_X25FMT_VER              Version:  C0200001
NL procedure:    TIO_TERMTRC_VER             Version:  C0200002

MPE XL Terminal I/O 32022B       overall version = C.02.00

Subsystem Number : 41

MPE/XL System Console   32098-20063          module versions:

NL procedure:    TMUX_VERSION_ID             AVersion:  A0001011

MPE/XL System Console   32098-20063          overall version = A.00.01

Subsystem Number : 50

HP FTP/XL        HP36957 module versions:

XL procedure:    HPFTP_COMMON        Version:  A0009001
XL procedure:    HPFTP_UTIL          Version:  A0009001
NM program file: FTP.ARPA.SYS        Version:  A0009001
NM program file: FTPSRVR.ARPA.SYS    Version:  A0009001
Catalog file:    FTPC000.ARPA.SYS    Version:  A0009001
```

```
Catalog file:    FTPHELP.ARPA.SYS    Version:  A0009001

HP FTP/XL        HP36957 overall version = A.00.09

Subsystem Number : 55

NIO System Console DM  32098-20078           module versions:

NL procedure:    CDM_CONSOLE_DM_VERSION      Version:  A0001015

NIO System Console DM  32098-20078           overall version = A.00.01

Subsystem Number : 57

HP SNMP/XL   SNMP module versions:

NM program file: SNMP.NET.SYS        Version:  A0400001
NM program file: SNMPUTIL.NET.SYS    Version:  A0400001
NM program file: SNMPSYMB.NET.SYS    Version:  A0400001
XL procedure:    SNMP_OMI_VERS       Version:  A0400001
XL procedure:    SNMP_API_VERS       Version:  A0400001
XL procedure:    SNMP_TRAP_VERS      Version:  A0400001
XL procedure:    SNMP_UTIL_VERS      Version:  A0400001
XL procedure:    SNMP_INIT_VERS      Version:  A0400001
XL procedure:    SNMP_LGTR_VERS      Version:  A0400001
XL procedure:    SUBSYS57FMTVERS     Version:  A0400001
NL procedure:    SNMP_IOCOMP_VERS    Version:  A0400001
Catalog file:    SNMPC000.NET.SYS    Version:  A0400001

HP SNMP/XL   SNMP overall version = A.04.00
SNMP/XL (c) Copyright 1991 Hewlett-Packard Company
SNMP/XL (c) Copyright 1988 by Carnegie Mellon University
SNMP/XL (c) Copyright 1988, 1989, Massachusetts Institute of Technology
```

```
Subsystem Number : 63

HP NSR/XL  HP32098-20084 module versions:

RL procedure:    NSR_GETHOST         Version:  A0006000
XL procedure:    NSR_GETNET          Version:  A0006000
XL procedure:    NSR_GETPROTO        Version:  A0006000
XL procedure:    NSR_GETSERV         Version:  A0006000
XL procedure:    NSR_HPGETHOST       Version:  A0006000
XL procedure:    NSR_INET_ADDR       Version:  A0006000
XL procedure:    NSR_INET_NETWORK    Version:  A0006000
XL procedure:    NSR_INET_NTOA       Version:  A0006000
XL procedure:    NSR_BINDUP          Version:  A0006000
XL procedure:    NSR_RES_COMP        Version:  A0006000
XL procedure:    NSR_RES_DEBUG       Version:  A0006000
XL procedure:    NSR_RES_INIT        Version:  A0006000
XL procedure:    NSR_RES_MKQUERY     Version:  A0006000
XL procedure:    NSR_RES_QUERY       Version:  A0006000
XL procedure:    NSR_RES_SEND        Version:  A0006000

HP NSR/XL  HP32098-20084 overall version = A.00.06

Subsystem Number : 65

HP SOCKET/XL C LIB module versions:

RL procedure:    SOCK_CLIB_VERS      Version:  B05090H0

HP SOCKET/XL C LIB overall version = B.05.09

Subsystem Number : 67

HP FDDI LAN Driver         32098-20093  module versions:
```

```
NL procedure:    FDDI_DRIVER_VER            Version:  A0060002
XL procedure:    FDDI_LINKCONTROL_VER       Version:  A0060000
Download:        FDDIDNLD.PUB.SYS           Version:  A0060000

HP FDDI LAN Driver         32098-20093  overall version = A.00.60

Subsystem Number : 68

HP Streams/iX module versions:

NL procedure:    streams_vers               Version:  A0060000
NL procedure:    streams_type_mgr_vers      Version:  A0060000
NL procedure:    streams_intrinsics_vers    Version:  A0060000
NL procedure:    dlpi_vers                  Version:  A0060001
XL procedure:    TLI_vers                   Version:  A0060000
RL procedure:    Libstr_vers                Version:  A0060000
NM program file: AUTOPUSH.NET.SYS           Version:  A0060000
NM program file: STRACE.NET.SYS             Version:  A0060000
NM program file: STRCLEAN.NET.SYS           Version:  A0060000
NM program file: STRCNTL.NET.SYS            Version:  A0060000
NM program file: STRDB.NET.SYS              Version:  A0060000
NM program file: STRERR.NET.SYS             Version:  A0060000
Catalog file:    STRCAT.NET.SYS             Version:  A0060000
Catalog file:    STRDBCAT.NET.SYS           Version:  A0060000

HP Streams/iX overall version = A.00.60

Subsystem Number : 69

DCE Core Services    module versions:

XL procedure:    mpedce_nmsseg_vers                 Version:  A0101001

DCE Core Services    overall version = A.01.01
```

```
Subsystem Number : 72

HP TELNET/iX Subsystem HP32040A module versions:

NM program file: TELNET.ARPA.SYS     Version:  A6000000
NL procedure:    PTD_SM_VER          Version:  A6000001
NL procedure:    PTD_HANDLER_VER     Version:  A6000002
NL procedure:    PTD_PTID_VER        Version:  A6000002
NL procedure:    PTD_PTOD_VER        Version:  A6000002
NL procedure:    PTD_COMMON_VER      Version:  A6000001

HP TELNET/iX Subsystem HP32040A overall version = A.60.00

Subsystem Number : 73

Internet Services for the HP e3000 module versions:

NM program file: INETD.NET.SYS              Version:  B0001003
NM program file: BOOTPD.NET.SYS             Version:  B0001003
NM program file: BOOTPQRY.NET.SYS           Version:  B0001002
NM program file: TFTPD.NET.SYS              Version:  B0001002
NM program file: REMSH.NET.SYS              Version:  B0001003
XL procedure:    INSVXL_SECURE_VERS         Version:  B0001004
XL procedure:    INSVXL_IPCSEC_VERS         Version:  B0001002
XL procedure:    INSVXL_NSRW_VERS           Version:  B0001003
XL procedure:    INSVXL_NETOF_VERS          Version:  B0001002
XL procedure:    INSVXL_SYSLOG_VERS         Version:  B0001003
XL procedure:    INSVXL_SIGNAL_VERS         Version:  B0001002
XL procedure:    INSVXL_GETTIME_VERS        Version:  B0001003

Internet Services for the HP e3000 overall version = B.00.01
```

```
Subsystem Number : 74

HP-PB 100VG-AnyLAN driver B5426AA              module versions:

NL procedure:    VG_NL_VERS                  ** NOT INSTALLED  **
XL procedure:    VG_XL_VERS                  ** NOT INSTALLED  **
NL procedure:    LAN_100_NL_VERS             ** NOT INSTALLED  **
XL procedure:    LAN_100_XL_VERS             Version:  A0060004
XL procedure:    SUBSYS_74_FMT_VER           Version:  A0060004
Catalog file:    NMCAT74.NET.SYS             Version:  A0060004
NL procedure:    LAN_STATION_ADDR_VER        Version:  A0060001
NL procedure:    IEEE_MULTICAST_VER          Version:  A0060002
NL procedure:    WANDMPSURRVERS              Version:  A0060001

HP-PB 100VG-AnyLAN driver B5426AA              overall version = A.00.60

Subsystem Number : 77

HP-PB 100Base-T Fast Ethernet driver B5427AA   module versions:

NL procedure:    BT_NL_VERS                  ** NOT INSTALLED  **
XL procedure:    BT_XL_VERS                  ** NOT INSTALLED  **
NL procedure:    LAN_100_NL_VERS             ** NOT INSTALLED  **
XL procedure:    LAN_100_XL_VERS             Version:  A0060004
XL procedure:    SUBSYS_77_FMT_VER           Version:  A0060004
Catalog file:    NMCAT77.NET.SYS             Version:  A0060004
NL procedure:    LAN_STATION_ADDR_VER        Version:  A0060001
NL procedure:    IEEE_MULTICAST_VER          Version:  A0060002
NL procedure:    WANDMPSURRVERS              Version:  A0060001

HP-PB 100Base-T Fast Ethernet driver B5427AA   overall version = A.00.60
```

Explanation of NMMAINT Output

The first group of numbers in the above example are the version ID numbers of the modules of the Node Management Services subsystem. Notice that the first five characters of the version for each module listed in this group are the same. This means that all the software modules in the subsystem match. It is necessary for all the modules of a given subsystem to be the same version. If a subsystem module does not match, NMMAINT prints the following error message:

```
Program file:  NMMAINT.PUB.SYS              ** MODULE ERROR **

   ONE OR MORE SUBSYSTEM MODULES ARE INVALID.  (NMERR 105)
```

This message indicates that the modules of the subsystem are not compatible.

Because the module version ID numbers match, NMMAINT displays the overall subsystem version number for the node management services; for the above example, it is `B.00.10`. The rest of the subsystems are handled in a similar fashion.

NMMAINT also checks that all the modules that belong with a particular subsystem are present. If a module is missing, NMMAINT displays the name of the module with the following error message in place of the version number.

```
SL procedure:  NMVERS01              **  REQ'D MODULE MISSING **

    ONE OR MORE REQUIRED SUBSYSTEM MODULES ARE MISSING.    (NMERR 104)
```

If an optional module is not present, NMMAINT displays a message similar to the following:

```
Program file:  NMDUMP.PUB.SYS  **NOT INSTALLED**
```

If the modules were correct when installed, only unusual circumstances such as a reload, a disk problem, or a system failure would result in missing or invalid modules. Restore a known valid version of the modules in error.

Question marks displayed for the overall version number indicate that the fix levels of the individual modules do not match. Remember that the internal fix level, represented by the last three numbers of the version ID, does not need to match between modules for the software to be compatible. Fix numbers are requested in service requests for HP to use when troubleshooting.

As each subsystem is displayed, NMMAINT checks that all the modules are present and compatible. However, NMMAINT does not perform any cross-subsystem version verification. When a system has HP-to-IBM products as well as HP-to-HP products installed, the Node Management Services, link services and the port software are used by both types of data communications products. Therefore, it is important to check that the version numbers of these common subsystems and

port software module are correct. It is possible for the HP-to-IBM products to use previous versions of the common software that are not compatible with the HP-to-HP products.

NMMAINT displays information on only the subsystems for the products installed on your system. In the example above, none of the HP-IBM products were installed, so their subsystems were not displayed.

NMMAINT displays the subsystem number just before it prints versions of that module.

```
Subsystem Number : 74
```

Then it starts printing the versions of that module (HP-PB 100VG-AnyLAN driver B5426AA).

```
How to get SUBSYSTEM ID list ??
:NMMAINT,-1
```

This will display the subsystem ID list and it helps to get the particular subsystem module versions by just keying `:NMMAINT,n` where `n` is the subsytem ID. For more information, refer to “Running NMMAINT” with subsystem ID).

```
ID       SUBSYSTEM
--       ------------
1        SNA Transport
2        NRJE
3        NS Transport
5        NETIPC
6        NS Services
11       SNA IMF
16       APPC
18       Link Support Services
20       DHCF
24       NMMGR
25       HP-PB 802.3 Thinlan Link
26       Termio
27       HP-PB SDLC Link
28       HP-PB LAPB Link
33       OSI/XL
35       X.400
37       HP-PB RJE/Bisync Link
38       SNA X.25
```

```
41      Terminal Mux Driver
42      Multiple Connection Module
46      SNADS
48      Lan Manager
50      FTP/iX
55      HP-PB Console DM
57      SNMP
61      HP-PB 802.5 Token Ring Link
63      Domain Name Service
65      Socket C Library
66      NCS
67      HP-PB FDDI Link
68      Streams/iX
69      DCE Core
70      Appletalk
71      Netware/iX
72      Telnet
73      Internet Services
74      HP-PB 100VG Link
77      HP-PB 100Base-T Link
78      PCI 100Base-T Link
80      Link Common
81      PCI SDLC Synchronous Mux Link
82      PCI LAPB Synchronous Mux Link
10000   NMS Common Services
```

NOTE It is not necessary that your system is loaded with all the subsystems shown in the preceding list.

Running NMMAINT With Subsystem ID

NMMAINT can also be executed to display the version information for just one subsystem, by entering a command: `NMMAINT, Subsystem number`, where the subsystem number can be obtained from running `NMDUMP`.

For example, `NMMAINT,3` displays the version information for Network Transport 32098-20033.

The only exception for using the subsystem number found from running `NMDUMP` is for the NMS, Node Management Services, which would be `0`. Use `NMMAINT, 10000` to display NMS version information.

7 NMDUMP

This chapter describes the Node Management Services Trace/Log File Analyzer, commonly known as NMDUMP. NMDUMP allows you to decode and format the logging records and trace messages that are created in coded form.

The following describes information contained in this chapter.

- Running the NMS Trace/Log File Analyzer (NMDUMP).
- General options.

  These options include two, ? and 0, that are used for menu display and are provided on all menus. Options 1–4 reflect the common structure of log and trace files.
- 802.3, 802.5, SDLC, LAP-B, RJE/BSC, NETXPORT, NetIPC, and Network Services logging options.

  These options are log options and the number varies according to the subsystem used.
- 802.3, 802.5, NETXPORT, NetIPC, Network Services, SDLC, LAP-B, and RJE/BSC trace options.

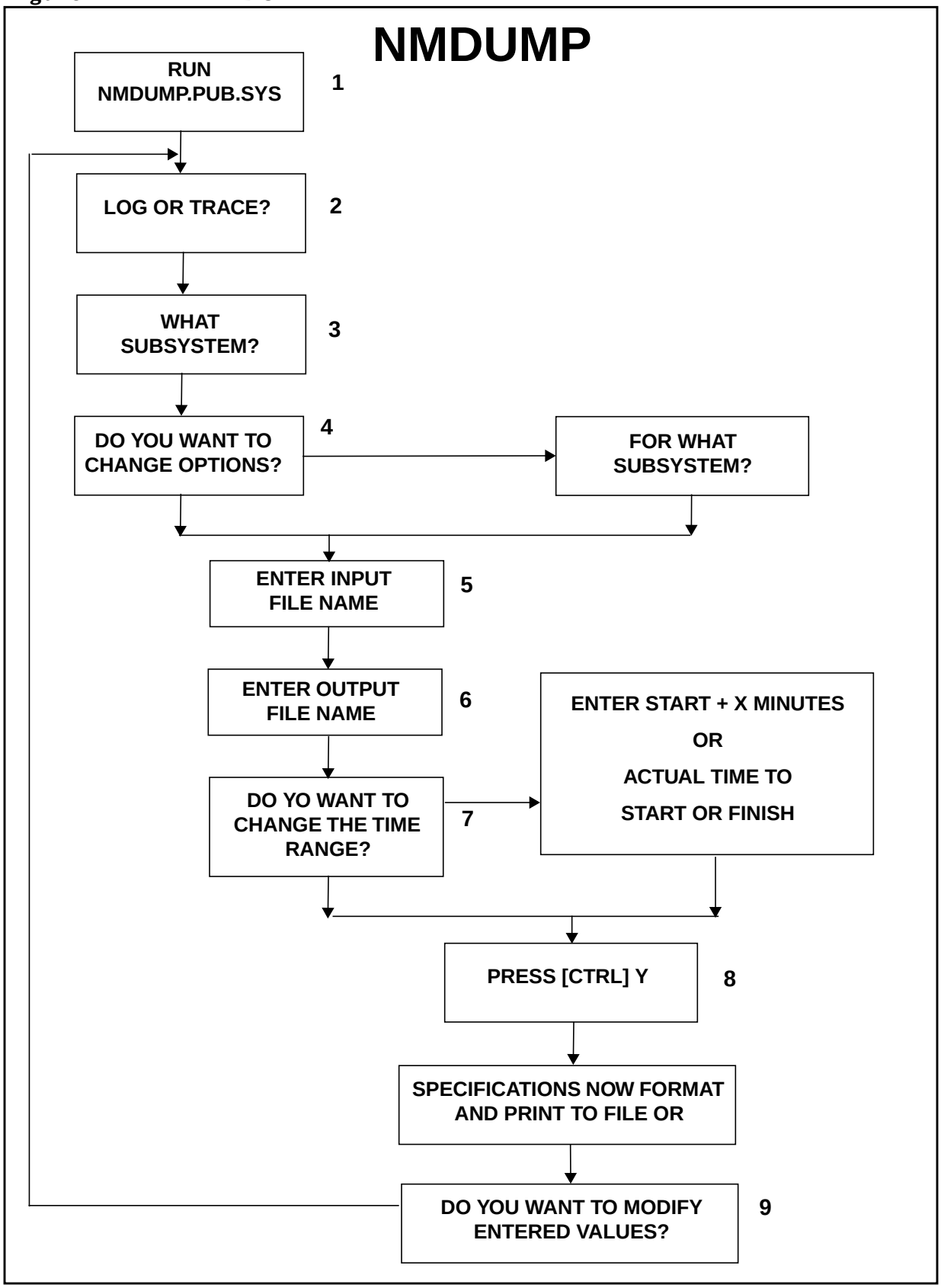
  These options are trace options and the number used relates to the subsystem used.
- SDLC, LAP-B, and RJE Filter sets.

  Some of the options allow you to also add additional filters to make more precise selections for formatting.

For information on using logging and tracing for NS 3000/iX products, see the *NS 3000/iX Operations and Maintenance Reference Manual*. For information on using logging and tracing for HP-to-IBM products, see the *Node Manager's Guide* for each product.

See the flow for NMDUMP in Figure 7-1.

Figure 7-1 NMDUMP



Running NMDUMP

Step 1. Type

```
:RUN NMDUMP.PUB.SYS
```

Step 2. Enter either (1) logging or (2) tracing.

Step 3. Enter the ID number for each subsystem you want to format. Use a comma to separate each number. (`Default = ALL.`)

NOTE ID numbers can be used as parameters with NMMAINT.

Step 4. Change the default (NO) to (YES) if you would like to enter subsystem options. (NMDUMP will set the default options if (NO) is entered.)

a. Enter the subsystem ID for the options you want to change.

b. Enter the number of the option or <CR> to select the current options.

Step 5. Enter the input log or trace file name. (Must already exist on the system.)

```
FILENAME.GROUP.ACCOUNT
```

Step 6. Enter the output log or trace file name. `Default = $STDLIST`. (Must *not* yet exist on the system.)

```
FILENAME.GROUP.ACCOUNT
```

Step 7. Change the default (NO) to (YES) if you want to specify a time range.

a. Enter the starting time.

Respond Y or N if the displayed time is correct.

b. Enter the finishing time.

Respond Y or N if the displayed time is correct.

Step 8. Press **[CTRL]Y** when you have completed your responses. (NMDUMP will then give you a chance to re-enter the values.)

Step 9. Use the default (NO) if you are satisfied with your entered values. NMDUMP then formats the logging or tracing information you specified.

Formatting Options

NMDUMP allows you to modify formatting options for specified subsystem IDs. There are three ways to change the formatting menu options.

1. Most options toggle between two possible values, like YES or NO and ON or OFF.
2. Some require you to enter an option number which then displays an additional menu and prompt.
3. Several options prompt you to enter the numbers of certain items.

The following tables show the options for logging and tracing. Some logging and tracing options also have filters you can specify.

You may type // at any of the main NMDUMP prompts to exit the program. If NMDUMP is displaying a subsystem menu, you must press **[RETURN]** to exit the menu and return to the main NMDUMP prompt before typing // to exit the program.

You may also type “Help” at any of the main NMDUMP prompts for help text.

See Table 7-1 for a description of general options.

Table 7-1 General Options

Subsystem	Option	Meaning	Description
802.3, 802.5, SDLC, LAP-B, RJE/BSC, FDDI. 100VG-AnyLAN, 100Base-T, X25	?	Redisplay Options	Displays current options. Additional input OK.
	0	Set Defaults	Set all options back to default values.
NETXPORT, NetIPC, Network Services	1	ASCII ON or OFF	ON = ASCII representation of data (OCTAL). OFF = Hexadecimal representation. Default = ON.
	2	Output Format	Automatically changes output format to HEX if currently in OCTAL or OCTAL if currently in HEX.
	3	Maximum Number	Allows a limit to the amount of data printed in the information and data sections by reducing the number of bytes per record to output.
	4	Verbosity	LOW = Summary, gives the formatted header and raw messages only. HIGH = Detail. Automatically changes LOW to HIGH or HIGH to LOW.

See Table 7-2 for a description of logging options.

Table 7-2 Log Options

Subsystem	Option	Meaning	Description
802.3, 802.5, FDDI, 100VG-AnyLAN, 100Base-T	1	Linknames	Select logging options by Linknames. @ = ALL
	2	Excluded Linknames	Select Linkname to be excluded from logging.
	3	Log Classes	Error message options (ERRORS, WARNINGS, INFO, ALL)
	4	Set Output Level	Toggle between Terse and Verbose. Verbose = Detail report, Terse = Summary.
SDLC, LAP-B, RJE/BSC	1	Linknames	Select logging options by Linknames. @ = ALL
	2	Class Selection	10 = Errors, 12 = Informational, 99 = ALL
NetIPC, Network Services, NETXPORT	5	Class Selection	Show LOG formatter memo with LOG classes configured within NMMGR.
	6	Entity or Module	Select specific entities (NETXPORT) or modules (NS) to format for logging.
	7	Event or PIN	Select event (NETXPORT) or PIN (NetIPC, NS) where error occurred.
NETXPORT Only	8	Port ID or PIN	Select a Port ID or PIN in hexadecimal format. Default = OFF.
	9	Display Summary Output	Allows a summary report of log entries either in additions to or instead of the normal formatting of log entries. Default = OFF.
	10	Save or Use Filter File	Allows saving of the filter option definitions to a file for later use or using previously saved filter file. 1= Use filter file, 2= Save filter file.
Link		No options	

See Table 7-3 for information on the trace formatter options.

Table 7-3 X.25 Trace Formatter

Options	Actual Settings
0 – Set Default Values	
3 – Display Mode	Terse or Lab
4 – Layer	Level2_3 or Level 2 or Level 3
5 – Dump Packet	No or Yes
Level 2:	
6 – Full or Header	Header Only or Full Packet with Data
8 – Packet Type	All, or Select Combination of 9 Level or Packet Types
Level 3:	
9 – Full or Header	Header or Full Packet with Data
10 – Display Length	Amount of Data to Display
11 – Q bit	Both, or Value of Q-bit `0`, `1`, or Both
12 – VC Number	All, or Select Virtual Circuit Number
13 – Packet Type	All, o Select From 17 Level 3 Packet Types in any Combination
Enter the number or <CR> to select the current option: packet types in any combination.	

See Table 7-4 for a description of trace options.

Table 7-4 Trace Options

Subsystem	Option	Meaning	Description
802.3, 802.5, FDDI, 100VG-AnyLAN, 100Base-T	1	Change Filters	Allows definition of what characters each packet must match before it will be formatted.
	2	Change Output Flags	Allows reduction of output by selecting which parts of filtered packets to format
NETXPORT, NetIPC, Network Services	5	Type or Descriptor	Format events for a particular type (NETXPORT) or descriptor number (NetIPC, NS).
	6	Entity or Service	Format events for a particular entity (NETXPORT) or service (NS).
	7	Event or PIN	Format events for a particular event (NETXPORT) or PIN (NetIPC, NS). Call for network services displayed.
	8	Port ID or PIN	Select a Port ID or PIN in hexadecimal format. Default = OFF.
	9	Display Summary Output	Allows a summary report of log entries either in additions to or instead of the normal formatting of log entries. Default = OFF.
	10	Save or Use Filter File	Allows saving of the filter option definitions to a file for later use or using previously saved filter file. 1= Use filter file, 2= Save filter file.
	11	Source IP Address	Allows specification of a source IP address for header trace messages. Default = OFF.
	12	Destination IP Address	Allows specification of a destination IP address for header trace messages.
	13	Source TCP Port	Allows specification of a source TCP address for header trace messages.
	14	Destination IPC Port NS Messages	Allows specification of a destination TCP address for header trace messages. ON = NS messages displayed. OFF = NetIPC intrinsic calls for Network services displayed.
Network Services Only	8	Format NS Messages Only	Toggle ON and OFF. ON = Only Display NS Protocols, (VT, NFT, RFA, PTOP) OFF = Also Display NetIPC Intrinsic Level Activity

Table 7-4 Trace Options

Subsystem	Option	Meaning	Description
SDLC, LAP-B, RJE/BSC 802.3, 802.5, FDDI, 100VG-AnyLAN, 100Base-T	1	Output Limit	Allow input of maximum bytes in line-data frames to reduce the amount of formatted data. Affects only *line-data-frames*.
	2	Filter Sets	Allows selection of filters for output data. All filter sets are displayed when selected.
	3	Show Raw Data	Allows printing of unformatted trace data along with the same data in decoded form. Default = YES.
	4	Show Decoded Data	Used with option 3, will disable printing of decoded data. (Prints only raw data.) Default = YES.
LAP-B, SDLC	7	Data Representation	Tells formatter what type of bit encoding is used. (ASCII or EBCDIC)
LAP-B Only	8	MODOLO Count	Tells formatter whether frame data in trace file was a modolo-128 format rather than default modolo-8 format.
802.3, 802.5	5	Select Linknames	
FDDI, 100VG-AnyLAN, 100Base-T	6	Exclude Linknames	
	7	Select Character Representation	Toggle between ASCII and EBCDIC representation.
802.3, 802.5, FDDI	9	Filter ON Station Address	Select MAC or station address for filtering Source and Destination.
	10	Filter ON SAP	Select filtering for both SSAP and BSAP.
	11	Generate HP-UX Trace Site	Create trace output file or format, that 8.0 HP-UX formatter can use.
100VG-AnyLAN, 100Base-T	8	Filter ON Station Address	Select MAC or station address for filtering Source and Destination.
	9	Filter ON SAP	Select filtering for both SSAP and BSAP.

See Table 7-5 for a description of filter sets.

Table 7-5 Filter Sets

Subsystem	Number	Filter	Description
SDLC	1	Data frames sent/rcvd	Enables printing of frames sent and frames received on the datacomm link.
	2	Driver message sent/rcvd	Enables printing of all port messages sent to the driver by SNA Transport and other entities, or sent to them by the driver.
	3	Driver state-changes	Enables printing of changes in internal state within the SDLC driver modules.
	4	Driver intervals	Enables printing of details related to internal processing of internal driver requests, mainly those related to utility functions (not datacomm I/O).
	55	Card footprint	Enables printing of large blocks of footprint information from the downloaded SDLC firmware.
	99	ALL	Produces a full trace.
	0	Errors Only	Disables all filter sets and produces a listing of error only.
X25	0	Set Defaults	Set all options back to default.
	1	VC Number	Select Virtual Circuit numbers
	2	Packet Type	Select Packet types.
	3	Q-Bit	Toggles between ON and OFF selection of Q-bit (Control bit)

Table 7-5 Filter Sets

Subsystem	Number	Filter	Description
LAP-B	2	Driver messages sent/rcvd	Enables printing of all port messages sent to the driver by NS Transport and other entities, or sent to them by the driver.
	3	Driver state-changes	Enables printing of changes in internals state within the LAP-B driver modules.
	4	Driver internals	Enables printing of details related to internal processing of internal driver requests, mainly those related to utility functions (not datacomm I/O).
	51	Card frames sent/rcvd	Enables printing of frames sent and frames received on the datacomm link.
	53	Card state-changes	Enables printing of the individual state changes traced by the downloaded LAP-B firmware.
	99	ALL	Produces a full trace.
	0	Errors	Disables all filter sets and produces a listing of error only.
RJE	1		Enables printing of frames sent and frames received on the datacomm line.
	2		Enables printing of all port messages sent to the driver by the RJERCS intrinsics and other entities, or sent to them by the driver.
	3		Enables printing of changes in internal state within the RJE driver modules.
	4		Enables printing of details related to internal processing of internal driver requests, mainly those related to utility functions (not datacomm I/O).
	5		Enables printing of all calls to all RJERCS intrinsics (such as ROPEN) and all buffer data written to or read from the RJE driver.
	51		Enables printing of frames sent and frames received on the datacomm link.
	52		Enables printing of all state changes not already shown under set 51, and any other information traced by the downloaded Bisync firmware.
	99		Produces a full trace.
	0		Disables all filter sets and produces a listing of error only.

Link Subsystem Formatting

The link manager subsystem does not call any menus. NMDUMP formats logging messages only. The first line labels the error as a link manager error, and shows whether it is fatal or non-fatal. The next line contains the time and date of the event. This line is followed by the log message, the requestor ID, the link name, and the logical device (LDEV) of the link.

The requestor ID is for internal use only. Any underlying errors are reported below the LDEV field. Many messages correspond to NMERR messages that are documented in Appendix A , “NMS Error Messages,” of this manual.

8 NMMGRVER

This chapter describes NMMGRVER, a conversion program that enables earlier versions of subsystems to be used with the current version of NMMGR.

This version of NMMGRVER will convert configuration files from previous versions of MPE/iX to the current MPE/iX release format.

This chapter includes discussions of the following:

- Using the NMMGRVER conversion program.
- Converting configuration files from previous versions of MPE XL format to the current version of MPE/iX format.

Using the Conversion Program

You need to convert files if you open an existing configuration file while using NMMGR and receive this message:

```
Version mismatch found on specified subsystem. Please run NMMGRVER.
(NMGRERR 53)
```

You also need to convert files if you are performing NETCONTROL and receive the following class 2 logging message at the console:

```
Bad CONFIG File Version
```

NMMGRVER will create backup copies of your configuration files for you, and will name them NMBACKA, NMBACKB, NMBACKC, and so on. Therefore, you can go back to a source file if necessary.

Converting MPE XL to MPE/iX

Step 1. Execute NMMGRVER by entering:

```
:RUN NMMGRVER.PUB.SYS
```

After displaying a banner, the system prompts you for the name of the configuration file to be converted.

```
Fileset to be scanned?
```

Step 2. Enter one of the following filesets, or press the **[RETURN]** key to end the conversion program.

```
filename[.groupname[.acctname]]
file prefix@[.groupname[.acctname]]
@[.groupname[.acctname]]
@@.@[.acctname]
@@.@.@
```

NOTE When converting from an earlier release of MPE XL to the current version of MPE/iX, the configuration file can have any valid MPE file name. If you have used another name instead of NMCONFIG, NMMGRVER will use that name as the final name for your conversion file. For example, if your configuration file is called MYCONFIG, NMMGRVER will convert it and save it under the same name, overwriting the original MYCONFIG. When the conversion is finished, you must rename or purge the existing NMCONFIG and then rename MYCONFIG to NMCONFIG, replacing the old NMCONFIG.

Step 3. NMMGRVER searches for files of type NCONF in the specified fileset. For each file found, it asks:

```
OK to convert filename.groupname.acctname?
```

where `filename.groupname.acctname` is the name of a configuration file. Enter `Y` for yes or either `N` or **[RETURN]** for no.

Step 4. NMMGRVER checks the configuration file to determine if it is an MPE/iX configuration file, then the conversion proceeds without further user input.

After each file is converted NMMGRVER will display the following message:

```
Conversion Completed Successfully (NMMGRVERMSG 0)
```

Step 5. Continue to enter either `Y`, `N`, or **[RETURN]** until you have converted all files.

Step 6. Run NMMGR and modify any of the configuration files, as needed.

A NMS Error Messages

This appendix includes listings of Node Management Services error messages, grouped in sets as shown below. The error messages in each set are listed numerically. Each error message listed includes at least one possible cause of the error and a recommended action for each cause.

Some of the messages, as shown in this manual, include an exclamation point (!), which is a substitution character that represents variable information. When the actual message is displayed, this substitution character will be replaced by appropriate information.

The following sets of messages are included in this appendix:

Message Set	Message Code
NMCN Error and Warning Messages	NMCNERR NMCNWARN
NMDUMP Error and Warning Messages	NMDUMPERR NMDUMPWARN
NM Error Messages	NMERR
NMFS Error and Warning Messages	NMFSERR NMFSWARN
NMGR Error and Warning Messages	NMGRERR NMGRWARN
NMMGRVER Messages, Errors and Warnings	NMMGRVERMSG NMMGRVERERR NMMGRVERWARN
ND Error Messages	NDIERR
FMT Error Messages	FMTERR

Resolving Problems

There are problems that are common to many situations, such as invalid software installation, version incompatibilities, insufficient MPE resources, corrupt configuration files, and file system errors. This section describes some of the resolutions for these problems. In many cases, you can use these descriptions to help you resolve these problems yourself. In addition, if you are running NMMGR, you can use the Error Information screen to help determine what the problem is. See Chapter 2 , “Basics of NMMGR,” of this manual for more information on the Error Information screen.

Note that you may get an error which is caused by an internal procedure. Some internal errors can be remedied only by qualified HP representatives. The causes and actions listed with the error messages will tell you which ones these are. In such cases, you should file a Change Request (CR) to get help. To enable HP to solve you problem in an efficient manner, please follow the guidelines listed on the following pages.

Invalid Software Installation

A software installation may be invalid. Run NMMAINT to get a listing of all software modules and their version IDs. Check that all required modules are present and that the first five characters of the version ID numbers of these modules are the same within each subsystem (these are the *v.uu.ff* fields). Finally, check these version ID numbers 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 it correctly.

Version Incompatibilities

There may be version incompatibilities between NMS software and other subsystem software. Run NMMAINT to get a listing of version ID numbers for NMS and for all of the NMS-dependent subsystems. Locate the overall version ID numbers for NMS and for each subsystem. Compare the first five characters of these version ID numbers with those listed as compatible with each other in the *System Status Bulletin* or other HP sources. If a discrepancy is found, locate a known set of compatible software and install it.

Insufficient MPE Resources

There may be insufficient MPE resources, such as configured table sizes. Check if the MPE configuration has enough DST and PCB entries configured. (If possible, use the HP Glance/XL product to check MPE table utilization.) Reconfigure MPE to fix any problems found and restart the system.

Corrupt Configuration Files

The configuration file is possibly corrupt. If the error persists, use NMMGR to manually check the configuration file (if possible). If bad records seem to be localized to a particular item, delete that item and reconfigure it. If necessary, restore a backup copy of the file.

File System Errors

An NM and/or MPE file system error (NMFSERR, NMFSWARN, 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 Information screen to find out what the underlying error is. Correct the problem and try again.

Submitting a CR

The messages that refer you to this section can indicate an internal error. For further assistance from HP, submit an CR (Change Request). 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.
- 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. Use NMMAINT to obtain this information for NS, DTS, NRJE, SNA and Node Management. This allows Hewlett-Packard to determine if the problem is already known and if the correct software is installed at your site.
- Record all result messages and numbers that appear at the user terminal and the system console.
- Run NMDUMP to format the NM log file (`NMGLnnnn.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 your NMS subsystem 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 configuration you are using for your Hewlett-Packard representative to further analyze. Inspect the output and try to locate errors.
- Try to determine the general area within the software where you think the problem exists. If you think the problem is caused by an NMS subsystem, refer to the manual(s) for that subsystem and try to resolve the problem by following the information-gathering guidelines in those manuals.
- Issue the `LINKCONTROL` *`linkname`*`;STATUS=` command for each link. Retain the 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 trace files that were active when the problem occurred for your Hewlett-Packard representative to analyze.
- **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.

NMCN Error and Warning Messages

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 type 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 1 **MESSAGE: NMMON: Unable to allocate area for port table. (NMCNERR 1)**

CAUSE: NMMON is unable to expand the DL-DB area in its stack.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMCNERR 2 **MESSAGE: NMMON: Unable to obtain port data segment. (NMCNERR 2)**

CAUSE: INITPORTDST returned a DST number of 0. The system is unable to allocate any extra data segments.

ACTION: See “Insufficient MPE Resources” at the beginning of this appendix.

NMCNERR 3 **MESSAGE: NMMON: Unable to create port in data segment. (NMCNERR 3)**

CAUSE: CREATEPORT returned a PORTID of 0.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMCNERR 4 **MESSAGE: NMMON: Unable to add port dictionary entry. (NMCNERR 4)**

CAUSE: DICTADD returned a nonzero result.

ACTION: See “Submitting a CRSubmitting a CR” at the beginning of this appendix.

NMCNERR 5 **MESSAGE: NMMON: CREATEPROCESS error *n* on NMFILE.PUB.SYS. (NMCNERR 5)**

CAUSE: CREATEPROCESS failed for NMFILE. The NMFILE.PUB.SYS program file might not be present, or 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. Also, there could be other MPE limitations such as insufficient table space.

ACTION: Look up the CREATEPROCESS error number in the *Intrinsics Reference Manual*. Correct this error. See also “Invalid Software Installation” and “Insufficient MPE Resources” at the beginning of this appendix.

NMCNERR 6 **MESSAGE: NMMON: CREATEPROCESS error *n* on NMLOGMON.PUB.SYS. (NMCNERR 6)**

CAUSE: CREATEPROCESS failed for NMLOGMON. The NMLOGMON.PUB.SYS program file might not be present, or 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. Also, there could be other MPE limitations such as insufficient table space.

ACTION: Look up the CREATEPROCESS error number in the *Intrinsics Reference Manual*. Correct this error. See also "Invalid Software Installation" and "Insufficient MPE Resources" at the beginning of this appendix.

NMCNERR 7 **MESSAGE: NMMON: NMS version mismatch. NMS-based datacomm unavailable. (NMCNERR 7)**

CAUSE: Version mismatch detected in the Node Management Services subsystem software modules installed on the system.

ACTION: See "Invalid Software Installation" at the beginning of this appendix.

NMCNERR 8 **MESSAGE: NMMON: Restart request rejected; not in proper state [!]. (NMCNERR 8)**

CAUSE: User attempted to perform an unsupported function.

ACTION: Use method supported by Hewlett Packard to achieve your goal. If uncertain, contact your HP representative.

NMCNERR 9 **MESSAGE: NMMON: Programmatic shutdown request rejected; not in proper state [!]. (NMCNERR 9)**

CAUSE: User attempted to perform an unsupported function.

ACTION: Use method supported by Hewlett Packard to achieve your goal. If uncertain, contact your HP representative.

NMCNERR 11 **MESSAGE: NMMON: CREATEPROCESS error *n* on NMINIT.PUB.SYS. (NMCNERR 11)**

CAUSE: CREATEPROCESS failed for NMINIT. The NMINIT.PUB.SYS program file might not be present, or 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. Also, there could be other MPE limitations such as insufficient table space.

ACTION: Look up the CREATEPROCESS error number in the *Intrinsics Reference Manual*. Correct this error. See also "Invalid Software Installation" and "Insufficient MPE Resources" at the beginning of this appendix.

NMCNERR 16 **MESSAGE: NM Log Monitor: Another MainLogMonitor exists. This one terminating. (NMCNERR 16)**

CAUSE: A Main Log Monitor process has found its entry already exists in the port dictionary.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 17 **MESSAGE: NM Log Monitor: Unable to obtain port data segment. (NMCNERR 17)**

CAUSE: INITPORTDST returned a DST number of 0. The system is unable to allocate any extra data segments.

ACTION: See "Insufficient MPE Resources" at the beginning of this appendix.

NMCNERR 18 **MESSAGE: NM Log Monitor: Unable to create port in data segment. (NMCNERR 18)**

CAUSE: CREATEPORT returned a PORTID of 0.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 19 **MESSAGE: NM Log Monitor: Unable to add port in dictionary entry. (NMCNERR 19)**

CAUSE: DICTADD returned a nonzero result.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 20 **MESSAGE: NM Log Monitor: Unable to add to NM Monitor port table. (NMCNERR 20)**

CAUSE: NMMONADDID failed for MainLogMonitor.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 21 **MESSAGE: NM Log Monitor: Unable to create user logging data segment. (NMCNERR 21)**

CAUSE: Main Log Monitor is unable to acquire an extra data segment.

ACTION: See "Insufficient MPE Resources" at the beginning of this appendix.

NMCNERR 22 **MESSAGE: NM Log Monitor: Unable to create trace dictionary data segment. (NMCNERR 22)**

CAUSE: Main Log Monitor is unable to acquire an extra data segment.

ACTION: See "Insufficient MPE Resources" at the beginning of this appendix.

NMCNERR 23 **MESSAGE: NM Log Monitor: Input/Output error in accessing the system disc cold load area. (NMCNERR 23)**

CAUSE: An error occurred trying to access the area of disk where the next NMLG*nnnn*, and NMTC*nnnn*, file name numbers are stored. Check for

other error indications that may affect the system disks, including I/O errors.

ACTION: Correct any situation that may cause disk I/O errors. If the problem persists, see "Submitting a CR" at the beginning of this appendix.

NMCNERR 24 **MESSAGE: NM Log Monitor: Illegal parameter passed; create failed. (NMCNERR 24)**

CAUSE: The user has attempted to enter a parameter which is not valid.

ACTION: Check input parameters and try again.

NMCNERR 25 **MESSAGE: NM Log Monitor: CREATEPROCESS error *n* on NMLOGMON.PUB.SYS. (NMCNERR 25)**

CAUSE: CREATEPROCESS failed for NMLOGMON. The NMLOGMON.PUB.SYS program file might not be present, or 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. Also, there could be other MPE limitations such as insufficient table space.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 26 **MESSAGE: NM Log Process: Internal error trying to set up NMS logging. (NMCNERR 26)**

CAUSE: An unexpected error has occurred.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 30 **MESSAGE: NM Log Process: Unable to obtain port data segment. (NMCNERR 30)**

CAUSE: INITPORTDST returned a DST number of 0. The system is unable to allocate any extra data segments.

ACTION: See "Insufficient MPE Resources" at the beginning of this appendix.

NMCNERR 31 **MESSAGE: NM Log Process: Unable to create port data segment. (NMCNERR 31)**

CAUSE: CREATEPORT returned a PORTID of 0.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 32 **MESSAGE: NM Log Process: Unable to add port dictionary entry. (NMCNERR 32)**

CAUSE: DICTADD returned a nonzero result.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 33 **MESSAGE: NM Log Process: Unable to add to NM Monitor port table. (NMCNERR 33)**

CAUSE: NMMONADDID failed for MainLogMonitor.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNERR 34 **MESSAGE: NM Log Process: Unable to create logging buffer data segment. (NMCNERR 34)**

CAUSE: NM Log Process is unable to acquire an extra data segment.

ACTION: See "Insufficient MPE Resources" at the beginning of this appendix.

NMCNERR 36 **MESSAGE: NMLG FILE NUMBER *nnnn* ERROR *#nnn*. NM LOGGING STOPPED. (NMCNERR 36)**

CAUSE: If the error number is greater than 1, this is the file system error that occurred when accessing file NMLG*nnnn*, where *nnnn* is the file number specified. If the error number is 1, then see the comments to NMCNERR 23.

ACTION: Correct this problem, then type RESUMENMLOG.

NMCNERR 38 **MESSAGE: NMLG FILE NUMBER *nnnn* ERROR *#nnn*. NM LOGGING SUSPENDED. (NMCNERR 38)**

CAUSE: If the error number is greater than 1, this is the file system error that occurred when accessing file NMLG*nnnn*, where *nnnn* is the file number specified. If the error number is 1, refer to message NMCNERR 23.

ACTION: Correct this problem, then type RESUMENMLOG.

NMCNERR 42 **MESSAGE: UNABLE TO ACCESS NMLG FILE NUMBER *nnnn*. (NMCNERR 42)**

CAUSE: 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.

ACTION: Try typing RESUMENMLOG. If SHOWNMLOG after this gives this message again, try rebooting the system to force logging to open a new NMLG*nnnn* file.

NMCNERR 44 **MESSAGE: NM Log Process: Unable to create log dictionary data segment. (NMCNERR 44)**

CAUSE: NM Log Process is unable to acquire an extra data segment.

ACTION: See "Insufficient MPE Resources" at the beginning of this appendix.

NMCNERR 45 **MESSAGE: NM Log Process: Cannot format log msg. Cannot access formatter for subsystem !. Encountered LOADPROC error !. (NMCNERR 45)**

CAUSE: A request to write a formatted log message specifies an NMS subsystem number where formatter Log Process was unable to LOADPROC.

ACTION: The SUBSYS*n*LOGFORMA procedure, where *n* 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. Look up the LOADPROC error number in the *MPE Intrinsics Reference Manual*. Correct this error. Check that NMS subsystem *n* is completely, correctly installed. See "Invalid Software Installation" and "Insufficient MPE Resources" at the beginning of this appendix.

Table A-1 Subsystem Numbers for NMCNERR Messages

nn	**Subsystem**
0	Node Management Services (30299-11017)
1	SNA Transport (32099-11015)
2	SNA/NRJE (Product #30245)
3	Network Transport (Product #30242)
4	Port Translator (30299-11017)
5	Sockets
6	Network Services (Product #32344)
7	Buffer Manager (30299-11016)
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 46 **MESSAGE: NM Log Process: Cannot format log msg. Unknown subsystem *nn*. (NMCNERR 46)**

CAUSE: A request to write a formatted log message specifies an unknown NMS subsystem number.

ACTION: This is an internal error. See "Submitting a CR" at the beginning of this appendix.

NMCNERR 47 **MESSAGE: NMLG FILES *mmmm* THRU *nnnn* SKIPPED. (NMCNERR 47)**

CAUSE: NM log files *mmmm* through *nnnn* were skipped over when NMS Logging tried to open a new disk log file. Files NMLG*mmmm*.PUB.SYS through NMLG*nnnn*.PUB.SYS already exist. This is an information message only; no error occurred.

ACTION: None.

NMCNERR 48 **MESSAGE: NMLG FILES 0000 THRU 9999 ALL USED, NONE AVAILALBLE FOR NEXT LOGFILE. (NMCNERR 48)**

CAUSE: NMS Logging finds that files NMLG0000 through NMLG9999 all already exist. It is more likely that a directory problem or an internal problem exists.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMCNMSG 49 **MESSAGE: MainLogMon: NMGLOBAL file found, purged (not needed for this version). (NMCNMSG 49)**

CAUSE: 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 disk, and the file is purged.

ACTION: None. Informative message.

NMCNERR 50 **MESSAGE: NM Log Process: Cannot access NMCAT.PUB.SYS to format a log msg. (NMCNERR 50)**

CAUSE: NM Log Process could not open the message catalog and so could not format a logging message.

ACTION: See "Invalid Software Installation" at the beginning of this appendix.

NMCNERR 51 **MESSAGE: NM Log Process: Logging class ! not configured for subsystem ! in !. (NMCNERR 51)**

CAUSE: A logging message was received from NMS subsystem *m* that specified log class *n*. However, log class *n* is not configured. The log message is discarded.

ACTION: Use NMMGR to configure logging class *n* under subsystem *m* in the specified configuration file. The NMMGR subtree is LOGGING. SUB*mmmm*.CLAS*nnnn*, where *mmmm* is the subsystem number *m* with leading zeros, and *nnnn* is the class number *n* with leading zeros.

NMCNWARN 70 **MESSAGE: Link Manager unable to open NM logging. (NMCNWARN 70)**

CAUSE: A Link Manager process encountered an error from NMOPENLOG.

ACTION: The specific NMERR will be reported in a console message immediately following this message. The Link Manager process will

continue to execute, but will be unable to log any errors, including I/O errors.

NMCNWARN 71 **MESSAGE: Trace Manager unable to open NM logging. (NMCNWARN 71)**

CAUSE: NMCONFIG does not have logging subsystem 18 configured.

ACTION: None required.

NMCNERR 80 **MESSAGE: Linkname Table creation error, subsys=! info=!. (NMCNERR 80)**

CAUSE: System call failure.

ACTION: Reboot the system.

NMDUMP Error and Warning Messages

NMDUMPERR 0 **MESSAGE: Unable to retrieve text of message #! of set #! from the message catalog. (NMDUMPERR 0)**

CAUSE: 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. It will be displayed when there is no message catalog, NMCAT.PUB.SYS, or the message catalog is not valid (corrupt).

ACTION: Verify that the message catalog exists and is valid.

CAUSE: The version of the NMS message catalog on the system is not compatible with the current NMS software.

ACTION: Verify that the version of NMCAT.PUB.SYS on the system is compatible with the current NMS software.

CAUSE: File system error, a problem accessing and retrieving information from message catalog, or an internal error in the NMDUMP program.

ACTION: File a CR (Change Request). Refer to "Submitting a CR" at the beginning of this appendix.

NMDUMPERR 1 **MESSAGE: Data type must be 1 or 2. (NMDUMPERR 1)**

CAUSE: User responded incorrectly to prompt for data type.

ACTION: Correct input and reenter.

NMDUMPERR 2 **MESSAGE: Invalid subsystem ID entered. (NMDUMPERR 2)**

CAUSE: User responded incorrectly to prompt for subsystem ID.

ACTION: Correct input and reenter.

NMDUMPERR 3 **MESSAGE: Input must be YES or NO. (NMDUMPERR 3)**

CAUSE: User responded incorrectly to a prompt requiring a Y or N answer. "Y", "YES", "y", or "yes" are allowed for Y. "N", "NO", "n", or "no" are allowed for N.

ACTION: Correct input and reenter.

NMDUMPERR 4 **MESSAGE: Error — File is not of log type. (NMDUMPERR 4)**

CAUSE: User specified that he wanted to format a log file, but the input file specified was not type NLOG.

ACTION: Check spelling of filename. Check file's type code. Correct input and reenter.

NMDUMPERR 5 **MESSAGE: Error — File is not of trace type. (NMDUMPERR 5)**

CAUSE: User specified that he wanted to format a trace file, but the input file specified was not type NTRAC.

ACTION: Check spelling of filename. Check file's type code. Correct input and reenter.

NMDUMPERR 6 **MESSAGE: Invalid date and time string entered. (NMDUMPERR 6)**

CAUSE: User entered an invalid date and/or time. User entered the date and/or time in improper format. Type "Help" for a list of allowed formats.

ACTION: Correct input and reenter.

NMDUMPERR 7 **MESSAGE: Time not within time range of file. (NMDUMPERR 7)**

CAUSE: User entered a date and/or time that is beyond the time range of the input file.

ACTION: Correct input and reenter.

NMDUMPERR 8 **MESSAGE: Finishing time earlier than starting time. (NMDUMPERR 8)**

CAUSE: User entered a finishing date and time that was earlier than the starting date and time.

ACTION: Correct input and reenter.

NMDUMPWARN 9 **MESSAGE: LOADPROC failed on procedure !, LOADPROC error !. Will output this subsystemid's entries in dump format. (NMDUMPWARN 9)**

CAUSE: NMDUMP was unable to LOADPROC (via MODCAL ADDR function) the trace or log formatter procedure for the specified subsystemid number. The procedure name is SUBSYSnLOGFORMAT or SUBSYSnTRACEFORMAT, for log or trace files, for subsystemid = n. NMDUMP will continue and will print out data for this subsystemid, but it will be in a raw dump (hex and ASCII) format. The procedure is not in an SL accessible to NMDUMP. Normally it should be present in SL.PUB.SYS on those systems that have installed the NMS software. Either the initial installation of these procedures was faulty, or these procedures have been deleted since their initial installation.

ACTION: Get a known good copy of these procedures and install them in SL.PUB.SYS.

NMDUMPWARN 13 **MESSAGE: LOADPROC failed on procedure !, LOADPROC error !. Default formatting options will be assumed for this subsystemid. (NMDUMPWARN 13)**

CAUSE: Similar to NMDUMPWARN 9, except the procedure that failed to load was a menu procedure.

ACTION: Get a known good copy of these procedures and install them in SL.PUB.SYS.

NMDUMPERR 20 **MESSAGE: Error — unexpected end of input data file. (NMDUMPERR 20)**

CAUSE: There was a system failure while tracing/logging was enabled and the file was closed improperly.

ACTION: Attempt to relog or retrace the error situation.

CAUSE: An internal error in the NMS trace/log facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to "Submitting a CR" at the beginning of this appendix.

CAUSE: Data file has become corrupt.

ACTION: Attempt to recreate the trace or log file.

NMDUMPERR 21 **MESSAGE: Error occurred during output of file header. (NMDUMPERR 21)**

CAUSE: A file system error occurred.

ACTION: Attempt to find out what file system error occurred: Rerun NMDUMP and see if error occurs.

CAUSE: An internal error in NMWRITE.

ACTION: Rerun NMDUMP. File a CR (Change Request) if the same problem occurs. Refer to "Submitting a CR" at the beginning of this appendix.

NMDUMPWARN 22 **MESSAGE: No data records, from the subsystems selected, were found in the input file. (NMDUMPWARN 22)**

CAUSE: No records were logged/traced to the file from the selected subsystems.

ACTION: None.

CAUSE: If the input file is a log file, logging for the subsystems selected may not be enabled.

ACTION: Check the logging configuration portion of NMCONFIG.PUB.SYS to ensure that logging to disk 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.

CAUSE: An internal error in the NMS trace/log facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to "Submitting a CR" at the beginning of this appendix.

NMDUMPWARN 23

MESSAGE: No data records, from the subsystems selected, were found within the time selected. (NMDUMPWARN 23)

CAUSE: No records were logged/traced to the file from the selected subsystems during the time range specified.

ACTION: None.

CAUSE: If the input file is a log file, logging for the subsystems selected may not be enabled.

ACTION: Check the logging configuration portion of NMCONFIG.PUB.SYS to ensure that logging to disk 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.

CAUSE: An internal error in the NMS trace/log facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to "Submitting a CR" at the beginning of this appendix.

NMDUMPERR 24

MESSAGE: Error — invalid data record in trace file. (NMDUMPERR 24)

CAUSE: There was a system failure while tracing was enabled and the file was closed improperly.

ACTION: Attempt to retrace the error situation.

CAUSE: An internal error in the NMS trace facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to "Submitting a CR" at the beginning of this appendix.

CAUSE: Data file has become corrupt.

ACTION: Attempt to recreate the trace file.

NMDUMPERR 25

MESSAGE: Error — invalid data record in log file. (NMDUMPERR 25)

CAUSE: There was a system failure while logging was enabled and the file was closed improperly.

ACTION: Attempt to retrace the error situation.

CAUSE: An internal error in the NMS log facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to "Submitting a CR" at the beginning of this appendix.

CAUSE: Data file has become corrupt.

ACTION: Attempt to recreate the logfile.

NMDUMPERR 26 **MESSAGE: Error — invalid trace data file. (NMDUMPERR 26)**

CAUSE: There was a system failure while tracing was enabled and the file was closed improperly.

ACTION: Attempt to retrace the error situation.

CAUSE: An internal error in the NMS trace facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Data file has become corrupt.

ACTION: Attempt to recreate the trace file.

NMDUMPERR 27 **MESSAGE: Error — invalid log data file. (NMDUMPERR 27)**

CAUSE: There was a system failure while logging was enabled and the file was closed improperly.

ACTION: Attempt to retrace the error situation.

CAUSE: An internal error in the NMS log facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Data file has become corrupt.

ACTION: Attempt to recreate the log file.

NMDUMPWARN 28 **MESSAGE: EOF was reached on the output file. The output listing is incomplete. (NMDUMPWARN 28)**

CAUSE: The output disk file was not built large enough to hold the full dump listing.

ACTION: Redirect the output to a nondisk file, or increase the number of records in the output file with a FILE equation or BUILD command.

NMDUMPERR 29 **MESSAGE: Error occurred during output of formatted data record. (NMDUMPERR 29)**

CAUSE: 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 disk space.”)

ACTION: Verify that the system is at least not “out of space”: Rerun NMDUMP and see if the same error occurs.

CAUSE: An internal error in NMWRITE.

ACTION: Rerun NMDUMP. File a CR (Change Request) if the same problem occurs. Refer to “Submitting a CR” at the beginning of this appendix.

NMDUMPWARN 30

MESSAGE: Invalid trace destination specified in global header. Reassigned according to file characteristics. (NMDUMPWARN 30)

CAUSE: An internal error in the NMS trace facility which caused bad data to be written to the data file.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, an CR may be filed against the trace facility. Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Data file has become corrupt.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.

NMDUMPWARN 31

MESSAGE: No data records are in the input file. (NMDUMPWARN 31)

CAUSE: No data records were logged/traced to the data file.

ACTION: None.

CAUSE: An internal error in the NMS trace/log facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Data file has become corrupt.

ACTION: Attempt to recreate the data file.

NMDUMPWARN 32

MESSAGE: No additional data records are in the input file. (NMDUMPWARN 32)

CAUSE: It is the end of the file.

ACTION: None.

CAUSE: An internal error in the NMS trace/log facility or the NMDUMP facility.

ACTION: File a CR (Change Request). Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Data file has become corrupt.

ACTION: Attempt to recreate the data file.

NMDUMPWARN 33

MESSAGE: An out-of-range block length was found. It was reassigned the maximum allowable value, 1024. (NMDUMPWARN 33)

CAUSE: An internal error in the NMS log facility which caused bad data to be written to the log data file.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, an CR may be filed against the log facility. Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Log data file has become corrupt.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.

NMDUMPWARN 34

MESSAGE: An out-of-range data record length was found. It was reassigned the maximum allowable value, 2046. (NMDUMPWARN 34)

CAUSE: An internal error in the NMS log facility which caused bad data to be written to the log data file.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, an CR may be filed against the log facility. Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Log data file has become corrupt.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.

NMDUMPWARN 35

MESSAGE: An out-of-range start data record length was found. It was reassigned the maximum allowable value, 8192. (NMDUMPWARN 34)

CAUSE: An internal error in the NMS trace facility which caused bad data to be written to the trace data file.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, an CR may be filed against the log facility. Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Trace data file has become corrupt.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.

NMDUMPWARN 36

MESSAGE: An out-of-range continuation data record length was found. It was reassigned the maximum allowable value. (NMDUMPWARN 36)

CAUSE: An internal error in the NMS trace facility which caused bad data to be written to the trace data file.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, an CR may be filed against the log facility. Refer to “Submitting a CR” at the beginning of this appendix.

CAUSE: Trace data file has become corrupt.

ACTION: No action is actually needed. NMDUMP recovers from such an error in the data file. However, you may attempt to recreate the data file.

NM Error Messages

NMERR 1 **MESSAGE: Invalid parameter specified. (NMERR 1)**

CAUSE: The caller of an NMS procedure has passed an invalid value for one or more of the parameters.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 2 **MESSAGE: Invalid SubsystemID parameter. (NMERR 2)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 3 **MESSAGE: Invalid UserID parameter. (NMERR 3)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 5 **MESSAGE: Invalid TraceElement parameter. (NMERR 5)**

CAUSE: The caller of an NMS procedure passed an invalid value to the *TraceElement* parameter. Returned by NMOPENTRACE, NMGETTRACE. This is usually an internal error in the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 6 **MESSAGE: Invalid Dest parameter. (NMERR 6)**

CAUSE: The caller of an NMS procedure passed an invalid value to the *Dest* parameter. Returned by NMOPENTRACE. This is usually an internal error in the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 7 **MESSAGE: Invalid TraceID parameter. (NMERR 7)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 8 **MESSAGE: Invalid InfoMode parameter. (NMERR 8)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 9 **MESSAGE: Invalid Mode parameter. (NMERR 9)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 10 **MESSAGE: Invalid FileName, RecordSize, and/or FileSize parameter. (NMERR 10)**

CAUSE: The caller of an NMS procedure passed an invalid value to the *FileName*, *RecordSize*, and/or *FileSize* parameters. Returned by NMOPENTRACE, NMCONFOPEN. 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.

ACTION: Correct and retry.

CAUSE: One or more of these parameters are being passed incorrectly by the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 11 **MESSAGE: Invalid LogID parameter. (NMERR 11)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 12 **MESSAGE: Invalid LogClass parameter. (NMERR 12)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 13 **MESSAGE: Invalid LogDataMode parameter. (NMERR 13)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 15 **MESSAGE: Unable to create new datafile. (NMERR 15)**

CAUSE: 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.)

ACTION: See "File System Error" at the beginning of this appendix.

NMERR 16 **MESSAGE: Unable to open the datafile. (NMERR 16)**

CAUSE: Returned by NMCONFOPEN. A File System error occurred. (Normal File System restrictions apply when accessing NM files.)

ACTION: See "File System Error" at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 17 **MESSAGE: Unable to close the datafile. (NMERR 17)**

CAUSE: Returned by NMCONFCLOSE. NMFILE detected an error on MIDASCLOSE.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 18 **MESSAGE: Unable to write to datafile. (NMERR 18)**

CAUSE: Returned by NMCONFGETDATA, NMCONFUPDATEDATA. NMFILE detected an error on MIDASGETDATA, besides NMFSERR 9 or 18.

ACTION: See "File System Error" and "Submitting a CR" at the beginning of this appendix.

CAUSE: Returned by NMOPENTRACE, NMWRITETRACE, NMCLOSETRACE, NMWRITELOG, and 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 disk space, or I/O errors.

ACTION: If error persists and no File System error is detectable, then see "Submitting a CR" at the beginning of this appendix.

NMERR 19 **MESSAGE: Unable to read from datafile. (NMERR 19)**

CAUSE: Returned by NMCONFGETDATA. NMFILE detected an error on MIDASGETDATA, besides NMFSERR 9 or NMFSERR 18. A File System error occurred. (Normal File System restrictions apply when accessing NM files.)

ACTION: See "File System Error" at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 20 **MESSAGE: Unable to obtain data segment for tracing. (NMERR 20)**

CAUSE: 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.

ACTION: See “Insufficient MPE Resources” and “Submitting a CR” at the beginning of this appendix.

NMERR 21 **MESSAGE: Must have 1 <= data length <= 8192 bytes. (NMERR 21)**

CAUSE: A call to NMCONFadddata or NMCONFupdatedata cannot send more than 8192 bytes of data. This is probably an internal error in the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 25 **MESSAGE: Multiple accesses to a trace entity are not supported. (NMERR 25)**

CAUSE: 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*. A user entered a command requesting a particular kind of trace when this trace is already active.

ACTION: Do not request a trace when that trace is already active.

CAUSE: An internal error has occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 26 **MESSAGE: Trace entity is not currently being traced. (NMERR 26)**

CAUSE: 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*).

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 27 **MESSAGE: Request can not be completed immediately. (NMERR 27)**

CAUSE: 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.

ACTION: Normally this is not an error condition.

NMERR 28 **MESSAGE: Subsystem not configured in logging configuration. (NMERR 28)**

CAUSE: The *SubSystemID* passed to NMOPENLOG cannot be found in the LOGGING subtree of the NMCONFIG.PUB.SYS configuration file. The subsystem has not been configured for logging, or the entry is spelled wrong, or the configuration file has been corrupted.

ACTION: Manually check the configuration using NMMGR and ensure the logging entry for that subsystem is configured properly. Refer to the appropriate reference manual for assistance.

NMERR 29 **MESSAGE: LogClass not configured in configuration file. (NMERR 29)**

CAUSE: NMS logging cannot find the specified log class in the configuration file NMCONFIG.PUB.SYS. Returned by NMWRITELOG. The log class specified for the calling subsystem is not configured correctly in NMCONFIG.PUB.SYS.

ACTION: Use NMMGR to manually check and correct the logging configuration in CONFIG.PUB.SYS. Make sure that the class name is spelled correctly. Refer to the appropriate reference manual for assistance.

NMERR 31 **MESSAGE: Unable to repetition trace to beginning of file. (NMERR 31)**

CAUSE: FCONTROL 5 failed.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 32 **MESSAGE: This program may not be run as a user process. (NMERR 32)**

CAUSE: 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, NMLOGICS.PUB.SYS.

ACTION: None.

NMERR 33 **MESSAGE: Unable to access logging configuration file. (NMERR 33)**

CAUSE: An unexpected error occurred while NMS logging was trying to read the logging configuration data in NMCONFIG.PUB.SYS. Returned by NMOPENLOG.

ACTION: See "Corrupt Configuration File" at the beginning of this appendix.

NMERR 34 **MESSAGE: Invalid reference parameter specified. (NMERR 34)**

CAUSE: Condition code ">" returned from an internal data segment move routine. One of the parameters, passed by reference, would cause a bounds violation if written to. This message is returned if a bad condition code is received after call of one of the move routines between data segments: MBFDS, MFDS, MBTDS, MTDS. This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 35 **MESSAGE: Internal error: Invalid data segment number. (NMERR 35)**

CAUSE: Condition code ">" returned from an internal data segment move routine. An invalid DST number was specified. This message is returned if a bad condition code is received after call of one of the move routines between data segments: MBFDS, MFDS, MBTDS. This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 36 **MESSAGE: Unable to find port for NM Monitor process. (NMERR 36)**

CAUSE: Returned by NMMONADDID and NMMONMAINTREQ. NMMON does not have an entry in Port Dictionary. Cause: internal problem, or bad software installation.

ACTION: See "Version Incompatibilities" and "Submitting a CR" at the beginning of this appendix.

NMERR 37 **MESSAGE: Calls from split stack are not supported. (NMERR 37)**

CAUSE: Returned by NMMONADDID, NMMONSTARTREQ, NMMONMAINTREQ, NMOPENLINK, NMCLOSELINK, NMMANAGELINK, NMLINKINFO and NMLINKDIAL. Attempt to call above procedures in Split stack. Caused by an internal problem, or bad software installation.

ACTION: See "Invalid Software Installation" and "Submitting a CR" at the beginning of this appendix.

NMERR 38 **MESSAGE: Parameter length out of range. (NMERR 38)**

CAUSE: Returned by NMMONSTARTREQ, NMOPENLINK, and NMOPENLOG2. Length given for string parameter negative or too long. Caused by an internal problem, or bad software installation.

ACTION: See "Invalid Software Installation" and "Submitting a CR" at the beginning of this appendix.

NMERR 39 **MESSAGE: System shutdown in progress. Can't complete request. (NMERR 39)**

CAUSE: Returned by NMMONADDID, NMMONSTARTREQ, NMMONMAINTREQ, NMOPENLINK, NMCLOSELINK, NMMANAGELINK, NMLINKINFO and NMLINKDIAL. NMMON and Link Manager are in the process of shutting down.

ACTION: This is normally not an error condition.

NMERR 40 **MESSAGE: Port table full. Unable to expand capacity. (NMERR 40)**

CAUSE: Returned by NMMONADDID. NMMON cannot expand its DL DB area. Caused by an internal problem, or bad software installation.

ACTION: See "Invalid Software Installation" and "Submitting a CR"' at the beginning of this appendix.

NMERR 41 **MESSAGE: Port identifier not found in port table. (NMERR 41)**

CAUSE: 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.

ACTION: See "Invalid Software Installation" and "Submitting a CR"' at the beginning of this appendix.

NMERR 42 **MESSAGE: Unable to create specified system process. (NMERR 42)**

CAUSE: 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.

ACTION: See "Insufficient MPE Resources," "Invalid Software Installation," and "Submitting a CR" at the beginning of this appendix.

NMERR 43 **MESSAGE: Unable to obtain data segment for port. (NMERR 43)**

CAUSE: Returned by NMOPENLINK. Link Manager found an error calling procedure INITPORTDST.

ACTION: See "Insufficient MPE Resources," "Invalid Software Installation," and "Submitting a CR" at the beginning of this appendix.

NMERR 44 **MESSAGE: Unable to create IPC port. (NMERR 44)**

CAUSE: Returned by NMOPENLINK. Link Manager found an error calling CREATEPORT.

ACTION: See "Submitting a CR'" at the beginning of this appendix.

NMERR 45 **MESSAGE: Add to NM Monitor port table failed. (NMERR 45)**

CAUSE: Returned by NMOPENLINK. Error calling procedure NMMONADDID (see message NMERR 40). Caused by an internal error, or bad software installation.

ACTION: See "Invalid Software Installation" and "Submitting a CR" at the beginning of this appendix.

NMERR 46 **MESSAGE: Add to port dictionary failed. (NMERR 46)**

CAUSE: Returned by NMOPENLINK. Error calling procedure DICTADD to add Link Manager in Port Dictionary. Caused by an internal error, or bad software installation.

ACTION: See "Invalid Software Installation" and "Submitting a CR" at the beginning of this appendix.

NMERR 47 **MESSAGE: Unable to access message catalog NMCAT.PUB.SYS. (NMERR 47)**

CAUSE: Returned by Version Checking Routines. Unable to FOPEN file NMCAT.PUB.SYS. Caused by a bad software installation.

ACTION: See "Invalid Software Installation" at the beginning of this

appendix.

NMERR 48 **MESSAGE: Unable to open $STDIN for process. (NMERR 48)**

CAUSE: Returned by NMOPENLINK. Unable to FOPEN $STDIN for Link Manager process. Caused by an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 49 **MESSAGE: Unable to open $STDLIST for process. (NMERR 49)**

CAUSE: Returned by NMOPENLINK. Unable to FOPEN $STDIN for Link Manager process. Caused by an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 50 **MESSAGE: Unable to find port for Link Manager process. (NMERR 50)**

CAUSE: Returned by NMOPENLINK. Link Manager does not have an entry in Port Dictionary. Caused by an internal problem, or bad software installation.

ACTION: See “Invalid Software Installation” and “Submitting a CR” at the beginning of this appendix.

NMERR 51 **MESSAGE: Length of data to be logged not in range 1 <= logDataSize <= max allowed (ICS, =58 bytes; non-ICS =2034 bytes. (NMERR 51)**

CAUSE: Caller of NMWRITELOG has requested either too much or too little data to be logged.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 53 **MESSAGE: Invalid NMCONF pathname. Non-printable characters not allowed. (NMERR 53)**

CAUSE: Returned by most NMCONF intrinsics. Caller has sent NMCONF intrinsic a pathname with non-printable character(s). May be a subsystem problem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 54 **MESSAGE: Invalid transaction number. (NMERR 54)**

CAUSE: Returned by most of the NMCONF procedures.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 55 **MESSAGE: NMTC FILES 0000 THRU 9999 ALL USED, NONE AVAILABLE FOR NEXT TRACEFILE. (NMERR 55)**

CAUSE: NMS Trace finds that files NMTC0000 through NMTC9999 all already exist. It is more likely that a directory problem or an internal problem exists.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 56 **MESSAGE: Invalid infolen, must be in range: 1 <= infolen <= 8. (NMERR 56)**

CAUSE: Returned by: NMCONFFILEINFO.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 57 **MESSAGE: Duplicate identifier already exists. (NMERR 57)**

CAUSE: Returned by NMCONFADDPATH, NMCONFRENAMEPATH. NMFILE detected NMFSERR 21 on MIDASADDPATH. User of configuration program entered erroneous information.

ACTION: Enter correct data specifications.

CAUSE: Configuration database has internal error.

ACTION: See “Corrupt Configuration File” at the beginning of this appendix.

CAUSE: Internal software error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 58 **MESSAGE: Unable to find identifier in path name. (NMERR 58)**

CAUSE: Returned by NMCONFGETDATA, NMCONFADDPATH, NMCONFPURGEPATH, NMCONFNEXTPATH, NMCONFADDDATA, NMCONFUPDATEDATA NMCONFDATALENGTH, NMCONFRENAMEPATH, NMCONFPURGEDATA. NMFILE detected message NMFSERR 9. User of configuration program or caller of procedure entered erroneous pathname.

ACTION: Enter correct pathname.

CAUSE: Configuration file internal error.

ACTION: See “Corrupt Configuration File” at the beginning of this appendix.

CAUSE: Internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 59 **MESSAGE: Path depth < minimum or > maximum allowed. (NMERR 59)**

CAUSE: 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

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 60 **MESSAGE: Unable to find NM Log Monitor. (NMERR 60)**

CAUSE: An NM Trace or Logging procedure is unable to locate the server trace or log process (NMLogMon). Returned by NMOPENTRACE, NMGETTRACEID, NMCLOSETRACE, NMOPENLOG, NMCLOSELOG, and by the SHOWNMLOG CI command. The trace or log server process creation failed at system startup due to a bad software installation, a loader error, or an internal error.

ACTION: See “Invalid Software Installation” and “Submitting a CR” at the beginning of this appendix.

CAUSE: 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.

ACTION: None.

NMERR 61 **MESSAGE: DB register at absolute. (NMERR 61)**

CAUSE: Caller’s DB register is at an absolute DB location (WHERES’DB 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. This is probably an internal error by the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 62 **MESSAGE: NM trace dictionary table is full. (NMERR 62)**

CAUSE: An unexpectedly large number of NMOPENTRACE 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 63 **MESSAGE: NM log table is full. (NMERR 63)**

CAUSE: An unexpectedly large number of NMOPENTRACE 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 64 **MESSAGE: Specified file is a system file. (NMERR 64)**

CAUSE: The file name *FileName* parameter of the NMOPENTRACE 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.

ACTION: Specify a valid file name and retry.

NMERR 65 **MESSAGE: Specified file is a back reference file. (NMERR 65)**

CAUSE: The file name *FileName* parameter of the NMOPENTRACE 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 the configuration file for that subsystem.

ACTION: Specify a valid file name and retry.

NMERR 67 **MESSAGE: User logging entries are not available. (NMERR 67)**

CAUSE: 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. The user has requested an unexpectedly large number of concurrent traces to go to the same trace file.

ACTION: Turn off some of the traces and retry.

CAUSE: An internal error has occurred.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 69 **MESSAGE: Unable to create the trace process. (NMERR 69)**

CAUSE: The tracing subsystem is unable to create a trace server process for the NMOPENTRACE request (NMMONSTARTREQ failed).

ACTION: See "Invalid Software Installation," "Insufficient MPE Resources," and "Submitting a CR" at the beginning of this appendix.

NMERR 70 **MESSAGE: Unable to initialize the trace process. (NMERR 70)**

CAUSE: The tracing subsystem is unable to initialize the trace server process for the NMOPENTRACE request (unable to create a port or acquire a data segment).

ACTION: See "Invalid Software Installation," "Insufficient MPE Resources," and "Submitting a CR" at the beginning of this appendix.

NMERR 71 **MESSAGE: Logging has stopped. (NMERR 71)**

CAUSE: An I/O error or File System error occurred earlier and logging is not currently taking place. Returned by NMOPENLOG.

ACTION: Enter the SHOWLOG 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.

NMERR 72 **MESSAGE: This command has no parameter. (NMERR 72)**

CAUSE: 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.

ACTION: Enter the command name alone without any other text on the $STDIN or $STDINX record.

NMERR 73 **MESSAGE: Invalid logging configuration file. (NMERR 73)**

CAUSE: NMCONFIG.PUB.SYS contains invalid logging configuration data. Returned by NMOPENLOG, NMWRITELOG.

ACTION: See “Corrupt Configuration File” at the beginning of this appendix.

NMERR 74 **MESSAGE: NM Log dictionary table is full. (NMERR 74)**

CAUSE: 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. Incompatible software versions installed.

ACTION: See “Invalid Software Installation” and “Version Incompatibilities” at the beginning of this appendix. If this does not resolve the problem, then see “Submitting a CR” at the beginning of this appendix.

NMERR 75 **MESSAGE: Data is already associated with this identifier. (NMERR 75)**

CAUSE: Returned by: NMCONFADDDATA. NMFILE detected NMFSERR 12. User attempted 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 database corruption, or by an internal error.

ACTION: If data base corruption is suspected, then see “File System Error” at the beginning of this appendix. If an internal error is suspected, then see “Submitting a CR” at the beginning of this appendix.

NMERR 76 **MESSAGE: File associated with this transaction is not locked. (NMERR 76)**

CAUSE: 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.

ACTION: If an internal error is suspected, see “Submitting a CR” at the beginning of this appendix.

NMERR 77 **MESSAGE: File associated with this transaction is locked. (NMERR 77)**

CAUSE: Returned by: NMCONFADDDATA, NMCONFUPDATEDATA, NMCONFPURGEDATA, NMCONFADDPATH, NMCONFPURGEPATH, NMCONFRENAMEPATH. Some other process has the NMCONF type file locked.

ACTION: Wait until the file is unlocked by the other user(s) before proceeding.

NMERR 78 **MESSAGE: No data associated with this identifier. (NMERR 78)**

CAUSE: Returned by: NMCONFGETDATA, NMCONFDATALENGTH, NMCONFPURGEDATA, NMCONFUPDATEDATA. NMFILE detected NMFSERR 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.

ACTION: If file corruption is suspected, see “Corrupt Configuration File” at the beginning of this appendix.

NMERR 82 **MESSAGE: Buffer length parameter out of allowable range. (NMERR 82)**

CAUSE: Returned by NMCONFGETDATA. Length parameter is longer than 8192 or less than 7. Probable internal error by caller.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 83 **MESSAGE: Transaction table is full. (NMERR 83)**

CAUSE: Returned if the maximum number of transactions via NMCONF are already opened, and a call to NMCONFOPEN is made.

ACTION: See “Corrupt Configuration File” at the beginning of this appendix.

NMERR 85 **MESSAGE: Data structures internal error in NMFILE. (NMERR 85)**

CAUSE: Returned by most NMCONF procedures.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 86 **MESSAGE: Switch to CM failed. (NMERR 86)**

CAUSE: Returned by native mode NMS procedures if an error is returned by SWITCH.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 87 **MESSAGE: CM data segment improperly mapped to NM object. (NMERR 87)**

CAUSE: Returned by native mode NMWRITETRACE if an error is returned by wrap-dst.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 88 **MESSAGE: Parameter not aligned properly. (NMERR 88)**

CAUSE: Internal error by the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 90 **MESSAGE: Invalid path type value, must be 1 or 2. (NMERR 90)**

CAUSE: Returned by NMCONFNEXTPATH. NMCONFNEXTPATH detected invalid path type value. Internal error by the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 92 **MESSAGE: Unable to purge datafile. (NMERR 92)**

CAUSE: Returned by NMCONFPURGE NMOPENTRACE. File system error.

ACTION: Try to purge the file from a CI session, and note the error. Correct this and retry.

NMERR 94 **MESSAGE: No identifiers beyond this point in datafile. (NMERR 94)**

CAUSE: 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.

ACTION: If file corruption is suspected, see “Corrupt Configuration File” at the beginning of this appendix. If this is not a problem, it may be due to incompatible software modules, or an internal error by the calling subsystem. See “Version Incompatibilities” and “Submitting a CR” at the beginning of this appendix.

NMERR 95 **MESSAGE: Read truncated to capacity of buffer. (NMERR 95)**

CAUSE: Returned by NMCONFGETDATA. NMFILE detected NMFWARN 19 on MIDASGETDATA. This is probably an internal error by the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 96 **MESSAGE: File code mismatch. (NMERR 96)**

CAUSE: Returned by NMCONFOPEN. NMFILE detected NMFSWARN 6 on MIDASOPEN. The file is not a valid configuration file.

ACTION: Type LISTF <filename>, 1 on the file. The file type should be type NCONF.

CAUSE: Internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 97 **MESSAGE: Unable to find port for NMFILE process. (NMERR 97)**

CAUSE: Returned by all NMCONF procedures. Error detected on DICTSEND.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 100 **MESSAGE: Subsystem does not support version checking. (NMERR 100)**

CAUSE: 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.

ACTION: See “Invalid Software Installation” at the beginning of this appendix.

NMERR 101 **MESSAGE: Fix levels differ in one or more modules. (NMERR 101)**

CAUSE: There is a version mismatch between the various modules of the subsystem. Incorrect installation of the subsystem software.

ACTION: See “Invalid Software Installation” at the beginning of this appendix.

NMERR 102 **MESSAGE: Update levels differ in one or more modules. (NMERR 102)**

CAUSE: There is a version mismatch between the various modules of the subsystem. Incorrect installation of the subsystem software.

ACTION: See “Invalid Software Installation” at the beginning of this appendix.

NMERR 103 **MESSAGE: Version levels differ in one or more modules. (NMERR 103)**

CAUSE: There is a version mismatch between the various modules of the subsystem. Incorrect installation of the subsystem.

ACTION: See “Invalid Software Installation” at the beginning of this appendix.

NMERR 104 **MESSAGE: One or more subsystem modules are missing. (NMERR 104)**

CAUSE: A module required for normal operation of the subsystem is missing.

ACTION: See “Invalid Software Installation” at the beginning of this appendix.

NMERR 105 **MESSAGE: One or more subsystem modules are invalid. (NMERR 105)**

CAUSE: An error has occurred trying to read the version ID of one or more of the subsystem’s modules. An I/O error, disk error, or similar has prevented reading the version stamp correctly.

ACTION: Correct this problem and retry. If necessary see “Invalid Software Installation” at the beginning of this appendix.

CAUSE: 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.

ACTION: See “Invalid Software Installation” at the beginning of this appendix.

NMERR 106 **MESSAGE: MODULE FLAGS parameter invalid. (NMERR 106).**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 107 **MESSAGE: FLAGS options are incompatible. (NMERR 107)**

CAUSE: Some mutually incompatible option bits were set in the *FLAGS* parameter. Returned by NMSUBSYSVERS, SUBSYSOVERS, and other subsystem level 2 version check procedures.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 130 **MESSAGE: Unable to create the link manager process. (NMERR 130)**

CAUSE: A nonzero result code was returned by NMMONSTARTREQ to NMOPENLINK.

Returned by NMOPENLINK. Loader error trying to load LINKMGR.PUB.SYS program file.

ACTION: Try to ALLOCATE LINKMGR.PUB.SYS. 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 occurs again, this is not the problem.

CAUSE: Out of MPE resources.

ACTION: See “Insufficient MPE Resources” at the beginning of this appendix.

CAUSE: A nonzero result code was returned by NMMONSTARTREQ to NMOPENLINK. Returned by NMOPENLINK. Internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 131 **MESSAGE: Invalid item detected in configuration record. (NMERR 131)**

CAUSE: Error reading and/or interpreting data from configuration file. Returned by NMOPENLINK.

ACTION: See “Corrupt Configuration File” at the beginning of this appendix.

NMERR 132 **MESSAGE: Link in exclusive use by another subsystem. (NMERR 132)**

CAUSE: Link has already been opened by another process. Returned by NMOPENLINK. Another process has this link opened.

ACTION: Shut down the other process to free the link.

CAUSE: A LINKMGR process which had this link previously did not close it when expected. This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix. If possible, include a memory dump with the CR.

NMERR 133 **MESSAGE: Startparm length error in Link Manager. (NMERR 133)**

CAUSE: Either a software version mismatch, or an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 134 **MESSAGE: A successful NMOPENLINK for this link must occur before executing this function. (NMERR 134)**

CAUSE: NMOPENLINK has not yet been called successfully. Returned by NMCLOSELINK, NMMANAGELINK, NMLINKINFO, and NMLINKDIAL. This is usually an internal error in the calling subsystem.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 135 **MESSAGE: Required items missing in configuration record. (NMERR 135)**

CAUSE: Error reading data from configuration file. Returned by NMOPENLINK. Configuration file is not valid.

ACTION: See “Corrupt Configuration File” at the beginning of this appendix.

NMERR 136 **MESSAGE: Parameter information exceeds permissible length. (NMERR 136)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 137 **MESSAGE: A successful NMOPENLINK for this link must occur before executing this function. (NMERR 137)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 138 **MESSAGE: Unable to find DC/LDM in system I/O tables. (NMERR 138)**

CAUSE: The NSLINK ldev was not configured for the link in NMCONFIG.PUB.SYS when the system was started.

ACTION: Ensure the NSLINK ldev is configured for the link used by NS, and reboot. More information may be found in the NMLG log file.

NMERR 139 **MESSAGE: Unable to find the specified linkname in system I/O tables. (NMERR 139)**

CAUSE: The specified linkname is not configured in the LINK subtree of the configuration file.

ACTION: Check that the linkname specified to the subsystem has a matching linkname configured under the LINK configuration subtree.

NMERR 142 **MESSAGE: Status request to communication board failed. (NMERR 142)**

CAUSE: Call to procedure TRAN'GETINFO failed. Returned by NMLINKINFO and LINKCONTROL. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See "Invalid Software Installation" at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 146 **MESSAGE: User specified buffer inadequate for request. (NMERR 146)**

CAUSE: Caller did not supply a buffer large enough for returned data. Returned by NMLINKINFO. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See "Invalid Software Installation" at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 147 **MESSAGE: Link manager buffer area inadequate for request. (NMERR 147)**

CAUSE: Link Manager's internal buffer is not large enough to handle this request. Returned by NMLINKINFO. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See "Invalid Software Installation" at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 148 **MESSAGE: Specified item code is out of range. (NMERR 148)**

CAUSE: No information item corresponds to the given item code. Returned by NMLINKINFO. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See “Invalid Software Installation” at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 149 **MESSAGE: Dial request to communication board failed. (NMERR 149)**

CAUSE: Error calling procedure TRAN'CONFIGDIAL. Returned by NMLINKDIAL. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See “Invalid Software Installation” at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 154 **MESSAGE: Dial facility is not supported. (NMERR 154)**

CAUSE: Call to LINKDIALREQ failed. Returned by NMLINKDIAL. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See “Invalid Software Installation” at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 155 **MESSAGE: Multicast address downloading is not supported. (NMERR 155)**

CAUSE: Call to NMLINKDOWNMC is not supported. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See “Invalid Software Installation” at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 156 **MESSAGE: Invalid ParmArray code. (NMERR 156)**

CAUSE: The caller of an NMOPENLINK2 procedure has passed an invalid item code in the parameter *ParmArray*.

ACTION: Returned by NMOPENLINK2.

CAUSE: An internal error occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 157 **MESSAGE: DS/LDM open request failed. (NMERR 157)**

CAUSE: The request to open the DC/LDM failed. Returned by NMOPENLINK. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See “Invalid Software Installation” at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 158 **MESSAGE: DS/LDM close request failed. (NMERR 158)**

CAUSE: The request to close the DC/LDM failed. Returned by NMCLOSELINK. Bad software installation.

ACTION: Make sure that the versions of NMS software and port translator software are compatible. See “Invalid Software Installation” at the beginning of this appendix.

CAUSE: An internal error occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 159 **MESSAGE: Unable to lock the Link Manager port DST. (NMERR 159)**

CAUSE: Returned by NMOPENLINK.

ACTION: Call to procedure failed.

CAUSE: Bad software installation.

ACTION: Make sure that the versions of NMS software are compatible.

CAUSE: An internal error occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 160 **MESSAGE: Number of parameters exceeds maximum of 20. (NMERR 160)**

CAUSE: Returned after entering LINKCONTROL command incorrectly.

ACTION: Check the parameters against the LINKCONTROL syntax. Try again.

NMERR 161 **MESSAGE: Expects link name parameter. (NMERR 161)**

CAUSE: Returned after entering LINKCONTROL command incorrectly.

ACTION: Specify the link name parameter and try again.

NMERR 162 **MESSAGE: Expects a name from one to eight characters long. (NMERR 162)**

CAUSE: Returned after entering LINKCONTROL command incorrectly.

ACTION: Check the spelling and try again.

NMERR 163 **MESSAGE: Expects alphanumeric name starting with alphabetic. (NMERR 163)**

CAUSE: Returned after entering LINKCONTROL command incorrectly.

ACTION: Check the spelling and try again.

NMERR 164 **MESSAGE: Expects a semicolon after link name parameter. (NMERR 164)**

CAUSE: Returned after entering LINKCONTROL command incorrectly.

ACTION: Check the spelling and try again.

NMERR 165 **MESSAGE: Expects TRACE keyword. (NMERR 165)**

CAUSE: Returned after entering LINKCONTROL command incorrectly.

ACTION: Specify keyword and try again.

NMERR 166 **MESSAGE: Expects an equals sign after keyword. (NMERR 166)**

CAUSE: Returned after entering LINKCONTROL command incorrectly.

ACTION: Correct and try again.

NMERR 171 **MESSAGE: Specified linkname is not an active datacomm device. (NMERR 171)**

CAUSE: The specified linkname does not exist.

ACTION: Check the spelling of your entry and try again.

CAUSE: The device specified is not configured.

ACTION: Check the list of configured devices and try again.

NMERR 172 **MESSAGE: Specified pathname is not a datacomm device. (NMERR 172)**

CAUSE: The specified pathname is not a valid datacomm device address.

ACTION: Check the pathname in the configuration file and reenter.

NMERR 175 **MESSAGE: Unexpected internal error accessing configuration data. (NMERR 175)**

CAUSE: An unexpected error has occurred.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 177 **MESSAGE: Locked(!) HW Recover(!) HW Sick(!) HW Dead(!) Resource(!). Run diagnostics for more information. (NMERR 177)**

CAUSE: This message is likely caused by a hardware problem, and is a generic status request to the I/O manager returned with the specified bits set. One particular example is that the user has entered the LINKCONTROL command while the system is in power fail recovery.

ACTION: Correct the problem and try again.

NMERR 178 **MESSAGE: Link H/W device indicates self test failure. Run diagnostics for more information. (NMERR 178)**

CAUSE: A failure has occurred in the datacomm hardware.

ACTION: Run diagnostics and replace the defective hardware as necessary.

NMERR 179 **MESSAGE: Unexpected internal error accessing I/O manager. (NMMERR 179)**

CAUSE: The I/O Manager is an unknown state.

ACTION: Run diagnostics for more information.

NMERR 181 **MESSAGE: Trace buffer size must be in the range 1 to 16. (NMERR 181)**

CAUSE: The user has entered a number that is not in the acceptable range. The current buffer sizes supported are within the ranges of 1K to 16K. Returned by the LINKCONTROL command parsing routine.

ACTION: Enter a valid number (1 through 16).

NMERR 182 **MESSAGE: HPE status : info =!, subsystem ID = !. (NMERR 182)**

CAUSE: Status information reported by each individual module.

ACTION: Look at “DHPESTAT.HPESTD.OFFICIAL” for the definitions of subsystem constants. Find out the error information by checking the status reporting file for that particular module.

NMERR 185 **MESSAGE: Only the LANIC link is supported. (NMERR 185)**

CAUSE: No link other than LAN is currently supported.

ACTION: Specify only the LANIC for this application.

NMERR 186 **MESSAGE: Trace request for *linkname* failed due to : HPE status: INFO = ! subsystem ID = !.**

CAUSE: You attempted to start or stop tracing, but tracing was already enabled or disabled.

ACTION: None.

CAUSE: An improper value was specified in the LINKCONTROL command.

ACTION: Reissue the LINKCONTROL command with the correct value.

CAUSE: An error occurred while accessing the specific I/O manager.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMERR 187 **MESSAGE: Trace for *linkname* has been initiated with some exceptions : HPE status: INFO = ! subsystem ID = !.**

CAUSE: This error is often returned even though tracing has been enabled.

ACTION: None. If this error occurs frequently, submit an CR. See “Submitting a CR” at the beginning of this appendix.

NMERR 189 **MESSAGE: Invalid length for a trace file name.**

CAUSE: MPE/iX trace file names are in the format of `filename.group.account` and must contain a maximum of eight characters in the filename, group, and account fields.

ACTION: Reissue the command using a valid trace file name which contains no more than eight characters in the filename, group, and account field.

NMERR 193 **MESSAGE: Trace buffer size for a LAPB, SDLC or RJE link must be between 5 & 16. (NMERR 193)**

CAUSE: The current buffer sizes supported for LAPB and SDLC are 5K to 16K.

ACTION: Configure values in the correct range.

NMERR 200 **MESSAGE: Unable to access ! subsystem message catalog !. (NMERR 200)**

CAUSE: The first parameter is the subsystem name or subsysid. The second parameter is the message catalog file name. This is 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.

ACTION: Something is wrong with the specified message catalog file. Either it does not exist, or is the wrong version, or is inaccessible due to someone else either storing it or accessing it exclusively, or some other I/O error has occurred. Correct the problem with the message catalog and retry.

NMERR 201 **MESSAGE: Error accessing NMCAT.PUB.SYS set=! msg=!. (NMERR 201)**

CAUSE: Returned by NMPRINTERRMSG and usually followed by one or more of messages 202 through 205 below, which further clarifies the error. NOTE: This message is actually hardcoded in NMPRINTERRMSG and is included here only for documentation purposes.

ACTION: Look for one or more of NMERR 202 through 205 following this message, and take the remedial action as suggested. Read the text and comments for the original message specified in the message, and take the suggested actions.

NMERR 202 **MESSAGE: OPEN FSERR ! on NMCAT.PUB.SYS. (NMERR 202)**

CAUSE: Returned by NMPRINTERRMSG and usually followed by the text of the FSError message.

ACTION: Correct the FOPEN problem and retry.

NMERR 203 **MESSAGE: Encountered GENMESSAGE error !. (NMERR 203)**

CAUSE: 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 Intrinsics Manual* under GENMESSAGE.

ACTION: 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 Intrinsics Manual* under GENMESSAGE. It is likely the problem is due to a bad software installation. If this is consistent with the GENMESSAGE error, see "Getting Help" at the beginning of this appendix. Otherwise, correct the problem causing the GENMESSAGE error and try again.

NMERR 204 **MESSAGE: GENMESSAGE encountered FSERR !. (NMERR 204)**

CAUSE: Returned by NMPRINTERRMSG. This message follows NMERR 203 message, and is usually followed with the text of the FSError message as well.

ACTION: Correct the File System error and retry.

NMERR 205 **MESSAGE: FCLOSE FSERR ! NMCAT.PUB.SYS. (NMERR 205)**

CAUSE: Returned by NMPRINTERRMSG after printing a message from NMCAT.PUB.SYS. The FCLOSE of NMCAT.PUB.SYS failed.

ACTION: Correct the File System error and retry.

NMERR 206 **MESSAGE: !: Error trying to access ! msgnum ! setnum !. (NMERR 206)**

CAUSE: Returned by a subsystem message-generating routine when it was unable to access the specified message catalog. The first parameter is the Subsys (module) name. The second parameter is the Subsys message catalog name. The third parameter is the message number. The fourth parameter is the set number. Note that this message is usually followed by one or more of messages NMERR 207 through 210.

ACTION: Check to see that the names entered actually exist and are spelled correctly. Read any other error messages which are also displayed, and take the action(s) recommended to correct the problem(s) described by those messages.

NMERR 207 **MESSAGE: Encountered FOPEN FSERR ! on !. (NMERR 207)**

CAUSE: Returned by a subsystem message-generating routine when it was unable to FOPEN the specified message catalog. The first parameter is the *FSERR* number. The second parameter is the message catalog name. This message is usually preceded by message NMERR 206.

ACTION: Correct the FOPEN error and retry.

NMERR 208 **MESSAGE: Encountered GENMESSAGE error !. (NMERR 208)**

CAUSE: Returned by a subsystem message-generating routine, usually following NMERR 206. The parameter is the *GENMESSAGE* errnum. If the error number is 1 or 2, NMERR 209 follows with a further description. Otherwise, the error is described in the *MPE Intrinsics Manual* under GENMESSAGE.

ACTION: If the error number is 1 or 2, see message NMERR 209. If the error number is not 1 or 2, look up the error number in the *MPE Intrinsics Manual* under GENMESSAGE. It is likely the problem is due to a bad software installation. If this is consistent with the GENMESSAGE error, the configuration file may be corrupted. Run NMMGR and verify that the configuration file is okay. Otherwise, correct the problem causing the GENMESSAGE error and try again.

NMERR 209 **MESSAGE: GENMESSAGE encountered FSERR !. (NMERR 209)**

CAUSE: Returned by a subsystem message-generating routine. The parm is the FSERR number. This message usually follows NMERR 208, and is usually followed with the text of the FSError message as well (by calling the intrinsic FErrMsg).

ACTION: Correct the FS error and retry.

NMERR 210 **MESSAGE: Encountered FCLOSE FSERR ! on !. (NMERR 210)**

CAUSE: Returned by a subsystem message-generating routine after reading a message from the specified message catalog. The first parameter is the *FSERR* number. The second parameter is the message catalog name. The FCLOSE of the message catalog failed.

ACTION: Correct the File System error and retry.

NMERR 220 **MESSAGE: Config file internal error detected and recovery failed. (NMERR 220)**

CAUSE: The configuration file is possibly corrupted.

ACTION: See “Corrupt Configuration Files” at the beginning of this appendix.

NMERR 221 **MESSAGE: Total data length too large to return as integer. (NMERR 221)**

CAUSE: 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. It is possible that the configuration file is corrupt. It is also possible that 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.

ACTION: See "Corrupt Configuration Files" at the beginning of this appendix.

CAUSE: Possible internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMERR 222 **MESSAGE: Son count too large to return as integer. (NMERR 222)**

CAUSE: Returned by NMCONFSONINFO. The number of first level sons linked to the path name sent by the calling subsystem exceeds 32767. It is possible that the configuration file is corrupt. It is also possible that an internal error occurred.

ACTION: See "Getting Help" at the beginning of this appendix.

NMERR 223 **MESSAGE: Request type out of bounds — error in port msg to NMFILE. (NMERR 223)**

CAUSE: Returned if NMFILE receives a request type that it does not recognize as being a valid NMCONF intrinsic request on its NMCONF subqueue.

ACTION: Internal error. See "Getting Help" at the beginning of this appendix.

NMERR 301 **MESSAGE: Will use LOGGING configuration for this subsystem that is already active. (NMERR 301)**

CAUSE: Returned by NMOPENLOG, NMOPENLOG2. The open log was successful and logging may proceed. Note that there is another openlog outstanding for the same subsystem id, so the configuration information 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.

ACTION: None.

NMFS Error and Warning Messages

NMFSERR and NMFSWARN messages are produced by the NMS File Server (NMFILE.PUB.SYS). In most cases, they are accompanied by other messages (NMGRERRs or MPE File System errors). You should take the action recommended for the accompanying messages first.

NMFSERR 1 **MESSAGE: Unable to create new datafile. (NMFSERR 1)**

CAUSE: This error occurs when NMFILE cannot create a new file that is requested by a call to NMCONFOPEN, because of an error in an FOPEN. It could be due to a faulty call to NMCONFOPEN or an error due to specific problems on the system itself, such as insufficient disk space or an I/O error on the file label.

ACTION: See “File System Error” and “Submitting a CR” at the beginning of this appendix.

NMFSERR 2 **MESSAGE: Unable to write root directory entry to datafile. (NMFSERR 2)**

CAUSE: This error occurs when NMFILE calls MIDASBUILDROOT when processing an NMCONFOPEN.

ACTION: See “File System Error” and “Submitting a CR” at the beginning of this appendix.

NMFSERR 3 **MESSAGE: Unable to close datafile. (NMFSERR 3)**

CAUSE: FCLOSE failure in MIDASCLOSE, called by NMFILE when processing an NMCONFCLOSE or NMCONFPURGE.

ACTION: See “File System Error” and “Submitting a CR” at the beginning of this appendix.

NMFSERR 4 **MESSAGE: Unable to open datafile. (NMFSERR 4)**

CAUSE: FOPEN failure in MIDASOPEN called by NMFILE when processing an NMCONFOPEN, or an FOPEN failure in MIDASCOMPRESS. File does not exist.

ACTION: Create file first.

CAUSE: FOPEN failure in MIDASOPEN called by NMFILE when processing an NMCONFOPEN, or an FOPEN failure in MIDASCOMPRESS. File system error.

ACTION: See “File System Error” and “Submitting a CR” at the beginning of this appendix.

NMFSERR 5 **MESSAGE: Unable to retrieve filecode from datafile. (NMFSERR 5)**

CAUSE: This error occurs when NMFILE calls MIDASOPEN which fails on FGETINFO after an NMCONFOPEN was called. This may indicate that the file label has been corrupted.

ACTION: See “File System Error” at the beginning of this appendix.

NMFSWARN 6 **MESSAGE: Datafile does not match user specified filecode. (NMFSWARN 6)**

CAUSE: This warning occurs when a caller of NMCONFOPEN tries to open a file that does not have a CONF file code either because the data file specified is not a configuration file (most likely), or because the data file label has been corrupted in some way.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMFSERR 7 **MESSAGE: Unable to read root directory entry in datafile. (NMFSERR 7)**

CAUSE: NMFILE called MIDASFILEINFO which failed on FREADDIR after NMCONFFILEINFO was called; or MIDASFINDENTRY was called by NMFILE, and FREADDIR failed. Most NMCONF procedures result in a call to MIDASFINDENTRY.

ACTION: See “File System Error” and “Corrupt Configuration File” at the beginning of this appendix.

NMFSERR 8 **MESSAGE: Unable to find root directory entry in datafile. (NMFSERR 8)**

CAUSE: This error occurs when the root of the file cannot be found in either MIDASFILEINFO or MIDASFINDENTRY. The first is called as a result of a call to NMCONFFILEINFO. The latter is called by many other MIDAS procedures.

ACTION: See “File System Error” and “Corrupt Configuration File” at the beginning of this appendix.

NMFSERR 9 **MESSAGE: Unable to find identifier in pathname. (NMFSERR 9)**

CAUSE: This error happens when MIDASFINDENTRY cannot find an entry with the given path name. This procedure is called internally by several MIDAS procedures. It also results for the same reason in MIDASCRRENAMEPATH (from a call to NMCONFRENAMEPATH) and MIDASPURGEPATH (from a call to NMCONFPURGEPATH). This is a user error. Make sure the pathname requested was previously entered into the file.

ACTION: Check spelling.

CAUSE: This error happens when MIDASFINDENTRY cannot find an entry with the given path name. This procedure is called internally by several MIDAS procedures. It also results for the same reason in MIDASRENAMEPATH (from a call to NMCONFRENAMEPATH) and MIDASPURGEPATH (from a call to NMCONFPURGEPATH). The file might be corrupt

ACTION: See “Corrupt Configuration File” at the beginning of this appendix

NMFSERR 10 **MESSAGE: Directory linkage error in datafile. (NMFSERR 10)**

CAUSE: This error occurs when there is a failure in an FREADDIR in the MIDAS procedures shown in the table when the next link or the root cannot be found. Specifically, an unexpected end of file was found.

ACTION: See “Corrupt Configuration File” at the beginning of this appendix.

NMFSERR 11 **MESSAGE: Unable to read directory entry in datafile. (NMFSERR 11)**

CAUSE: This error is similar to message NMFSERR 10 except that the end of file was not the error when FREADDIR was called.

ACTION: See “File System Error” and “Corrupt Configuration File” at the beginning of this appendix.

NMFSERR 12 **MESSAGE: Data is already associated with this identifier. (NMFSERR 12)**

CAUSE: This error is returned by MIDASADDDATA when data already exists at the location where it was to be added.

ACTION: See “Corrupt Configuration File,” “Invalid Software Installation,” and “Submitting a CR” at the beginning of this appendix.

NMFSERR 13 **MESSAGE: Unable to retrieve freespace pointer from datafile. (NMFSERR 13)**

CAUSE: This error is returned by the MIDAS procedures listed in the table when there is an FGETINFO to find the last record and there is a failure of that call.

ACTION: See “File System Error” and “Corrupt Configuration” at the beginning of this appendix.

NMFSERR 14 **MESSAGE: Filespace exhausted. Unable to add entry. (NMFSERR 14)**

CAUSE: This is caused when FGETINFO returns insufficient file space left for an additional entry in the configuration file.

ACTION: Compress configuration file. If this does not resolve the error, add records to the configuration file.

NMFSERR 15 **MESSAGE: Unable to write data record to datafile. (NMFSERR 15)**

CAUSE: This is due to an FWRITEDIR failure.

ACTION: See “File System Error” and “Submitting a CR” at the beginning of this appendix.

NMFSERR 16 **MESSAGE: Unable to write directory entry to datafile. (NMFSERR 16)**

CAUSE: This is due to an FWRITEDIR failure.

ACTION: See “File System Error” at the beginning of this appendix.

NMFSERR 18 **MESSAGE: No data associated with this identifier. (NMFSERR 18)**

CAUSE: In all MIDAS procedures returning this, there is a failure of MIDASFINDENTRY.

ACTION: See “File System Error” and “Corrupt Configuration File” at the beginning of this appendix.

NMFSWARN 19 **MESSAGE: Read truncated to capacity of data buffer. (NMFSWARN 19)**

CAUSE: This error occurs when caller of NMCONFGETDATA specifies a buffer length smaller than the actual data entry size.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMFSERR 20 **MESSAGE: Unable to read data record from datafile. (NMFSERR 20)**

CAUSE: This error results from a failure of FREADDIR in those MIDAS procedures that call it. (The failure is not an end-of-file found.)

ACTION: See “File System Error” at the beginning of this appendix.

NMFSERR 21 **MESSAGE: Duplicate identifier already exists. (NMFSERR 21)**

CAUSE: This error is returned when trying to add a path that already exists.

ACTION: See “File System Error” and “Submitting a CR” at the beginning of this appendix.

NMFSERR 22 **MESSAGE: Resultant file size beyond permissible range. (NMFSERR 22)**

CAUSE: 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 corrupt.

ACTION: See “File System Error” and “Submitting a CR” at the beginning of this appendix.

NMFSWARN 23 **MESSAGE: No identifiers exist beyond this path. (NMFSWARN 23)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMFSERR 24 **MESSAGE: Pathname exceeds user specified maximum depth. (NMFSERR 24)**

CAUSE: This is returned by MIDASPARSEPATH when the user specified pathname is longer than the path depth. No NMCONF procedure calls this intrinsic.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMFSERR 25 **MESSAGE: Identifier exceeds maximum permissible length. (NMFSERR 25)**

CAUSE: This is returned by MIDASPARSEPATH when the pathname is too long. No NMCONF procedure calls this intrinsic.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMFSERR 26 **MESSAGE: Pathname length exhausted user specified buffer. (NMFSERR 26)**

CAUSE: This is returned by MIDASTRAVERSE when the maxlevel parameter is exceeded by the *pathlevel* parameter. This is probably caused by an excessive *pathdepth* parameter in NMCONF procedure calls.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMFSERR 27 **MESSAGE: Unable to rename old datafile prior to replacement. (NMFSERR 27)**

CAUSE: This is caused by an FRENAME failure in MIDASCOMPRESS, and is currently only returned by the user interface.

ACTION: See “File System Error” at the beginning of this appendix.

NMFSWARN 28 **MESSAGE: Unable to purge old datafile prior to replacement. (NMFSWARN 28)**

CAUSE: This is due to an FCLOSE failure in MIDAScompress, and is currently returned only by the user interface.

ACTION: See “Corrupt Configuration File” at the beginning of this appendix.

NMFSWARN 29 **MESSAGE: Datafile is empty. (NMFSWARN 29)**

CAUSE: 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.

ACTION: If you suspect that there should have been data, then see “Corrupt Configuration File” at the beginning of this appendix.

NMFSERR 30 **MESSAGE: Parameter out of range. (NMFSERR 30)**

CAUSE: This is a generic error returned from several MIDAS procedures. Check parameters in calls to NMCONF procedures to see if they are in permissible range.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMFSERR 31 **MESSAGE: Unable to open message catalog NMCAT.PUB.SYS. (NMFSERR 31)**

CAUSE: 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 corrupt.

ACTION: See "Invalid Software Installation" at the beginning of this appendix.

NMFSERR 32 **MESSAGE: Unable to read message catalog NMCAT.PUB.SYS. (NMFSERR 32)**

CAUSE: Returned by MIDASERRMSG. The file might be corrupted.

ACTION: See "Invalid Software Installation" at the beginning of this appendix.

NMFSERR 33 **MESSAGE: Unable to close message catalog NMCAT.PUB.SYS. (NMFSERR 33)**

CAUSE: Returned by MIDASERRMSG. FCLOSE failure on the file.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGR Error and Warning Messages

NMGRERR 1

MESSAGE: Terminal is of incorrect type or cannot be opened. (NMGRERR 1)

CAUSE: The user's terminal is not a block mode terminal supported by VPLUS/3000.

ACTION: Check the terminal type and strap settings.

CAUSE: The user is attempting to run NMMGR from a batch job. Batch operation is not supported.

ACTION: None.

CAUSE: A terminal I/O or internal VPLUS/3000 error occurred.

ACTION: Check the version of VPLUS/3000 and repeat VPLUS/3000 installation if necessary.

NMGRERR 2

MESSAGE: Form file is missing or cannot be opened. (NMGRERR 2)

CAUSE: NMMGR was unable to open the forms file NMMGRF.PUB.SYS at program startup. The file NMMGRF.PUB.SYS is missing.

ACTION: See "Invalid Software Installation" at the beginning of this appendix.

CAUSE: A file equation exists for NMMGRF.PUB.SYS.

ACTION: Check for file equations using LISTEQ5.PUB.SYS and RESET if necessary.

CAUSE: File NMMGRF.PUB.SYS is not a valid VFAST or VFORM forms file, or it has become corrupted.

ACTION: Restore a backup copy of NMMGRF.PUB.SYS.

CAUSE: An internal VPLUS/3000 error occurred.

ACTION: Check the version of VPLUS/3000 and repeat VPLUS/3000 installation if necessary.

NMGRERR 3

MESSAGE: That type is not defined for this class of items. (NMGRERR 3)

CAUSE: The user entered a type name in the TYPE field of a typed-select screen that is not defined for this screen.

ACTION: Check the subsystem manual for correct type names and try again.

NMGRERR 4 **MESSAGE: That function is not implemented. (NMGRERR 4)**

CAUSE: The user pressed an invalid function key (with a blank label), or pressed the **[ENTER]** in a screen without a command window (currently only the OPEN FILE screen).

ACTION: None.

NMGRERR 5 **MESSAGE: Not a valid <NMMGR cmd> or @<pathname or : <MPE cmd>. (NMGRERR 5)**

CAUSE: The user typed an unrecognizable command in the command window and pressed **[ENTER]**.

ACTION: Check the spelling of the command, and check the list of valid commands in your subsystem node management or configuration manual.

NMGRERR 6 **MESSAGE: End of file on $STDINX. Cannot accept further input. (NMGRERR 6)**

CAUSE: The user typed :EOF or :EOD in response to the prompt:

"Press Return when done viewing screen contents."

ACTION: This error is irrecoverable since the terminal is closed for further input. Run NMMGR again to continue configuration.

NMGRWARN 7 **MESSAGE: Warning: Screen changed. Use Save Data key to save data. (NMGRWARN 7)**

CAUSE: 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.

ACTION: The user may ignore the warning by pressing a key other than UPDATE, or may save changes by pressing UPDATE.

NMGRWARN 8 **MESSAGE: There are no entries at this level to display. (NMGRWARN 8)**

CAUSE: 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.

ACTION: None.

NMGRERR 9 **MESSAGE: Internal NM configuration file error. (NMGRERR 9)**

CAUSE: NMMGR has encountered an unexpected condition in the configuration file.

ACTION: Check the NMCONF error (if one is reported) for further information.

CAUSE: NMMGR has encountered an unexpected condition in the configuration file. Two or more users are updating the same

configuration file concurrently, and one renames or deletes a path which another is configuring.

ACTION: Coordinate activity between users.

CAUSE: NMMGR has encountered an unexpected condition in the configuration file. An internal error occurred. Submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

ACTION: Check the version of NMCONF.

NMGRERR 10 **MESSAGE: Unexpected type: NM config file corrupt or bad version. (NMGRERR 10)**

CAUSE: NMMGR has encountered a link 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 disk error.

ACTION: Restore an old version of the configuration file if possible, or delete and reconstruct the corrupt link data record.

NMGRERR 11 **MESSAGE: Type must be present. (NMGRERR 11)**

CAUSE: The user attempted to add a new LINK without specifying a link type.

ACTION: The type for a new link must be specified.

NMGRERR 12 **MESSAGE: Unexpected data: NM config file corrupt or bad version. (NMGRERR 12)**

CAUSE: 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: 1) A data record does not match the expected format. 2) A link data record has an unexpected type code (word #1). 3) A link exists without a data record to indicate its type.

ACTION: Restore an old version of the configuration file if possible, or delete and reconstruct the corrupt link data record.

NMGRERR 13 **MESSAGE: Maximum number of allowed items already configured. (NMGRERR 13)**

CAUSE: The user attempted to add more items than the maximum allowed at this level.

ACTION: Check the NMMGR manual for these maximum values.

NMGRERR 14 **MESSAGE: Cannot build command table; NMCAT.PUB.SYS corrupt. (NMGRERR 14)**

CAUSE: The file NMCAT.PUB.SYS is not a valid message file, does not exist, or is corrupt.

ACTION: See "Invalid Software Installation" at the beginning of this appendix.

CAUSE: A file equation exists for NMMGRCAT.PUB.SYS.

ACTION: Check for file equations using LISTEQ2.PUB.SYS and RESET if necessary.

CAUSE: The table of commands in the NM catalog file NMCAT.PUB.SYS is corrupt or missing. File NMCAT.PUB.SYS is not a valid catalog file, or it has become corrupted.

ACTION: Restore a backup copy of NMMGRF.PUB.SYS.

CAUSE: The table of commands in the NM catalog file NMCAT.PUB.SYS is corrupt or missing. Set 7 of NMCAT.PUB.SYS (the command set) is missing, or some commands have been deleted from this set.

ACTION: Restore a backup copy of NMMGRF.PUB.SYS.

NMGRERR 15 **MESSAGE: Missing data: NM config file corrupt or bad version. (NMGRERR 15)**

CAUSE: NMMGR was unable to locate type code in data record.

ACTION: Restore an old version of the configuration file if possible, or delete and reconstruct the corrupt link data record.

NMGRERR 16 **MESSAGE: Cannot set up form for next screen. (NMGRERR 16)**

CAUSE: The forms file NMMGRF.PUB.SYS may be missing or corrupt.

ACTION: Go to the Errors screen and check any other errors which are displayed. See “Invalid Software Installation” at the beginning of this appendix.

CAUSE: A terminal I/O error may have occurred. A user may have entered :EOF or :EOD in response to the prompt “Press RETURN when done viewing contents,” thereby closing the terminal for further input.

ACTION: Check the state of the terminal. Run NMMGR again if the terminal is closed for input.

CAUSE: A data record may be corrupted, making it impossible for NMMGR to display it.

ACTION: Go to the Errors screen and check any other errors which are displayed. See “Invalid Software Installation” at the beginning of this appendix.

CAUSE: NMMGR was unable to display the form for the screen which the user selected. An internal VPLUS/3000 or NMCONF error may have occurred.

ACTION: Check the version of VPLUS/3000 and NMCONF and restore backup copies if necessary.

NMGRWARN 17 **MESSAGE: No errors have yet occurred. (NMGRWARN 17)**

CAUSE: The user has gone to the ERRORS screen to check the last error, but no errors have occurred.

ACTION: None.

NMGRERR 19 **MESSAGE: MPE command error. (NMGRERR 19)**

CAUSE: The user executed an MPE command (by entering the command preceded by a colon and pressing ENTER), and the command terminated in an error state.

ACTION: Use the Error Information screen and check the Command Interpreter error for further information.

NMGRERR 20 **MESSAGE: Item does not exist: use the ADD key to create a new item. (NMGRERR 20)**

CAUSE: The user tried to DELETE, RENAME, or UPDATE an item in a select screen, but the item does not exist in the configuration file.

ACTION: Use the ADD key if you intend to add the new item; otherwise check the spelling of the item name.

NMGRERR 21 **MESSAGE: Item already exists. (NMGRERR 21)**

CAUSE: The user tried to ADD an item in a select screen, but the item already exists.

ACTION: Check the spelling of the item name.

NMGRERR 22 **MESSAGE: Cannot open NM configuration file. (NMGRERR 22)**

CAUSE: A file system error occurred.

ACTION: Go to the Errors screen and check for a file system error (FSERR). Correct the error and try again.

CAUSE: The NMFILE.PUB.SYS process of the Node Management Services is not running.

ACTION: Go to the Errors screen and check for FSERR 97. If this error occurred, the problem may be due to a version mismatch in the NMS subsystem. See “Invalid Software Installation” at the beginning of this appendix.

NMGRERR 23 **MESSAGE: Cannot reopen NM configuration file. (NMGRERR 23)**

CAUSE: NMMGR was unable to reopen the configuration file after closing it for compression.

ACTION: Check the NMCONF or File System error (if one is reported) for further information. This error is fatal and cannot be recovered except by running NMMGR again. See message NMGRERR 22.

NMGRERR 24 **MESSAGE: Cannot compress NM configuration file. (NMGRERR 24)**

CAUSE: A file system error occurred.

ACTION: Go to the Errors screen and check for a file system error (FSERR). Correct the error and try again.

CAUSE: You are not the creator of the configuration file.

ACTION: Go to the Errors screen and check for FSERR 94. If this error occurred, you can copy the file and then compress it, or ask the creator to compress the file.

CAUSE: NMMGR was unable to compress the configuration file because at least one other user is currently accessing the file.

ACTION: COMPRESS requires exclusive access to the configuration file. Use LISTF,2 to check whether other users are accessing this file. Wait until the file is not being accessed and try again.

CAUSE: The absolute value of the number of records to add or remove is too large. The resulting file would not have been able to contain all the records in the file, or, if a positive number was specified, the resulting file would have exceeded the 64,000 record limit.

ACTION: Enter a different value.

NMGRERR 25 **MESSAGE: NA or NM capability is needed to run NMMGR. (NMGRERR 25)**

CAUSE: The user does not have the Node Manager or Network Administrator capability required to run NMMGR.

ACTION: Check user capability with program LISTDIR5.PUB.SYS, and contact the account manager or system manager if an additional capability is needed.

NMGRERR 26 **MESSAGE: File already exists. Use OPEN FILE (f1). (NMGRERR 26)**

CAUSE: The user tried to CREATE a file in the OPEN FILE screen when the file already exists.

ACTION: Delete the file to create a new, empty configuration file, or use the OPEN key to open an existing file.

NMGRERR 27 **MESSAGE: Must specify new name for rename. (NMGRERR 27)**

CAUSE: The user tried to RENAME an item in a select screen without specifying the new name.

ACTION: Enter a name in the rename field and try again.

NMGRERR 28 **MESSAGE: File does not exist. Use CREATE FILE (f2). (NMGRERR 28)**

CAUSE: The user tried to OPEN a file in the OPEN FILE screen when the file does not exist.

ACTION: Use the CREATE key to create a new file.

NMGRERR 31 **MESSAGE: That command is ambiguous — use more letters. (NMGRERR 31)**

CAUSE: The user typed an ambiguous command prefix in the command window and hit ENTER.

ACTION: Make the prefix unambiguous by using more letters of the command. Check the NMMGR manual for unambiguous command prefixes.

NMGRERR 32 **MESSAGE: Maximum path depth exceeded. (NMGRERR 32)**

CAUSE: This error in an internal NMMGR error. NMMGR has created a path whose depth exceeds the maximum allowable depth for paths.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 33 **MESSAGE: Path name format is invalid. (NMGRERR 33)**

CAUSE: NMMGR encountered a path name whose format is not recognized. A possible situation which may cause this error is that the user has entered an incorrect path name in the command window.

ACTION: Check your subsystem node management or configuration manual for correct format of a path name and check the subsystem manual for valid paths.

CAUSE: An internal NMMGR error has occurred.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 34 **MESSAGE: Error occurred while listing configuration file. (NMGRERR 34)**

CAUSE: An error occurred during output of the tree structure or data records of a configuration file.

ACTION: Check the NMCONF or File System error to determine the specific error.

CAUSE: The configuration file may have corrupt data records or invalid paths.

ACTION: Delete and reconstruct the corrupt link data record, or restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

CAUSE: If the file FORMLIST is equated to a disk file, the file may be too small to accommodate the output listing.

ACTION: Check the size of the file and change the file size specification if necessary.

NMGRERR 36 **MESSAGE: Invalid syntax for file name. (NMGRERR 36)**

CAUSE: The user attempted to OPEN or CREATE a configuration file with an invalid file name.

ACTION: Check the spelling and syntax of the file name.

NMGRERR 37 **MESSAGE: ENTER executes commands: the command field is blank. (NMGRERR 37)**

CAUSE: 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.

ACTION: Make modifications to the configuration file by using the function keys.

NMGRERR 38 **MESSAGE: MPE command warning. (NMGRERR 38)**

CAUSE: The user executed an MPE command (by entering the command preceded by a colon and pressing ENTER), and the command terminated in a warning state.

ACTION: Use the Error Information screen and check the Command Interpreter error for further information.

NMGRERR 39 **MESSAGE: Unable to set termination trap handler. (NMGRERR 39)**

CAUSE: 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.

ACTION: Check the MPE installation to see that XDSNTRAP is present and working.

NMGRERR 40 **MESSAGE: Must open a file before using this command. (NMGRERR 40)**

CAUSE: The user is trying to view a configuration screen without first opening a configuration file.

ACTION: Open the configuration file and enter the command again.

NMGRERR 41 **MESSAGE: Internal error: Unexpected screen length. (NMGRERR 41)**

CAUSE: The configuration file is corrupted.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

CAUSE: The forms file is corrupted or is a bad version.

ACTION: See “Invalid Software Installation” at the beginning of this appendix.

NMGRERR 42 **MESSAGE: Internal error: Unexpected screen contents. (NMGRERR 42)**

CAUSE: This is an internal NMMGR error. NMMGR has encountered unexpected data from the screen.

ACTION: Check to see that the correct version of NMMGR is installed. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 43 **MESSAGE: Internal error: Unexpected data record length. (NMGRERR 43)**

CAUSE: This is an internal NMMGR error. NMMGR cannot properly create a data record from the input from the screen.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 44 **MESSAGE: Internal error: Unexpected data record contents. (NMGRERR 44)**

CAUSE: NMMGR cannot properly display a data field in the configuration file on the screen. The configuration file is corrupted.

ACTION: Restore a backup copy of the configuration file if possible.

NMGRERR 45 **MESSAGE: Internal error: Unexpected status code from procedure. (NMGRERR 45)**

CAUSE: This is an internal NMMGR error. An unknown status code is returned from a procedure.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 46 **MESSAGE: Specified path is not in this configuration file. (NMGRERR 46)**

CAUSE: The user has entered a path name in the command field that is not in the configuration file.

ACTION: Check the path name entered and try again.

NMGRERR 47 **MESSAGE: Internal error: No child with this type is in schema. (NMGRERR 47)**

CAUSE: This is an internal NMMGR error. NMMGR cannot match a path name and a type code to an internal table.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 48 **MESSAGE: Internal error: Can’t find this path in the schema. (NMGRERR 48)**

CAUSE: This is an internal NMMGR error. NMMGR cannot match a path name to an internal table.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 49 **MESSAGE: Internal error: The root node has parent node. (NMGRERR 49)**

CAUSE: This is an NMMGR internal error. NMMGR is scanning the configuration file off the boundary.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 50 **MESSAGE: Internal error: The schema has an invalid format. (NMGRERR 50)**

CAUSE: This is an internal NMMGR error. NMMGR cannot locate a node in an internal table describing the configuration file structure.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 51 **MESSAGE: No screen for this path. (NMGRERR 51)**

CAUSE: 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.

ACTION: This path is for internal use only. Check the pathname and try again.

NMGRERR 52 **MESSAGE: Internal error: Cannot create version stamps. (NMGRERR 52)**

CAUSE: 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 the configuration file due to an NMCONF error. Check the NMCONF error number for detail.

ACTION: Purge this new file and try to recreate it. If an error still occurs, see “Submitting a CR” at the beginning of this appendix.

NMGRERR 53 **MESSAGE: Version mismatch found on specified subsystem. Please run NMMGRVER. (NMGRERR 53)**

CAUSE: 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.

ACTION: Run the version control program NMMGRVER to update the file, or open another file, or create a new file.

NMGRERR 54 **MESSAGE: Internal error: Version checking routine failed. (NMGRERR 54)**

CAUSE: NMMGR checks version stamps of each subsystem in the configuration file at file open time. An error has occurred in the version checking routine. The configuration file may have corrupt data records or invalid paths.

ACTION: Restore a backup copy of the configuration file if possible.

NMGRERR 55 **MESSAGE: Internal error: Version-flag checking failed. (NMGRERR 55)**

CAUSE: An internal NMMGR error has occurred: unable to get vsflag status. The possible causes include: internal error in vsflag_check_driver, or the parameters *file_num*, *file_type_column*, or *vsflag_path* do not match those stored in vsflag array at open time.

ACTION: Submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMGRERR 56 **MESSAGE: Version mismatch found on specified subsystem. (NMGRERR 56)**

CAUSE: NMMGR checks version stamps of each subsystem in the configuration file at accessing time. The version checking result shows that the specified subsystem has a mismatched version stamp in the configuration file that is not supported by this version of NMMGR.

ACTION: Since this version stamp is greater than what NMMGR supports, use NMMGR to create a new file. In this case, the NMMGRVER conversion utility will not help.

NMGRERR 70 **MESSAGE: Internal error: Unable to get info on VPLUS field. (NMGRERR 70)**

CAUSE: NMMGR was unable to retrieve information on the screen field via VPLUS utilities.

ACTION: Go to the Errors screen and check the VPLUS error message to determine the specific error. Correct the error and try again.

CAUSE: NMMGR was unable to retrieve information on the screen field via VPLUS utilities. The forms file NMMGRF.PUB.SYS and NMMGR are different versions, or the forms file is corrupt.

ACTION: See "Invalid Software Installation" at the beginning of this appendix.

NMGRERR 71 **MESSAGE: Internal error: Unable to get info on VPLUS form. (NMGRERR 71)**

CAUSE: NMMGR was unable to retrieve information on the screen field via VPLUS utilities.

ACTION: Go to the Errors screen and check the VPLUS error messages to determine the specific error. Correct the error and try again.

CAUSE: NMMGR was unable to retrieve information on the screen field via VPLUS utilities. The forms file NMMGRF.PUB.SYS and NMMGR are different versions, or the forms file is corrupt.

ACTION: See "Invalid Software Installation" at the beginning of this appendix.

NMGRERR 72 **MESSAGE: Internal error: Data field alignment error. (NMGRERR 72)**

CAUSE: This is an NMMGR internal conversion table error.

ACTION: Submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMGRERR 73 **MESSAGE: Internal error: Data field extraction is out of bounds. (NMGRERR 73)**

CAUSE: This is an NMMGR internal conversion table error. NMMGR cannot locate data for a field to display on this screen.

ACTION: Submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMGRERR 74 **MESSAGE: Internal error: Conversion code not yet implemented. (NMGRERR 74)**

CAUSE: This is an NMMGR internal conversion table error. NMMGR encountered an unknown conversion code.

ACTION: Submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMGRERR 75 **MESSAGE: Internal error: String overflow. (NMGRERR 75)**

CAUSE: This is an internal NMMGR error. A character string passed to one of the conversion routines is too long.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 76 **MESSAGE: Internal error: Screen conversion ptr is out of bounds. (NMGRERR 76)**

CAUSE: This is an internal NMMGR error.

ACTION: Go to the Errors screen and check for a VPLUS error message to determine the specific error. Correct any errors and try again.

CAUSE: This is an internal NMMGR error. The forms file NMMGRF.PUB.SYS and NMMGR are not the same version, or the forms file is corrupt.

ACTION: Restore a backup copy of NMMGRF.PUB.SYS.

NMGRERR 77 **MESSAGE: Internal error: Data conversion ptr is out of bounds. (NMGRERR 77)**

CAUSE: This is an internal NMMGR conversion table error.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 78 **MESSAGE: Internal error: Missing description for this screen. (NMGRERR 78)**

CAUSE: This is an NMMGR internal table error. The screen name is not in an internal conversion table.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 79 **MESSAGE: Internal error: Invalid scr field position from VPLUS. (NMGRERR 79)**

CAUSE: This is an internal NMMGR error. NMMGR cannot properly locate field data from this screen.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 80 **MESSAGE: Internal error: Data field not on proper unit boundary. (NMGRERR 80)**

CAUSE: This is an internal NMGRR conversion table error.

ACTION: Submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 81 **MESSAGE: Cannot lock NM configuration file. (NMGRERR 81)**

CAUSE: NMMGR was unable to successfully lock the configuration file.

ACTION: Go to the Errors screen and check for any NMERR or FSERR error messages to determine the specific error. Correct the error and try again. If necessary, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 82 **MESSAGE: Cannot unlock NM configuration file. (NMGRERR 82)**

CAUSE: NMMGR was unable to successfully unlock the configuration file.

ACTION: Go to the Errors screen and check for any NMERR or FSERR error messages to determine the specific error. Correct the error and try again. If necessary, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMGRERR 83 **MESSAGE: Press Delete again to confirm deletion. (NMGRERR 83)**

CAUSE: The Delete key needs to be pressed twice to accomplish the deletion.

ACTION: Press the Delete key a second time to confirm the deletion.

NMGRERR 84 **MESSAGE: Cannot access the NMMGR help catalog. (NMGRERR 84)**

CAUSE: NMMGR was unable to open the NMMGR help catalog, NMMGRHLP.PUB.SYS.

ACTION: Restore the NMMGR help catalog.

NMGRERR 85 **MESSAGE: Incomplete summary printed. (NMGRERR 85)**

CAUSE: Some configuration data could not be found or printed in the summary.

ACTION: Check the summary to ensure that all required fields are configured.

CAUSE: The data that could not be found or printed is replaced with asterisks in the summary printout.

ACTION: Check the summary to ensure that all required fields are configured.

NMGRERR 86 **MESSAGE: Cannot invoke subsystem summary routine. (NMGRERR 86)**

CAUSE: The subsystem summary output routine cannot be load processed from the group, account, or system SL.

ACTION: Stream the install job I00INMAC.NMA.HPPL87 to add the routine to system SL.

NMGRERR 87 **MESSAGE: Invalid SNA LU Name Format. Must be XXXXXXXX.XXXXXXXX. (NMGRERR 87)**

CAUSE: The additional address in the Network Directory data screen must be in the format of AXXXXXXX.AXXXXXXX, where A is any alpha char and X is any alphanumeric character.

ACTION: Use correct format.

NMGRERR 88 **MESSAGE: Error in NMMGR help catalog. (NMGRERR 88)**

CAUSE: The MPE HELP subsystem could not use the help file NMMGRHLP.PUB.SYS.

ACTION: Make sure that the file NMMGRHLP.PUB.SYS is properly formatted (RUN MAKECAT.PUB.SYS,HELP).

CAUSE: The MPE HELP subsystem could not use the help file NMMGRHLP.PUB.SYS.

ACTION: RESTORE the file NMMGRHLP.PUB.SYS.

NMGREWARN 89 **MESSAGE: Warning: Incompatible selection. Press key again to confirm. (NMGRWARN 89)**

CAUSE: The user pressed a GO TO type function key on the DTS screen that was not compatible with the type of DTS subsystem specified on that screen.

ACTION: Press the correct key or, to force selection of the incompatible subsystem, press the incompatible key a second time.

NMGRERR 90 **MESSAGE: Invalid IP Address; press Help for more information. (NMGRERR 90)**

CAUSE: The user entered an IP address that failed IP address edits (address was invalid).

ACTION: Enter a valid IP address; check the class letter (A, B, C, or E accepted). (Press the Help key for more information on entering a valid IP address.)

NMGRERR 91 **MESSAGE: Must be xx-xx-xx-xx-xx-xx where x is a hex number. (NMGRERR 91)**

CAUSE: The user entered a LAN station address that failed station address edits (address was invalid).

ACTION: Enter a valid LAN station address; must be six pairs of hex digits. (Press the Help key for more information on entering a valid LAN station address.)

NMGRERR 92 **MESSAGE: Reachable Net IP Addr can't be the same as the Gateway IP Addr. (NMGRERR 92)**

CAUSE: A reachable network IP address is the same as the gateway IP address. The network portion of these addresses must be different.

ACTION: Correct either the reachable network IP address or the gateway IP address and reenter.

NMGRERR 93 **MESSAGE: Enter the required Reachable Net IP Address with Hops. (NMGRERR 93)**

CAUSE: User attempted to update information without entering required data. At least one Reachable Net IP Address/Hop pair is required on page 1 of the Reachable Networks screen.

ACTION: Enter the required information and continue.

NMGRERR 94 **MESSAGE: Maximum page count exceeded. (NMGRERR 94)**

CAUSE: User attempted to go to next page at the maximum page count (256).

ACTION: Use CONDENSE PAGE.

CAUSE: User attempted to do "LAST PAGE" or "CONDENSE PAGE". The configuration file may have Reachable Network paths in excess of

the maximum page count.

ACTION: Restore the configuration file with Reachable Network paths within the maximum page count.

NMGRERR 95 **MESSAGE: You must enter a configuration file name to open or create. (NMGRERR 95)**

CAUSE: The user pressed “Open Config” or “Create Config” but did not enter the configuration file name on the OPEN screen.

ACTION: Supply the configuration file name.

NMGRERR 96 **MESSAGE: You must enter a directory file name to open or create. (NMGRERR 96)**

CAUSE: The user pressed “Open Directory” or “Create Directory”, but did not fill in the Network Directory File Name field on the OPEN screen.

ACTION: Supply the network directory file name.

NMGRERR 97 **MESSAGE: You must enter a directory file name to open or create. (NMGRERR 97)**

CAUSE: The user entered the NEXT command but there is no next screen.

ACTION: None.

NMGRERR 98 **MESSAGE: There is no entry to be condensed. (NMGRERR 98)**

CAUSE: No reachable networks exist in the file to be condensed.

ACTION: None.

NMGRERR 99 **MESSAGE: Condense Page function failed. (NMGRERR 99)**

CAUSE: Error occurs during “CONDENSE PAGE” while doing an “nmconfgetdata” or “nmconfrenamepath”. It can be caused by a corrupted configuration file. Another possibility is that an internal error is occurring with NMCONF intrinsics.

ACTION: Restore a back up copy of the configuration file and try again. If the error still occurs, see “Submitting a CR” at the beginning of this appendix.

NMGRERR 100 **MESSAGE: Internal error: Nmconf file number not in file table. (NMGRERR 100)**

CAUSE: The file number was changed in NMMGR but not entered in the table.

ACTION: Exit NMMGR, then rerun it and try to observe what damage has been done. Repair if possible or restore the configuration file.

CAUSE: The file number was changed in NMMGR but not entered in the table.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMGRERR 101 **MESSAGE: Internal error: Midas file number not in file table. (NMGRERR 101)**

CAUSE: The file number was not located in a search through the table. It is likely that a file number was changed in NMMGR but not entered in the table.

ACTION: Exit NMMGR, and rerun NMMGR and try to observe what damage has been done. Repair if possible or restore the configuration file. If the problem still exists, see “Submitting a CR” at the beginning of this appendix.

NMGRERR 102 **MESSAGE: Internal error: Unable to remove closed file from file table. (NMGRERR 102)**

CAUSE: An attempt to clear the file table of a closed file failed.

ACTION: Exit NMMGR. It is possible that no damage occurred. Rerun NMMGR. If the problem still exists, see “Submitting a CR” at the beginning of this appendix.

NMGRERR 103 **MESSAGE: Internal error: NMMGR file table inconsistent. (NMGRERR 103)**

CAUSE: 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 if the slot in the table is already occupied.

ACTION: Exit NMMGR. It is possible that no damage occurred. Rerun NMMGR. If the problem still exists, see “Submitting a CR” at the beginning of this appendix.

NMGRERR 104 **MESSAGE: Netxport has locked the file; cannot begin guided task; wait. (NMGRERR 104)**

CAUSE: The network transport is being started using the file that NMMGR has open as the active configuration file. A guided dynamic update cannot be started until the transport has been started.

ACTION: Wait until the transport is started and then try again.

NMGRERR 105 **MESSAGE: The file has been locked; type ‘STOP’ to abort, or wait. (NMGRERR 105)**

CAUSE: Either the transport is being started using the file NMMGR has open as the active configuration file, or NMMGR is processing a guided dynamic update which cannot continue until the transport has been started.

ACTION: Wait until the transport is started and then try again.

NMGRERR 106 **MESSAGE: The file has been locked; cannot begin guided task. (NMGRERR 106)**

CAUSE: The 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 can).

ACTION: None.

NMGRERR 107 **MESSAGE: The file has been locked; Type 'STOP' to abort. (NMGRERR 107)**

CAUSE: The 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.

ACTION: Type 'STOP' in the command window and press **ENTER** to stop guided configuration.

NMGRERR 108 **MESSAGE: The file has been locked; cannot make any modifications. (NMGRERR 108)**

CAUSE: Transport is using the file NMMGR has open as the active configuration file. The file cannot be changed except with guided configuration.

ACTION: Enter guided configuration to perform this function.

NMGRERR 109 **MESSAGE: This file has been locked; subtree copy aborted. (NMGRERR 109)**

CAUSE: The transport is being initiated using the file that NMMGR has open as the active configuration file, and NMMGR was in the middle of a subtree copy.

ACTION: When the transport is no longer running, purge the subtree you were copying into and restart the subtree copy.

NMGRERR 110 **MESSAGE: Internal error: Cannot check file lock status; data not saved. (NMGRERR 110)**

CAUSE: NMMGR cannot determine whether or not the transport is using this file.

ACTION: If the transport is being started or shut down, wait until it is finished and then try again. If the problem still exists, see "Submitting a CR" at the beginning of this appendix.

NMGRERR 111 **MESSAGE: NETXPORT not validated. Type exit again to leave NMMGR. (NMGRERR 111)**

CAUSE: Data in the NETXPORT subsystem was changed and NETXPORT was not successfully validated afterwords.

ACTION: Go to the validation screen and validate NETXPORT or type exit again, this leaves the file unvalidated.

NMGRERR 112 **MESSAGE: DTS/LINK not validated. Type exit again to leave NMMGR. (NMGRERR 112)**

CAUSE: Data in the DTS or LINK subsystems was changed and DTS/LINK was not successfully validated afterwords.

ACTION: Go to the validation screen and validate DTS/LINK or type exit again, this leaves the file unvalidated.

NMGRERR 113 **MESSAGE: HP-IBM not validated. Type exit again to leave NMMGR. (NMGRERR 113)**

CAUSE: Data in the SNANODE, NRJE, or IMF subsystems was changed and HP-IBM was not successfully validated afterwards.

ACTION: The user can go to the validation screen and validate HP-IBM. The user can type exit again and leave the file unvalidated.

NMGRERR 114 **MESSAGE: Cannot find validation program NMMGRVAL.PUB.SYS. (NMGRERR 114)**

CAUSE: File does not exist.

ACTION: Check to see what happened to the file NMMGRVAL.PUB.SYS. If it has been inadvertently purged, try restoring it from a backup tape.

NMGRERR 115 **MESSAGE: Cannot send mail to validation program. (NMGRERR 115)**

CAUSE: Internal error.

ACTION: Contact your Hewlett-Packard representative.

NMGRERR 116 **MESSAGE: Cannot activate validation program NMMGRVAL.PUB.SYS. (NMGRERR 116)**

CAUSE: Internal error.

ACTION: Contact your Hewlett-Packard representative.

NMGRERR 117 **MESSAGE: Cannot receive mail from validation program. (NMGRERR 117)**

CAUSE: Internal error.

ACTION: Contact your Hewlett-Packard representative.

NMGRERR 118 **MESSAGE: LU Number "!" on page ! is a duplicate. (NMGRERR 118)**

CAUSE: The user entered two LU's with the same LU Numbers. The duplicate numbers may be on the same page of LU data, or one may be on page 1 of LU data and the other on page 2 of LU data.

ACTION: Make sure all LU's have unique numbers.

NMGRERR 119 **MESSAGE: LU Number "!" on page ! is a duplicate. (NMGRERR 119)**

CAUSE: You have entered two LUs with the same LU name. These names may be on the same page (1 or 2) of LU data, or one name may be on page 1 and the other on page 2.

ACTION: Make sure all LUs have unique names.

NMGRERR 120 **MESSAGE: If the Node Type is "2.0", then the LU # is required. (NMGRERR 120)**

CAUSE: The user entered an LU Number out of the acceptable range of 1–255.

ACTION: Enter an LU Number that is in the range 1–255.

NMGRERR 121 **MESSAGE: IP Address with node portion of zeros is reserved for broadcast. (NMGRERR 121)**

CAUSE: You entered an IP address with the node portion of the IP address equal to zero.

ACTION: Modify the node portion of the IP address to a valid IP address.

NMGRERR 122 **MESSAGE: LU Name must be a letter followed by letters for digits. (NMGRERR 122)**

CAUSE: The user entered a string that contained some non alpha-numeric characters.

ACTION: Reenter the string with alpha-numeric characters only.

NMGRERR 123 **MESSAGE: IP Mask can only contain digits separated by periods or spaces. (NMGRERR 123)**

CAUSE: The IP mask was entered incorrectly. Each octet (XXX) can only contain digits. The octets can be separated by periods or blank spaces.

ACTION: Enter a mask in the correct format.

NMGRERR 124 **MESSAGE: IP Mask octets can only contain values between 0 and 255. (NMGRERR 124)**

CAUSE: One or more of the octets entered in the IP mask contains a number less than 0 or greater than 255.

ACTION: Enter a mask with octets within the range 0 to 255.

NMGRERR 125 **MESSAGE: IP Mask must contain exactly four octets. (NMGRERR 125)**

CAUSE: More or less than four octets (XXX) were entered.

ACTION: Reenter the mask with exactly four octets.

NMGRERR 126 **MESSAGE: IP Subnet Mask of 255.255.255 is not allowed. (NMGRERR 126)**

CAUSE: An IP Subnet Mask of 255.255.255 was entered. This is not a legal mask.

ACTION: Reenter the mask with a different value.

NMGRERR 127 **MESSAGE: If Node 2.1 Dependent LU Support, then LU #'s must be blank. (NMGRERR 127)**

CAUSE: If the PU Type is 2.1 and the PU Dependent Support is N, then there cannot be any LU Numbers associated with the LU names.

ACTION: Make all the LU Numbers blank and try again.

NMGRERR 128 **MESSAGE: Invalid SNA LU Name Format. Must be XXXXXXXX.XXXXXXXX. (NMGRERR 128)**

CAUSE: The user entered an invalid SNA LU name. The SNA LU Name must be in the format of AXXXXXXX.AXXXXXXX, where A is any alpha character and X in any alphanumeric character.

ACTION: Make all the LU Numbers blank and try again.

NMGRERR 130 **MESSAGE: No previous page. (NMGRERR 130)**

CAUSE: The user pressed the **PREV PAGE** function key on a paged data screen and there was no previous page of data.

ACTION: None.

NMGRERR 131 **MESSAGE: Ldev of ! is not valid. Valid range is -1 to 4679. (NMGRERR 131)**

CAUSE: The user entered an Ldev that is out of range.

ACTION: Reenter an Ldev within the allowed range.

NMGRERR 132 **MESSAGE: Names can only be 16 characters long. (NMGRERR 132)**

CAUSE: The user entered a name in a field that allows more characters than a valid name allows. This field is usually used for more than one type of entry. The program believes that the user is trying to store a name that is too long.

ACTION: Enter a new name 16 characters or shorter.

NMGRERR 133 **MESSAGE: Allowed name chars are "A".."Z", "0".."9", "_" and "-". (NMGRERR 133)**

CAUSE: The user has tried to enter a name with invalid characters in it.

ACTION: Enter a name with valid characters.

NMGRERR 134 **MESSAGE: IP Address with node portion of zero's reserved. (NMGRERR 134)**

CAUSE: The node portion of the IP address is all zeros.

ACTION: Check the IP address and make sure that the node portion is not all zeros. Enter a valid IP address. (Press the **Help** key for more information on entering a valid IP address.)

NMGRERR 135 **MESSAGE: IP Address with network portion of zero's reserved. (NMGRERR 135)**

CAUSE: The network portion of the IP address is all zeros.

ACTION: Check the IP address and make sure that the network portion is not all zeros. Enter a valid IP address. (Press the **Help** key for more information on entering a valid IP address.)

NMGRERR 136 **MESSAGE: IP Address A 127 XXX.XXX.XXX is reserved for Loopback. (NMGRERR 136)**

CAUSE: The IP address entered has a network address of 127. This network address with any node address is reserved for loopback.

ACTION: Check the IP address and make sure that the network address is not 127. Enter a valid IP address. (Press the **Help** key for more information on entering a valid IP address.)

NMGRERR 137 **MESSAGE: IP Address E 255.255.255.255 is reserved for Broadcast. (NMGRERR 137)**

CAUSE: The IP address the user entered is a reserved address.

ACTION: Enter a different IP address. (Press the **Help** key for more information on entering a valid IP address.)

NMGRERR 138 **MESSAGE: Bad LAN address. Format is xx-xx-xx-xx-xx-xx; x is 0–9 or A–F. (NMGRERR 138)**

CAUSE: The user entered an invalid LAN address on a screen or in a maintenance mode command.

ACTION: Correct the LAN address and repeat the last command or action. (Press the **Help** key for more information on entering a valid LAN address.)

NMGRERR 139 **MESSAGE: Invalid response. you must enter ON or OFF. (NMGRERR 139)**

CAUSE: The user, while using the DTSDYNCONF command in maintenance mode, entered an invalid character The only valid response is either ON or OFF.

ACTION: Enter either ON or OFF.

NMGRERR 140 **MESSAGE: SNA/DS not validated. Type exit again to leave NMMGR. (NMGRERR 140)**

CAUSE: Data in the SNA.DS subsystem was changed and SNA/DS was not successfully validated afterwords.

ACTION: Go to the validation screen and validate SNA/DS or type exit again to leave the file unvalidated.

NMGRERR 141 **MESSAGE: Subsystem(s) are not validated. Type ERR for more information. (NMGRERR 141)**

CAUSE: One or more of the subsystems in NMMGR have not been validated.

ACTION: To see which subsystems have not been validated, type ERRORS in the command line and press the **Enter** key. Go to the validation screen to validate the unvalidated subsystems or type exit again to leave the file unvalidated.

NMGRERR 200 **MESSAGE: Error in build statement table. (NMGRERR 200)**

CAUSE: This is an internal NMMGR error. The number of statements in an internal table does not match the number expected by NMMGR.

ACTION: Restore the file NMMGRCAT.PUB.SYS. Then run NMMAINT.PUB.SYS to make sure the version of NMMGR is correct.

NMGRERR 201 **MESSAGE: Internal error in Guided config scanner. (NMGRERR 201)**

CAUSE: This is an internal guided configuration error caused by a corrupt NMMGRCAT.PUB.SYS file.

ACTION: Restore NMMGRCAT and retry. If this fails see “Submitting a CR” at the beginning of this appendix.

NMGRERR 202 **MESSAGE: Aux NCONF file already open. (NMGRERR 202)**

CAUSE: This is an internal guided configuration error caused when more than one NMCONF file is opened by the guided configuration open statement.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMGRERR 203 **MESSAGE: Cannot open source, destination, or Aux NCONF file. (NMGRERR 203)**

CAUSE: This is caused when the source/destination file or the file NMAUX1.PUB.SYS is either missing, is the wrong version, is locked for exclusive access, or was corrupted during a subtree copy.

ACTION: If doing a subtree copy, check to see that the source and destination files really exist. 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.

NMGRERR 204 **MESSAGE: Aux NCONF file not opened. (NMGRERR 204)**

CAUSE: 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.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMGRERR 205 **MESSAGE: Aux file does not contain specified path. (NMGRERR 205)**

CAUSE: This is a guided configuration error caused when NMMGRCAT specifies a path in the auxiliary file that does not exist.

ACTION: Copy NMAUX1.PUB.SYS from backup tape, and run NMAINT.PUB.SYS to make sure that the version of NMAUX1 is the same as the version of NMMGR.

NMGRERR 206 **MESSAGE: Path to subtree in user file does not exist. (NMGRERR 206)**

CAUSE: This problem could be caused by a corrupt file or by an old configuration file that needs to be updated.

ACTION: Run NMMGRVER.PUB.SYS. If needed, restore a known good configuration file from a backup tape, or create a new configuration file with NMMGR.

NMGRERR 207 **MESSAGE: Internal error; Guided token overflow. (NMGRERR 207)**

CAUSE: This is an internal guided configuration error.

ACTION: Restore NMMGRCAT.PUB.SYS from a backup tape. If this fails see "Submitting a CR" at the beginning of this appendix.

NMGRERR 208 **MESSAGE: Unexpected Guided Config error. (NMGRERR 208)**

CAUSE: An unexpected or internal guided configuration error occurred.

ACTION: Type the ERROR command after this message is displayed for clarification of the error(s). A PC value is specified at the end of this error message. If unable to include the value problem, submit a CR (Change Request). See "Submitting a CR" at the beginning of this appendix. Be sure to include the value of the PC with the CR.

NMGRERR 209 **MESSAGE: Cannot Stop Guided Configuration. (NMGRERR 209)**

CAUSE: The STOP command is allowed only 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.

ACTION: Move to a screen which contains a "path" at the top of the menu and retype the stop command.

NMGRERR 211 **MESSAGE: Cannot perform NEXT function. (NMGRERR 211)**

CAUSE: This error occurs when the user attempts to use the NEXT command when no selection screen has been encountered.

ACTION: There is no need to use this function at this time.

NMGRERR 214 **MESSAGE: Function is not allowed during Guided configuration. (NMGRERR 214)**

CAUSE: 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.

ACTION: Press a labeled function key.

NMGRERR 215 **MESSAGE: Illegal vplus field specified in Guided config. (NMGRERR 215)**

CAUSE: This is an internal guided configuration error that is caused by missing information in the forms file.

ACTION: Restore NMMGRF.PUB.SYS from backup tape, and run NMMAINT.PUB.SYS. If this fails see "Submitting a CR" at the beginning of this appendix.

NMGRERR 216 **MESSAGE: Illegal Guided config variable name. (NMGRERR 216)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 217 **MESSAGE: Illegal path iden name in Guide config. (NMGRERR 217)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 218 **MESSAGE: Max num of items that can be put to a screen exceeded. (NMGRERR 218)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 219 **MESSAGE: String overflow. (NMGRERR 219)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 220 **MESSAGE: Boolean logic error. (NMGRERR 220)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 221 **MESSAGE: Missing ENDIF statement. (NMGRERR 221)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 222 **MESSAGE: Select loops nested too deep. (NMGRERR 222)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 223 **MESSAGE: Select stack underflow probably missing SELECT. (NMGRERR 223)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 224 **MESSAGE: Missing ENDSELECT statement. (NMGRERR 224)**

CAUSE: This is an internal guided configuration error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 226 **MESSAGE: Unknown statement in Guided Configuration driver. (NMGRERR 226)**

CAUSE: This is an internal guided configuration error.

ACTION: Restore NMMGRCAT.PUB.SYS from backup tape. If this fails see "Submitting a CR" at the beginning of this appendix.

NMGRERR 227 **MESSAGE: Command not allowed on error or version screen. (NMGRERR 227)**

CAUSE: 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.

ACTION: Move to a state which contains a path and retype the stop command.

NMGRERR 228 **MESSAGE: The network interface data and the topology key must match. (NMGRERR 228)**

CAUSE: The type of the network interface does not match the topology key which you selected.

ACTION: Make sure you pressed the correct topology key and have the correct network interface name. Check the type of the network interface name by going to NEXPORT.NI (do a direct branch).

NMGRERR 229 **MESSAGE: The Network interface must of type POINT-TO-POINT. (NMGRERR 229)**

CAUSE: The Network Interface must be of type POINT-TO-POINT.

ACTION: Check the type of the network interface name by going to NETXPORT.NI (do a direct branch).

NMGRERR 230 **MESSAGE: The Network interface may not be of type LOOPBACK. (NMGRERR 230)**

CAUSE: There is no Internet data to configure under the loopback network interface.

ACTION: Do not use this function with loopback.

NMGRERR 231 **MESSAGE: No network interface found, or unknown type. (NMGRERR 231)**

CAUSE: You may have spelled the name incorrectly.

ACTION: Check the spelling and reenter.

CAUSE: The type may be unknown.

ACTION: Check the type of the network interface name by going to NETXPORT.NI (do a direct branch). File a CR (Change Request) if the type is labeled as UNKNOWN. (See "Submitting a CR" at the beginning of this appendix). Delete the unknown type and retry.

NMGRERR 232 **MESSAGE: Unable to open source NCONF file for copy. (NMGRERR 232)**

CAUSE: File does not exist or is the wrong version.

ACTION: If in guided configuration, then NMAUXI.PUB.SYS could not be opened. If performing a copy subtree, check the source file to make sure it exists and is the correct version.

NMGRERR 233 **MESSAGE: Unable to open destination NCONF file for copy. (NMGRERR 233)**

CAUSE: File does not exist or is the wrong version.

ACTION: If in guided configuration, then NMCONFIG.PUB.SYS or the user file does not exist, or is corrupt. You may check the version by running NMMAINT.PUB.SYS. You may also run NMMGRVER to determine if your file is corrupt.

If performing a copy subtree, check the destination file to make sure it exists. Check the version and check to see if the file is corrupt (as above).

NMGRERR 234 **MESSAGE: No PC return value is on the Gosub stack. (NMGRERR 234)**

CAUSE: There is an internal G-code error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 235 **MESSAGE: Illegal PC value specified in statement. (NMGRERR 235)**

CAUSE: There is an internal G-code error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 236 **MESSAGE: The Gosub stack is full. (NMGRERR 236)**

CAUSE: There is an internal G-code error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 237 **MESSAGE: The Network interface must be of type X.25. (NMGRERR 237)**

CAUSE: The operation is illegal if the NI is not an X.25 link.

ACTION: Check to make sure that the NI is an X.25 link.

NMGRERR 240 **MESSAGE: Data must be entered and Saved before continuing. (NMGRERR 240)**

CAUSE: While running guided configuration, the user tried to press **Next Screen** without first pressing **Update Data** while at the path SNANODE.nodename.

ACTION: Enter the correct data and press Update Data.

NMGRERR 250 **MESSAGE: The NI Name must be specified. (NMGRERR 250)**

CAUSE: At the Guided HP Configuration screen, the user attempted to fine tune the parameters for an NI configuration without specifying the NI name in the NI Name field.

ACTION: Enter a valid NI name in the NI Name field and press the *FineTune* Parms key again.

NMGRERR 251 **MESSAGE: The NI Name does not exist in the configuration file. (NMGRERR 251)**

CAUSE: The user attempted to perform an operation on an nonexistent NI. Either the NI is not configured or the specified NI name is incorrect.

ACTION: Specify the correct NI name of a configured NI and try again.

NMGRERR 253 **MESSAGE: The NI Name already exists and is of another type. (NMGRERR 253)**

CAUSE: The user attempted to create an NI using an NI name that has already been configured for another NI of a different type.

ACTION: Specify an NI name that has not already been used and try again.

NMGRERR 254 **MESSAGE: This link name is used by another NI; select another name. (NMGRERR 254)**

CAUSE: While configuring an NI, the user specified a link name that has already been configured for a different NI and cannot be shared.

ACTION: Specify a different link name and try again.

NMGRERR 255 **MESSAGE: A link name must be entered. (NMGRERR 255)**

CAUSE: The user attempted to update the configuration file without specifying a link name, which is required for this screen.

ACTION: Enter a link name in the Link name field and try again.

NMGRERR 256 **MESSAGE: This link cannot be renamed. It is used by another NI. (NMGRERR 256)**

CAUSE: The user attempted to change the name of a link that is used by more than one NI.

ACTION: Leave the link name as it is or reconfigure one or the other of the NIs to use a different link.

NMGRERR 257 **MESSAGE: The NI name does not exist. Please specify a type to create it. (NMGRERR 257)**

CAUSE: At the Guided HP Configuration screen, the user entered a new NI name and pressed the **Config Network** key without specifying a type in the NI type field. The type must be specified if the NI does not already exist.

ACTION: If you are configuring a new NI, enter the type of the new NI in the NI type field and press **Config Network**. If you are updating an existing NI and entered the wrong name in the NI name field, enter the correct NI name and press **Config Network**.

NMGRERR 258 **MESSAGE: Data saved, but profile doesn't exist. Use GoToProfiles command to create it. (NMGRERR 258)**

CAUSE: At the DTS Configuration screen or at one of the DTC card configuration screens, the user specified the name of a profile that is not configured and then pressed the **save data** key.

ACTION: Press the **Go To Profiles** key if one exists for the screen. If not, type `GoToProfiles` in the command line and press **Enter**. This will take you to the profile configuration screens. Configure the nonexisting profile(s) and save the information in the configuration file. When you are finished, press the **Prior Screen** key until NMMGR returns you to the screen you were at when you originally entered the nonexisting profile name. There is no need to reenter the data on this screen, since it has already been saved. Continue with the next configuration task.

NMGRERR 259 **MESSAGE: A DTC name must be specified. (NMGRERR 259)**

CAUSE: At the DTC Configuration screen, the user pressed the **Read DTC** function key without specifying a DTC name.

ACTION: Enter a valid DTC name and try again.

NMGRERR 260 **MESSAGE: The DTC name does not exist; enter data and press Save Data to create it. (NMGRERR 260)**

CAUSE: At the DTC Configuration screen, the user specified a nonexisting DTC name and pressed either the **Config Card** key or the **Read DTC** key.

ACTION: If an incorrect DTC name was entered, enter the correct DTC name and try again. If the DTC name is correct but the DTC has not yet been configured, enter the information for the DTC and press the **Save Data** key, then try again.

NMGRERR 261 **MESSAGE: The DTS Link does not exist. Enter a Link name and press Sate Data. (NMGRERR 261)**

CAUSE: At the DTS Configuration screen, the user entered a nonexisting link name and pressed the **Tune DTS Link** key.

ACTION: If an incorrect link name was entered, enter the correct link name and try again. If the link name is correct but the link has not yet been configured, enter the information for the link and press the **Save Data** key, then try again.

NMGRERR 262 **MESSAGE: Must be a number from 0 to 5. (NMGRERR 262)**

CAUSE: At the DTC Configuration screen, the user entered an invalid character in the field specifying the card to be configured and pressed the **Config Card** key.

ACTION: Enter the number of the card to be configured and press **Config Card** again. The number must be between 0 and 5 and must correspond to the DTC slot number of the card being configured.

NMGRERR 263 **MESSAGE: Data saved, but the home Network Interface does not exist. (NMGRERR 263)**

CAUSE: The user specified a nonexisting NI name as the home network interface and saved the data on the screen.

ACTION: If an incorrect NI name was specified, correct the NI name and press **Save Data** again. If the NI name is correct but the NI has not yet been configured, configure the NI. There is no need to reenter the information on the current screen since it has already been saved.

NMGRERR 264 **MESSAGE: Data saved, but the SNA does not exist. (NMGRERR 264)**

CAUSE: The user specified a nonexisting SNA node and saved the data on the screen.

ACTION: If an incorrect SNA node was specified, correct the SNA node name and press **Save Data** again. If the SNA node name is correct but the SNA node has not yet been configured, configure the SNA node. There is no need to reenter the information on the current screen since it has already been saved.

NMGRERR 265 **MESSAGE: This link name does not exist for this router NI. (NMGRERR 265)**

CAUSE: The user entered a nonexisting link name and pressed the **Link Routing** key.

ACTION: If an incorrect link name was specified, correct the link name and try again. If link name is correct but the link has not yet been configured, configure the link.

NMGRERR 266 **MESSAGE: The path report for the node is full; no new address can be added. (NMGRERR 266)**

CAUSE: The user attempted to add an address to the network directory for a node whose path report is already full. No additional addresses can be added.

ACTION: Go to the Network Directory Data screen for the node and delete some of the addresses assigned to the node name.

NMGRERR 267 **MESSAGE: The node name must be configured first. (NMGRERR 267)**

CAUSE: The node name was not configured.

ACTION: Go to the Main screen and configure the node name.

NMGRERR 268 **MESSAGE: Missing IP address. (NMGRERR 268)**

CAUSE: The user neglected to enter the IP address in the appropriate field.

ACTION: Enter the IP address and try again.

NMGRERR 269 **MESSAGE: You must enter a backup configuration file name. (NMGRERR 269)**

CAUSE: The user pressed the **Open Config** or **Create Config** key with no file name specified in the backup configuration file name field.

ACTION: Enter a valid file name in the backup configuration file name field and press **Open Config** or **Create Config** again.

NMGRERR 270 **MESSAGE: Cannot open node information file for ADDVC or PURGEVC. (NMGRERR 270)**

CAUSE: NMMGR was unable to open the file whose name was specified in the ADDVC or PURGEVC command, either because the file does not exist or because a more serious file system error occurred.

ACTION: 1. The file name specified may not exist. Try the command again with a file that exists.

ACTION: 2. A more serious file system error may have occurred. See the accompanying file system error message for resolution.

NMGRERR 271 **MESSAGE: You must open the configuration and directory files first. (NMGRERR 271)**

CAUSE: The user attempted to perform an ADDVC or PURGEVC command without first opening the configuration and/or directory files.

ACTION: Open a configuration file with the OPENCONF command and a directory file with the OPENDIR command.

NMGRERR 272 **MESSAGE: The link exists, but its type is not correct for this NI. (NMGRERR 272)**

CAUSE: The user specified an existing link name on one of the custom NI update screens. The selected link's type was not correct; that is, a LAPB type link was specified for an X.25 NI.

ACTION: Enter the name of a link with the correct type or delete the link configuration.

NMGRERR 273 **MESSAGE: The selected card number is not configured with a card type. (NMGRERR 273)**

CAUSE: At the DTC Configuration screen, the user selected a card number and pressed the **Config Card** key. No type was entered in the Type field associated with the selected card.

ACTION: Fill in a card type in the Type field for the selected card and press the **Save Data** key. Type must be "D" for direct connect, "M" for modem, or "P" for PAD. Once the data has been saved, select the card and press the **Config Card** key again.

NMGRERR 274 **MESSAGE: The config is valid, but could not be backed up; Type ERR for info. (NMGRERR 274)**

CAUSE: The user pressed the **validate** key and the configuration validated correctly, but NMMGR could not back up the configuration file because an error occurred while writing the backup file.

ACTION: Type ERR on the command line and view the errors that occurred. After correcting the errors, retry the validate operation.

NMGRERR 275 **MESSAGE: You must specify either a switched or permanent virtual circuit address. (NMGRERR 275)**

CAUSE: The user failed to enter either a valid switched virtual circuit address or a valid permanent virtual circuit address. One or the other must be entered.

ACTION: Enter a valid address as appropriate for the VC, either switched or permanent.

NMGRERR 276 **MESSAGE: The NI name exists, but its type is not X.25. (NMGRERR 276)**

CAUSE: The user entered the name of an existing NI and specified the type as X.25. The NI exists but its type is not X.25.

ACTION: If you are updating an existing NI, enter the correct NI name and the correct type and try again. If you are configuring a new NI, enter a name that has not already been used and try again.

NMGRERR 277 **MESSAGE: Duplicate address key; it must be unique for the X.25 NI. (NMGRERR 277)**

CAUSE: The user specified an address key that was not unique for the NI specified at the VC Configuration screen or through the ADDVC command.

ACTION: Go to the SVC and PVC paths screens for the NI to see the names that are already configured. Choose an address key that is not used in either of these screens.

NMGRERR 278 **MESSAGE: Missing quote; the IP address must be enclosed in quotes. (NMGRERR 278)**

CAUSE: While using the ADDVC command in maintenance mode, the user forgot to enter the IP address with either an opening or a closing quote.

ACTION: Reissue the command with the correct IP address enclosed in quotes.

NMGRERR 280 **MESSAGE: The source path was not found. (NMGRERR 280)**

CAUSE: The path to the subtree to copy was not found.

ACTION: Check to make sure you have the correct file and check the source path spelling.

NMGRERR 281 **MESSAGE: The destination path was not found. (NMGRERR 281)**

CAUSE: The destination path, which is created by substituting any destination IDs into the source path, was not accessible. The path in the file was not an exact match, or the destination path was missing.

ACTION: Check the source and destination path spelling and make sure you have the correct file.

NMGRERR 282 **MESSAGE: The destination path exists. Use the overwrite option to replace. (NMGRERR 282)**

CAUSE: The destination path already exists in the file.

ACTION: Enter “Y” in the overwrite option.

NMGRERR 283 **MESSAGE: Source and destination do not map with each other correctly. (NMGRERR 283)**

CAUSE: 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.

ACTION: 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.

Check to make sure that any destination type select items, if changed, were changed to items of the same type (as in LAN to LAN, instead of LAN to router).

NMGRERR 284 **MESSAGE: Internal ERROR in subtree copy. (NMGRERR 284)**

CAUSE: Internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMGRERR 285 **MESSAGE: A non select screen id was changed in the destination path. (NMGRERR 285)**

CAUSE: Incorrect IDs in the destination path.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMGRERR 286 **MESSAGE: Illegal path name identifier in destination path name. (NMGRERR 286)**

CAUSE: A path ID in the destination pathname is not legal.

ACTION: Check the destination path id for typing mistakes.

NMGRERR 287 **MESSAGE: Invalid destination path — path too long. (NMGRERR 287)**

CAUSE: 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, 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.

ACTION: Check to make sure that you are not missing path ids in the source path.

NMGRERR 288 **MESSAGE: Source path contains empty path identifiers. (NMGRERR 288)**

CAUSE: This occurs when the user leaves path IDs empty in the middle of the source path field on the copy subtree screen.

ACTION: Check the source path, and fix the path, so that none of the source path IDs in the middle of the source path are blank.

NMGRERR 289 **MESSAGE: The source and destination may not be the same file and path. (NMGRERR 289)**

CAUSE: The user is attempting to copy over the source data, which is not allowed.

ACTION: Select another file or path to copy into.

NMGRERR 290 **MESSAGE: The file does not exist or cannot be opened. (NMGRERR 290)**

CAUSE: An NMCONF file to be opened for a copy could not be accessed.

ACTION: Check the spelling of the filename. Do a “listf <filename>” to see if file exists.

NMGRERR 291 **MESSAGE: Source path is not allowed to be copied. (NMGRERR 291)**

CAUSE: The source path is not permitted to be copied by the subtree command.

ACTION: None.

NMGRERR 300 **MESSAGE: Internal NMMGR error: cannot close current Network Directory. (NMGRERR 300)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMGRERR 301 **MESSAGE: Internal NMMGR error: corrupt file likely. (NMGRERR 301)**

CAUSE: This is an internal error.

ACTION: The directory file is probably corrupt and should be replaced by a copy from a backup tape. Restore both data and key files. See "Submitting a CR" at the beginning of this appendix.

NMGRERR 302 **MESSAGE: No next page of node names. (NMGRERR 302)**

CAUSE: 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.

ACTION: None.

NMGRERR 303 **MESSAGE: No previous page of node names. (NMGRERR 303)**

CAUSE: This is an informative message that is issued when the user hits **PREV PAGE** and there are none, or when the name supplied does not exist.

ACTION: None.

NMGRERR 304 **MESSAGE: A node with the same name and global/local setting already exists. (NMGRERR 304)**

CAUSE: This is an informative message that is issued when the user tries to add a node name that already exists into the directory. The name is probably misspelled, or the wrong global/local setting was given.

ACTION: Correct the node name, the global/local setting, the type, and/or the enable flag.

NMGRWARN 305 **MESSAGE: Cannot find a node with this name and global/local setting. (NMGRWARN 305)**

CAUSE: This is an informative message that is issued when the user tries to delete or update a node name that does not exist. The name is probably misspelled, or the wrong global/local setting was given.

ACTION: Correct the node name, the global/local setting, the type, and/or the enable flag.

NMGRERR 306 **MESSAGE: RENAME requires a new node name and/or new global/local setting. (NMGRERR 306)**

CAUSE: 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.

ACTION: Specify the missing information.

NMGRERR 307 **MESSAGE: The current node name entry has been deleted by another user. (NMGRERR 307)**

CAUSE: 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.

ACTION: Coordinate update activities with other user(s).

NMGRERR 308 **MESSAGE: Duplicate IP address. (NMGRERR 308)**

CAUSE: The user attempted to add a network address that already exists in the current path report.

ACTION: Either choose a different network address, or make sure you are updating the correct node name global/local setting.

NMGRERR 321 **MESSAGE: Not enough room in the path report list for this addition. (NMGRERR 321)**

CAUSE: 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, such as a node with more than 15 network addresses.

ACTION: See “Submitting a CR” at the beginning of this appendix. (Request an expansion on the limit on path reports.)

NMGRERR 322 **MESSAGE: Internal NMMGR error — corrupt path report list data. (NMGRERR 322)**

CAUSE: Severe error indicating an internal logic error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMGRERR 323 **MESSAGE: No directory file open. (NMGRERR 323)**

CAUSE: Maintenance mode interface: An informative message that is issued when a user gives a command prior to completing a successful OPENDIR command.

ACTION: Open or create a directory file using OPENDIR, then reissue the command.

NMGRWARN 324 **MESSAGE: Cannot find this entry in the directory. (NMGRWARN 324)**

CAUSE: Maintenance mode interface: An informative message that is 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.

ACTION: Correct the node name.

NMGRERR 325 **MESSAGE: Cannot open source file / wrong file type. (NMGRERR 325)**

CAUSE: Maintenance mode interface: An informative message issued when an invalid file was specified in a MERGEDIR command. Possible causes are:

- Nonexistent file
- Wrong type of file (not directory or configuration file)
- Security violation
- A system file name was given
- Other file system problem

ACTION: Correct the filename.

NMGRERR 326 **MESSAGE: Cannot specify a node name when source is a configuration file. (NMGRERR 326)**

CAUSE: Maintenance mode interface: Informative message issued when a user specified a node name in conjunction with a configuration file in a MERGEDIR command.

ACTION: Omit the node name from the command or use a directory file as the source and retain the node name.

NMGRERR 327 **MESSAGE: Local and global entries exist for this node name; choose one. (NMGRERR 327)**

CAUSE: Maintenance mode interface: An informative message issued when the user has given a DELETENODE command, specifying a node name that is not unique. For example, both a local and global entry could exist for the node name.

ACTION: Explicitly state the entry to be deleted using ;LOCAL or ;GLOBAL.

NMGRERR 328 **MESSAGE: The node name must be of the form NAME.DOMAIN.ORG. (NMGRERR 328)**

CAUSE: A node name was expected, however, the data present did not conform to the node name format.

ACTION: Correct the node name.

CAUSE: The node name is more than 50 characters long.

ACTION: Correct the node name.

NMGRERR 329 **MESSAGE: The catalog file has an error in the Batch Command list. (NMGRERR 329)**

CAUSE: An internal error in NMMGR has occurred.

ACTION: Run NMMAINT.PUB.SYS to make sure that you have the correct version of NMMGR. If necessary, restore the file NMMGRCAT.PUB.SYS

from a backup tape. If the problem still exists, see "Submitting a CR" at the beginning of this appendix.

NMGRERR 330 **MESSAGE: Extra data was specified for this command. (NMGRERR 330)**

CAUSE: The user specified too much data.

ACTION: Check syntax of command or type "help" for more information.

NMGRERR 332 **MESSAGE: A key operator was already specified. (NMGRERR 332)**

CAUSE: The user specified both a ;LOCAL and ;GLOBAL key operator.

ACTION: Retype the command with only a ;LOCAL or ;GLOBAL key operator.

NMGRERR 333 **MESSAGE: A merge operator was already specified. (NMGRERR 333)**

CAUSE: The user specified more than one merge operator (KEEP, NOKEEP, TIMESTAMP).

ACTION: Retype the command with only one merge operator.

NMGRERR 334 **MESSAGE: Unknown command encountered. (NMGRERR 334)**

CAUSE: The user typed in an incorrect command.

ACTION: If the command is an MPE command, the command must start with a colon ":". Check the spelling of the command name and reenter as needed.

NMGRERR 335 **MESSAGE: Parameter length overflow. (NMGRERR 335)**

CAUSE: A parameter's length in characters exceeds the maximum length permitted.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NMGRERR 336 **MESSAGE: Unexpected semicolon encountered. (NMGRERR 336)**

CAUSE: A semicolon was encountered before other expected data was entered.

OPENDIR: no options (no semicolon) are allowed.
MERGEDIR: no filename was specified.
LISTDIR: no options (no semicolon) are allowed.
EXPANDDIR: no options (no semicolon) are allowed.

ACTION: Check syntax of the command or type "help" for more information.

NMGRERR 337 **MESSAGE: Expected parameter after command. (NMGRERR 337)**

CAUSE: A parameter is needed after certain commands. This error occurs if the user does not specify that parameter. OPENDIR: needs a filename. MERGEDIR: needs a filename. EXPANDDIR: needs an integer.

ACTION: Check syntax of the command or type “help” for more information.

NMGRERR 338 **MESSAGE: Unknown or extra keyword parameter specified. (NMGRERR 338)**

CAUSE: 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. DELETENODE only allows local or global keywords.

ACTION: Check spelling of keywords. Check for duplicate keyword types. Type “help” for correct syntax.

NMGRERR 339 **MESSAGE: Illegal configuration file name. (NMGRERR 339)**

CAUSE: Configuration file name is invalid.

ACTION: Check the file name for validity. Also, make sure the name is not too long.

NMGRERR 340 **MESSAGE: Illegal directory file name. (NMGRERR 340)**

CAUSE: Directory name may be too long, or contains illegal characters.

ACTION: Recheck file name specified.

NMGRERR 341 **MESSAGE: No keywords are allowed for this command. (NMGRERR 341)**

CAUSE: This command does not allow keywords.

ACTION: Check syntax of the command or type “help” for more information.

NMGRERR 342 **MESSAGE: Node Name length must be from 5 to 50 chars in length. (NMGRERR 342)**

CAUSE: The node name length is wrong.

ACTION: Check the length of each segment in the node name. Each segment (name,domain,org) must be 1–16 characters in length.

NMGRERR 343 **MESSAGE: Name segment in node name must be from 1 to 16 chars in length. (NMGRERR 343)**

CAUSE: The name portion of the node name is the incorrect length.

ACTION: Fix the length of the name in NAME.domain.org.

NMGRERR 344 **MESSAGE: Domain segment in node name must be from 1 to 16 chars in length. (NMGRERR 344)**

CAUSE: The domain portion of the node name is the incorrect length.

ACTION: Fix the length of the domain in name.DOMAIN.org.

NMGRERR 345 **MESSAGE: org segment in node name must be from 1 to 16 chars in length. (NMGRERR 345)**

CAUSE: The org portion of the node name is the incorrect length.

ACTION: Fix the length of the org in name.domain.org.

NMGRERR 346 **MESSAGE: Each segment in the node name must begin with an alphabetic char. (NMGRERR 346)**

CAUSE: Each segment in node name (name,domain, and org) must begin with an alphabetic character.

ACTION: Check to see that the first char in each segment is in the set ["A" .. "Z"].

NMGRERR 347 **MESSAGE: Node names may only be composed of alpha, numeric and _, "-". (NMGRERR 347)**

CAUSE: Illegal character specified.

ACTION: Check each segment for an illegal character.

NMGRERR 348 **MESSAGE: Expected the destination path anf file to be formatted as PATH:FILE. (NMGRERR 348)**

CAUSE: Incorrect format specified.

ACTION: Check to make sure that the three components — path, colon, and file are present.

NMGRERR 349 **MESSAGE: Expected three filename parameters : streamfile, nodefile, cmdfile. (NMGRERR 349)**

CAUSE: Incorrect format specified.

ACTION: File name parameters incorrectly specified.

NMGRERR 350 **MESSAGE: Missing or invalid source file name. (NMGRERR 350)**

CAUSE: Missing or invalid source file name specified.

ACTION: Check to make sure that an MPE file name was specified after the : delimiter to the copyconf command.

NMGRERR 351 **MESSAGE: Missing comma. (NMGRERR 351)**

CAUSE: The syntax of the command requires a comma.

ACTION: Reissue the command using a comma.

NMGRERR 352 **MESSAGE: Need to save data on previous screen before adding domain name. (NMGRERR 352)**

CAUSE: Data was not updated for this node.

ACTION: Update the data for this node.

NMGRERR 353 **MESSAGE: The path specified does not point to a paged data screen. (NMGRERR 353)**

CAUSE: You did not access a paged data screen which has only one page.

ACTION: Check the path specified in the PATHCONF command.

NMGRERR 354 **MESSAGE: Entry selected is empty. (NMGRERR 354)**

CAUSE: User selected an empty selection from the entry selection window.

ACTION: Select an existing entry.

NMGRERR 355 **MESSAGE: Domain labels can only end in an alphabetic character or digit. (NMGRERR 355)**

CAUSE: User entered a name which contained a label that terminated with an invalid character. Valid terminating characters are A..Z..,a..z, or 0..9.

ACTION: Enter the name correctly.

NMGRERR 356 **MESSAGE: Domain labels can only begin with an alphabetic character. (NMGRERR 356)**

CAUSE: User entered a domain name which began with an invalid character. Domain name labels can only begin with an alphabetic character.

ACTION: Enter the name correctly.

NMGRERR 357 **MESSAGE: Domain labels can only consist of A..Z, a..z, 0..9, or -. (NMGRERR 357)**

CAUSE: User entered an invalid domain name. Valid characters consist of A..Z, a..z, 0..9 or -.

ACTION: Enter the name correctly.

NMGRERR 358 **MESSAGE: Domain label lengths cannot exceed 63 characters. (NMGRERR 358)**

CAUSE: Valid label length is 1 to 63 characters. User entered more than 63 characters.

ACTION: Enter the name correctly.

NMGRERR 359 **MESSAGE: Domain name is empty. (NMGRERR 359)**

CAUSE: The user selected an operation which required a domain, yet neglected to enter a domain.

ACTION: Reenter the information with the domain name specified.

NMGRERR 360 **MESSAGE: Domain screen can be accessed only after an NS nodename addition. (NMGRERR 360)**

CAUSE: User can access the domain screen only after using the add function key to add an NS nodename.

ACTION: Follow the instructions in "Cause."

NMGRERR 361 **MESSAGE: Select an entry between 1 and 8, or enter the full node name. (NMGRERR 361)**

CAUSE: User pressed a key which required that an entry selection be provided.

ACTION: User must either select an entry via the entry field, or enter the full node name in the nodename field.

NMGRERR 362 **MESSAGE: User cannot add a domain name to a record already containing one.**

CAUSE: User attempted to go to the domain screen after having just added a domain entry.

ACTION: None.

NMGRERR 363 **MESSAGE: Entry field must contain a value between 1 and 8. (NMGRERR 363)**

CAUSE: The entry field was empty or contained a value not in the range 1 to 8.

ACTION: Enter a value in the correct range.

NMGRERR 364 **MESSAGE: Nodename too long. Max for NS is 50; Max for Domain name is 255. (NMGRERR 364)**

CAUSE: User entered a name that exceeded 255 characters for DDN name, or user entered a name that exceeded 50 characters for NS name.

ACTION: Reenter the name correctly.

NMGRERR 365 **MESSAGE: File name entered is invalid; max length is 36 characters. (NMGRERR 365)**

CAUSE: User entered a file name that exceeded 36 characters.

ACTION: Enter a filename of correct length.

NMGRERR 366 **MESSAGE: Domain name entered already exists. (NMGRERR 366)**

CAUSE: User entered a domain name that already existed in the directory.

ACTION: None.

NMGRERR 367 **MESSAGE: User is not allowed to merge individual domain entries. (NMGRERR 367)**

CAUSE: The MERGEDIR command not permit the merging of a single domain entry. However, you can merge domain entries as a group, such as all the global domains or all the local domains.

ACTION: None.

NMGRERR 368 **MESSAGE: User must enter: Node Name, Type, Global, and Enable settings. (NMGRERR 368)**

CAUSE: User has selected a function that needs the above information.

ACTION: Enter the above information.

NMGRERR 369 **MESSAGE: User cannot select using both Entry Name Field and Name Field. (NMGRERR 369)**

CAUSE: User has entered a name into the node name field and data into the entry number field. User can only specify one at a time for the operation selected (update, delete).

ACTION: Retry with the correct information.

NMGRERR 370 **MESSAGE: The options when merging from a config file are LOCAL and GLOBAL. (NMGRERR 370)**

CAUSE: The user is using the merged command and is attempting to merge from a configuration file. In this case, the only valid options that can be specified are LOCAL and GLOBAL.

ACTION: Specify correct options.

NMGRERR 371 **MESSAGE: User must save data prior to using NEXT function. (NMGRERR 371)**

CAUSE: User is on the directory data screen and wants to use NEXT branching. User cannot do so until the current data is updated.

ACTION: Press **UPDATE**; then NEXT can be used.

NMGRERR 380 **MESSAGE: Problem accessing the existing directory file. (NMGRERR 380)**

CAUSE: 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.

ACTION: Check the accompanying file system error for more information. If the error reflects an exclusive access violation, correct the multiple access and/or the user capabilities.

NMGRERR 381 **MESSAGE: Problem accessing the new (expanded) directory file. (NMGRERR 381)**

CAUSE: 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 the save option on.
- 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.

ACTION: Check the accompanying file system error for more information. If the error reflects a security violation, then you are most likely (a) trying to access a file for read/write access for which you do not have adequate capabilities, or (b) trying to expand the file in a different account than your logon account.Since the expand operation involves a RENAME, you MUST be logged into the same account as the directory file that you are trying to expand. 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 attributes identical to that of the original file. Use FCOPY to copy the data and key files SEPARATELY into the newly built KSAM data and key files. Be sure to use the “;NOKSAM” option of FCOPY. If the temporary files do not exist, then the original directory must be restored from a backup tape.

NMGRERR 382 **MESSAGE: Incompatible version of KSAM for file rename operation. (NMGRERR 382)**

CAUSE: 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.

ACTION: For an intermediate solution, use KSAMUTIL to build a larger (expanded) file and use FCOPY to copy the directory to the new file. If the problem still exists, see “Submitting a CR” at the beginning of this appendix.

NMGRERR 383 **MESSAGE: Cannot specify a negative number for expansion. (NMGRERR 383)**

CAUSE: Maintenance mode interface: The user gave a negative number of records to expand the file.

ACTION: Supply a positive number of records.

NMGRERR 384 **MESSAGE: Cannot open command file "NMMGRCMD". (NMGRERR 384)**

CAUSE: The command file NMMGRCMD could not be opened.

ACTION: Check for any file equations set for "NMMGRCMD". See the accompanying file system error message for problem resolution.

NMGRERR 385 **MESSAGE: An NMMGR configuration file name must be specified. (NMGRERR 385)**

CAUSE: Maintenance mode interface: An error message is issued when the configuration file argument for the OPENCONF command is missing.

ACTION: Reissue the command with the configuration file name.

NMGRERR 386 **MESSAGE: Invalid subsystem name, enter valid name (i.e., NETXPORT, SNANODE). (NMGRERR 386)**

CAUSE: Maintenance mode interface: An error message is issued when an invalid subsystem name is entered.

ACTION: Reissue the command with a correct subsystem name.

NMGRERR 387 **MESSAGE: Unable to OPEN, and unable to CREATE config file. (NMGRERR 387)**

CAUSE: File system error.

ACTION: Check to see if user is allowed to access file. Check to see if user and account capabilities of NA or NM are set.

NMGRERR 388 **MESSAGE: Attempted to access non data or page data screen with PATHCONF. (NMGRERR 388)**

CAUSE: Incorrect use of PATHCONF command.

ACTION: Make sure that the screen you are trying to access is data or paged data. This can be checked by looking at the screen and seeing if there is a data flag in the upper right corner of the screen. If not, you are trying to access a screen which has no data fields.

NMGRERR 389 **MESSAGE: Attempt to access field which does not exist. (NMGRERR 389)**

CAUSE: You are trying to access a field N+k when there are only N fields on the form.

ACTION: Use NMMGR to go to the path which you specified in the PATHCONF command. Make sure that your field count matches the field

number you are trying to access. Make sure you are not trying to use Vplus field numbers to access the field.

NMGRERR 390 **MESSAGE: Path not specified, or path specified does not exist. (NMGRERR 390)**

CAUSE: PATHCONF was not previously issued.

ACTION: Check to see if you set the path with the PATHCONF command. Check to see if the path that you specified exists in the configuration file

NMGRERR 391 **MESSAGE: Version stamp in VERSIONCONF does not match NMMGR version. (NMGRERR 391)**

CAUSE: Version stamp must match NMMGR version.

ACTION: Change the version stamp in your batch file to match the version displayed on the NMMGR banner line.

NMGRERR 392 **MESSAGE: VERSIONCONF must be called before this command may be called. (NMGRERR 392)**

CAUSE: Tried to perform OPENCONF before VERSIONCONF.

ACTION: Call VERSIONCONF with the version stamp which NMMGR displays on the banner line.

NMGRERR 393 **MESSAGE: Missing or invalid destination path name. (NMGRERR 393)**

CAUSE: The copyconf command will not operate without a valid destination path.

ACTION: Check to make sure an NMCONF path name was specified for the copyconf command.

NMGRERR 394 **MESSAGE: Missing or invalid destination file name. (NMGRERR 394)**

CAUSE: The copyconf command will not operate without a valid destination file name.

ACTION: Check to make sure that an MPE file name was specified after the colon (:) delimiter in the copyconf command.

NMGRERR 395 **MESSAGE: Invalid option specified for copyconf command. (NMGRERR 395)**

CAUSE: An option other than KEEP was specified.

ACTION: Retry with valid option.

NMGRERR 400 **MESSAGE: Cannot open the nodelist file. (NMGRERR 400)**

CAUSE: The nodelist file could not be opened for read/write access.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 401 **MESSAGE: Record size of nodelist file too small; must be >= 80 bytes. (NMGRERR 401)**

CAUSE: The record size of the nodelist file is too small to be used.

ACTION: If creating the nodelist file using the LISTDIR command, then do not include a *;REC=* parameter in the file equation. Copy the nodelist file into a file with a larger record width.

NMGRERR 402 **MESSAGE: Filecode of nodelist file non zero. (NMGRERR 402)**

CAUSE: The nodelist file supplied did not have a 0 filecode — it was not a standard EDITOR-type file.

ACTION: If creating the nodelist file using the LISTDIR command, then do not include a *;CODE=* parameter in the file equation. Copy the nodelist file into a file created with no file code.

NMGRERR 403 **MESSAGE: FREADDIR failed trying to read from nodelist file. (NMGRERR 403)**

CAUSE: Could not issue a directed read to the nodelist file. The file most likely has a variable-length record structure.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 404 **MESSAGE: FWRITEDIR failed trying to write to nodelist file. (NMGRERR 404)**

CAUSE: Could not issue a directed write against the nodelist file.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 405 **MESSAGE: Cannot close nodelist file. (NMGRERR 405)**

CAUSE: Could not close the nodelist file.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 406 **MESSAGE: FCONTROL failed trying to set EOF marker on nodelist file. (NMGRERR 406)**

CAUSE: Internal error.

NMGRERR 407 **MESSAGE: FPOINT failed on nodelist file. (NMGRERR 407)**

CAUSE: Could not set the record pointer in the nodelist file.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 408 **MESSAGE: FGETINFO failed on nodelist file. (NMGRERR 408)**

CAUSE: Internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NMGRERR 409 **MESSAGE: FREAD failed trying to read from nodelist file. (NMGRERR 409)**

CAUSE: Could not read sequentially from the nodelist file.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 410 **MESSAGE: Cannot gain access to the stream file. (NMGRERR 410)**

CAUSE: A check to verify that the stream file does not already exist could not be completed.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 411 **MESSAGE: The stream file already exists; choose another name. (NMGRERR 411)**

CAUSE: The stream file given already exists as a permanent file. The MAKESTREAM command requires that this file not exist.

ACTION: Choose another file name or rename the existing file to another name.

NMGRERR 412 **MESSAGE: Cannot gain access to the command file. (NMGRERR 412)**

CAUSE: A check to verify that the command file does exist could not be completed.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 413 **MESSAGE: The command file does not exist. (NMGRERR 413)**

CAUSE: The command file given does not exist.

ACTION: Supply the name of an existing command file.

NMGRERR 414 **MESSAGE: Internal catalog error: job text identifier table overflow. (NMGRERR 414)**

CAUSE: Message catalog NMMGRCAT.PUB.SYS is incorrect.

ACTION: RESTORE NMMGRCAT.PUB.SYS from a backup tape. If the problem still exists, see “Submitting a CR” at the beginning of this appendix.

NMGRERR 415 **MESSAGE: Internal catalog error: incorrect format for job text ID entry. (NMGRERR 414)**

CAUSE: Message catalog NMMGRCAT.PUB.SYS is incorrect.

ACTION: RESTORE NMMGRCAT.PUB.SYS from a backup tape. If the problem still exists, see “Submitting a CR” at the beginning of this appendix.

NMGRERR 416 **MESSAGE: Error converting a catalog entry into a numeric value. (NMGRERR 416)**

CAUSE: Internal error.

ACTION: RESTORE NMMGRCAT.PUB.SYS from a backup tape. If the problem still exists, see "Submitting a CR" at the beginning of this appendix.

NMGRERR 417 **MESSAGE: Catalog entry value not in range -32768..32767. (NMGRERR 417)**

CAUSE: Message catalog NMMGRCAT.PUB.SYS is incorrect.

ACTION: RESTORE NMMGRCAT.PUB.SYS from a backup tape. If the problem still exists, see "Submitting a CR" at the beginning of this appendix.

NMGRERR 418 **MESSAGE: Cannot read an entry from the message catalog. (NMGRERR 418)**

CAUSE: Message catalog NMMGRCAT.PUB.SYS is incorrect.

ACTION: RESTORE NMMGRCAT.PUB.SYS from a backup tape. If the problem still exists, see "Submitting a CR" at the beginning of this appendix.

NMGRERR 419 **MESSAGE: Cannot open the stream file. (NMGRERR 419)**

CAUSE: The stream file could not be opened.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 420 **MESSAGE: FWRITE failed trying to write to the stream file. (NMGRERR 420)**

CAUSE: Could not write to the stream file. Most likely, the end-of-file has been reached and the file is full.

ACTION: See the accompanying file system error message for resolution. 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.

NMGRERR 421 **MESSAGE: Cannot close the stream file. (NMGRERR 421)**

CAUSE: The stream file could not be closed.

ACTION: See the accompanying file system error message for resolution.

NMGRERR 500 **MESSAGE: Missing equal sign. (NMGRERR 500)**

CAUSE: An equal sign was missing in the command syntax.

ACTION: Reenter the command with the proper syntax.

NMGRERR 501 **MESSAGE: Missing or invalid pathname parameter. (NMGRERR 501)**

CAUSE: The syntax of the command requires a pathname parameter.

ACTION: Check pathname and reissue the command.

NMGRERR 502 **MESSAGE: Missing or invalid field number. (NMGRERR 502)**

CAUSE: Either the field number parameter was not specified or the field number was not terminated with a comma.

ACTION: Check the field number on the screen.

NMGRERR 503 **MESSAGE: Missing data. Data follows a comma. (NMGRERR 503)**

CAUSE: WRITECONF command did not list data to be stored.

ACTION: The syntax of the command requires a data parameter. The data may be enclosed in quotes.

NMGRERR 504 **MESSAGE: Invalid option specified. (NMGRERR 504)**

CAUSE: An invalid option was specified for the command.

ACTION: Use help to enter correct option.

NMGRERR 505 **MESSAGE: Missing or invalid version string. (NMGRERR 505)**

CAUSE: Did not specify version correctly.

ACTION: The syntax of the command requires a valid version string parameter.

NMGRERR 506 **MESSAGE: Missing or invalid page number. (NMGRERR 506)**

CAUSE: The syntax of the command requires a page number.

ACTION: The page number must be a positive integer.

NMGRERR 507 **MESSAGE: Invalid path, a select or type select path is required. (NMGRERR 507)**

CAUSE: The path must be for a select or type select screen.

ACTION: Check the path and reissue.

NMGRERR 508 **MESSAGE: Unable to open Formlist as OLD or NEW. (NMGRERR 508)**

CAUSE: File system error.

ACTION: Check the file equation. See if the file is locked open or cannot be accessed. Check to see if there is disk space.

NMGRERR 509 **MESSAGE: The new data is larger than the field size. (NMGRERR 509)**

CAUSE: WRITECONF error.

ACTION: Check to see that you are accessing the correct field, or reduce the size of the data you are entering.

NMGRERR 510 **MESSAGE: There are Vplus field edit errors. (NMGRERR 510)**

CAUSE: UPDATECONF error.

ACTION: Examine all WRITECONF statements before the screen associated with the UPDATECONF which caused the error. One or more of these fields does not match the edits which are associated with this field. Go to the NMMGR screen which corresponds to the path for further explanation of the Vplus error.

NMGRERR 511 **MESSAGE: Field number must be a positive integer. (NMGRERR 511)**

CAUSE: A READCONF or WRITECONF error occurred.

ACTION: Check to see if the field number entered is greater than zero.

NMGRERR 512 **MESSAGE: Missing closing quote. (NMGRERR 512)**

CAUSE: A closing quote is needed.

ACTION: Retype the erroneous string with a closing quote.

NMGRERR 514 **MESSAGE: Must open config file before executing this command. (NMGRERR 514)**

CAUSE: The user tried to perform some maint mode command like SUMMARYCONF, COMPRESSCONF, PATHCONF, etc. that requires an open file.

ACTION: Open a config file with the OPENCONF command first.

NMGRERR 550 **MESSAGE: Unexpected parameter encountered. (NMGRERR 550)**

CAUSE: You specified an invalid LDEV range while using the SUMMARYCONF command to obtain a DTS critical summary report on a range of logical devices.

ACTION: Reenter the SUMMARYCONF command with a correctly specified LDEV range. The LDEV range must be separated by a slash. (Example: SUMMARYCONF DTS,LDEV 35/83)

NMGRERR 551 **MESSAGE: The parameters for this command must be an integer. (NMGRERR 551)**

CAUSE: While using the SUMMARYCONF command to obtain a DTS critical summary report, you specified one or more of the parameters as a noninteger. The correct format for the LDEV specification is LDEV [xxx[/yyy]], where xxx and yyy are integers.

ACTION: Reenter the command with the parameters specified as integers.

NMGRERR 552 **MESSAGE: Extra data was specified in the command line. (NMGRERR 552)**

CAUSE: While using the SUMMARYCONF command to obtain a DTS critical summary report on a range of logical devices, you entered more data than was expected in the command line.

ACTION: Reenter the command with the parameters specified in the correct format (LDEV [xxx[/yyy]], where xxx and yyy are integers).

NMGRERR 553 **MESSAGE: The lower LDev # must be less than the upper LDev #. (NMGRERR 553)**

CAUSE: While using the SUMMARYCONF command to obtain a DTS critical summary report on a range of logical devices, the first LDEV number you specified was higher than the second LDEV number you specified. This is an invalid range specification.

ACTION: Reenter the command with the LDEV range specified correctly, with the first number in the range lower than the second number in the range.

NMGRERR 554 **MESSAGE: There are no LDevs within the specified range. (NMGRERR 554)**

CAUSE: While using the SUMMARYCONF command to obtain a DTS critical summary report on a range of logical devices, you specified a valid range; however, there are no LDEVs within that range.

ACTION: Reenter the command with a correct range of logical devices specified (one that includes LDEVS).

NMGRERR 555 **MESSAGE: The DTC Name specified is not configured. (NMGRERR 555)**

CAUSE: You specified an incorrect DTC name while using the SUMMARYCONF command to obtain a DTS critical summary report on a specific DTC. Either the DTC does not exist or no data has been configured for that DTC.

ACTION: If the name was entered incorrectly, reenter the SUMMARYCONF command with the correct DTC name specified. If the DTC exists but is not correctly configured, use NMMGR to configure the data for the DTC, then reenter the SUMMARYCONF command.

NMGRERR 556 **MESSAGE: The Card specified is not configured in the specified DTC. (NMGRERR 556)**

CAUSE: You specified an incorrect card number while using the SUMMARYCONF command to obtain a DTS critical summary report on a specific DTC. Either the DTC does not exist or the card specified is not configured for that DTC.

ACTION: Reenter the command with the correct card number and DTC specified. If the card exists but is not properly configured, use NMMGR

to correct the card configuration, then reenter the SUMMARYCONF command.

NMGRERR 557 **MESSAGE: That Port is not configured in the DTC and Card specified. (NMGRERR 557)**

CAUSE: You specified an incorrect port number while using the SUMMARYCONF command to obtain a DTS critical summary report on a specific card in a specific DTC. Either the DTC does not exist, the card specified is not configured for that DTC, or the port is not configured for that card.

ACTION: Reenter the command with the correct port number, card number, and DTC specified. If the port exists but is not properly configured, use NMMGR to correct the configuration, then reenter the SUMMARYCONF command.

NMGRERR 558 **MESSAGE: The DTC subsystem has not been configured. (NMGRERR 558)**

CAUSE: You entered a SUMMARYCONF DTS command on a system where no distributed terminal subsystem is configured (the HOST/PC flag has not been set).

ACTION: Configure the distributed terminal subsystem, then reenter the SUMMARYCONF DTS command.

NMGRERR 559 **MESSAGE: Illegal delimiter given. Type HELP for command syntax. (NMGRERR 559)**

CAUSE: While using the SUMMARYCONF command to obtain a DTS critical summary report, you entered an illegal delimiter.

ACTION: Type HELP at the prompt to access the HELP messages for the SUMMARYCONF command. Study these messages to determine the proper syntax to obtain the desired information. Reenter the command using the correct delimiters.

NMGRERR 560 **MESSAGE: The card number must be an integer from 0 to 5. (NMGRERR 560)**

CAUSE: While using the SUMMARYCONF command to obtain a DTS critical summary report on a specific card in a DTC, you entered an invalid card number. Card numbers must be entered as integers, from 0 to 5.

ACTION: Reenter the command with a card number specified in the valid range, 0 through 5.

NMGRERR 561 **MESSAGE: The port number must be an integer from 0 to 7. (NMGRERR 561)**

CAUSE: While using the SUMMARYCONF command to obtain a DTS critical summary report on a specific port, you entered an invalid port number. Port numbers must be entered as integers, from 0 to 7.

ACTION: Reenter the command with a port number specified in the valid range, 0 through 7.

NMGRERR 562 **MESSAGE: Expected a parameter after the delimiter. (NMGRERR 562)**

CAUSE: You entered a SUMMARYCONF DTS command that ended in a delimiter when another parameter could have been entered. For example, you may have entered “LDEV 23/” instead of “LDEV 23”.

ACTION: Reenter the command correctly. Type HELP to access the help messages if you do not know the correct syntax for the command you are trying to enter.

NMGRERR 563 **MESSAGE: Cannot end a command with a delimiter. (NMGRERR 563)**

CAUSE: You entered a SUMMARYCONF DTS command that ended in a delimiter (“,”, “/”, etc.)

ACTION: Reenter the command correctly. Type HELP to access the help messages if you do not know the correct syntax for the command you are trying to enter.

NMMGRVER Messages, Errors and Warnings

The following messages may be returned from the NMMGRVER utility (n represents the message number). Note that NMMGRVER may also provide you with messages which tell you that the operation has completed successfully.

(NMMGRVERWARN n) messages are displayed when conversion failed and the file is *not* changed.

(NMMGRVERERR n) messages are displayed when conversion has failed and the file *may be* changed. These warning messages are listed and described together at the end of the following error messages.

NMMGRVERMSG 0

MESSAGE: CONVERSION completed successfully. (NMMGRVERMSG 0)

CAUSE: Successful completion.

ACTION: None.

NMMGRVERMSG 1

MESSAGE: NO NEED TO CONVERT. (NMMGRVERMSG 1)

CAUSE: Configuration file version is correct; file does not require conversion.

ACTION: None.

NMMGRVER WARN 2

MESSAGE: OPEN FILE ERROR: Cannot convert file. (NMMGRVERWARN 2)

CAUSE: NMMGRVER was unable to open the configuration file during conversion. More than one user is accessing the file.

ACTION: Execute the LISTDIR5 subsystem and type LISTF to check whether other users are accessing or storing this file. NMMGERVER needs exclusive access to the configuration file. Run NMMGRVER when file is freed.

CAUSE: Internal file system unable to LOCK and OPEN the file with write access due to file system security.

ACTION: Resolve the MPE security restriction and retry. Run LISTDIR5 and type LISTSEC configFileName to determine the security restrictions of the file.

CAUSE: Internal file system unable to OPEN the file if incorrect LOCKWORD was provided.

ACTION: Rerun NMMGRVER with correct LOCKWORD.

CAUSE: Another internal error has occurred when opening the file.

ACTION: An internal file system error has occurred. See “Submitting a CR” at the beginning of this appendix.

NMMGRVER WARN 3

MESSAGE: INTERNAL ERROR: cannot convert file. (NMMGRVERWARN 3)

CAUSE: The configuration file is corrupted. One or more of the following situations were detected in the file.

- Paths are missing.
- Version stamps are missing or are incorrect.
- A LINKCONF detail data record has unexpected record length. NOTE: This corrupted configuration file is not changed.

ACTION: Restore an old configuration file if possible and rerun NMMGRVER. If the error still occurs, see "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 4

MESSAGE: FILE CORRUPT: Conversion Failed, file might be changed. (NMMGRVERERR 4).

CAUSE: NMMGRVER was unable to complete the configuration file conversion because a LINKCONF detail data record has the incorrect item identification number. Note: The configuration file may have been changed.

ACTION: The configuration file may be corrupted. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

CAUSE: NMMGRVER was unable to complete the configuration file conversion because a data record has incorrect record length.

ACTION: The configuration file may be corrupted. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

CAUSE: NRJE has the wrong previous version stamp. Note that the configuration file may have been changed.

ACTION: The configuration file may be corrupted. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 5

MESSAGE: INTERNAL ERROR: Conversion Failed, file might be changed. (NMMGRVERERR 5).

CAUSE: Disk file space is used up.

ACTION: Purge unnecessary files from disk to recover some space. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

CAUSE: An internal error occurred with intrinsics, midasgetdata, midasnextpath, midasupdatedata, or midasaddpath.

ACTION: The configuration file may be corrupted. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

CAUSE: An unexpected internal error has occurred.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 6

MESSAGE: CLOSE FILE ERROR: File may have been changed. (NMMGRVERERR 6).

CAUSE: An internal NMMGRVER error has occurred when attempting to close the configuration file.

ACTION: Note that the configuration file may have been changed. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVER WARN 7

MESSAGE: User has Insufficient Capability to Run NMMGRVER. (NMMGRVERWARN 7)

CAUSE: The user is required to have NM or NA capability to run NMMGRVER. However, the current user does not have sufficient capability.

ACTION: Check user capability with program LISTDIR5.PUB.SYS, and modify the capability list. Contact the account manager or system manager, if needed.

NMMGRVER WARN 8

MESSAGE: ACCESS VIOLATION: Cannot convert file. (NMMGRVERWARN 8)

CAUSE: 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.

ACTION: Release file security and rerun NMMGRVER, or run NMMGRVER in the GROUP and ACCOUNT where the configuration file is stored.

NMMGRVER WARN 9

MESSAGE: Config File Version Is Newer than NMMGRVER can support (NMMGRVERWARN 9).

CAUSE: At least one version stamp of the configuration file is newer than NMMGRVER can support. NMMGRVER cannot convert this file. This configuration file is not changed.

ACTION: Check the module version of NMMGRVER and overall NMC.

Install the newer version of NMC and run the newer NMMGRVER if needed or, restore an old configuration file if possible and rerun NMMGRVER.

NMMGRVER WARN 12

MESSAGE: File NMCONFIG.PUB.SYS couldn't be opened. (NMMGRVERWARN 12)

CAUSE: NMCONFIG was already open for exclusive access, or MIDASOPEN detected an error.

ACTION: Check NMCONFIG and retry.

NMMGRVERERR 13

MESSAGE:

Error during merge of configuration files.
Path: !
Midasstat = !
(NMMGRVERERR 13)

CAUSE: There is an error in one of the cells in the file hierarchy. This error has been detected as an error in the configuration file.

ACTION: Check the **midasstat** value to determine what the problem is. It may be necessary to use some other tool to determine which cell has the problem. If possible, manually edit the data in this cell and verify it manually. If this is not possible, delete the cell and run NMMGRVER again.

CAUSE: The configuration file is corrupted.

ACTION: Since the destination file has been changed, recovery is not possible. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 14

MESSAGE:

Path not found in the config file.
Path: !
(NMMGRVERERR 14)

CAUSE: This may be a normal condition if the user does not have NS on the system. However, it may also indicate that you are trying to convert NMCONFIG.PUB.SYS on a non-XL system, when you should actually be converting an NSCONF-like file.

ACTION: The conversion will operate correctly. The user is being warned to be sure that the correct file is being converted.

NMMGRVERERR 15

MESSAGE:

Invalid data length.
Path: !
Length: !
(NMMGRVERERR 15)

CAUSE: The length of the data array which was read from the cell was

incorrect. This could indicate that an incorrect cell was accessed or that the user is trying to convert an invalid configuration file. The cell is not converted.

ACTION: Verify that the original file was a valid version. Using another tool, examine the cell data and verify the data. Since the cell was not touched, the data may have to be entered manually.

NMMGRVERERR 16

MESSAGE:

Conversion failure.
PATH: !
MIDASSTAT: !
(NMMGRVERERR 16)

CAUSE: This is a generic message which allows the path name and status to be output.

ACTION: Depends on status and user needs.

NMMGRVERERR 17

MESSAGE:

Path not allowed for this version. Path purged.
Path: !
(NMMGRVERERR 17)

CAUSE: Certain paths are not supported on the current version of the configuration file, even though they were supported on previous versions.

ACTION: None necessary. You may want to verify which paths have been deleted.

NMMGRVERERR 18

MESSAGE: File type has not been defined. (NMMGRVERERR 18)

CAUSE: Internal error. User entered valid data but it somehow has been corrupted. The type of the file passed to NMMGRVER is not within the valid range of: 1= MPE V NSCONF type; 2= MPE V NMCONF type.

ACTION: Run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMMGRVER ERR 19

MESSAGE: Unable to create LINK subtree (NMMGRERR 19)

CAUSE: You specified that the configuration file was an MPE V file. Therefore, NMMGRVER checked to make sure the LINK subtree did not exist. Since it did not exist, NM tried to create it because iX configuration files need it. However, the NM intrinsic failed during this process. One possible reason for this is that the configuration file may be full.

ACTION: Run NMMGRVER again. If the error still occurs, submit a Service ReRun NMMGR and expand the size of the configuration file. Then run NMMGRVER again.

NMMGRVERERR 20

MESSAGE: Unable to purge LINKCONF subtree (NMMGRVERERR 20)

CAUSE: Internal error. File has been converted. However, in the attempt to purge the subtree LINKCONF, the NM intrinsic failed.

ACTION: The configuration file may be corrupted. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, see "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 21

MESSAGE: Error accessing NMMGRCAT.PUB.SYS set=! msg=!. (NMMGRVERERR 21)

CAUSE: Returned by NMCPRINTERRMSG. Usually followed by one or more of messages 22 through 25 below, which further clarifies the error.

ACTION: Look for one or more of NMMGRVERERR 22 through 25 following this message, and take the remedial action suggested below. Look up the text and comments for the original message specified in the message, and take the suggested actions.

NMMGRVERERR 22

MESSAGE: FOPEN FSERR ! on NMMGRCAT.PUB.SYS. (NMMGRVERERR 22)

CAUSE: Returned by NMCPRINTERRMSG and usually followed by the text of the FSError message.

ACTION: If the error number is 1 or 2, NMMGRVERERR 24 will also be displayed. See the NMMGRVERERR 24 causes and actions for further information. Returned by NMCPRINTERRMSG.

NMMGRVERERR 23

MESSAGE: Encountered GENMESSAGE error !. (NMMGRVERERR 23)

CAUSE: Possible bad software installation (NMMGRCAT.PUB.SYS).

ACTION: If the error number is not 1 or 2, look up the error number in the MPE Intrinsics Manual under GENMESSAGE. The problem may be due to a corrupt NMMGRCAT.PUB.SYS. Restore NMMGRCAT.PUB.SYS and run NMMGRVER again. Otherwise, correct the problem causing the GENMESSAGE error and run NMMGRVER again.

NMMGRVERERR 24

MESSAGE: GENMESSAGE encountered FSERR !. (NMMGRVERERR 24)

CAUSE: Returned by NMCPRINTERRMSG. This message follows NMMGRVERERR 23 message, and is usually followed with the text of the file system error message as well.

ACTION: Correct the file system error and run NMMGRVER again.

NMMGRVERERR 25

MESSAGE: FCLOSE FSERR ! on NMMGRCAT.PUB.SYS. (NMMGRVERERR 25)

CAUSE: Returned by NMCPRINTERRMSG after printing a message from NMMGRCAT.PUB.SYS. The FCLOSE of NMMGRCAT.PUB.SYS failed.

ACTION: Correct the file system error and run NMMGRVER again.

NMMGRVERERR 26

MESSAGE: Merge failed. Error in NMCONFIG.PUB.SYS (NMMGRVERR 26)

CAUSE: During the merge of NMCONFIG and the file to be converted, an error was found in one of the paths in NMCONFIG.

ACTION: The configuration file may have been changed. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

CAUSE: The file NMCONFIG.PUB.SYS is not valid.

ACTION: The configuration file may be corrupted. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix

CAUSE: Depth of paths exceed *max_path_depth*.

ACTION: The configuration file may be corrupted. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVER WARN 27

MESSAGE: File full; no conversion done. (NMMGRVERWARN 27)

CAUSE: The configuration file to be converted is full. There must be at least two (and possibly more than two) records available in the configuration file to do a conversion.

ACTION: Go to the Compress utility screen in NMMGR and expand the file.

NMMGRVERERR 40

MESSAGE: Cannot copy configuration file to NMTEMP; no conversion done. (NMMGRVERR 40)

CAUSE: The configuration file could not be copied to NMTEMPa.

ACTION: Check if there is any disk space left on LDEV 1.

NMMGRVERERR 41

MESSAGE: Could not rename config file; no conversion done. (NMMGRVERR 41)

CAUSE: Could not rename or copy the configuration file to NMMGBAK, or could not rename or copy NMMGRTMP to the configuration file.

ACTION: Check if there is any disc space left on LDEV 1.

NMMGRVERMSG 56

MESSAGE: File not converted NMMGRVERMSG 56.

CAUSE: You selected the skip option when asked for a file type during the configuration file conversion.

ACTION: None. This is an informative message.

NMMGRVERERR 60

MESSAGE:

Unable to add path.
Path: !
Midasstat = !
(NMMGRVERERR 60)

CAUSE: An internal error occurred while adding the displayed path.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix. Note: not user solvable. A qualified HP representative should check the midasstat value to determine what the problem is and take appropriate action.

NMMGRVERERR 61

MESSAGE:

Unable to add data.
Path: !
Midasstat = !
(NMMGRVERERR 61)

CAUSE: Internal error occurred while adding data to the displayed path.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix. Note: not user solvable. A qualified HP representative should check the midasstat value to determine what the problem is and take appropriate action.

NMMGRVERERR 62

MESSAGE:

Unable to purge path.
Path: !
Midasstat = !
(NMMGRVERERR 62)

CAUSE: Internal error occurred while purging displayed path.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix. Note: not user solvable. A qualified HP representative should check the midasstat value to determine what the problem is and take appropriate action.

NMMGRVERERR 63

MESSAGE:

Unable to purge data.
Path: !
Midasstat = !
(NMMGRVERERR 63)

CAUSE: Internal error occurred while purging data at displayed path.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix. Note: not user solvable. A qualified HP representative should check the midasstat value to determine what the problem is and take appropriate action.

NMMGRVERERR 64

MESSAGE:

Unable to get son path.
Path: !
Midasstat = !
(NMMGRVERERR 64)

CAUSE: Internal error, could not get the son of the displayed path.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix. Note: not user solvable. A qualified HP representative should check the midasstat value to determine what the problem is and take appropriate action.

NMMGRVERERR 65

MESSAGE:

Unable to get data.
Path: !
Midasstat = !
(NMMGRVERERR 65)

CAUSE: Internal error occurred while attempting to get data from the displayed path.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix. Note: not user solvable. A qualified HP representative should check the midasstat value to determine what the problem is and take appropriate action.

NMMGRVERERR 66

MESSAGE:

Unable to get brother path.
Path: !
Midasstat = !
(NMMGRVERERR 66)

CAUSE: Internal problem accessing path in the configuration file. Brother of displayed path could not be obtained.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix. Note: not user solvable. A qualified HP representative should check the midasstat value to determine what the problem is and take appropriate

action.

NMMGRVERERR 67 **MESSAGE:**

Unable to update data.
Path: !
Midasstat = !
(NMMGRVERERR 67)

CAUSE: Internal problem updating data in configuration file.

ACTION: Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix. Note: not user solvable. A qualified HP representative should check the midasstat value to determine what the problem is and take appropriate action.

NMMGRVERERR 70 **MESSAGE: Error in MPE-V Phase I file. (NMMGRVERR 70)**

CAUSE: An error occurred in the converting of the file from MPE V phase I to MPE V phase II. The process of converting an MPE V configuration file to an MPE/iX file includes checking whether the file is NS I or NS II. If the file is NS I, NMMGR first converts it to NS II and then to MPE/iX. This error message was generated because NMMGR detected an error during the conversion from NS I to NS II.

ACTION: The configuration file may be corrupted. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMMGRVERERR 72 **MESSAGE: ** Converting MPE V Nsconf file to MPE/iX file ****

CAUSE: This is an informative message.

ACTION: None.

NMMGRVERERR 73 **MESSAGE: ** Converting MPE V Nmconfig file to MPE/iX file ****

CAUSE: This is an informative message.

ACTION: None.

NMMGRVERERR 74 **MESSAGE: ** Converting MPE/iX config file ****

CAUSE: This is an informative message.

ACTION: None.

NMMGRVERERR 75 **MESSAGE:**

Invalid path found in source file.
Path: !
(NMMGRVERERR 75)

CAUSE: An invalid path was found in the source configuration file. The path may have been created by an unofficial NMMGR tool. Conversion

will continue if possible. NMMGRVERERR 76 will usually be displayed along with this message.

ACTION: Note that the configuration file may have been changed. Depending on which subsystem is involved, the invalid path may or may not be deleted from the converted file. Restore a backup copy of the configuration file if possible and run NMMGRVER again. If the error still occurs, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 76

MESSAGE: Attempting to continue conversion. (NMMGRVERERR 76)

CAUSE: This is used to inform the user that NMMGRVER is continuing the conversion process.

ACTION: None.

NMMGRVERERR 77

MESSAGE: The default NS LINK physical path is 6/4.2; User modification may be needed. (NMMGRVERERR 77)

CAUSE: The default physical path has been set to 6/4.2.

ACTION: Confirm that this value is correct for your system and modify it with NMMGR if needed.

NMMGRVERERR 78

MESSAGE: The default DTS LINK physical path is 2/4.2; User modification may be needed. (NMMGRVERERR 78)

CAUSE: The default physical path has been set to 2/4.2.

ACTION: Confirm that this value is correct for your system and modify it with NMMGR if needed.

NMMGRVERERR 80

MESSAGE: An error has occurred during LINKCONF CONVERSION. (NMMGRVERERR 80)

CAUSE: An error occurred during the LINKCONF part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 81

MESSAGE: An error has occurred during IMF CONVERSION. (NMMGRVERERR 81)

CAUSE: An error occurred during the IMF part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 82

MESSAGE: An error has occurred during SNA CONVERSION. (NMMGRVERERR 82)

CAUSE: An error occurred during the SNA part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 83

MESSAGE: An error has occurred during NRJE CONVERSION. (NMMGRVERERR 83)

CAUSE: An error occurred during the NRJE part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 84

MESSAGE: An error has occurred during LOGGING CONVERSION. (NMMGRVERERR 84)

CAUSE: An error occurred during the LOGGING part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See "Submitting a CR" at the beginning of this appendix.

NMMGRVERERR 85 **MESSAGE: An error has occurred during NETXPORT CONVERSION. (NMMGRVERERR 85)**

CAUSE: An error occurred during the NETXPORT part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMMGRVERERR 86 **MESSAGE: An error has occurred during LAPB LINK CONVERSION. (NMMGRVERERR 86)**

CAUSE: An error occurred during the LAPB LINK part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMMGRVERERR 87 **MESSAGE: An error has occurred during DTS CONVERSION. (NMMGRVERERR 87)**

CAUSE: An error occurred during the DTS part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMMGRVERERR 88 **MESSAGE: An error has occurred during LAN LINK CONVERSION. (NMMGRVERERR 88)**

CAUSE: An error occurred during the LAN LINK part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure

that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMMGRVERERR 89

MESSAGE: Duplicate host luname (!) found in node !. (NMMGRVERERR 89)

CAUSE: The configuration file contains an SNANODE that contains two or more lus that have the same name. Only the first lu found is converted. The other names are skipped, and the conversion will continue.

ACTION: Use the same version of NMMGR that created it to modify the unconverted configuration file. Delete the duplicate lu names or change them to unique names and then convert the configuration file.

NMMGRVERERR 90

MESSAGE: Can’t find host luname. Nau = !, Node = !. (NMMGRVERERR 90)

CAUSE: The host luname is not configured in the configuration file. Therefore, this nau is not converted.

ACTION: Use the same version of NMMGR that created it to modify the unconverted configuration file. Either delete the host luname or add the host lu and then convert the configuration file.

NMMGRVERERR 91

MESSAGE: An error has occurred during LINK CONVERSION. (NMMGRVERERR 91)

CAUSE: An error occurred during the LINK part of the conversion process. The actual error is listed in an error message which should be displayed along with this one.

ACTION: Restore a backup copy of the configuration file if possible. Use the version of NMMGR that created the configuration file to make sure that each data screen in the configuration file has data associated with it and that its data flag is set to Y. Run NMMGRVER again. If the same error occurs again, check any accompanying error message and take the action listed for it in this appendix. If this fails, submit a Change Request. See “Submitting a CR” at the beginning of this appendix.

NMMGRVERERR 92

MESSAGE: The default SNA/SDLC LINK physical path is 24; User modification may be needed. (NMMGRVERERR 92)

CAUSE: The default physical path has been set to 24, which may be correct for the given system.

ACTION: Run NMMGR, confirm this value, and modify it as needed.

NMMGRVERERR 93

MESSAGE: The default LAPB LINK physical path is 24; User modification may be needed. (NMMGRVERERR 93)

CAUSE: The default physical path has been set to 24, which may be correct for the given system.

ACTION: Run NMMGR, confirm this value, and modify it as needed.

NMMGRVERERR 94

MESSAGE: An error has occurred during APPC CONVERSION. (NMMGRVERERR 94)

CAUSE: During the APPC conversion process an error occurred.

ACTION: User should restore file with backup copy and use the version of NMMGR that had created it to confirm that each data screen has data associated with it. Each data screen should have its data flag set to Y. If this does not solve the problem, consult your Hewlett-Packard representative.

ND Error Messages

NDIERR messages are produced by errors from the Network Directory intrinsics. In most cases, they are accompanied by other messages (NMGRERRs or MPE File System errors). You should take the action recommended for the accompanying messages first.

NDIERR 001 **MESSAGE: Directory file not open. (NDIERR 001)**

CAUSE: No directory file was opened.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 002 **MESSAGE: Directory is not open for write access. (NDIERR 002)**

CAUSE: The currently opened directory was not opened with write access.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 003 **MESSAGE: FLOCK failed — internal error. (NDIERR 003)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 004 **MESSAGE: Requires Network Administrator capability. (NDIERR 004)**

CAUSE: User does not have network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 006 **MESSAGE: Not enough room in directory for new entry. (NDIERR 006)**

CAUSE: The directory file is full.

ACTION: Expand the directory file capacity using the NMMGR maintenance mode EXPANDDIR command.

NDIERR 007 **MESSAGE: FCONTROL/FUNLOCK failed — internal error. (NDIERR 007)**

CAUSE: The directory file is full.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 008 **MESSAGE: Name type invalid; must be 1 (NS node name). (NDIERR 008)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 009 **MESSAGE: Name length invalid for name type. (NDIERR 009)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 010 **MESSAGE: Path report list length cannot be negative. (NDIERR 010)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 011 **MESSAGE: Path report list length > than ND’CREATE maximum. (NDIERR 011)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 012 **MESSAGE: Duplicate node name in directory — cannot add new entry. (NDIERR 012)**

CAUSE: An entry with the same node name and global/local flag setting already exists in the directory.

ACTION: Supply a different node name and/or global/local setting.

NDIERR 013 **MESSAGE: FFINDBYKEY failed — corrupt file likely. (NDIERR 013)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 020 **MESSAGE: Directory file not open. (NDIERR 020)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 021 **MESSAGE: Cannot close directory file — internal error. (NDIERR 021)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 022 **MESSAGE: Requires Node Manager or Network Administrator capability. (NDIERR 022)**

CAUSE: User does not have Node Manager or Network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 040 **MESSAGE: Directory size too small; must be > 0. (NDIERR 040)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 041 **MESSAGE: Directory size too large; must be <= 10,000 records. (NDIERR 041)**

CAUSE: Directory size parameter too large.

ACTION: 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. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 042 **MESSAGE: Maximum path report list length negative; must be > 0. (NDIERR 042)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 043 **MESSAGE: Maximum path report list length too large; must be <= 500. (NDIERR 043)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 044 **MESSAGE: Cannot create directory file. (NDIERR 044)**

CAUSE: The network directory file could not be opened.

ACTION: See the accompanying file system error message for problem resolution.

NDIERR 045 **MESSAGE: FWRITE of header record failed — internal error. (NDIERR 045)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 046 **MESSAGE: FCLOSE failed — internal error. (NDIERR 046)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 047 **MESSAGE: Directory name cannot contain a lockword. (NDIERR 047)**

CAUSE: Directory file names may not be lockword protected.

ACTION: Resubmit the file name with no lockword or a null lockword.

NDIERR 048 **MESSAGE: Requires Network Administrator capability. (NDIERR 048)**

CAUSE: User does not have Node Manager or Network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 060 **MESSAGE: ND’FSERR called when no file system error had occurred. (NDIERR 060)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 080 **MESSAGE: Directory file not open. (NDIERR 080)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 081 **MESSAGE: Item number invalid; must be 1, 2, 3, 4, 5, or 6. (NDIERR 081)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 082 **MESSAGE: Requires Node Manager or Network Administrator capability. (NDIERR 082)**

CAUSE: User does not have Node Manager or Network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 083 **MESSAGE: FGETINFO failed — internal error. (NDIERR 083)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 084 **MESSAGE: FLOCK failed — internal error. (NDIERR 084)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 085 **MESSAGE: FCONTROL/FUNLOCK failed — internal error. (NDIERR 085)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 100 **MESSAGE: Cannot open directory file. (NDIERR 100)**

CAUSE: Could not open the directory file due to various MPE file system errors.

ACTION: Consult accompanying file system error message for problem resolution.

NDIERR 101 **MESSAGE: FGETINFO failed — internal error. (NDIERR 101)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 102 **MESSAGE: Wrong filecode for directory file; expected 1211. (NDIERR 102)**

CAUSE: The file name specified is not a network directory file.

ACTION: Correct filename to refer to a network directory file.

NDIERR 103 **MESSAGE: Access mode invalid; must be 0 or 1. (NDIERR 103)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 104 **MESSAGE: Share option invalid; must be 0, 1, 2 or 3. (NDIERR 104)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 105 **MESSAGE: FLOCK failed — internal error. (NDIERR 105)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 106 **MESSAGE: Incompatible directory version — outdated directory. (NDIERR 106)**

CAUSE: The current level of software does not support the format of the directory file.

ACTION: Install correct versions of NMC software or restore correct version of the network directory file.

NDIERR 107 **MESSAGE: FCONTROL/FUNLOCK failed — internal error. (NDIERR 107)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 108 **MESSAGE: FCLOSE failed — internal error. (NDIERR 108)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 109 **MESSAGE: Directory name cannot contain a lockword. (NDIERR 109)**

CAUSE: The network directory file cannot be lockword protected.

ACTION: Remove the lockword from the filename, or replace it with a null lockword.

NDIERR 110 **MESSAGE: Requires Node Manager or Network Administrator capability. (NDIERR 110)**

CAUSE: User does not have Node Manager or Network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 111 **MESSAGE: File is not a Network Directory. (NDIERR 111)**

CAUSE: 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.

ACTION: Correct the filename.

NDIERR 120 **MESSAGE: One or more required parameters are missing. (NDIERR 120)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 121 **MESSAGE: Directory file not open. (NDIERR 121)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 122 **MESSAGE: Relop parameter invalid; must be 0, 1 or 2. (NDIERR 122)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 123 **MESSAGE: Name type invalid; must be 1 (NS node name). (NDIERR 123)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 124 **MESSAGE: Name length invalid for name type. (NDIERR 124)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 125 **MESSAGE: FFINDBYKEY failed — corrupt file likely. (NDIERR 125)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 126 **MESSAGE: Cannot find a matching node name in the directory. (NDIERR 126)**

CAUSE: 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.

ACTION: Supply the nodename of an existing entry, or a generic key to satisfy the match.

NDIERR 127 **MESSAGE: FREAD failed — corrupt file likely. (NDIERR 127)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 128 **MESSAGE: FLOCK failed — internal error. (NDIERR 128)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 129 **MESSAGE: FCONTROL/FUNLOCK failed — internal error. (NDIERR 129)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 130 **MESSAGE: Requires Node Manager or Network Administrator capability. (NDIERR 130)**

CAUSE: User does not have Node Manager or Network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 131 **MESSAGE: Select parameter invalid; must be 0, 1 or 2. (NDIERR 131)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 132 **MESSAGE: FSPACE failed — corrupt file likely. (NDIERR 132)**

CAUSE: Probable corrupt directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see "Submitting a CR" at the beginning of this appendix.

NDIERR 140 **MESSAGE: Directory is not open. (NDIERR 140)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 141 **MESSAGE: Directory is not open for write access. (NDIERR 141)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 142 **MESSAGE: FLOCK failed — internal error. (NDIERR 142)**

CAUSE: Internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 143 **MESSAGE: Cannot remove node name — internal error. (NDIERR 143)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 144 **MESSAGE: Requires Network Administrator capability. (NDIERR 144)**

CAUSE: User does not have Network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 145 **MESSAGE: FREAD failed — corrupt file likely. (NDIERR 145)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see "Submitting a CR" at the beginning of this appendix.

NDIERR 146 **MESSAGE: FCONTROL/FUNLOCK failed — internal error. (NDIERR 146)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 147 **MESSAGE: Name type invalid; must be 1 (NS node name). (NDIERR 147)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 148 **MESSAGE: Name length invalid for name type. (NDIERR 148)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 149 **MESSAGE: FFINDBYKEY failed — corrupt file likely. (NDIERR 149)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see "Submitting a CR" at the beginning of this appendix.

NDIERR 150 **MESSAGE: No such name in directory — cannot remove it. (NDIERR 150)**

CAUSE: The name does not exist in the directory file.

ACTION: Correct the nodename and/or global/local setting.

NDIERR 160 **MESSAGE: Directory file not open. (NDIERR 160)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 161 **MESSAGE: Requires Node Manager or Network Administrator capability. (NDIERR 161)**

CAUSE: User does not have Node Manager or Network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 162 **MESSAGE: Request parameter invalid; must be 1 or 2. (NDIERR 162)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 163 **MESSAGE: FREADBYKEY failed — corrupt file likely. (NDIERR 163)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see "Submitting a CR" at the beginning of this appendix.

NDIERR 164 **MESSAGE: FREAD failed — corrupt file likely. (NDIERR 164)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see "Submitting a CR" at the beginning of this appendix.

NDIERR 165 **MESSAGE: FLOCK failed — internal error. (NDIERR 165)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 166 **MESSAGE: FCONTROL/FUNLOCK failed — internal error. (NDIERR 166)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 167 **MESSAGE: Cannot read node name backreference record — corrupt file likely. (NDIERR 167)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see "Submitting a CR" at the beginning of this appendix.

NDIERR 180 **MESSAGE: FOPEN of message catalog failed. (NDIERR 180)**

CAUSE: The message catalog NMMGRCAT.PUB.SYS could not be opened. Possible CAUSEs and solutions include incorrect software installation, insufficient user access rights to the file, or incorrect version of software.

ACTION: Restore NMMGRCAT.PUB.SYS from a backup tape, increase user's access rights, or reinstall the product.

NDIERR 181 **MESSAGE: GENMESSAGE failed. (NDIERR 181)**

CAUSE: A message could not be read from the message catalog. A possible CAUSE is incorrect version of the software.

ACTION: Reinstall the product.

NDIERR 190 **MESSAGE: Error in NMCONF Intrinsic; check for error status. (NDIERR 190)**

CAUSE: A problem was encountered when calling an NMCONF procedure.

ACTION: Refer to the accompanying NMCONF error message.

NDIERR 191 **MESSAGE: Error in Network Directory intrinsic; check for error status. (NDIERR 191)**

CAUSE: This is an internal error.

ACTION: 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.

NDIERR 192 **MESSAGE: Requires Network Administrator capability. (NDIERR 192)**

CAUSE: User does not have Network Administrator capabilities.

ACTION: Change user capabilities.

NDIERR 200 **MESSAGE: File recovery: cannot open message catalog. (NDIERR 200)**

CAUSE: The message catalog NMMGRCAT.PUB.SYS could not be opened. Possible CAUSEs include: improper product installation, insufficient user access rights to the catalog file, or an incorrect version of the software installed.

ACTION: Reinstall the product, increase the user's access rights, or restore NMMGRCAT.PUB.SYS from a backup tape.

NDIERR 201 **MESSAGE: File recovery: FOPEN of temporary command file failed. (NDIERR 201)**

CAUSE: MPE could not open a scratch file to write file recovery commands into. This could be CAUSEd by one or more of the following reasons:

- Duplicate file name. BeCAUSE the file name generated is random, this CAUSE is very unlikely.
- User does not have Save Files capability.
- Other file system error.

ACTION: 1. Consult the associated file system error for problem resolution.

ACTION: 2. Attempt manual recovery of the directory file using KSAMUTIL.PUB.SYS.

NDIERR 202 **MESSAGE: File recovery: GEMMESSAGE failed. (NDIERR 202)**

CAUSE: Could not read a message from the catalog NMMGRCAT.PUB.SYS. A possible CAUSE is that an incorrect version of the software is installed.

ACTION: Reinstall the product, restore NMMGRCAT.PUB.SYS, or attempt manual recovery of the directory file using KSAMUTIL.PUB.SYS.

NDIERR 203 **MESSAGE: File recovery: FWRITE to temporary command file failed. (NDIERR 203)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 204 **MESSAGE: File recovery: FCLOSE of temporary command file failed. (NDIERR 204)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 205 **MESSAGE: File recovery: CREATEPROCESS of KSAMUTIL.PUB.SYS failed. (NDIERR 205)**

CAUSE: Problem encountered trying to create a son process to run KSAM.PUB.SYS. It is possible that the program file KSAMUTIL.PUB.SYS is missing.

ACTION: Restore KSAMUTIL.PUB.SYS

CAUSE: Out of some type of system resource — check SYSDUMP configuration.

ACTION: Consult CREATEPROCESS errors in the *MPE Intrinsics Reference Manual*.

NDIERR 206 **MESSAGE: File recovery: cannot open directory file exclusively. (NDIERR 206)**

CAUSE: The network directory file could not be opened exclusively in order to recover the file.

ACTION: See the accompanying file system error message. If FSERR 192 is displayed, recover the network directory file.

NDIERR 207 **MESSAGE: File recovery: FCLOSE failed — internal error. (NDIERR 207)**

CAUSE: This is an internal error.

ACTION: See "Submitting a CR" at the beginning of this appendix.

NDIERR 208 **MESSAGE: File recovery: FFINDBYKEY failed — internal error. (NDIERR 208)**

CAUSE: Network directory file is irrecoverable.

ACTION: Attempt manual recovery of the file using KSAMUTIL.PUB.SYS or restore the data and key files from a backup tape.

NDIERR 209 **MESSAGE: File recovery: FREAD failed — internal error. (NDIERR 209)**

CAUSE: Network directory file is irrecoverable.

ACTION: Attempt manual recovery of the file using KSAMUTIL.PUB.SYS or restore the data and key files from a backup tape.

NDIERR 220 **MESSAGE: FPOINT to header record failed — corrupt file likely. (NDIERR 220)**

CAUSE: The file is corrupt, empty, or is not a network directory file.

ACTION: Restore the data and key files from a backup tape.

NDIERR 221 **MESSAGE: FREADC of header record failed — corrupt file likely. (NDIERR 221)**

CAUSE: The file is not a KSAM file (and thus not a network directory file), or is a corrupt network directory.

ACTION: Restore the proper KSAM file from a backup tape (data and key files) or attempt manual recovery on the file using KSAMUTIL.PUB.SYS.

NDIERR 222 **MESSAGE: Length of header record incorrect — corrupt file likely. (NDIERR 222)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 230 **MESSAGE: FPOINT to header record failed. (NDIERR 230)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 231 **MESSAGE: FUPDATE of header record failed. (NDIERR 231)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 240 **MESSAGE: FUPDATE of existing record failed. (NDIERR 240)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 241 **MESSAGE: FWRITE of new record failed. (NDIERR 241)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 250 **MESSAGE: Actual path report list length differs from passed length. (NDIERR 250)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 251 **MESSAGE: Path report list length too small to support minimal report. (NDIERR 251)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 252 **MESSAGE: Domain report in path report list too short (< 6 bytes). (NDIERR 252)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 253 **MESSAGE: Version of domain report in path report list <> 0. (NDIERR 253)**

CAUSE: The version number (1st octet) of a domain indicates an unsupported version.

ACTION: Possible version mismatch; reinstall the product. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 254 **MESSAGE: Domain number of domain report in path report list 1. (NDIERR 254)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 260 **MESSAGE: Cannot read a node name back reference record — corrupt file likely. (NDIERR 260)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 261 **MESSAGE: A required node name record is not in dir — corrupt file likely. (NDIERR 261)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 262 **MESSAGE: FUPDATE failed — internal error. (NDIERR 262)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 270 **MESSAGE: FGETINFO failed — internal error. (NDIERR 270)**

CAUSE: This is an internal error.

ACTION: See “Submitting a CR” at the beginning of this appendix.

NDIERR 271 **MESSAGE: FFINDBYKEY failed — corrupt file likely. (NDIERR 271)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see “Submitting a CR” at the beginning of this appendix.

NDIERR 272 **MESSAGE: FREAD failed — corrupt file likely. (NDIERR 272)**

CAUSE: Possible corrupt network directory file.

ACTION: Restore the data and key files from a backup tape. If this fails, see “Submitting a CR” at the beginning of this appendix.

FMT Error Messages

Listed are the messages that are generated by the Link Trace Formatter. They are displayed on the user terminal when running NMDUMP.

If you must submit a CR or call your HP representative, please copy the error *exactly as it appears on the terminal;* it will make determining the CAUSE of the problem easier. These messages are not logged.

The messages are listed in numerical order according to the error number.

FMTERR 995 **MESSAGE: SUBSYSxxTRACEFORMAT CM STUB ERROR (nnn,sss) FROM HPLOADNMPROC**

UNABLE TO CALL NM TRACE FORMATTER ROUTINE (FMTERR 995)

CAUSE: The CM Stub could not load an NM WAN Trace Formatter routine for subsystem “xx” from the system library XL.PUB.SYS.

ACTION: Incorrect software installation to run Native-Mode Trace Formatters. The SWITCH error number is “nnn” and the subsystem reporting the error is “sss”. Call your HP representative.

FMTERR 996 **MESSAGE: SUBSYSTEM_xx_MENU CM STUB ERROR (nnn,sss) FROM HPSWTONMNAME**

UNABLE TO CALL NM MENU ROUTINE (FMTERR 996)

CAUSE: The CM Stub could not call the named NM WAN Trace Formatter options menu routine for subsystem “xx” from the system library XL.PUB.SYS.

ACTION: Incorrect software installation to run Native-Mode Trace Formatters. This could also be caused by incorrect privilege levels. The SWITCH error number is “nnn” and the subsystem reporting the error is “sss”. Call your HP representative.

FMTERR 998 **MESSAGE: SUBSYSxxTRACEFORMAT CM STUB ERROR (nnn,sss) FROM HPSWTONMPLABEL**

UNABLE TO CALL NM TRACE FORMATTER ROUTINE (FMTERR 998)

CAUSE: The CM stub successfully loaded the NM WAN Trace Formatter routine for subsystem “xx” from the system library XL.PUB.SYS, but could not call it.

ACTION: Incorrect software installation to run Native-Mode Trace Formatters. This could also be caused by incorrect privilege levels or a bug in the NM WAN Trace Formatter CM Stub. The SWITCH error number is “nnn” and the subsystem reporting the error is “sss”. Call your HP representative.

FMTERR 999

MESSAGE: SUBSYSxxTRACEFORMAT CM STUB ERROR (nnn,sss) FROM HPSWTONMNAME

UNABLE TO CALL NM TRACE FORMATTER ROUTINE (FMTERR 999)

CAUSE: The CM Stub could not call the named NM WAN Trace Formatter routine for subsystem “xx” in the system library XL.PUB.SYS.

ACTION: Incorrect software installation to run Native-Mode Trace Formatters. This could also be caused by incorrect privilege levels. The SWITCH error number is “nnn” and the subsystem reporting the error is “sss”. Call your HP representative.

4024

MESSAGE: ALL overrides other selections entered at the same time

CAUSE: Among the filter-set numbers you entered, you also specified the number for ALL. This is a warning.

ACTION: Check your input. Unless you mistyped one of the other set numbers, it does not make sense to specify ALL along with other items, because ALL would include the other sets anyway. To retype the input after this warning, you must first return to the filter-set selection menu.

4025

MESSAGE: Warning: Errors always print; for Errors only don’t include other sets

CAUSE: Among the filter-set numbers you entered, you also specified the number for ERRORS-ONLY. This is a warning.

ACTION: Check your input. Unless you mistyped one of the other set numbers, it does not make sense to specify ERRORS-ONLY along with other items, because including the other items would defeat the meaning of ERRORS-ONLY. To retype your input after this warning you must first return to the filter-set selection menu.

4026

MESSAGE: Input truncated to 80 characters

CAUSE: The input file to the user menu was given more than 80 characters of input, but the menu can only accept 80. This is a warning.

ACTION: If the extra characters are just extra blanks, ignore this message or reduce the width of the input file. But if the extra characters are nonblank, you must edit the input file, finding a way to reduce the width of the input data to no more than 80 characters.

4027

MESSAGE: Extra input ignored

CAUSE: Only one number was expected, but you entered more than one, and the extra number(s) were ignored. This is a warning.

ACTION: Check your input and, if necessary, return to that prompt and retype the input.

4028 **MESSAGE: Range error at position shown; other values accepted if allowed**

CAUSE: One of the numbers you entered was out of range; a "^^" indicator appears below the illegal number. The number entered was probably much too large.

ACTION: The bad value was not accepted. Press the **Return** key to keep the other values on the same line, or else retype the entire input using only legal values.

4029 **MESSAGE: Syntax error at position shown; other values accepted if allowed**

CAUSE: Some of the numbers on the input line contained illegal characters, or were separated by illegal characters. Legal inputs are digits 0–9 and the question mark "?". Legal separators for a list are the comma "," and the blank " ".

ACTION: Retype the input.

4030 **MESSAGE: Invalid set number NN; reenter all or hit RETURN to keep others**

CAUSE: One of the filter-set numbers you selected is not one of the valid filter sets for this formatter.

ACTION: Check your input against the available sets shown in the menu. Press the **Return** key to keep the other number(s) you entered on the same line, or you may retype the entire input. You may also return to the main menu and "set all options back to their default values."

4031 **MESSAGE: Output limit out of range; enter another number or hit RETURN**

CAUSE: You have selected a value which is less than the lower output limit or greater than the upper output limit.

ACTION: The value you selected was not accepted. Reenter a value which is within the range shown in the prompt. The prompt is meant as a reminder; values up to 4096 are also legal.

4032 **MESSAGE: Invalid option number NN ignored; others accepted**

CAUSE: One of the option numbers you selected at the main menu was not a valid option number for this formatter.

ACTION: The illegal option number was ignored, but any other options on the same line were executed. Check your input and retype if necessary.

4033 **MESSAGE: Number of inputs exceeds storage capacity, rest ignored**

CAUSE: Bug in Trace Formatter numeric input processing. The formatter could not process all the numbers entered by the user.

ACTION: Check your input and retype if necessary. If the problem continues to occur, submit an HP Change Request form against the Trace Formatter, specifying the input you tried and the subsystem you were trying to format. A temporary solution might be to type fewer numbers.

4034 **MESSAGE: CIERROR NNNN while executing MPE command**

CAUSE: The MPE command you tried encountered an error. MPE returned error number NNNN to the Formatter (MPE warnings are ignored).

ACTION: Check your input. If necessary, retype the MPE command. You may look up the Command Interpreter error number in the *NS 3000/iX Error Messages Reference Manual*.

4035 **MESSAGE: MISSING OPT EXECUTOR #NN; PLEASE SUBMIT HP CHANGE REQUEST**

CAUSE: Bug in Trace Formatter option execution processing. The formatter recognized an option you typed, but could not find processing for the option.

ACTION: Submit an HP Change Request form against the Formatter, specifying what input you typed and what subsystem you were trying to format.

none **MESSAGE: MISSING MESSAGE #NNNN**

CAUSE: Bug in Trace Formatter error message processing. The explanatory text for error number NNNN is missing from the formatter.

ACTION: Submit an HP Change Request form against the Formatter, specifying what input you typed and what subsystem you were trying to format.

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