Comm-Pro Associates
Host Network Access Support

HNAS

Messages and Codes Debugging Guide

V2R4M0

Please see next page for important
information concerning your
Host NAS distribution materials.

This file revised November 8, 2012 9:32 am, includes maintenance thru 2400111.

General Information

Comm-Pro Associates is the designer and developer of the X.25 Host Network Access Support host resident Program Product (Commonly referred to as **Host NAS** or **HNAS**). The Host NAS product provides support for X.25 connectivity over router based networks using IBM's X.25 through TCP/IP (**XTP**) or Cisco's X.25 over TCP/IP (**XOT**) transport protocols. The HNAS implementation was designed to avoid application changes by providing a transparent migration from IBM 3745 NSPI based communication controllers to the HNAS router based solution. The product offering provides a robust suite of non-SNA NPSI type support. Please refer to Chapter 1 (Introduction) for a complete list of products and Applications supported.

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For additional documentation and up-to-date information, please refer to member @README in the Comm-Pro distribution macro library. See our WEB site for the latest information.

Important Notes

1) Please refer to the optional README/@README file included with the HNAS product distribution media (separate file or HNASMAC macro member) for additional product information and documentation not included in this manual. Additional information can also be located on our web site (Please refer to Contact Information section for contact details).

Preface

Comm-Pro Biography

Comm-Pro Associates, Inc. was formed in 1973 to provide software packages designed to enhance the performance of early IBM 3705 communications controllers. IBM sold Comm-Pro's PP04 software package as the PEP Extended Features PRPQ. Comm-Pro is a privately held corporation.

Comm-Pro's X.25 Network Access Support (NAS) provided X.25 access to EP and NCP host applications and provided expanded support over what was provided by NPSI. Over the years Comm-Pro has worked extensively with IBM on special projects and custom environments. This product was introduced in 1976 and continues to be in use today at a limited number of customer sites. That's over 30 years of service.

HNAS, which allows X25 links to communicate with host programs without the need for a 37xx controller, was first implemented for IBM routers employing the XTP (X25 over TCP/IP) protocol in 1998. IBM specifically selected Comm-Pro to develop the software and much of the initial testing was done at IBM Raleigh. HNAS was developed for Cisco routers employing the XOT protocol in 1999. Due to changes in IBM's business strategy the router line was dropped. As a result, HNAS now is primarily used with Cisco routers and German AGIS Bin-Tec routers.

Special Notices

This book is furnished as is. Comm-Pro assumes no responsibility for the use of the functions described in this book in any manner.

The Host NAS licensed program described in this documentation and all license material available for it are provided by Comm-Pro under terms of the Software Use Agreement provided by Comm-Pro or it's Business Partner's.

Trademarks

X.25 Host NAS is fully year 2000 compliant.

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Related Publications

Related publications, providing reference material for this product are:

RFCs
- RFC1613 - XOT (X25 Over TCP)

Comm-Pro Associates
- Host NAS Configuration Guide and Reference
- Host NAS Messages and Codes Debugging Guide
- Host NAS Console Subsystem Operations Guide
- Host NAS Console Subsystem Operations Guide & Trace Formats
- Host NAS Master Index (Including Master Revision Index)

Please refer to the Documentation Overview section for additional information on the HNAS documentation organization and edistribution locations.

Cisco Systems

Keywords - XOT (X.25 over TCP/IP, formerly tunneling), X.25 Switching and X.25 LAPB)
- Cisco IOS Configuration Fundamentals, Network Protocols and various modules
- Cisco IOS Wide-Area Networking Configuration Guide - X.25 and LAPB (78-11751-01)
- Cisco IOS Wide-Area Networking Command Reference - X.25 and LAPB (78-011752-01)
- Cisco IOS Software Command Summary
- Cisco IOS Software Error Messages
- Cisco Debug Command Reference (Use with Internetwork Troubleshooting Guide)

Cisco Connection online documentation is available online at the following Web Site link:

www.cisco.com/univercd/home/home.htm

IBM Corporation

Keywords - XTP (X.25 through TCP/IP), X.25 MAS and X.25 LAPB)
- IBM Communication Controller Migration Guide (/redbooks/SG246298.html)
- IBM NCP and NPSI - X.25 Planning and Installation (SC30-3470-nn)
- IBM NCP and NPSI - X.25 Diagnosis, Customization and Tuning (LY30-5610-nn)
- IBM - IP Application Programming Interface Guide (SC31-8788)
  (TCP/IP Stack information, including the list of TCP/IP Stack **ERRNO** return codes
- IBM - Access Integration Services - Software User's Guide (SC30-3988/SC30-3998)
  (NWAYS Multiprotocol Access Services - IBM 22nn)

Several IBM documentation manuals relating to **ACF/NCP, ACF/SSP, ACF/VTAM, EP** and **NPSI** are available for viewing or downloading at the following IBM Web Site link:

www.networking.ibm.com/375/public.html

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Emergency Support Information

Comm-Pro Associates, Inc. HNAS emergency technical support is available by contacting our office, phone attendants are available 24 hours a day, 7 days a week. Our technical support representatives are usually available to provide immediate support during our standard business hours of 07:00 AM to 04:30 PM Monday through Friday. There are times during our **standard** business hours when phone calls will initially be handled by our non-technical phone attendants. In these cases, calls will be handled the same as our non-standard hours support.

During **non-standard** business hours, our phone attendant will gather any appropriate customer information for call back. The attendant will then attempt to locate a technical support representative to assist you. Your phone call will either be directly connected to a technician or receive a call back with-in a reasonable time frame.

We recommend that all customers provide problem descriptions **via E-mail** as well as trace or dump (ABEND) diagnostics via E-mail or ftp so that we can begin work on the problem as soon as possible. It's a good idea to always provide a copy of the CDF (configuration data file) and the product level information (see DNAS display output which is provided at the beginning of all HNAS sysprint output).

You may also obtain emergency support by e-mail notification. Under emergency situations your e-mail transmission should always be followed up with a phone call if you haven't received an e-mail response with-in a reasonable time frame. This is primarily because our e-mail services are primarily only monitored during our standard office hours. Please refer to our contact page for contact numbers and E-mail addresses.

International users should contact their Comm-Pro Business Partners for first level support, if applicable.

General Support Information

General product support is provided to all licensed HNAS users. Responses to customer inquiries are typically provided with-in 24 hours during normal business hours.

As indicated under Emergency Support Information above, we recommend that all customers provide problem reporting (as well as support questions regarding configuration or run time issues) via E-mail.

Questions or problems reported via e-mail outside of our standard business hours will often be responded to on the day of the inquiry if received before 10:00 PM Pacific Time (GMT-8).

FAX / Facsimile - Direct service no longer provided

We no longer provide direct Fax / Facsimile service in our offices. E-mail and FTP are the primary methods supported for electronic document or image delivery.

Should there be a requirement to send a Fax from your organization to Comm-Pro there are a couple of potential options:

- Make arrangements with a fax-to-email service that can accept your fax and route via email to Comm-Pro at support@comm-pro.com.

- Call (during standard business hours) or e-mail a Comm-pro representative to see if a onsite fax session can be temporarily enabled with a temporary phone number, if available.

Note: Our old fax numbers 661/287-1646 and 661/291/2324 were retired and are no longer in service.

HNAS Documentation Overview

The HNAS product documentation manuals (currently 4 primary publications and a master index guide) are provided below with their respective sections listed for ease of information source retrieval and viewing. Supplemental booklet references (as applicable) are also provided in this section.

Documentation manuals for the HNAS products are available in PDF format for individual books (vrm_HNASBook|MsgCodes|Console|ConsTrc|MasterIndex_yyyy-mm-dd.pdf) and collectively in zip archive files (vrm_HNASBooks_yyyy-mm-dd.zip).

These manuals are primarily available on our FTP server (userid required) or can be obtained by contacting a HNAS marketing and support representative for an alternate form of PDF documentation delivery. The PDF files were designed for duplex printing although the content can be printed in simplex (one sided) mode.

All HNAS documentation manuals and books provide the revision date on the bottom left corner of the header page "**This file revised Month, day (dd), year (yyyy) time (hh:mm) am|pm"**. As of February 15, 2006, "**,includes maintenance thru 2400nnn.**" is also provided in the header page to reflect the maintenance level that the documentation level reflects.

The documentation manuals are downward compatible with older HNAS releases. Every effort is made to identify and label new features or changes at the HNAS vrm level that the change was introduced. As we add APARs fixes and enhancement content, we denote the APAR numbers associated with the new parameters, alert messages and content whenever possible.

HNAS APAR Maintenance Level included in this Documentation:

2400nnn	APAR maintenance level included in this documentation series. Refer to HNAS book cover page 'includes maintenance thru 2400nnn' text.

HNAS Guide and Reference:

-Book File-	240_HNASBook_yyyy-mm-dd.pdf - PDF Format
Prefix	(Prefix) General Information, Contact Information and important Notes. *
Preface	(Preface) Comm-Pro Biography, Special Notices, Trademarks, Related Publications, Emergency Support and General Support. *
DocOView	(Documentation Overview) Descriptive list of HNAS Documentation manuals (books) and Sections. *
Chapter 1	(Introduction) describes the features of the HNAS software.

HNAS Guide and Reference:

Chapter 2	(Installation, Activation and Runtime Guide) describes the procedures used to install the Comm-Pro software from its distribution medium and how to generate and execute an HNAS load module program.
Chapter 3	(Configuration Guide) describes the operational characteristics of Comm-Pro's HNAS software and illustrates how to use configuration definition statements to define HNAS resources.
Chapter 4	(Configuration Reference) describes the configuration definition statements and parameters that are used to define HNAS resources.
Chapter 5	(Migration Reference) describes the configuration operands and run time functions that have changed in this release of HNAS. **Note**: It is important that you review this section prior to refreshing/upgrading from an older HNAS release.
Chapter 6	(Maintenance and APAR Summaries) provides information on maintenance types, installation and APAR (PTF) maintenance memo formats. Memo's are available on the HNAS maintenance Web site FTP Server or via E-mail subscription.
Appendix A	(X.3 PAD Parameters) describes X.3 PAD parameters.
Appendix B	(Configuration Examples) provides an example HNAS configuration data file and the resulting SYSPRINT log files.
Appendix C	(Router Checklist Overview) currently provides a basic overview for defining XOT and X.25 support in a Cisco router for HNAS connectivity. Also describes some of the Cisco diagnostic show and debug commands.
Appendix D	(Changes & New Features) provides an overview of new features provided in the current release as well as historical data for previous releases. In 220 and earlier releases of HNAS this content was provided in the Preface section.
Glossary	(Glossary of Terms) currently provides a reference list and some brief definitions for terms, abbreviation and acronyms that may be used in the HNAS documentation manuals, ftp or web page content.

HNAS Messages and Codes Debugging Guide:

-Book File-	240_MsgCodes_yyyy-mm-dd.pdf - PDF Format
CnfgMsgs	(Configuration Messages) provides information for HNAS configuration messages (Information, Default, Warning, Error, etc.) that can be encountered during HNAS initialization when processing the Configuration Data File (CDF).

HNAS Messages and Codes Debugging Guide:

AlrtMsgs	(Alert Messages) provides information for HNAS alert messages (Info, Warning, Error and Severe) that can be encountered during HNAS activation (after the CDF scan) and during “run time” operation.
BindfCodes	(BIND Failure User Sense Codes) describes reason for BIND failures.
TcpipErrno	(TCP/IP Error Numbers ERRNO) describes reason for TCPIP Errors.
PvcssCodes	(PVC Setup Status Codes RFC-1613) describes PVC Setup Ending Status.
RstCodes	(X.25 Reset Cause and Diagnostic Codes) describes the X.25 Reset Cause and Diagnostic codes that are present in the HNAS environment.
ClrCodes	(X.25 Clear Cause and Diagnostic Codes) describes the X.25 Clear Cause and Diagnostic codes that are present in the HNAS environment. In 230 Extended Diagnostic reason codes were added to the respective clear code entries to further define the cause of the event.
CisMsgs	(Cisco Messages Relating to HNAS Events) describes common Cisco codes in relationship to HNAS events.
SysAbnd	(System Abend Codes - Messages Relating to HNAS Events)
HaltMsgs	(HNAS HALT/NASHALT Messages Relating to HNAS ABEND Events)
ConsMsgs	(Console Command Error Messages) provides diagnostic error messages for some HNAS console subsystem commands.

HNAS Console Subsystem Operations Guide:

-Book File-	240_Console_yyyy-mm-dd.pdf - PDF Format
Console	(Console Subsystem) This document contains the same Console section content as the primary Console Subsystem Operations Guide but does not contains the Trace Entry Formats section. This section was designed for users who prefer to view or print the guide but don’t require use of the estimated 70 pages of Trace Entry Formats.
ConsMsgs	(Console Command Error Messages) provides diagnostic error messages for some HNAS console subsystem commands.

HNAS Console Subsystem Operations Guide & Trace Formats:

-Book File-	240_ConsTrc_yyyy-mm-dd.pdf - PDF Format

HNAS Console Subsystem Operations Guide & Trace Formats:

Console	(Console Subsystem) includes the Console Users Guide that describes the operation of the HNAS console subsystem for local or optional remote consoles.
ConsMsgs	(Console Command Error Messages) provides diagnostic error messages for some HNAS console subsystem commands.
Trace	(Trace Entry Formats) this section provides HNAS trace table entry identifiers, layouts and descriptions of the various trace entries provided by HNAS.

HNAS Master Index - Index Entries for All HNAS Manuals:

-Book File-	240_MasterIndex_yyyy-mm-dd.pdf - PDF Format
Master-Index	(Master Indexes) This document contains the master index. The master index contains the combined book indexes for all of the above referenced HNAS manuals and guides. On 03-17-2004 the Master Revision Index section was removed to avoid confusion that some customers were encountering when searching through the index. This section is now available upon request. **Note**: The master revision index was designed for documentation change control and doesn't contain content suitable for indexing.

HNASBooks in Pkware ZIP Format - All HNAS Manuals:

-All Books-	240_HNASBooks_yyyy-mm-dd.zip - ZIP archive of PDF books
HNASBooks	This zip file contains a collection of HNAS documentation manuals for single file transfer download operation. File CONSTRC is not included is this set, download separately.

***** - Denoted sections available in all documentation manuals.

All HNAS manuals and guides include Prefix sections (General Information, Important Notes), Preface sections (Special Notices, Trademarks, Related Publications), Documentation Overview, Table of Contents and Index sections. See 'Vendor Reference' index entries for additional vendor documentation references.

In 220, The Revision Index was removed from the individual manuals on 07/11/2003 in an effort to eliminate confusion. The Revision Index is still available for viewing in the Master Index manual.

HNAS Documentation Format

Documentation manuals for the HNAS products are available in PDF book format for individual books ***(vrm_book-name_yyyy-mm-dd*.pdf)** and collectively in zip archive file format **(*vrm*_HNASBooks_*yyyy-mm-dd*.zip)**. The PDF files were designed for Adobe Reader viewing and duplex printing although the content can be printed in simplex (one sided) mode. Some documentation content is available in HTML format on our Web site.

HNAS Documentation Locations

HNAS documentation manuals are available for customer download (using registered HNAS FTP server userid/password) at the following FTP Site address:

ftp://ftp.comm-pro4ftp.com/

HNAS documentation information is available online at the following Web Site link:

www.comm-pro.com/hostnas/docs/docindx.htm

Alternate forms of documentation delivery (e-mail file attachment or physical media) can be arranged by contacting your HNAS marketing and support representative. For Comm-Pro directly supported customers, we suggest that you send an e-mail request to the following address with the text 'HNAS Documentation Request' in the subject field of the E-mail:

support@comm-pro.com

HNAS Documentation Maintenance

Every effort is made to provide accurate and up-to-date product documentation for our users. Please don't hesitate to contact us with any corrections or recommendations regarding any of our documentation content. We appreciate your input and efforts.

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Table of Contents

Introduction

This manual contains various message and codes documentation in support of the Comm-Pro Associates' X.25 Host Network Access Support (**HNAS**) program product.

If you are unable to locate HNAS messages (Configuration, Alert, Clear, etc.) in the HNAS documentation manuals then we suggest that you review the APARs and Maintenance Summaries for your current release to see if the message was added after the initial release as an APAR or enhancement. If you are still unable to locate a HNAS message description we suggest that you contact your HNAS support representative for further assistance.

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Configuration Messages

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Configuration Messages

The HNAS initialization process produces diagnostic messages during processing of the Configuration Data File (CDF). The message identifier for each message begins with the string “NAS”. All messages have the following basic format:

NAS	*cdrms*		Description
NAS			**is the Host NAS message identifier.**
	c		**is a component identifier.**
		1	indicates a configuration related message.
	d		**is a definition statement identifier.**
		0	indicates a problem unrelated to the type of definition.
		1	indicates a problem while processing the BUILD definition.
		2	indicates a problem while processing the LOCAL definition.
		3	indicates a problem while processing the REMOTE definition.
	r		**is a reason code.**
		0	indicates that an operand value was omitted.
		1	indicates that an operand value was invalid or in conflict.
		2	indicates that an operand value was in error.
	m		**is a message number.**
	s		**is a severity code.**
		C	indicates information comment message.
		I	indicates information only message.
		D	indicates a default action was taken.
		A	indicates a user action is required.
		W	indicates a warning.
		E	indicates an error.
		S	indicates a severe error.

An ***s-value*** of **C** identifies an informational comment message that does not alter the system Return Code (RC). This ***s-value*** type is typically used as a separator comment between primary operands. **Note that not all informational comment messages are listed in this section since most are self explanatory**.

An ***s-value*** of **I** identifies an informational message that does not alter the system Return Code (RC). **Note that not all informational messages are listed in this section since most are self explanatory**.

An ***s-value*** of **D**, **A** or **W** identifies a problem that **should not** impact HNAS operation. RC=4 is set and configuration processing continues. This ***s-value*** usually means that the placement of a definition statement is incorrect or the value specified for a definition statement operand was omitted, is invalid or is in conflict with another operand value. The condition is either ignored or a default action is taken. In either case, the condition is not considered critical enough to affect the operation of the HNAS control program. If a default action taken by HNAS is not what you had intended, you **SHOULD** stop HNAS, correct the error then restart HNAS.

An ***s-value*** of **E** or **S** identifies a problem that **will** impact HNAS operation. RC=8|12 is set and configuration processing continues. This ***s-value*** usually means that the placement or use of a definition statement is incorrect or the value specified for a definition statement operand is invalid to the extent that it will affect the operation of the HNAS control program. Continued operation is terminated after the CDF is completely processed. You **MUST** correct the error then restart HNAS.

Configuration messages are written to the SYSPRINT file and sent to the master operator console during CDF prescan processing (as directed with start parameters) when HNAS is activated. Message activity can be reduced by enabling specific alarm ***filtering*** and ***limiting*** options via the ALRMFLTR= and ALRMLMTS= operands on the BUILD definition statement.

Note that more than one (1) configuration message can be generated for the same statement or operand error condition.

The leading seven (7) digits of each configuration message represents the identifier while the remaining digit represents the severity.

Configuration messages that have the same identifier (e.g., NAS1301*s*) are **listed alphabetically by operand**. For example, NAS1301E is listed for IFNUM before NAS1301D is listed for INIT.

Note: Some configuration messages that may be considered generic like the following:

`NAS1311`*`s`*`REMOTE` *`opname`* `INVALID,` *`action`*

may be listed specifically by the actual ***opname*** value if additional information is required to convey why the ***action*** is taken (e.g., see NAS1311W REMOTE INIT INVALID).

NAS1000I LOCAL PRESCAN COMPLETE, COUNTS FOLLOW
NAS1000I WALCDFLM=*deflmt* WALCMXCT=*maxcnt* WALCMNCT=*mincnt*

EXPLANATION:

The Configuration Data File (CDF) prescan has completed. LOCAL definition counts are displayed.

WALCDFLM = total number of LOCAL definition statements specified.
WALCMXCT = the number of TYPE=XOT LOCAL definitions specified.
WALCMNCT = the number of TYPE=XTP LOCAL definitions specified.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1000I LOCAL SCAN COMPLETE, COUNTS FOLLOW
NAS1000I WALCDFLM=*deflmt* WALCDFCT=*defcnt* WALCCNLM=*conlmt*
NAS1000I WALCXTPC=*xtpcnt* WALCXOTC=*xotcnt* WALCSHRC=*shrcnt*

EXPLANATION:

The Configuration Data File (CDF) scan has completed. LOCAL definition counts are displayed.

WALCDFLM = total number of LOCAL definition statements specified.
WALCDFCT = total number of LOCAL definition statements processed.
WALCCNLM = total number of LOCAL definitions that can be connected.
WALCXTPC = the number of TYPE=XTP LOCAL definitions that can be connected.
WALCXOTC = the number of TYPE=XOT LOCAL definitions that can be connected.
WALCSHRC = the number of TYPE=XOT LOCAL definitions that can be shared.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1000I REMOTE PRESCAN COMPLETE, COUNTS FOLLOW
NAS1000I WARMDFLM=*deflmt* WARMMXCT=*maxcnt* WARMMNCT=*mincnt*
NAS1000I WARMMTCT=*mxtcnt* WARMPUCT=*spucnt*

EXPLANATION:

The Configuration Data File (CDF) prescan has completed. REMOTE definition counts are displayed.

WARMDFLM = total number of REMOTE definition statements specified.
WARMMXCT = the number of TYPE=MCH|XTP REMOTE definitions specified.
WARMMNCT = the number of TYPE=XOT REMOTE definitions specified.
WARMMTCT = the number of TYPE=MXT REMOTE definitions specified.
WARMPUCT = the number of TYPE=SPU REMOTE definitions specified.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1000I REMOTE SCAN COMPLETE, COUNTS FOLLOW
NAS1000I WARMDFLM=*deflmt* WARMDFCT=*defcnt* WARMCNLM=*conlmt*
NAS1000I WARMXTPC=*xtpcnt* WARMXOTC=*xotcnt* WARMMCHC=*mchcnt*
NAS1000I WARMMXTC=*mxtcnt* WARMSPUC=*spucnt*

EXPLANATION:

The Configuration Data File (CDF) scan has completed. REMOTE definition counts are displayed.

WARMDFLM = total number of REMOTE definition statements specified.
WARMDFCT = total number of REMOTE definition statements processed.
WARMCNLM = total number of REMOTE definitions that can be connected.
WARMXTPC = the number of TYPE=XTP REMOTE definitions that can be connected.
WARMXOTC = the number of TYPE=XOT REMOTE definitions that can be connected.
WARMMCHC = the number of TYPE=MCH REMOTE definitions that can be accessed.
WARMMXTC = the number of TYPE=MXT REMOTE definitions that can be accessed.
WARMSPUC = the number of TYPE=SPU REMOTE definitions that can be accessed.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1000*s* CONFIGURATION ERROR SUMMARY, COUNTS FOLLOW
NAS1000*s* INFO=*imsgcnt* DEFAULT=*dmsgcnt* WARNING=*wmsgcnt*
ERROR=*emsgcnt* SEVERE=*smsgcnt*

EXPLANATION:

The Configuration Data File (CDF) scan has completed. Diagnostic message counts are displayed.

INFO = total number of informational messages issued (RC=0).
DEFAULT = total number of default warning messages issued (RC=4).
WARING = total number of warning messages issued (RC=4).
ERROR = total number of error messages issued (RC=8).
SEVERE = total number of severe error messages issued (RC=12).

The severity code ***s*** in **NAS1000*s*** above will be displayed as either **I**, **D**, **W**, **E** or **S** depending on the maximum return code set during CDF processing.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1001S CONFIGURATION DATA FILE COULD NOT BE OPENED, REQUIRED

EXPLANATION:

The Configuration Data File (CDF) could not be opened.

SYSTEM ACTION:

HNAS processing terminates immediately.

PROGRAMMER ACTION:

Supply a **CONFIG DDNAME** statement in the HNAS start JOB (z/OS, OS/390 and MVS) or a **CONFIG FILEDEF** statement in the NASXEQ EXEC (VM/CMS) and ensure that it points at a valid CDF.

NAS1001S NEW DEFINITION DATA FILE COULD NOT BE OPENED, REQUIRED

EXPLANATION:

The New Definition Data File (NDDF) could not be opened when GENNWDF was specified as an HNAS start parameter.

SYSTEM ACTION:

HNAS processing terminates immediately.

PROGRAMMER ACTION:

Supply a **NEWDEFN DDNAME** statement in the HNAS start JOB (z/OS, OS/390 and MVS) or a **NEWDEFN FILEDEF** statement in the NASXEQ EXEC (VM/CMS) and ensure that it points at a write only file that is available to hold the NDDF.

NAS1002I APPLICATION MAJOR NODE FILE GENERATION IN PROGRESS

EXPLANATION:

This message is generated at the end of a FASTRUN execution when the AMNF file is being produced using the //MAJNODE DDNAME file.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1002W APPLICATION MAJOR NODE FILE COULD NOT BE OPENED, IGNORED

EXPLANATION:

The Application Major Node File (AMNF) could not be opened during FASTRUN processing.

SYSTEM ACTION:

HNAS processing continues. HNAS will not be able to create the AMNF using the information in the CDF.

PROGRAMMER ACTION:

Supply a **MAJNODE DDNAME** statement in the HNAS start JOB (z/OS, OS/390 and MVS) or a **MAJNODE FILEDEF** statement in the NASXEQ EXEC (VM/CMS) and ensure that it points at a write only file that is available to hold the AMNF.

NAS1003I NEW DEFINITION FILE GENERATION IN PROGESS

EXPLANATION:

This message is generated at the end of a FASTRUN execution when the new definition file is being produced using the //NEWDEFN DDNAME file. PARM=GENNWDF must also be specified.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1006I *FASTRUN information*

EXPLANATION:

These messages are generated at the end of a FASTRUN execution to display resource counts and associated memory requirements. An example of the type of *information* is:

```
NAS1006I TOTLAREA: 010EA258 REGION=017825K
```

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1041E DECODE FAILURE, RECORD FOLLOWS

(apar/changed for V2R3M0)

EXPLANATION:

Indicates that the CDF record that follows could not be decoded or the record contains an operand that is not valid for the current definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the invalid statement(s) then restart HNAS.

Note: As of March 9, 2004 (APAR 2300001) the severity code for NAS1041W was changed from W to E. The following System and Programmer Action's were recommended under severity code W:

SYSTEM ACTION:

HNAS processing continues. The invalid record will probably result in a default value being used.

PROGRAMMER ACTION:

If the default value is not, terminate HNAS, correct the statement then restart HNAS.

NAS1100I BUILD *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the BUILD definition statement was processed successfully.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1101*s* BUILD *opname* OMITTED, *action*

EXPLANATION:

Indicates that the ***opname*** operand on the BUILD definition statement was omitted.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1101D BUILD ALRMLMTS LOGGING TABLE LIMIT PARAMETER HAS BEEN RETIRED, 0512 ALWAYS USED

(apar/new for V2R4M0)

EXPLANATION:

Indicates that last (ninth) suboperand of the ALRMLMTS= operand for the BUILD definition statement (alarm logging table limit) specified a value that is no longer supported. This suboperand has been retired because the alarm logging table limit is now forced to 512 by the configuration processing. Heretofore, the alarm logging table was allocated after the CDF was scanned using the alarm logging table limit value you specified (or a default of 256). By allocating the alarm logging table so late, some important alarms like the NAS92*xxs* authorization alarms we not logged. Further, it used to be possible to specify an alarm logging table limit value of zero (0) which would prevent the alarm logging table from being created at all. HNAS will now unconditionally allocate the alarm logging table using a default limit value of 512 as soon as it is started which allow all non-configuration alarms to be logged. SInce this table is an important component for problem resolution, this change means that the alarm logging table will *always* be generated.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

Note: This configuration message was introduced into 240 with APAR 2400089.

NAS1101E BUILD PRTSWLST *subopnum* DDNAME *ddname* CANNOT BE OPENED, REQUIRED

(new for V2R4M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PRTSWLST= operand for the BUILD definition statement specified a DDNAME of ***ddname*** that could not be opened. This is most likely because the specified name was not included in the HNAS start job JCL.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid DDNAME for the PRTSWLST= suboperand or ensure that the specified name is present in the HNAS start job then restart HNAS.

NAS1101W BUILD VCLMT VALUE of *limit* OVERRIDES SUM OF *count* <--- WARNING

EXPLANATION:

Indicates that the VCLMT= operand of the BUILD definition statement specified a value of ***limit*** which overrides the computed VCLMT= operand value of ***count***.

SYSTEM ACTION:

HNAS processing continues. The specified VCLMT= operand value of ***limit*** is used even if it is less than the ***count*** value which is computed by adding the values in effect for the VCLMT= operand of each REMOTE definition in the CDF. This message is issued after the entire CDF is processed.

Warning: Because the BUILD VCLMT= value is less than the required number of virtual circuits needed to support all configured switched SLUs, SVC calls that exceed the BUILD VCLMT= value will be cleared for lack of a VC control block with CAUSE/DIAG=000/130.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1102S BUILD DEFINITION OMITTED, REQUIRED FOR HOST NAS INITIALIZATION

EXPLANATION:

The BUILD definition statement is required to supply global information for HNAS operation. It must be the first definition in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a BUILD definition statement as the first in the CDF then restart HNAS.

NAS1103W LIMIT: BUILD *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the BUILD definition statement could not be saved because operand ***opname*** contains too many suboperands.

For example: if ALRMFLTR=(ALLOW,*msgid*1,...,*msgid*17) is specified on the BUILD definition statement, the following message is displayed when the last ALRMFLTR= suboperand is processed:

```
NAS1103W LIMIT: BUILD   msgid17)
```

This message is issued because the last ALRMFLTR= operand value (*msgid*17) exceeds the limit of 16 allowed for the ALRMFLTR= operand.

SYSTEM ACTION:

HNAS processing continues. The 'extra' suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1111*s* BUILD *opname* INVALID, *action*

EXPLANATION:

Indicates that operand ***opname*** on the BUILD definition statement specified an invalid value.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1111*s* BUILD *opnane=opval* INVALID, *action*

EXPLANATION:

Indicates that ***opval*** is an invalid value for the ***opname*** operand on the BUILD definition statement.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1111W DUPLICATE: BUILD *opname=opval*

EXPLANATION:

Indicates that operand ***opname*** on the BUILD definition statement appears more than once.

SYSTEM ACTION:

HNAS processing continues. The duplicate operand is ignored. The first occurrence of the operand wins.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1111D BUILD ALRMLMTS *subopnum=lmtname* OMITTED, *limit* ASSUMED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the ALRMLMTS= operand of the BUILD definition statement was omitted or its value was invalid. The ALRMLMTS= operand is used to specify alarm limit values for the HNAS console subsystem. Alarm limit types are positional in the ALRMLMTS= operand. Their position, name and default values are listed below:

subopnum	*lmtname*	*limit*
0	TIMER	30
1	INFO	20
2	DEFAULT	10
3	ACTION	20
4	WARNING	25
5	ERROR	30
6	SEVERE	30
7	MISC	10
8	LOG	256

SYSTEM ACTION:

HNAS processing continues. A default ***lmtname*** value of ***limit*** will be used. Please refer to the description of the ALRMLMTS= operand in Chapter 4 of the HNAS Guide and Reference documentation for more information.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1111D BUILD MSGLMT VALUE OF *badvalue* TOO LOW, *limit* ASSUMED

EXPLANATION:

Indicates that the MSGLMT= operand of the BUILD definition statement was specified but the value is lower than the minimum that is required for optimum HNAS performance. The MSGLMT= operand is used to specify the maximum number of TCP/IP requests that HNAS can have outstanding. When this limit is reached, subsequent requests wait for older requests to complete.

SYSTEM ACTION:

HNAS processing continues. A default MSGLMT= operand value of ***limit*** is generated by multiplying the number of REMOTE definition statements in the CDF by two (2) then adding one (1). This message is issued after the entire CDF is processed.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1111D BUILD NASNAME CONFLICTS WITH TCPNAME, TCB ADDRESS

EXPLANATION:

Indicates that the NASNAME= operand of the BUILD definition statement specified a value that was also specified for the TCPNAME= operand. The NASNAME= operand value is ignored.

SYSTEM ACTION:

HNAS processing continues. A default NASNAME= operand value is generated from the HNAS address space Task Control Block (TCB) address.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1111E BUILD *opname=tabname* IS NOT A VALID *tabtype* TABLE, REQUIRED

(apar/new for V2R4M0)

EXPLANATION:

Indicates that ***tabname*** is an invalid table name value for the ***opname*** operand on the BUILD definition statement. ***opname*** can be LOGTAB, USSTAB or NRITAB. ***tabtype*** can be LOGON, USS or NRI.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Specify a valid table name for the ***opname*** operand then restart HNAS.

Note: This configuration warning message was introduced into 240 with APAR 2400032.

NAS1111E BUILD SCHEDULE LIST IS INCOMPLETE, REQUIRED

(new for V2R4M0)

EXPLANATION:

Indicates that the SCHEDULE= operand for the BUILD definition statement specified a schedule list that ended with a time value and not a command.

For example, SCHEDULE=(12:00:00 , ALARM LOG=? ,..., 06:00:00) is invalid.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Ensure that the SCEHDULE= operand contains an even number of suboperands (time/command pairs).

Note: This configuration warning message was introduced into 240 with APAR 2400064.

NAS1121E ERROR: BUILD *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the BUILD definition statement is in error.

Note: If the operand ***opname*** is a sublist (e.g., ALRMLMTS=(*decvalue*1,...,*decvalue*n)), the suboperand in error is the last value displayed for the ***opval*** text.

For example: if ALRMLMTS=(30,300,20) is specified on the BUILD definition statement, the following message is displayed when the second ALRMLMTS= suboperand is processed:

```
NAS1121E ERROR: BUILD   ALRMLMTS=(30,300
```

This message is issued because the second ALRMLMTS= operand value (300) is greater than 254 which is the maximum allowable ALRMLMTS value for the second suboperand (***llmt***).

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the invalid statement(s) then restart HNAS.

NAS1121E BUILD SCHEDULE *ddname* INVALID, CANNOT BE OPENED, REQUIRED

(new for V2R4M0)

EXPLANATION:

Indicates that the SCHEDULE= operand for the BUILD definition statement specified a DDNAME of ***ddname*** that could not be opened. This is most likely because the specified name was not included in the HNAS start job JCL.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid DDNAME for the SCHEDULE= operand or ensure that the specified name is present in the HNAS start job then restart HNAS.

Note: This configuration warning message was introduced into 240 with APAR 2400064.

NAS1121E BUILD SCHEDULE *ddname* CONTAINS INVALID DATA, REQUIRED

(new for V2R4M0)

EXPLANATION:

Indicates that the SCHEDULE= operand for the BUILD definition statement specified a DDNAME of ***ddname*** referencing a file that contains invalid schedule data. This could be a bad or missing time value or a missing beginning and/or ending parenthesis.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Ensure that the SCEHDULE= operand points at a valid schedule file rather than an EXEC command list file and ensure that the file contains valid schedule list data.

Note: This configuration warning message was introduced into 240 with APAR 2400064.

NAS1121W BUILD DEFINITION ALREADY PROCESSED, IGNORED

EXPLANATION:

Indicates that a BUILD definition statement appears more than once in the CDF.

SYSTEM ACTION:

HNAS processing continues. The duplicate BUILD definition statement and all of its operands are ignored. The first occurrence of the BUILD definition wins.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1131E INVALID: BUILD *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the BUILD definition statement is invalid.

For example: if CUD0=(C1,C2) is specified on the BUILD definition statement, the following message is displayed:

```
NAS1131E INVALID: BUILD   CUD0=(C1,C2)
```

This message is issued because the CUD0 operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the invalid statement(s) then restart HNAS.

NAS1131W BUILD CONLMT=0 FORCED, REMOTE CONSOLE ACCESS BARRED

(apar/new for V2R3M0)

EXPLANATION:

Indicates that CONLMT=0 was specified on the BUILD definition statement in the CDF. This message is issued as a reminder that remote console access will not be permitted. The RMTCONS|RMTCONP start parameter remembrances, if specified, are reset.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

Note: This configuration warning message was introduced into 230 with APAR 2300061 on July 29, 2004.

NAS1154E BUILD SCHEDULE *ddname* COMMAND QUEUE LIMIT *count/limit* EXCEEDED, REQUIRED

(new for V2R4M0)

EXPLANATION:

Indicates that the SCHEDULE= operand for the BUILD definition statement specified a DDNAME of ***ddname*** referencing a file that contains more schedule data than can fit in schedule queue. Currently ***limit*** is set to 512 bytes. ***count*** is the number of bytes that is required to hold the schedule file data.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Reduce the number of commands in the schedule file using an END statement (any records that follow the END statement are ignored) or use wildcard characters (*) for the time value when the same command is scheduled more than once in the file.

Note: This configuration warning message was introduced into 240 with APAR 2400064.

NAS1200I LOCAL *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the LOCAL definition statement was processed successfully.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1201*s* LOCAL *opname* OMITTED, *action*

EXPLANATION:

Indicates that the ***opname*** operand on the LOCAL definition statement was omitted. This version of the **NAS1201*s*** message *does not* display a LOCAL name because it is generated during the processing of the current LOCAL definition statement. The LOCAL name is displayed after the line of asterisks that starts the LOCAL processing. The current LOCAL is delimited by a new line of asterisks.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1201*s* LOCAL *lclname opname* OMITTED, *action*

EXPLANATION:

Indicates that the ***opname*** operand on the LOCAL definition statement named ***lclname*** was omitted. This version of the **NAS1201*s*** message displays a LOCAL name because it is generated after the entire CDF is scanned rather than during processing of the current LOCAL definition statement.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1201I LOCAL RTEIN UNNECESSARY SINCE NO INBOUND SVCS WERE SPECIFIED, IGNORED

EXPLANATION:

Indicates that the RTEIN= operand on the LOCAL definition statement was specified when no callin SVCs were defined, only PVCs were defined. HNAS will terminate when no VCs are defined but will continue running if either/or SVCs or PVCs are defined.

SYSTEM ACTION:

The RTEIN= operand is ignored.

PROGRAMMER ACTION:

None required.

Note: The NAS1201I message above was introduced into 240 with Enhancement APAR 2400007.

NAS1201I LOCAL RTEOUT UNNECESSARY SINCE NO OUTBOUND SVCS WERE SPECIFIED, IGNORED

EXPLANATION:

Indicates that the RTEOUT= operand on the LOCAL definition statement was specified when no callout SVCs were defined, only PVCs were defined. HNAS will terminate when no VCs are defined but will continue running if either/or SVCs or PVCs are defined.

SYSTEM ACTION:

The RTEOUT= operand is ignored.

PROGRAMMER ACTION:

None required.

Note: The NAS1201I message above was introduced into 240 with Enhancement APAR 2400007.

NAS1202S LOCAL OMITTED, REQUIRED FOR HOST NAS SERVER SUPPORT

EXPLANATION:

The LOCAL definition statement is required to supply TCP/IP server information for HNAS operation. At least one (1) LOCAL definition statement is required. It must follow the BUILD definition statement in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a LOCAL definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1202W LOCAL MUST FOLLOW BUILD, IGNORED

EXPLANATION:

Indicates that the BUILD definition statement was either omitted from the CDF or was placed after the LOCAL definition statement. The BUILD definition statement **must** be the first in the CDF.

SYSTEM ACTION:

HNAS processing continues. The LOCAL definition statement and all of its operands are ignored. This will generate additional errors that will cause HNAS to terminate.

PROGRAMMER ACTION:

Terminate HNAS, move or add a BUILD definition statement as the first in the CDF then restart HNAS.

NAS1203W LIMIT: LOCAL *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the LOCAL definition statement could not be saved because operand ***opname*** contains too many suboperands.

For example: if RTEIN=(*mchnm*1,...,*mchnm*1024) is specified on a LOCAL definition statement, the following message is displayed when the last RTEIN= suboperand is processed:

```
NAS1203W LIMIT: LOCAL   mchnm1024)
```

This message is issued because the last RTEIN= operand value (*mchnm*1024) exceeds the limit of 1023 allowed for the RTEIN= operand.

SYSTEM ACTION:

HNAS processing continues. The 'extra' suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1203S LOCAL TYPE=XTP REQUIRES REMOTE TYPE=XTP BUT NONE WAS SPECIFIED

EXPLANATION:

Indicates that an XTP server component was specified without the associated XTP client component(s). An XTP server is defined by the TYPE=XTP LOCAL definition statement. An XTP client is defined by the TYPE=XTP REMOTE definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a TYPE=XTP REMOTE definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1203S LOCAL TYPE=XOT REQUIRES REMOTE TYPE=XOT BUT NONE WAS SPECIFIED

EXPLANATION:

Indicates that an XOT server component was specified without the associated XOT client component(s). An XOT server is defined by the TYPE=XOT LOCAL definition statement. An XOT client is defined by the TYPE=XOT REMOTE definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a TYPE=XOT REMOTE definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1203S LOCAL TYPE=XOT REQUIRES REMOTE TYPE=MCH BUT NONE WAS SPECIFIED

EXPLANATION:

Indicates that an XOT server component was specified without the associated XOT MCH component(s). An XOT server is defined by the TYPE=XOT LOCAL definition statement. An XOT MCH is defined by the TYPE=MCH REMOTE definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a TYPE=MCH REMOTE definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1203W LOCAL SCAN LIMIT REACHED, IGNORED

EXPLANATION:

Indicates that the number of LOCAL definition statements describing an XTP server (TYPE=XTP) and/or an XOT server (TYPE=XOT), exceeds 32 which is the maximum number of LOCAL definition statements that HNAS can support in a single address space.

SYSTEM ACTION:

HNAS processing continues. The additional LOCAL definition statement and all of its operands are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1211*s* LOCAL *opname* INVALID, *action*

EXPLANATION:

Indicates that operand ***opname*** on the LOCAL definition statement specified an invalid value.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1211*s* REMOTE *opname=opval* INVALID, *action*

EXPLANATION:

Indicates that ***opval*** is an invalid value for the ***opname*** operand on the LOCAL definition statement.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1211W DUPLICATE: LOCAL *opname=opval*

EXPLANATION:

Indicates that operand ***opname*** on the LOCAL definition statement appears more than once.

SYSTEM ACTION:

HNAS processing continues. The duplicate operand is ignored. The first occurrence of the operand wins.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1211D LOCAL PORT CANNOT BE DYNAMIC, *port* ASSUMED

EXPLANATION:

Indicates that the PORT= operand for this LOCAL definition statement was specified as DYNAMIC. The PORT= operand is used to specify the TCP port number that is assigned to this HNAS server component and must be fixed.

SYSTEM ACTION:

HNAS processing continues. A default ***port*** value of **3065** is used when TYPE=XTP is specified and **1998** is used when TYPE=XOT is specified. 3065 and 1998 are the 'well known' TCP port numbers for XTP and XOT service, respectively.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

**NAS1211D MULTIPLE TCPNAME VALUES SPECIFIED,
SVRSTRT OPTION FORCED**

(apar/changed for V2R4M0)

EXPLANATION:

Indicates that different TCPNAME= operand values were specified for some LOCAL definition statements in the CDF so that the SVRSTRT parameter must be forced on. This will allow HNAS to continue communication with active TCP/IP stacks even when one of the stacks is deactivated. When SVRSTRT is omitted and only one stack is defined in the CDF, HNAS will shutdown when the stack is deactivated. This cannot be allowed when multiple stacks are configured.

SYSTEM ACTION:

HNAS processing continues. The SVRSTRT parameter is forced on.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, specify the same TCPNAME= operand value for all LOCAL definition statements in the CDF then restart HNAS.

NAS1211E LOCAL IPADDR CANNOT BE DYNAMIC, REQUIRED

EXPLANATION:

Indicates that the IPADDR= operand for this LOCAL definition statement was specified as DYNAMIC. The IPADDR= operand is used to specify the IP address that is assigned to

this HNAS server component and must be fixed. This IP address must be the same as the IP address of the TCP/IP stack.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid value for IPADDR= operand for this LOCAL definition statement then restart HNAS.

NAS1211E LOCAL NAME *badname* INVALID, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that the name ***badname*** is not a valid assembler language symbol or the name is used for another resource in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid name for this LOCAL definition statement then restart HNAS.

NAS1211E LOCAL *lclname* RTEIN *subopnum* RMTNAME *rmtname*
NOT FOUND, REQUIRED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the RTEIN= operand for this TYPE=XOT LOCAL definition statement named ***lclname*** specified a REMOTE definition statement name of ***rmtname*** that could not be found in the CDF. This error means that the given name was not specified in the symbol field of any REMOTE definition statement in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid TYPE=MCH REMOTE definition statement name for the RTEIN= suboperand then restart HNAS.

NAS1211E LOCAL *lclname* RTEIN *subopnum* RMTNAME *rmtname*
IS NOT TYPE=MCH, REQUIRED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the RTEIN= operand for this TYPE=XOT LOCAL definition statement named ***lclname*** specified a valid REMOTE definition statement name of ***rmtname*** but it was not TYPE=MCH.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid TYPE=MCH REMOTE definition statement name for the RTEIN= suboperand then restart HNAS.

NAS1211E LOCAL *lclname* RTEOUT *subopnum* RMTNAME *rmtname*
NOT FOUND, REQUIRED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the RTEOUT= operand for this TYPE=XOT LOCAL definition statement named ***lclname*** specified a REMOTE definition statement name of ***rmtname*** that could not be found in the CDF. This error means that the given name was not specified in the symbol field of any REMOTE definition statement in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid TYPE=XOT REMOTE definition statement name for the RTEOUT= suboperand then restart HNAS.

NAS1211E LOCAL *lclname* RTEOUT *subopnum* RMTNAME *rmtname*
IS NOT TYPE=XOT, REQUIRED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the RTEOUT= operand for this TYPE=XOT LOCAL definition statement named ***lclname*** specified a valid REMOTE definition statement name of ***rmtname*** but it was not TYPE=XOT.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid TYPE=XOT REMOTE definition statement name for the RTEOUT= suboperand then restart HNAS.

NAS1211E LOCAL *lclname* RTEOUT *subopnum* RMTNAME *rmtname* CANNOT CONNECT-OUT, REQUIRED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the RTEOUT= operand for this TYPE=XOT LOCAL definition statement named ***lclname*** specified a valid TYPE=XOT REMOTE definition statement name of ***rmtname*** but the REMOTE was configured for connect-in only (IPADDR=DYNAMIC and/or PORT=DYNAMIC).

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid TYPE=XOT REMOTE definition statement name for the RTEOUT= suboperand whose port number is 1998 (PORT=1998) then restart HNAS.

NAS1211W LOCAL OPTIONS=BALANCERTEOUT VALID FOR TYPE=XOT ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the BALANCERTEOUT value was coded for the OPTIONS= operand for this TYPE=XTP LOCAL definition statement. OPTIONS=BALANCERTEOUT is valid for TYPE=XOT LOCAL definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1221E ERROR: LOCAL *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the LOCAL definition statement is in error.

Note: If the operand ***opname*** is a sublist (e.g., RTEIN=(*mchnm*1/*detaddr*1,...,*mchnm*n/*dteaddr*n)), the suboperand in error is the last value displayed for the ***opval*** text.

For example: if RTEIN=(MCH1/12345,MCH2/ABC,MCH3) is specified on a LOCAL definition statement, the following message is displayed when the second RTEIN= suboperand is processed:

```
NAS1221E ERROR: LOCAL   RTEIN=(MCH1/12345,MCH2/ABC
```

This message is issued because the second RTEIN= operand value (MCH2/ABC) contains a non-decimal DTE address value.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the invalid statement(s) then restart HNAS.

NAS1221E LOCAL IPADDR/PORT DUPLICATED, INVALID CONFIGURATION

EXPLANATION:

Indicates that the combination of values specified for the IPADDR= and PORT= operands for this LOCAL definition statement appear more than once in the CDF. Multiple LOCAL definition statements that specify the same IPADDR= operand values are allowed but the PORT= operand values must be different.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid value for the PORT= operand of the LOCAL definition statement then restart HNAS.

NAS1221E LOCAL IPADDR INVALID, MUST BE DIFFERENT THAN REMOTE IPADDR, REQUIRED

EXPLANATION:

Indicates that the IPADDR= operand for this LOCAL definition statement specified the same value that was specified for the IPADDR= operand of a REMOTE definition statement in the CDF. The LOCAL IPADDR= operand identifies HNAS as perceived by the TCP/IP network. The REMOTE IPADDR= operand identifies a router in the TCP/IP network.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid value for the IPADDR= operand for this LOCAL definition statement then restart HNAS.

NAS1221E LOCAL NAME *badname* DUPLICATED, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that the name ***badname*** appeared in the symbol field of more than one LOCAL definition statement in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid name for this LOCAL definition statement then restart HNAS.

NAS1221I LOCAL IPADDR WAS ALSO SPECIFIED FOR REMOTE NAMED *rmtname*
NAS1221I VALID ONLY IN HNAS-TO-HNAS ENVIRONMENT USING THE SAME TCPIP STACK

(APAR/added for V2R3M0
(apar/changed for V2R4M0)

EXPLANATION:

Indicates that the same IP address was specified for this LOCAL and the REMOTE named ***rmtname***. This configuration is allowed in an HNAS-to-HNAS environment where the same TCP stack is used for both HNAS images. This message is issued for information only.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1221I LOCAL IPADDR AND PORT WERE ALSO SPECIFIED FOR LOCAL NAMED *lclname*
NAS1221I TCPIP STACK WILL PROVIDE INBOUND LOAD BALANCING ACROSS BOTH LOCALS

(APAR/added for V2R3M0
(apar/changed for V2R4M0)

EXPLANATION:

Indicates that the same IP address and port number were specified for this LOCAL and the LOCAL named ***lclname***. This configuration is allowed and causes the TCPIP stack to load balance inbound socket connections across both LOCALs. This message is issued for information only.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1221S LOCAL *lcltype* PRESCAN LIMIT REACHED, INVALID CONFIGURATION

EXPLANATION:

Indicates that this **TYPE=*lcltype*** (XTP or XOT) LOCAL definition statement exceeded the HNAS limit. The total number of LOCAL definition statements in the CDF (regardless of type) cannot exceed 32 (the current HNAS limit).

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Remove the extra LOCAL definition statement(s) from the CDF then restart HNAS.

NAS1221W LOCAL NAME *lclname* CONFLICTS WITH BUILD NASNAME, IGNORED

EXPLANATION:

Indicates that the name ***lclname*** specified for this LOCAL definition statement is the same as the name specified for the NASNAME= operand of the BUILD definition statement. The LOCAL name **must** be different than NASNAME= operand value.

SYSTEM ACTION:

HNAS processing continues. The LOCAL definition statement name is ignored. A default name is generated based on the position of the LOCAL definition statement in the CDF.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1221W LOCAL NAME *lclname* CONFLICTS WITH BUILD TCPNAME, IGNORED

EXPLANATION:

Indicates that the name ***lclname*** specified for this LOCAL definition statement is the same as the name specified for the TCPNAME= operand of the BUILD definition statement. The LOCAL name **must** be different than TCPNAME= operand value.

SYSTEM ACTION:

HNAS processing continues. The LOCAL definition statement name is ignored. A default name is generated based on the position of the LOCAL definition statement in the CDF.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1231E INVALID: LOCAL *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the LOCAL definition statement is invalid.

For example: if CUD0=(C1,C2) is specified on a LOCAL definition statement, the following message is displayed:

```
NAS1231E INVALID: LOCAL   CUD0=(C1,C2)
```

This message is issued because the CUD0 operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the invalid statement(s) then restart HNAS.

NAS1231S CONFIGURATION FAILURE, LOCAL PRESCAN ERRORS

EXPLANATION:

A computing error has occurred while processing the LOCAL definition statement(s) during the prescan of the CDF. The sum of the TYPE=XOT (WALCMXCT) and TYPE=XTP (WALCMNCT) LOCAL definition types does not equal the total (WALCDFLM) LOCAL definition statements defined (see NAS1000I).

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact Comm-Pro for assistance.

NAS1241S CONFIGURATION FAILURE, LOCAL SCAN ERRORS

EXPLANATION:

A computing error has occurred while processing the LOCAL definition statement(s) during the processing scan of the CDF. The sum of the TYPE=XTP (WALCXTPC) and TYPE=XOT (WALCXOTC) LOCAL definitions that can be connected does not equal the total (WALCCNLM) LOCAL definitions that can be connected (see NAS1000I).

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact Comm-Pro for assistance.

NAS1300I REMOTE *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the REMOTE definition statement was processed successfully.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1301*s* REMOTE *opname* OMITTED, *action*

EXPLANATION:

Indicates that the ***opname*** operand on the REMOTE definition statement was omitted. This version of the **NAS1301*s*** message *does not* display a REMOTE name because it is generated during the processing of the current REMOTE definition statement. The REMOTE name is displayed after the line of asterisks that starts the REMOTE processing. The current REMOTE is delimited by a new line of asterisks.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1301*s* REMOTE *rmtname opname* OMITTED, *action*

EXPLANATION:

Indicates that the ***opname*** operand on the REMOTE definition statement named ***rmtname*** was omitted. This version of the **NAS1301*s*** message displays a REMOTE name because it is generated after the entire CDF is scanned rather than during processing of the current REMOTE definition statement.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1301D REMOTE *rmtname* HOME OMITTED, *lclname* ASSUMED
SOCCNT=*count* SOCLMT=*limit*

EXPLANATION:

Indicates that when the HOME= operand is omitted from the REMOTE definition statement named ***rmtname***, a default HOME LOCAL named ***lclname*** was assigned. ***count*** represents the number of REMOTE sockets currently assigned to the LOCAL and ***limit*** represents the maximum number of REMOTE sockets that can be assigned to the LOCAL (SOCLMT= operand value).

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1301D REMOTE *operand* SLU INIT VALUE (-{A|I}) OMITTED
FOR ONE OR MORE
NAS1301D ENTRIES STARTING WITH *operand* XXXX, -A (ACTIVE) ASSUMED

EXPLANATION:

Indicates that the initial value for the SLUs in the named operand were omitted.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

Note: *sluname*-{A|I} support was introduced into 240 as Enhancement APAR 2400028.

NAS1301E REMOTE LLCI UNDEFINED FOR SUBADDR=YES, REQUIRED

EXPLANATION:

Indicates that the LLC0=, LLC3=, LLC4= and LLC5 operands for this TYPE=XTP|MCH REMOTE definition statement were either omitted or specified a value of NONE when SUBADDR=YES was also specified. SUBADDR=YES requires that at least one (1) sub-address value to be specified for LLC selection.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid subaddress value for the LLC0=, LLC3=, LLC4= or LLC5= operand for this REMOTE definition statement then restart HNAS.

NAS1301E REMOTE VIRTUAL CIRCUITS UNDEFINED, REQUIRED

EXPLANATION:

Indicates that the PVC=, SVC0=, SVC3=, SVC4= and SVC5= operands for this TYPE=XTP|MCH REMOTE definition statement specified a value of NONE. This prevents HNAS from allocating Logical Unit Blocks (LUBs) and Virtual Circuit Blocks (VCBs) which are required to manage host and virtual circuit sessions.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a virtual circuit limit (***vclmt***) value for the PVC=, SVC0=, SVC3=, SVC4= or SVC5= operand for this REMOTE definition statement then restart HNAS.

NAS1301I REMOTE *rmtname* HOME *lclname* RESOLVED
SOCCNT=*count* SOCLMT=*limit*

EXPLANATION:

Indicates that the HOME= operand for this TYPE=XTP|XOT|MCH REMOTE definition statement named ***rmtname*** specified a value of ***lclname*** which was successfully resolved in the CDF. ***count*** represents the number of REMOTE sockets currently assigned to the LOCAL and ***limit*** represents the maximum number of REMOTE sockets that can be assigned to the LOCAL (SOCLMT= operand value).

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1301S REMOTE *rmtname* HOME DEFAULT CANNOT BE RESOLVED FOR TYPE=*type*, REQUIRED

EXPLANATION:

Indicates that when the HOME= operand is omitted from the TYPE=***type*** REMOTE definition statement named ***rmtname***, a default HOME LOCAL could not be assigned. This occurs when the SOCLMT= value on the defined LOCAL(s) is set too low for the number of REMOTE clients specified in the CDF. When the SOCLMT= operand is omitted on a LOCAL definition statement, a default value of 2000 is set which is usually large enough for most installations. The SOCLMT= value can also be set to larger values to accommodate larger REMOTE configurations. If you receive this message and have set the SOCLMT= operand to a value less than 2000, we recommend allowing the SOCLMT= value to default or ensuring that it is large enough to handle your REMOTE client configuration.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Increase the SOCLMT= operand value or allow it to default to 2000 on the LOCAL definition statements in the CDF then restart HNAS.

NAS1302S REMOTE OMITTED, REQUIRED FOR HOST NAS CLIENT SUPPORT

EXPLANATION:

The REMOTE definition statement is required to supply remote router information for HNAS operation. At least one (1) REMOTE definition statement is required. It must follow the BUILD definition statement in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a REMOTE definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1302W REMOTE MUST FOLLOW BUILD, IGNORED

EXPLANATION:

Indicates that the BUILD definition statement was either omitted from the CDF or was placed after the REMOTE definition statement. The BUILD definition statement **must** be the first in the CDF.

SYSTEM ACTION:

HNAS processing continues. The REMOTE definition statement and all of its operands are ignored. This will generate additional errors that will cause HNAS to terminate.

PROGRAMMER ACTION:

Terminate HNAS, move or add a BUILD definition statement as the first in the CDF then restart HNAS.

NAS1303E LIMIT: REMOTE *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the REMOTE definition statement could not be saved because operand ***opname*** contains too many suboperands.

For example: if LUNAME=(*lunm*1,...,*lunm*29) is specified on a REMOTE definition statement, the following message is displayed when the last LUNAME= suboperand is processed:

```
NAS1011W LIMIT: REMOTE  lunm29)
```

This message is issued because the last LUNAME= operand value (*lunm*29) exceeds the limit of 28 allowed for the LUNAME= operand.

This message can also be issued if the *vclmt* value for the PVC=, SVC0=, SVC3=, SVC4= or SVC5= operands exceed their respective array limits. The *vclmt* value is provided as the first suboperand for these operands.

For example: if PVC=(256,...) is specified on a REMOTE definition statement, the following message is displayed when the first PVC= suboperand is processed:

```
NAS1011W LIMIT: REMOTE  PVC=(256,
```

The maximum vclmt values are as follows:

```
PVC   SVC0   SVC3   SVC4   SVC5
255    511    255    511    511
```

SYSTEM ACTION:

HNAS processing continues. The 'extra' suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1303S REMOTE TYPE=XTP REQUIRES LOCAL TYPE=XTP BUT NONE WAS SPECIFIED

EXPLANATION:

Indicates that XTP client component(s) were specified without the associated XTP server component. An XTP client is defined by the TYPE=XTP REMOTE definition statement. An XTP server is defined by the TYPE=XTP LOCAL definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a TYPE=XTP LOCAL definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1303S REMOTE TYPE=XOT REQUIRES LOCAL TYPE=XOT BUT NONE WAS SPECIFIED

EXPLANATION:

Indicates that XOT client component(s) were specified without the associated XOT server component. An XOT client is defined by the TYPE=XOT REMOTE definition statement. An XOT server is defined by the TYPE=XOT LOCAL definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a TYPE=XOT LOCAL definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1303S REMOTE TYPE=MCH REQUIRES LOCAL TYPE=XOT BUT NONE WAS SPECIFIED

EXPLANATION:

Indicates that XOT MCH component(s) were specified without the associated XOT server component. An XOT MCH is defined by the TYPE=MCH REMOTE definition statement. An XOT server is defined by the TYPE=XOT LOCAL definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a TYPE=XOT LOCAL definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1303S REMOTE TYPE=XOT REQUIRES REMOTE TYPE=MCH BUT NONE WAS SPECIFIED

EXPLANATION:

Indicates that XOT client component(s) were specified without the associated XOT MCH component(s). An XOT client is defined by the TYPE=XOT REMOTE definition statement. An XOT MCH is defined by the TYPE=MCH REMOTE definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a TYPE=MCH REMOTE definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1303S REMOTE TYPE=MCH REQUIRES REMOTE TYPE=XOT BUT NONE WAS SPECIFIED

EXPLANATION:

Indicates that XOT MCH component(s) were specified without the associated XOT client component(s). An XOT MCH is defined by the TYPE=MCH REMOTE definition statement. An XOT client is defined by the TYPE=XOT REMOTE definition statement.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Add a TYPE=MCH REMOTE definition statement after the BUILD definition statement in the CDF then restart HNAS.

NAS1303W REMOTE SCAN LIMIT REACHED, IGNORED

EXPLANATION:

Indicates that the number of REMOTE definition statements describing XTP physical multi-channel links (TYPE=XTP), XOT router port ranges (TYPE=XOT) or XOT logical multi-channel links (TYPE=MCH) exceeds 510 which is the maximum number of REMOTE definition statements that HNAS can support in a single address space.

SYSTEM ACTION:

HNAS processing continues. The additional REMOTE definition statement and all of its operands are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311*s* REMOTE *opname* INVALID, *action*

EXPLANATION:

Indicates that operand ***opname*** on the REMOTE definition statement specified an invalid value.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311*s* REMOTE *opname* INVALID FOR TYPE=*type, action*

EXPLANATION:

Indicates that operand ***opname*** on the REMOTE definition statement specified a valid value but it was invalid for the REMOTE *type*.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311*s* REMOTE *opname=opval* INVALID, *action*

EXPLANATION:

Indicates that ***opval*** is an invalid value for the ***opname*** operand on the REMOTE definition statement.

SYSTEM ACTION:

The ***action*** text indicates the default action taken by HNAS.

PROGRAMMER ACTION:

If the ***action*** is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE CONNECT REQUIRES GATE=GENERAL, NO ASSUMED

EXPLANATION:

Indicates that the CONNECT= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value other than NO without GATE=GENERAL also being specified. CONNECT=YES|CUD0|SUBD requires GATE=GENERAL.

SYSTEM ACTION:

HNAS processing continues. A default CONNECT= operand value of **NO** is used.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE CTCP INVALID FOR CONNECT=YES,
1 VALUE ASSUMED

EXPLANATION:

Indicates that the CTCP= operand for this TYPE=XTP|MCH REMOTE definition statement specified more than one (1) value when CONNECT=YES was also specified. CONNECT=YES implies that only one CTCP can be accessed thus multiple CTCP= operand values are inconsistent.

SYSTEM ACTION:

HNAS processing continues. The additional CTCP= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE INIT INVALID, *state* ASSUMED

EXPLANATION:

Indicates that the INIT= operand value for this TYPE=XTP|XOT REMOTE definition statement differs from the INIT= operand value for the first TYPE=XTP|XOT REMOTE definition statement that represents the same router in the CDF. The INIT= operand is global for all X.25 interfaces on the same XTP|XOT router.

SYSTEM ACTION:

HNAS processing continues. The default INIT= operand ***state*** value (ACTIVE or IDLE) is taken from the **first** TYPE=XTP|XOT REMOTE definition statement for the router.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE LUNAME INVALID FOR CONNECT=YES,
1 VALUE ASSUMED

EXPLANATION:

Indicates that the LUNAME= operand for this TYPE=XTP|MCH REMOTE definition statement specified more than one (1) value when CONNECT=YES was also specified. CONNECT=YES implies that only one CTCP can be accessed thus multiple LUNAME= operand values are inconsistent.

SYSTEM ACTION:

HNAS processing continues. The additional LUNAME= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE LUNAME INVALID FOR CUD0=ALL,
2 VALUES ASSUMED

EXPLANATION:

Indicates that the LUNAME= operand for this TYPE=XTP|MCH REMOTE definition statement specified more than two (2) values when CUD0=ALL was also specified. CUD0=ALL implies that only two CTCPs can be accessed thus more than two LUNAME= operand values are inconsistent.

SYSTEM ACTION:

HNAS processing continues. The additional LUNAME= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE LUNAME *subopnum* LUQTY *count* INVALID
FOR CONNECT=NO, 1 ASSUMED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the LUNAME= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU quantity value of ***count*** when CONNECT=NO was also specified. The LUQTY value is used for GATEFC

MCHs (CONNECT=YES|CUD0|SUBD) to indicate how may GATEFC SLU sessions can be supported across a given CTCP/MCH connection.

SYSTEM ACTION:

HNAS processing continues. A default LUQTY value of **1** is used.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE PORT CANNOT BE DYNAMIC, 3065 ASSUMED

EXPLANATION:

Indicates that the PORT= operand for this TYPE=XTP REMOTE definition statement was specified as DYNAMIC. The PORT= operand is used to specify the TCP port number that is assigned to this XTP router component and must be fixed. PORT=DYNAMIC is valid for TYPE=XOT REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. A default PORT= operand value of **3065** is used.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE PORT=*port*, DYNAMIC ASSUMED

EXPLANATION:

Indicates that the PORT= operand for this TYPE=XOT REMOTE definition statement was specified as ***port*** when IPADDR=DYNAMIC was also specified. The PORT= operand is used to specify the TCP port number that is assigned to this XOT router component and must be DYNAMIC when the IP address is also DYNAMIC.

SYSTEM ACTION:

HNAS processing continues. A default PORT= operand value of **DYNAMIC** is used.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE PWPROT REQUIRES PAD=INTEG, NO ASSUMED

EXPLANATION:

Indicates that the PWPROT= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value other than NO when PAD=NO|TRANSP was also specified. PWPROT=YES|YESWOCC requires PAD=INTEG.

SYSTEM ACTION:

HNAS processing continues. A default PWPROT= operand value of **NO** is used.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE SUBADDR REQUIRES GATE=GENERAL, NO ASSUMED

EXPLANATION:

Indicates that the SUBADDR= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value of YES when GATE=NO was also specified. SUB-ADDR=YES requires GATE=GENERAL.

SYSTEM ACTION:

HNAS processing continues. A default SUBADDR= value of **NO** is used.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE SUBADDR REQUIRES CONNECT=NO, NO ASSUMED

EXPLANATION:

Indicates that the SUBADDR= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value of YES when CONNECT=YES|CUD0|SUBD was also specified. The SUBADDR=YES requires CONNECT=NO.

SYSTEM ACTION:

HNAS processing continues. A default SUBADDR= operand value of **NO** is used.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE SYSL REQUIRES APPLNAME, MCHSOL WILL BE USED

(new for V2R2M0)

EXPLANATION:

Indicates that the SYSL= operand for this TYPE=SPU REMOTE definition statement specified value(s) when none were specified for the APPLNAME= operand. The SYSL= operand is optional for host application access for QLLC sessions. The DATA= suboperand entries of the SYSL= operand is used in conjunction with the APPLNAME= operand to map QLLC terminal input to an application name.

SYSTEM ACTION:

HNAS processing continues. The SYSL= operand value(s) are ignored. A default application name of MCHSOL is used. Host application access will be controlled by LOGTAB and/or USSTAB processing

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311D REMOTE TRAN REQUIRES PAD=INTEG|TRANSP, NO ASSUMED

EXPLANATION:

Indicates that the TRAN= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value other than NO when PAD=NO was also specified. TRAN=EVEN|ODD|MARK|SPACE|USER requires PAD=INTEG|TRANSP.

SYSTEM ACTION:

HNAS processing continues. A default TRAN= operand value of **NO** is used.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311E REMOTE *rmtname opname=tabname* IS NOT A VALID *btype* TABLE, REQUIRED

(apar/new for V2R4M0)

EXPLANATION:

Indicates that ***tabname*** is an invalid table name value for the ***opname*** operand for this TYPE=XTP|MCH|MXT|SPU REMOTE definition statement named ***rmtname***. ***opname*** can be LOGTAB, USSTAB or NRITAB. ***tabtype*** can be LOGON, USS or NRI.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Specify a valid table name for the ***opname*** operand then restart HNAS.

Note: This configuration warning message was introduced into 240 with APAR 2400032.

NAS1311E REMOTE CUD0 AND CTCP COUNTS DO NOT MATCH, REQUIRED

(new for V2R3M0

EXPLANATION:

Indicates that the CUD0= operand for this TYPE=XTP|MCH REMOTE definition statement specified a number of value(s) that was not equal to the number of values specified for the CTCP= operand. CUD0= to CTCP= mapping requires that both operands contain the same number of entries.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the CUD0= and/or CTCP= operands to ensure that the same number of values are specified then restart HNAS.

NAS1311E REMOTE IPADDR CANNOT BE DYNAMIC, REQUIRED

EXPLANATION:

Indicates that the IPADDR= operand for this TYPE=XTP REMOTE definition statement was specified as DYNAMIC. The IPADDR= operand is used to specify the IP address that is assigned to this HNAS XTP client component and must be fixed. The IPADDR= operand is required to identify a specific XTP router in the TCP/IP network.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid value for IPADDR= operand for this REMOTE definition statement then restart HNAS.

NAS1311E REMOTE LUNAME *subopnum* SLUNAME *sluname* INVALID, REQUIRED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the LUNAME= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***sluname*** that is not a valid assembler language symbol. LUNAME= operand SLU name values are used to identify the MCH for specific host CTCP applications.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply valid SLU names for the LUNAME= operand for this REMOTE definition statement then restart HNAS.

NAS1311E REMOTE NAME *badname* INVALID, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that the name ***badname*** is not a valid assembler language symbol or the name is used for another resource in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid name for this REMOTE definition statement then restart HNAS.

NAS1311E REMOTE PVC *subopnum* SLUNAME *badname* INVALID, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***badname*** that is not a valid assembler language symbol.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SLU name for the PVC= suboperand then restart HNAS.

NAS1311E REMOTE *ownrname* PVC *subopnum* RMTNAME *trgtname* NOT FOUND, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=MCH REMOTE definition statement named ***ownrname*** specified a target REMOTE definition statement name of ***trgtname*** that could not be found in the CDF. This error means that the given name was not specified in the symbol field of any REMOTE definition statement in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid TYPE=XOT REMOTE definition statement name for the PVC= suboperand then restart HNAS.

NAS1311E REMOTE *ownrname* PVC *subopnum* RMTNAME *trgtname* IS NOT TYPE=XOT, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=MCH REMOTE definition statement named ***ownrname*** specified a valid target REMOTE definition statement name of ***trgtname*** but it was not TYPE=XOT.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid TYPE=XOT REMOTE definition statement name for the PVC= suboperand then restart HNAS.

NAS1311E REMOTE SUBD AND CTCP COUNTS DO NOT MATCH, REQUIRED

(new for V2R3M0

EXPLANATION:

Indicates that the SUBD= operand for this TYPE=XTP|MCH REMOTE definition statement specified a number of value(s) that was not equal to the number of values specified for the CTCP= operand. SUBD= to CTCP= mapping requires that both operands contain the same number of entries.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the SUBD= and/or CTCP= operands to ensure that the same number of values are specified then restart HNAS.

NAS1311E REMOTE SVC0 *subopnum* SLUNAME *sluname* INVALID, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC0= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***sluname*** that is not a valid assembler language symbol.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SLU name for the SVC0= suboperand then restart HNAS.

NAS1311E REMOTE SVC3 *subopnum* SPUNAME *spuname* INVALID, REQUIRED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC3= operand for this TYPE=MCH REMOTE definition statement specified an SPU name of ***spuname*** that is not a valid assembler language symbol.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SPU name for the SVC3= operand entry then restart HNAS.

NAS1311E REMOTE *ownrname* SVC3 *subopnum* RMTNAME *trgtname* NOT FOUND, REQUIRED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC3= operand for this TYPE=MCH REMOTE definition statement named ***ownrname*** specified a target REMOTE definition statement name of ***trgtname*** that could not be found in the CDF. This error means that the given name was not specified in the symbol field of any REMOTE definition statement in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Define a valid TYPE=SPU REMOTE definition statement that has the correct ***trgtname*** then restart HNAS.

NAS1311E REMOTE *ownrname* SVC3 *subopnum* RMTNAME *trgtname* IS NOT TYPE=SPU, REQUIRED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC3= operand for this TYPE=MCH REMOTE definition statement named ***ownrname*** specified a valid REMOTE definition statement name of ***trgtname*** but it was not TYPE=SPU.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Define a valid TYPE=SPU REMOTE definition statement that has the correct ***trgtname*** then restart HNAS.

NAS1311E REMOTE SVC4 *subopnum* SLUNAME *sluname* INVALID, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC4= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***sluname*** that is not a valid assembler language symbol.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SLU name for the SVC4= suboperand then restart HNAS.

NAS1311E REMOTE SVC5 *subopnum* SLUNAME *sluname* INVALID, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC5= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***sluname*** that is not a valid assembler language symbol.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SLU name for the SVC5= suboperand then restart HNAS.

NAS1311S REMOTE *rmtname* HOME *lclname* CANNOT BE RESOLVED, REQUIRED

(new for V2R2M0)

EXPLANATION:

Indicates that the HOME= operand for this TYPE=XTP|XOT REMOTE definition statement named ***rmtname*** specified a value of ***lclname*** but the named LOCAL definition statement could not be found in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Define a valid HOME LOCAL definition statement that has the correct ***lclname*** then restart HNAS.

NAS1311S REMOTE *rmtname* HOME *lclname* IS NOT TYPE=*type*, REQUIRED

(new for V2R2M0)

EXPLANATION:

Indicates that the HOME= operand for this TYPE=XTP|XOT|MCH REMOTE definition statement named ***rmtname*** specified a value of ***lclname*** but the named LOCAL definition statement, which was found, did not have a matching ***type*** value.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Define a valid HOME LOCAL definition statement that has the correct ***type*** then restart HNAS.

NAS1311S REMOTE *rmtname* HOME *lclname* LIMIT REACHED
SOCCNT=*count* SOCLMT=*limit* NEEDED=*vclmt*

(new for V2R2M0)
(apar/changed for V2R4M0)

EXPLANATION:

Indicates that the HOME= operand for this TYPE=XTP|XOT REMOTE definition statement named ***rmtname*** specified a value of ***lclname*** but the named LOCAL definition statement, which was resolved, cannot support additional client connections. For example:

```
NAS1311S REMOTE XOTCNOT2 HOME XOTSRVR LIMIT REACHED
                SOCCNT=00303 SOCLMT=00602 NEEDED=00301
```

This message is issued when NEEDED+SOCCNT>SOCLMT. SOCCNT includes the 2 reserved sockets.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned. The named server is currently associated with ***count*** clients and can support a maximum of ***limit*** clients.

PROGRAMMER ACTION:

Increase the SOCLMT= operand value for the LOCAL definition statement named ***lclname*** then restart HNAS.

NAS1311W DUPLICATE: REMOTE *opname=opval*

EXPLANATION:

Indicates that operand ***opname*** on the REMOTE definition statement appears more than once.

SYSTEM ACTION:

HNAS processing continues. The duplicate operand is ignored. The first occurrence of the operand wins.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE APPLNAME *subopnum* CONSOLE INVALID FOR TYPE=SPU, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the APPLNAME= operand for this TYPE=SPU REMOTE definition statement specified a value of **CONSOLE** which is not valid for QLLC session.

SYSTEM ACTION:

HNAS processing continues. The invalid APPLNAME= suboperand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CONNECT VALID FOR TYPE=XTP|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the CONNECT= operand was coded for this TYPE=XOT|MXT|SPU REMOTE definition statement. The CONNECT= operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The CONNECT= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CTCP REQUIRES GATE=GENERAL, IGNORED

EXPLANATION:

Indicates that the CTCP= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) without GATE=GENERAL also being specified.

SYSTEM ACTION:

HNAS processing continues. The CTCP= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CTCP REQUIRES LUNAME, VTAM ACCESS CANNOT BE PROVIDED

EXPLANATION:

Indicates that the CTCP= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) less than 80 (non-LLC) when no values were specified for the LUNAME= operand. CTCP=operand values less than 80 are used to select entries in the LUNAME= operand list. CTCP operand values of 80 and above are used to set the LLC type (80, 83, 84, 85).

SYSTEM ACTION:

HNAS processing continues. The CTCP= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CTCP *subopnum* APPLID *lunmndx* EXCEEDS LUNAME, VTAM ACCESS CANNOT BE PROVIDED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the CTCP= operand for this TYPE=XTP|MCH REMOTE definition statement specified an APPLID value of ***lunmndx*** which exceeds the number of values in the LUNAME= operand list. CTCP= operand values are used to select entries in the LUNAME= operand list.

SYSTEM ACTION:

HNAS processing continues. The CTCP= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CTCP *subopnum* LLCID 85 REQUIRES PAD=INTEG|TRANSP, IGNORED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the CTCP= operand for this TYPE=XTP|MCH REMOTE definition statement specified an LLCID value of **85** which requires PAD=INTEG|TRANSP.

SYSTEM ACTION:

HNAS processing continues. The CTCP= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CUD VALID FOR TYPE=XTP|XOT|MCH|MXT|SPU ONLY, IGNORED

EXPLANATION:

Indicates that the CUD= operand was coded for this REMOTE definition statement. The CUD= operand is valid for TYPE=XTP|XOT|MCH|MXT|SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The CUD= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CUD INVALID WHEN CALLOUT NOT USED, IGNORED

EXPLANATION:

Indicates that the CUD= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value when no ***called*** DTE address ('O' for outgoing) was specified for an SVC0= or SVC5= operand entry.

SYSTEM ACTION:

HNAS processing continues. The CUD= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CUD INVALID WHEN TAPPING NOT USED, IGNORED

(new for V2R3M0

EXPLANATION:

Indicates that the CUD= operand for this TYPE=XOT REMOTE definition statement specified a value when TAP=0 was specified.

SYSTEM ACTION:

HNAS processing continues. The CUD= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CUD0 REQUIRES GATE=GENERAL, IGNORED

EXPLANATION:

Indicates that the CUD0= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) without GATE=GENERAL also being specified.

SYSTEM ACTION:

HNAS processing continues. The CUD0= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CUD0 REQUIRES CONNECT=NO|CUD0, IGNORED

EXPLANATION:

Indicates that the CUD0= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) without CONNECT=NO|CUD0 also being specified.

SYSTEM ACTION:

HNAS processing continues. The CUD0= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE CUD0=ALL REQUIRES DEFAULT CTCP, CTCP IGNORED

EXPLANATION:

Indicates that the CUD0= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value of ALL but the CTCP= operand also specified a list of values. CUD0=ALL requires that the CTCP= operand be omitted.

SYSTEM ACTION:

HNAS processing continues. The CTCP= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE DCEADDR VALID FOR TYPE=XTP|XOT|MCH|MXT|SPU ONLY, IGNORED

EXPLANATION:

Indicates that the DCEADDR= operand was coded for this REMOTE definition statement. The DCEADDR= operand is valid for TYPE=XTP|XOT|MCH|MXT|SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The DCEADDR= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE DCEADDR INVALID WHEN CALLOUT NOT USED, IGNORED

EXPLANATION:

Indicates that the DCEADDR= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value when no ***called*** DTE address ('O' for outgoing) was specified for an SVC0= or SVC5= operand entry.

SYSTEM ACTION:

HNAS processing continues. The DCEADDR= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE DCEADDR INVALID WHEN TAPPING NOT USED, IGNORED

(new for V2R3M0

EXPLANATION:

Indicates that the DCEADDR= operand for this TYPE=XOT REMOTE definition statement specified a value when TAP=0 was specified.

SYSTEM ACTION:

HNAS processing continues. The DTEADDR= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE DTEADDR VALID FOR TYPE=XTP|XOT|MCH|MXT|SPU ONLY, IGNORED

(new for V2R3M0

EXPLANATION:

Indicates that the DTEADDR= operand was coded for this REMOTE definition statement. The DTEADDR= operand is valid for TYPE=XTP|XOT|MCH|MXT|SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The DTEADDR= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE DTEADDR INVALID WHEN TAPPING NOT USED, IGNORED

(new for V2R3M0)

EXPLANATION:

Indicates that the DTEADDR= operand for this TYPE=XOT REMOTE definition statement specified a value when TAP=0 was specified.

SYSTEM ACTION:

HNAS processing continues. The DTEADDR= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE FAC VALID FOR TYPE=XTP|XOT|MCH|MXT|SPU ONLY, IGNORED

EXPLANATION:

Indicates that the FAC= operand was coded for this REMOTE definition statement. The FAC= operand is valid for TYPE=XTP|XOT|MCH|MXT|SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The FAC= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE FAC INVALID WHEN CALLOUT NOT USED, IGNORED

EXPLANATION:

Indicates that the FAC= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value when no ***called*** DTE address ('O' for outgoing) was specified for an SVC0= or SVC5= operand entry.

SYSTEM ACTION:

HNAS processing continues. The FAC= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE FAC INVALID WHEN TAPPING NOT USED, IGNORED

(new for V2R3M0)

EXPLANATION:

Indicates that the FAC= operand for this TYPE=XOT REMOTE definition statement specified a value when TAP=0 was specified.

SYSTEM ACTION:

HNAS processing continues. The FAC= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE GATE VALID FOR TYPE=XTP|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the GATE= operand was coded for this TYPE=XOT|MXT|SPU REMOTE definition statement. The GATE= operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The GATE= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE HOME VALID FOR TYPE=XTP|XOT|MCH ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the HOME= operand was coded for this TYPE=MXT|SPU REMOTE definition statement. The HOME= operand is valid for TYPE=XTP|XOT|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The HOME= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE IDBLK VALID FOR TYPE=SPU ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the IDBLK= operand was coded for this TYPE=XTP|XOT|MCH|MXT REMOTE definition statement. The IDBLK= operand is valid for TYPE=SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The IDBLK= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE IDNUM VALID FOR TYPE=SPU ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the IDNUM= operand was coded for this TYPE=XTP|XOT|MCH|MXT REMOTE definition statement. The IDNUM= operand is valid for TYPE=SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The IDNUM= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE IFNUM VALID FOR TYPE=XTP ONLY, IGNORED

EXPLANATION:

Indicates that the IFNUM= operand was coded for this TYPE=XOT|MCH|MXT|SPU REMOTE definition statement. The IFNUM= operand is valid for TYPE=XTP REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The IFNUM= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE INIT VALID FOR TYPE=XTP|XOT ONLY, IGNORED

EXPLANATION:

Indicates that the INIT= operand was coded for this TYPE=MCH|MXT|SPU REMOTE definition statement. The INIT= operand is valid for TYPE=XTP|XOT REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The INIT= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE IPADDR VALID FOR TYPE=XTP|XOT ONLY, IGNORED

EXPLANATION:

Indicates that the IPADDR= operand was coded for this TYPE=MCH|MXT|SPU REMOTE definition statement. The IPADDR= operand is valid for TYPE=XTP|XOT REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The IPADDR= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LLC0 INVALID FOR SUBADDR=NO, IGNORED

EXPLANATION:

Indicates that the LLC0= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when SUBADDR=NO was also specified. LLC0 selection requires SUBADDR=YES.

SYSTEM ACTION:

HNAS processing continues. The LLC0= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LLC3 VALID FOR TYPE=MCH ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the LLC3= operand was coded for this TYPE=XTP REMOTE definition statement. The LLC3= operand is valid for TYPE=MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The LLC3= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LLC3 INVALID FOR SUBADDR=NO, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the LLC3= operand for this TYPE=MCH REMOTE definition statement specified value(s) when SUBADDR=NO was also specified. LLC3 selection requires SUBADDR=YES.

SYSTEM ACTION:

HNAS processing continues. The LLC3= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LLC4 INVALID FOR SUBADDR=NO, IGNORED

EXPLANATION:

Indicates that the LLC4= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when SUBADDR=NO was also specified. LLC4 selection requires SUBADDR=YES.

SYSTEM ACTION:

HNAS processing continues. The LLC4= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LLC5 INVALID FOR SUBADDR=NO, IGNORED

EXPLANATION:

Indicates that the LLC5= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when SUBADDR=NO was also specified. LLC5 selection requires SUBADDR=YES.

SYSTEM ACTION:

HNAS processing continues. The LLC5= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LLC5 REQUIRES PAD=INTEG|TRANSP, IGNORED

EXPLANATION:

Indicates that the LLC5= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when PAD=NO was also specified. LLC5 selection requires PAD=INTEG|TRANSP.

SYSTEM ACTION:

HNAS processing continues. The LLC5= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LOGTAB VALID FOR TYPE=XTP|MCH|MXT|SPU ONLY, IGNORED

EXPLANATION:

Indicates that the LOGTAB= operand was coded for this TYPE=XOT REMOTE definition statement. The LOGTAB= operand is valid for TYPE=XTP|MCH|MXT|SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The LOGTAB= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LOGTAB INVALID WHEN MCHSOL NOT USED, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the LOGTAB= operand was coded for this TYPE=XTP|MCH REMOTE definition statement but MCHSOL was not specified in the APPLNAME= operand for the same REMOTE definition statement. The MCHSOL 'application' is required to interpret the LOGTAB= operand value.

SYSTEM ACTION:

HNAS processing continues. The LOGTAB= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LULMT VALID FOR TYPE=XTP|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the LULMT= operand was coded for this TYPE=XOT|MXT|SPU REMOTE definition statement. The LULMT= operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The LULMT= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LULMT INVALID FOR CONNECT=NO, IGNORED

EXPLANATION:

Indicates that the LULMT= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value when CONNECT=NO was also specified. The LULMT= operand is used to specify the total number of SLU connections that are required for GATEFC sessions (CONNECT=YES|CUD0|SUBD).

SYSTEM ACTION:

HNAS processing continues. The LULMT= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE LUNAME REQUIRES GATE=GENERAL, IGNORED

EXPLANATION:

Indicates that the LUNAME= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) without GATE=GENERAL also being specified. The LUNAME= operand is required for GATE support to identify MCH SLU names and host CTCP application PLU names.

SYSTEM ACTION:

HNAS processing continues. The LUNAME= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE MAXDATA VALID FOR TYPE=SPU ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the MAXDATA= operand was coded for this TYPE=XTP|XOT|MCH|MXT REMOTE definition statement. The MAXDATA= operand is valid for TYPE=SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The MAXDATA= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE MBITCHN VALID FOR TYPE=XTP|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the MBITCHN= operand was coded for this TYPE=XOT|MXT|SPU REMOTE definition statement. The MBITCHN= operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The MBITCHN= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=ECHODTEADDR VALID FOR TYPE=MCH ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the ECHODTEADDR value was coded for the OPTIONS= operand for this TYPE=XTP|XOT|MXT|SPU REMOTE definition statement. OPTIONS=ECHODTEADDR is valid for TYPE=MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=ECHOFAC VALID FOR TYPE=MCH ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the ECHOFAC value was coded for the OPTIONS= operand for this TYPE=XTP|XOT|MXT|SPU REMOTE definition statement. OPTIONS=ECHOFAC is valid for TYPE=MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=LCN0USED VALID FOR TYPE=XTP|MCH ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the LCN0USED value was coded for the OPTIONS= operand for this TYPE=XOT|MXT|SPU REMOTE definition statement. OPTIONS=LCN0USED is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=LCN0USED REQUIRES GATE=GENERAL, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the LCN0USED value was coded for the OPTIONS= operand for this TYPE=XTP|MCH REMOTE definition statement when GATE=NO was also specified. OPTIONS=LCN0USED is valid for GATE=GENERAL only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=LCN0USED REQUIRES PVC=NONE, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the LCN0USED value was coded for the OPTIONS= operand for this TYPE=XTP|MCH REMOTE definition statement when the PVC= operand specified a list of values. OPTIONS=LCN0USED is valid for PVC=NONE only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=MCHTMR VALID FOR TYPE=XTP|MCH ONLY, IGNORED

(new for V2R1M1)

EXPLANATION:

Indicates that the MCHTMR= suboperand was coded for the OPTIONS= operand for this TYPE=XOT|MXT|SPU REMOTE definition statement. OPTIONS=MCHTMR= is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=PRI|SEC|PEER VALID FOR TYPE=SPU ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the PRI, SEC or PEER value was coded for the OPTIONS= operand for this TYPE=XTP|XOT|MCH|MXT REMOTE definition statement. OPTIONS=PRI|SEC|PEER is valid for TYPE=SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=REPDCEADDR VALID FOR TYPE=MCH ONLY, IGNORED

EXPLANATION:

Indicates that the REPDCEADDR value was coded for the OPTIONS= operand for this TYPE=XTP|XOT|MXT|SPU REMOTE definition statement. OPTIONS=REPDCEADDR is valid for TYPE=MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=REPDCEADDR REQUIRES GATE=GENERAL, IGNORED

EXPLANATION:

Indicates that the REPDCEADDR value was coded for the OPTIONS= operand for this TYPE=MCH REMOTE definition statement when GATE=NO was also specified. OPTIONS=REPDCEADDR is valid for GATE=GENERAL only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=STRIPFAC VALID FOR TYPE=MCH ONLY, IGNORED

EXPLANATION:

Indicates that the STRIPFAC value was coded for the OPTIONS= operand for this TYPE=XTP|XOT|MXT|SPU REMOTE definition statement. OPTIONS=STRIPFAC is valid for TYPE=MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=STRIPFAC REQUIRES GATE=GENERAL, IGNORED

EXPLANATION:

Indicates that the STRIPFAC value was coded for the OPTIONS= operand for this TYPE=MCH REMOTE definition statement when GATE=NO was also specified. OPTIONS=STRIPFAC is valid for GATE=GENERAL only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=STRIPRTEIN VALID FOR TYPE=MCH ONLY, IGNORED

EXPLANATION:

Indicates that the STRIPRTEIN value was coded for the OPTIONS= operand for this TYPE=XTP|XOT|MXT|SPU REMOTE definition statement. OPTIONS=STRIPRTEIN is valid for TYPE=MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=STRIPRETIN REQUIRES GATE=GENERAL, IGNORED

EXPLANATION:

Indicates that the STRIPRTEIN value was coded for the OPTIONS= operand for this TYPE=MCH REMOTE definition statement when GATE=NO was also specified. OPTIONS=STRIPRTEIN is valid for GATE=GENERAL only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE OPTIONS=TCPRBLMT VALID FOR TYPE=XTP|XOT ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the TCPRBLMT= suboperand was coded for the OPTIONS= operand for this TYPE=MCH|MXT|SPU REMOTE definition statement. OPTIONS=TCPRBLMT= is valid for TYPE=XTP|XOT REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The OPTIONS= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PACE VALID FOR TYPE=XTP|SPU ONLY, IGNORED

EXPLANATION:

Indicates that the PACE= operand was coded for this TYPE=XOT|MCH|MXT REMOTE definition statement. The PACE= operand is valid for TYPE=XTP|SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The PACE= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PACE INVALID FOR PAD=NO, IGNORED

EXPLANATION:

Indicates that the PACE= operand was specified for this TYPE=XTP REMOTE definition statement when PAD=NO was also specified. Output pacing requires that HNAS be allowed to send Qualified Data packets to solicit a response from the remote DTE. Qualified Data exchanges requires PAD facilities. When the PACE= operand is specified, PAD=INTEG|TRANSP|PACEONLY must also be specified.

SYSTEM ACTION:

HNAS processing continues. The PACE= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PAD VALID FOR TYPE=XTP|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the PAD= operand was coded for this TYPE=XOT|MXT|SPU REMOTE definition statement. The PAD= operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The PAD= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PADPARM REQUIRES PAD=INTEG, IGNORED

EXPLANATION:

Indicates that the PADPARM= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when PAD=NO|TRANSP was also specified. The PADPARM= operand is valid with PAD=INTEG only.

SYSTEM ACTION:

HNAS processing continues. The PADPARM= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PKTSIZ VALID FOR TYPE=XOT ONLY, IGNORED

EXPLANATION:

Indicates that the PKTSIZ= operand was coded for this TYPE=XTP|MCH|MXT|SPU REMOTE definition statement. The PKTSIZ= operand is valid for TYPE=XOT REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The PKTSIZ= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PORT VALID FOR TYPE=XTP|XOT ONLY, IGNORED

EXPLANATION:

Indicates that the PORT= operand was coded for this TYPE=MCH|MXT|SPU REMOTE definition statement. The PORT= operand is valid for TYPE=XTP|XOT REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The PORT= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC REQUIRES CONNECT=NO, IGNORED

EXPLANATION:

Indicates that the PVC= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when CONNECT=YES|CUD0|SUBD was also specified. The PVC= operand is invalid for a GATEFC MCH.

SYSTEM ACTION:

HNAS processing continues. The PVC= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC *subopnum* LLC5 REQUIRES PAD=INTEG|TRANSP, IGNORED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP|MCH REMOTE definition statement specified an LLC type of 5 when PAD=NO was also specified. An LLC type of 5 requires PAD=INTEG|TRANSP.

SYSTEM ACTION:

HNAS processing continues. The LLC type for the PVC= operand entry is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC *subopnum* LLC*i* REQUIRES APPLNAME, VTAM ACCESS CANNOT BE PROVIDED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP|MCH REMOTE definition statement specified an LLC type of ***i*** (0|5) when no APPLNAME= operand was specified. LLC0 or LLC5 sessions require the APPLNAME= operand for host application access.

SYSTEM ACTION:

HNAS processing continues. Non-GATE application access is not available.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC *subopnum* APPLID *apnmndx* INVALID APPLNAME INDEX, ACCESS DENIED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP|MCH REMOTE definition statement specified an APPLID value of ***apnmndx*** which exceeds the number of entries in the APPLNAME= operand. LLC0 or LLC5 sessions require the APPLNAME= operand for host application access.

SYSTEM ACTION:

HNAS processing continues. Non-GATE application access is not available.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC *subopnum* LLC4 REQUIRES LUNAME, VTAM ACCESS CANNOT BE PROVIDED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP|MCH REMOTE definition statement specified an LLC type of 4 when no

LUNAME= operand was specified. LLC4 sessions require the LUNAME= operand for host CTCP application access.

SYSTEM ACTION:

HNAS processing continues. GATE application access is not available.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC *subopnum* APPLID *lunmndx* INVALID LUNAME INDEX, ACCESS DENIED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP|MCH REMOTE definition statement specified an APPLID value of ***lunmndx*** which exceeds the number of entries in the LUNAME= operand. LLC4 sessions require the LUNAME= operand for host CTCP application access.

SYSTEM ACTION:

HNAS processing continues. Non-GATE application access is not available.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC *subopnum* IFNAME *ifname* VALID FOR TYPE=MCH ONLY, IGNORED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP REMOTE definition statement specified a target IFNAME value of ***ifname***. The IFNAME value is used to identify an MCH interface on the remote router over which the PVC session will operate. It is valid for a TYPE=MCH REMOTE definition statement only.

SYSTEM ACTION:

HNAS processing continues. The IFNAME value for the PVC= operand entry is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC *subopnum* RMTNAME *rmtname* VALID FOR TYPE=MCH ONLY, IGNORED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP REMOTE definition statement specified a target RMTNAME value of ***rmtname***. The RMTNAME value is used to identify a TYPE=XOT REMOTE definition statement that will be used for the PVC connection and is valid for a TYPE=MCH REMOTE definition statement only.

SYSTEM ACTION:

HNAS processing continues. The RMTNAME value for the PVC= operand entry is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PVC *subopnum* LLC3 VALID FOR TYPE=MCH ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP REMOTE definition statement specified an LLC type of 3 which is invalid for a TYPE=XTP REMOTE definition statement. LLC3 support is provided for a TYPE=MCH REMOTE definition statement only.

SYSTEM ACTION:

HNAS processing continues. The PVC= operand entry is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE PWPROT VALID FOR TYPE=XTP|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the PWPROT= operand was coded for this TYPE=XOT|MXT|SPU REMOTE definition statement. The PWPROT= operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The PWPROT= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE SUBADDR VALID FOR TYPE=XTP|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the SUBADDR= operand was coded for this TYPE=XOT|MXT|SPU REMOTE definition statement. The SUBADDR= operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The SUBADDR= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE SUBD REQUIRES GATE=GENERAL, IGNORED

EXPLANATION:

Indicates that the SUBD= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) without GATE=GENERAL also being specified.

SYSTEM ACTION:

HNAS processing continues. The SUBD= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE SUBD REQUIRES CONNECT=NO|SUBD, IGNORED

(changed for V2R3M0)

EXPLANATION:

Indicates that the SUBD= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) without CONNECT=SUBD also being specified.

SYSTEM ACTION:

HNAS processing continues. The SUBD= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE *ownrname* SVC0 *subopnum* RMTNAME *trgtname* NOT FOUND, IGNORED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC0= operand for this TYPE=XTP|MCH REMOTE definition statement named ***ownrname*** specified a target REMOTE definition statement name of ***trgtname*** that could not be found in the CDF. This error means that the given name was not specified in the symbol field of any REMOTE definition statement in the CDF.

SYSTEM ACTION:

HNAS processing continues. The SVC0= suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, supply a valid TYPE=MXT REMOTE definition statement name for the SVC0= suboperand then restart HNAS.

NAS1311W REMOTE *ownrname* SVC0 *subopnum* RMTNAME *trgtname* IS NOT TYPE=MXT, IGNORED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC0= operand for this TYPE=XTP|MCH REMOTE definition statement named ***ownrname*** specified a valid REMOTE definition statement name of ***trgtname*** but it was not TYPE=MXT.

SYSTEM ACTION:

HNAS processing continues. The SVC0= suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, supply a valid TYPE=MXT REMOTE definition statement name for the SVC0= suboperand then restart HNAS.

NAS1311W REMOTE SVC0 REQUIRES CONNECT=NO, IGNORED

EXPLANATION:

Indicates that the SVC0= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when CONNECT=YES|CUD0|SUBD was also specified. The SVC0= operand is invalid for a GATEFC MCH.

SYSTEM ACTION:

HNAS processing continues. The SVC0= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE *ownrname* SVC3 *subopnum* RMTNAME *trgtname* NOT FOUND, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC3= operand for this TYPE=MCH REMOTE definition statement named ***ownrname*** specified a target REMOTE definition statement name of ***trgtname*** that could not be found in the CDF. This error means that the given name was not specified in the symbol field of any REMOTE definition statement in the CDF.

SYSTEM ACTION:

HNAS processing continues. The SVC3= suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, supply a valid TYPE=MXT REMOTE definition statement name for the SVC3= suboperand then restart HNAS.

NAS1311W REMOTE *ownrname* SVC3 *subopnum* RMTNAME *trgtname* IS NOT TYPE=MXT, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC3= operand for this TYPE=MCH REMOTE definition statement named ***ownrname*** specified a valid REMOTE definition statement name of ***trgtname*** but it was not TYPE=MXT.

SYSTEM ACTION:

HNAS processing continues. The SVC3= suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, supply a valid TYPE=MXT REMOTE definition statement name for the SVC3= suboperand then restart HNAS.

NAS1311W REMOTE SVC3 VALID FOR TYPE=MCH ONLY, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the SVC3= operand was coded for this TYPE=XTP REMOTE definition statement. The SVC3= operand is valid for TYPE=MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The SVC3= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE SVC3 REQUIRES CONNECT=NO, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the SVC3= operand for this TYPE=MCH REMOTE definition statement specified value(s) when CONNECT=YES|CUD0|SUBD was also specified. The SVC3= operand is invalid for a GATEFC MCH.

SYSTEM ACTION:

HNAS processing continues. The SVC3= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE SVC4 REQUIRES GATE=GENERAL, IGNORED

EXPLANATION:

Indicates that the SVC4= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) without GATE=GENERAL also being specified.

SYSTEM ACTION:

HNAS processing continues. The SVC4= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE SVC4 REQUIRES CONNECT=NO, IGNORED

EXPLANATION:

Indicates that the SVC4= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when CONNECT=YES|CUD0|SUBD was also specified. The SVC4= operand is invalid for a GATEFC MCH.

SYSTEM ACTION:

HNAS processing continues. The SVC4= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE *ownrname* SVC5 *subopnum* RMTNAME *trgtname* NOT FOUND, IGNORED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC5= operand for this TYPE=XTP|MCH REMOTE definition statement named ***ownrname*** specified a target REMOTE definition statement name of ***trgtname*** that could not be found in the CDF.

This error means that the given name was not specified in the symbol field of any REMOTE definition statement in the CDF.

SYSTEM ACTION:

HNAS processing continues. The SVC5= suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, supply a valid TYPE=MXT REMOTE definition statement name for the SVC5= suboperand then restart HNAS.

NAS1311W REMOTE *ownrname* SVC5 *subopnum* RMTNAME *trgtname* IS NOT TYPE=MXT, IGNORED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC5= operand for this TYPE=XTP|MCH REMOTE definition statement named ***ownrname*** specified a valid target REMOTE definition statement name of ***trgtname*** but it was not TYPE=MXT.

SYSTEM ACTION:

HNAS processing continues. The SVC5= suboperand is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, supply a valid TYPE=MXT REMOTE definition statement name for the SVC5= suboperand then restart HNAS.

NAS1311W REMOTE SVC5 REQUIRES CONNECT=NO, IGNORED

EXPLANATION:

Indicates that the SVC5= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when CONNECT=YES|CUD0|SUBD was also specified. The SVC5= operand is invalid for a GATEFC MCH.

SYSTEM ACTION:

HNAS processing continues. The SVC5= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE SVC5 REQUIRES PAD=INTEG|TRANSP, IGNORED

EXPLANATION:

Indicates that the SVC5= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) without PAD=INTEG|TRANSP also being specified.

SYSTEM ACTION:

HNAS processing continues. The SVC5= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart

NAS1311W REMOTE SYSL REQUIRES APPLNAME, VTAM ACCESS BLOCKED

EXPLANATION:

Indicates that the SYSL= operand for this TYPE=XTP|MCH REMOTE definition statement specified value(s) when none were specified for the APPLNAME= operand. SYSL= operand values are used to select entries in the APPLNAME= operand list.

SYSTEM ACTION:

HNAS processing continues. The SYSL= operand value(s) are ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE TAP VALID FOR TYPE=XTP|XOT ONLY, IGNORED

EXPLANATION:

Indicates that the TAP= operand was coded for this TYPE=MCH|MXT|SPU REMOTE definition statement. The TAP= operand is valid for TYPE=XTP|XOT REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The TAP= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE TAP INVALID FOR IPADDR=DYNAMIC, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the TAP= operand was coded for this TYPE=XOT REMOTE definition statement that also specified IPADDR=DYNAMIC. The TAP= operand is valid for fixed IP address definitions only.

SYSTEM ACTION:

HNAS processing continues. The TAP= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE TAP INVALID FOR SECONDARY ROUTER DEFINITION, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the TAP= operand was coded for this TYPE=XTP|XOT REMOTE definition statement that has a fixed IP address but another REMOTE definition statement with the same IP address was already processed. The TAP= operand is valid for first REMOTE definition statement in a collection of REMOTE definition statements that share the same fixed IP address.

SYSTEM ACTION:

HNAS processing continues. The TAP= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE TRAN VALID FOR TYPE=XTP|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the TRAN= operand was coded for this TYPE=XOT|MXT|SPU REMOTE definition statement. The TRAN= operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The TRAN= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE USSTAB VALID FOR TYPE=XTP|MCH|MXT|SPU ONLY, IGNORED

EXPLANATION:

Indicates that the USSTAB operand was coded for this TYPE=XOT REMOTE definition statement. The USSTAB operand is valid for TYPE=XTP|MCH|MXT|SPU REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The USSTAB= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE USSTAB WHEN MCHSOL NOT USED, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that the USSTAB= operand was coded for this TYPE=XTP|MCH REMOTE definition statement but MCHSOL was not specified in the APPLNAME= operand for the same REMOTE definition statement. The MCHSOL ‘application’ is required to interpret the USSTAB= operand value.

SYSTEM ACTION:

HNAS processing continues. The USSTAB= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1311W REMOTE VCLMT VALID FOR TYPE=XTP|XOT|MCH ONLY, IGNORED

EXPLANATION:

Indicates that the VCLMT= operand was coded for this TYPE=MXT|SPU REMOTE definition statement. The VCLMT= operand is valid for TYPE=XTP|XOT|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing continues. The VCLMT= operand value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1321D REMOTE PKTSIZ TOO HIGH, 256 ASSUMED

EXPLANATION:

Indicates that the PKTSIZ= operand for this TYPE=XOT REMOTE definition statement specified a value too large to be accommodated by the HNAS buffer pool. The PKTSIZ= operand is used to specify the default packet size that HNAS will use for GATE sessions when a packet size is not provided by the host CTCP.

SYSTEM ACTION:

HNAS processing continues. A default PKTSIZ= operand value of **256** is use.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1321D REMOTE VCLMT TOO LOW, *limit* ASSUMED

EXPLANATION:

Indicates that the VCLMT= operand for this TYPE=XTP|MCH REMOTE definition statement specified a value that was less that the sum of the SLU counts specified for the PVC=, SVC0=, SVC3=, SVC4= and SVC5= operands.

SYSTEM ACTION:

HNAS processing continues. A default VCLMT= operand value of ***limit*** is generated by combining the SLU counts specified for the PVC=, SVC0=, SVC3=, SVC4= and SVC5= operands.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1321E ERROR: REMOTE *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the REMOTE definition statement is in error.

Note: If the operand ***opname*** is a sublist (e.g., CUD0=(hexvalue1,...,hexvaluen)), the suboperand in error is the last value displayed for the ***opval*** text.

For example: if CUD0=(C1,101,C2) is specified on a REMOTE definition statement, the following message is displayed when the second CUD0= suboperand is processed:

```
NAS1321E ERROR: REMOTE  CUD0=(C1,101
```

This message is issued because the second CUD0= operand value (101) is greater than X'FF' which is the maximum allowable CUD0 value.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the invalid statement(s) then restart HNAS.

NAS1321E REMOTE IDBLK/IDNUM DUPLICATED, INVALID CONFIGURATION

(new for V2R2M0)

EXPLANATION:

Indicates that the combination of values specified for the IDBLK= and IDNUM= operands for this TYPE=SPU REMOTE definition statement appear more than once in the CDF. Multiple TYPE=SPU REMOTE definition statements that specify the same IDBLK= operand values are allowed but the IDNUM= operand values must be different.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid value for the IDNUM= operand for this REMOTE definition statement then restart HNAS.

NAS1321E REMOTE IPADDR/PORT DUPLICATED, INVALID CONFIGURATION

EXPLANATION:

Indicates that the combination of values specified for the IPADDR= and PORT= operands for this TYPE=XOT REMOTE definition statement appear more than once in the CDF. Multiple TYPE=XOT REMOTE definition statements that specify the same IPADDR= operand values are allowed but the PORT= operand values must be different.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid value for the PORT= operand for this REMOTE definition statement then restart HNAS.

NAS1321E REMOTE IPADDR/PORT/IFNUM DUPLICATED, INVALID CONFIGURATION

EXPLANATION:

Indicates that the combination of values specified for the IPADDR=, PORT= and IFNUM= operands for this TYPE=XTP REMOTE definition statement appear more than once in the CDF. Multiple TYPE=XTP REMOTE definition statements that specify the same IPADDR= and PORT= operand values are allowed but the IFNUM= operand values must be different.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid value for the IFNUM= operand for this REMOTE definition statement then restart HNAS.

NAS1321E REMOTE IPADDR INVALID, MUST BE DIFFERENT THAN LOCAL IPADDR, REQUIRED

EXPLANATION:

Indicates that the IPADDR= operand for this TYPE=XTP|XOT REMOTE definition statement specified the same value that was specified for the IPADDR= operand of a LOCAL definition statement in the CDF. The REMOTE IPADDR= operand identifies a specific router in the TCP/IP network. The LOCAL IPADDR= operand identifies HNAS as perceived by the TCP/IP network.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid value for the IPADDR= operand for this REMOTE definition statement then restart HNAS.

NAS1321E REMOTE LUNAME *subopnum* SLUNAME *sluname* DUPLICATED, REQUIRED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the LUNAME= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***sluname*** that appears more than once in the CDF. LUNAME= operand SLU name values are used to identify the MCH for specific host CTCP applications. Each MCH SLU name must be unique.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply unique SLU names for the LUNAME= operand for this REMOTE definition statement then restart HNAS.

NAS1321E REMOTE NAME *badname* DUPLICATED, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that the name ***badname*** appeared in the symbol field of more than one REMOTE definition statement in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid name for this REMOTE definition statement then restart HNAS.

NAS1321E REMOTE NAME *badname* CONFLICTS WITH ANOTHER REMOTE NAME, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that the first 4-characters of the name ***badname*** appeared in the symbol field of more than one REMOTE definition statement in the CDF. REMOTE names must be unique in the first four (4) character positions.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid name for this REMOTE definition statement then restart HNAS.

NAS1321E REMOTE PVC *subopnum* SLUNAME *badname* DUPLICATED, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***badname*** that appears more than once in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SLU name for the PVC= suboperand then restart HNAS.

NAS1321E REMOTE PVC *subopnum* IFNAME *ifname* LCN *lcn* DUPLICATED, REQUIRED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the PVC= operand for this TYPE=XOT REMOTE definition statement specified a target IFNAME value of ***ifname*** and a target LCN value of ***lcn*** that was already specified in the PVC= operand. Each PVC= operand entry represents a distinct PVC on the XOT router and hence all descriptive information must be unique.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply valid IFNAME and LCN values for all PVC operand entries of the TYPE=MCH REMOTE definition statement then restart HNAS.

NAS1321E REMOTE SVC0 *subopnum* SLUNAME *badname* DUPLICATED, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC0= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***badname*** that appears more than once in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SLU name for the SVC0= suboperand then restart HNAS.

NAS1321E REMOTE SVC4 *subopnum* SLUNAME *badname* DUPLICATED, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC4= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***badname*** that appears more than once in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SLU name for the SVC4= suboperand then restart HNAS.

NAS1321E REMOTE SVC5 *subopnum* SLUNAME *badname* DUPLICATED, REQUIRED

(changed for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC5= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***badname*** that appears more than once in the CDF.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid SLU name for the SVC5= suboperand then restart HNAS.

NAS1321E REMOTE SYSL *subopnum* APPLID *apnmndx* EXCEEDS APPLNAME, VTAM ACCESS BLOCKED

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SYSL= operand for this TYPE=XTP|MCH REMOTE definition statement specified an APPLID value of ***apnmndx*** which exceeds the number of entries in the APPLNAME= operand. PCNE (LLC0) and PAD (LLC5) sessions require the APPLNAME= operand for host application access.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Supply a valid APPLNAME= operand index for the SYSL= suboperand then restart HNAS.

NAS1321I REMOTE IPADDR WAS ALSO SPECIFIED FOR LOCAL NAMED *lclname*

NAS1321I VALID ONLY IN HNAS-TO-HNAS ENVIRONMENT USING THE SAME TCPIP STACK

(APAR/added for V2R3M0
(apar/changed for V2R4M0)

EXPLANATION:

Indicates that the same IP address was specified for this REMOTE and the LOCAL named ***lclname***. This configuration is allowed in an HNAS-to-HNAS environment where the same TCP stack is used for both HNAS images. This message is issued for information only.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1321I REMOTE IPADDR AND PORT WERE ALSO SPECIFIED FOR REMOTE NAMED *rmtname*

NAS1321I THE SOCKETS FROM BOTH REMOTES WILL BE COMBINED IN A COMMON POOL

(APAR/added for V2R3M0
(apar/changed for V2R4M0)

EXPLANATION:

Indicates that the same IP address and port number were specified for this REMOTE and the REMOTE named ***rmtname***. This configuration is allowed and causes the sockets from both REMOTEs to be combined into a common socket pool. This message is issued for information only.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1321I REMOTE SVC3 *subopnum* SPUNAME *spuname* DUPLICATED, WILL BE ALLOCATED FCF

(new for V2R2M0
(apar/changed for V2R4M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC3= operand for this TYPE=MCH REMOTE definition statement specified an SLU name of ***spuname*** that appears in more than one SVC3= operand entry in the CDF.

SYSTEM ACTION:

HNAS processing continues. The named SPU will be allocated on a first come, first served basis.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1321S REMOTE *rmttype* PRESCAN LIMIT REACHED, INVALID CONFIGURATION

EXPLANATION:

Indicates that this **TYPE=*rmttype*** (XTP, XOT, MCH, MXT or SPU) REMOTE definition statement exceeded the HNAS limit. The total number of REMOTE definition statements in the CDF (regardless of type) cannot exceed 510 (the current HNAS limit).

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Remove the extra REMOTE definition statement(s) from the CDF then restart HNAS.

NAS1321W REMOTE LLCI CONTAIN DUPLICATE SUBADDRESS VALUES, EFFECT UNKNOWN

EXPLANATION:

Indicates that the same called DTE subaddress value (SUBD) appears more than once within the LLC0=, LLC3=, LLC4= or LLC5= operand lists for this TYPE=XTP|MCH REMOTE definition statement.

SYSTEM ACTION:

HNAS processing continues. The runtime effect of this error cannot be predicated.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1321W REMOTE NAME *rmtname* CONFLICTS WITH BUILD NASNAME, IGNORED

EXPLANATION:

Indicates that the name ***rmtname*** specified for this REMOTE definition statement is the same as the name specified for the NASNAME= operand of the BUILD definition statement. The REMOTE name **must** be different than NASNAME= operand value and **must** be unique in its first four (4) characters.

SYSTEM ACTION:

HNAS processing continues. The REMOTE definition statement name is ignored. A default name is generated based on the position of this REMOTE definition statement in the CDF.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1321W REMOTE NAME *rmtname* CONFLICTS WITH BUILD TCPNAME, IGNORED

EXPLANATION:

Indicates that the name ***rmtname*** specified for this REMOTE definition statement is the same as the name specified for the TCPNAME= operand of the BUILD definition statement. The REMOTE name **must** be different than TCPNAME= operand value and **must** be unique in its first four (4) characters.

SYSTEM ACTION:

HNAS processing continues. The REMOTE definition statement name is ignored. A default name is generated based on the position of this REMOTE definition statement in the CDF.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1322W REMOTE SVC0 *subopnum* SLUNAME *sluname* APPLNAME INDEX *apnmndx* INVALID, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC0= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***sluname*** and an APPLNAME= operand index value of ***apnmndx*** but the specified index exceeds the number of entries in the APPLNAME= operand.

SYSTEM ACTION:

HNAS processing continues. The SVC0= operand entry ***apnmndx*** value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1322W REMOTE SVC5 *subopnum* SLUNAME *sluname* APPLNAME INDEX *apnmndx* INVALID, IGNORED

(new for V2R2M0)

EXPLANATION:

Indicates that suboperand number ***subopnum*** of the SVC5= operand for this TYPE=XTP|MCH REMOTE definition statement specified an SLU name of ***sluname*** and an APPLNAME= operand index value of ***apnmndx*** but the specified index exceeds the number of entries in the APPLNAME= operand.

SYSTEM ACTION:

HNAS processing continues. The SVC5= operand entry ***apnmndx*** value is ignored.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

NAS1331E INVALID: REMOTE *opname=opval*

EXPLANATION:

Indicates that value ***opval*** for operand ***opname*** on the REMOTE definition statement is invalid.

For example: if CUD0=(C1,C2) is specified on a TYPE=MXT REMOTE definition statement, the following message is displayed:

```
NAS1331E INVALID: REMOTE  CUD0=(C1,C2)
```

This message is issued because the CUD0 operand is valid for TYPE=XTP|MCH REMOTE definition statements only.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the invalid statement(s) then restart HNAS.

NAS1331S CONFIGURATION FAILURE, REMOTE PRESCAN ERRORS

EXPLANATION:

A computing error has occurred while processing the REMOTE definition statement(s) during the prescan of the CDF. The sum of the TYPE=XTP|MCH (WARMMXCT), TYPE=XOT (WARMMNCT), TYPE=MXT (WARMMTCT) and TYPE=SPU (WARMPUCT) REMOTE definition types does not equal the total (WARMDFLM) REMOTE definition statements defined (see NAS1000I).

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact Comm-Pro for assistance.

NAS1341S CONFIGURATION FAILURE, REMOTE SCAN ERRORS

EXPLANATION:

A computing error has occurred while processing the REMOTE definition statement(s) during the processing scan of the CDF. The sum of the TYPE=XTP (WARMXTPC), TYPE=XOT (WARMXOTC) and TYPE=MCH (WARMMCHC) REMOTE definitions that can be connected does not equal the total (WARMCNLM) REMOTE definitions that can be connected (see NAS1000I).

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact Comm-Pro for assistance.

NAS1351I REMOTE *rmtname* TYPE=*ttt* WAS NOT REFERENCED, INFO ONLY

EXPLANATION:

Indicates that the TYPE=XOT|MCH|MXT|DFL|DFX REMOTE identified by ***rmtname*** was specified but was not referenced in an operand on another CDF definition statement.

TYPE=XOT REMOTEs with a valid IPADDR= value may be referenced in the RTEOUT= operand of a TYPE=XOT LOCAL definition statement or in the PVC= operand of a TYPE=MCH REMOTE definition statement. TYPE=XOT REMOTEs that identify a dynamic socket pool with IPADDR=DYNAMIC or PORT=DYNAMIC are required to be unreferenced.

TYPE=MCH REMOTEs should be referenced in the RTEIN= of a TYPE=XOT LOCAL definition statement.

TYPE=MXT REMOTEs should be referenced in the PVC=, SVC0= or SVC5= operand of a TYPE=MCH|XTP REMOTE definition statement.

TYPE=DFL REMOTEs should be referenced in the DFLNAME= of a TYPE=MCH REMOTE definition statement.

TYPE=DFX REMOTEs should be referenced in the DFXNAME= of a TYPE=MCH REMOTE definition statement.

SYSTEM ACTION:

HNAS processing continues. The message is issued for information only. The named REMOTE will be created but will not be accessible unless it is named in an operand that can be updated using the MLCL or MRMT console command.

PROGRAMMER ACTION:

If this action is not acceptable, terminate HNAS, correct the statement(s) then restart HNAS.

```
NAS1391I  THE FOLLOWING OPERANDS FOR RES resname
          (DEFINED ON MCH mchname

NAS1391I  AS mchop ENTRY xxxx) COME FROM MXT mxtname
          RATHER THAN THE MCH
NAS1391I  --> mxtop=opval
NAS1391I  --> mxtop=opval
NAS1391I  --> :
```

EXPLANATION:

Indicates that the *RES* resource (SLU|SPU) named ***resname*** from the ***mchop*** operand (PVC=|SVC*i*=), entry index ***xxxx*** on the TYPE=MCH|XTP REMOTE identified by ***mchname*** will use override operands from the MXT identified by ***mxtname*** rather than the root MCH.

SYSTEM ACTION:

HNAS processing continues. The message is issued for information only.

PROGRAMMER ACTION:

None.

Overview for NAS1391I:

NAS1391I messages are now issued to display MXT operand overrides. When a user associates an MXT with a PVC= or SVC0|3|5= operand entry, he is asking HNAS to override operands on the root MCH with those from the MXT. In some cases, this can lead to confusion if one does not remember to review the HNAS documentation to see which operands can be overridden based on the associated resource type.

The configuration logic has been modified to display, for each SLU or SPU defined in the PVC= or SVC0|3|5= operands with an associated MXT (or SVC), those MXT operands that will override operands of the same name on the root MCH. Not all MXT operands are valid overrides for all SLUs or SPUs. For example, IDLETO= is a valid override when specified for an MXT that is associated with a SVC0|5= SLU but is not used for a PVC= SLU.

MXT override messages are listed at the end of the CDF scan in NAS1391I messages. Only those MXT operands that are specified and, of these, only those that are valid as overrides for an SLU or SPU are displayed. If an MXT operand is not listed, it is because it was either omitted from the MXT (an hence cannot override the MCH operand) or, if specified, is not valid as an override for the SLU or SPU resource. Consider the following configuration example:

```
MCH1      REMOTE TYPE=MCH
                 IDLETO=2
                 PAD=INTEG
                 PADPARM=(1/1,
                          2/1,
                          13/7,
```

```
                         21/0,
                         110/0)
                  PVC=(3,
                       MCH1P001/5/255/01/SERIAL0-1/R2CNOT1/MXT0,
                       MCH1P002/5/255/02/SERIAL0-1//MXT2,
                       MCH1P003/5/255/03/SERIAL0-1)
                  SVC0=(2,
                        MCH10011/1234-X1234-<MXT1>T01/MXT0
                        MCH10012/1234-<MXT0>-X1234T1)
                  SVC5=(2,
                        MCH15001/1234-X1234-<MXT1>T01/MXT0
                        MCH15002/1234-<MXT0>-X1234T1)
                  SVC3=(1,Q1990100//MXT0)
                  :
MXT0      REMOTE TYPE=MXT
                  CUD=(01111111)
                  DCEADDR=1111
                  DTEADDR=9999
                  FAC=(420808
                       430404)
                  IDLETO=15
                  PADPARM=(1/1,
                           2/1,
                           3/2,
                           4/0,
                           5/2,
                           7/2,
                           12/1,
                           13/7,
                           21/0,
                           110/0)
MXT1      REMOTE TYPE=MXT
                  CUD=(01222222)
                  DCEADDR=2222
                  FAC=(0101420A0A430202)
                  PADPARM=(1/1,
                           2/1,
                           7/2,
                           12/1,
                           13/7,
                           21/0,
                           110/0)
MXT2      REMOTE TYPE=MXT
                  CUD=(01222222)
                  DCEADDR=2222
Q1990100 REMOTE TYPE=SPU
                  LUNAME=(,
                  Q1990102/201/201/1/PVCMXT,
                  Q1990103)
                  DTEADDR=20361234
                  DCEADDR=20364321
                  FAC=420707430707
                  CUD=C3000000
                  IDBLK=199
```

```
                IDNUM=00001
                :
```

Based on this configuration, the following messages are generated at the end of the CDF scan.

```
NAS1391I THE FOLLOWING OPERANDS FOR SLU MCH1P001 (DEFINED ON MCH MCH1
NAS1391I AS PVC ENTRY 000) COME FROM MXT MXT0     RATHER THAN THE MCH
NAS1391I --> FAC=420808430404
NAS1391I THE FOLLOWING OPERANDS FOR SLU MCH1P002 (DEFINED ON MCH MCH1
NAS1391I AS PVC ENTRY 001) COME FROM MXT MXT2     RATHER THAN THE MCH
NAS1391I --> NO OVERRIDES
NAS1391I THE FOLLOWING OPERANDS FOR SLU MCH10011 (DEFINED ON MCH MCH1
NAS1391I AS SVC0 ENTRY 0000) COME FROM MXT MXT0     RATHER THAN THE MCH
NAS1391I WHEN CONNECTION IS NOT ESTABLISHED VIA A <RMTNAME>
NAS1391I --> CUD=01111111
NAS1391I --> DCEADDR=1111
NAS1391I --> DTEADDR=9999
NAS1391I --> FAC=420808430404
NAS1391I --> IDLETO=00015
NAS1391I THE FOLLOWING OPERANDS FOR SLU MCH10011 (DEFINED ON MCH MCH1
NAS1391I AS SVC0 ENTRY 0000) COME FROM MXT MXT1     RATHER THAN THE MCH
NAS1391I WHEN CONNECTION IS ESTABLISHED VIA <MXT1>
NAS1391I --> CUD=01222222
NAS1391I --> DCEADDR=2222
NAS1391I --> FAC=0101420A0A430202
NAS1391I THE FOLLOWING OPERANDS FOR SLU MCH10012 (DEFINED ON MCH MCH1
NAS1391I AS SVC0 ENTRY 0001) COME FROM MXT MXT0     RATHER THAN THE MCH
NAS1391I WHEN CONNECTION IS ESTABLISHED VIA <MXT0>
NAS1391I --> CUD=01111111
NAS1391I --> DCEADDR=1111
NAS1391I --> DTEADDR=9999
NAS1391I --> FAC=420808430404
NAS1391I --> IDLETO=00015
NAS1391I THE FOLLOWING OPERANDS FOR SPU Q1990100 (DEFINED ON MCH MCH1
NAS1391I AS SVC3 ENTRY 0000) COME FROM MXT MXT0     RATHER THAN THE MCH
NAS1391I WHEN THEY ARE OMITTED FOR THE SPU
NAS1391I --> CUD=01111111
NAS1391I --> DCEADDR=1111
NAS1391I --> DTEADDR=9999
NAS1391I --> FAC=420808430404
NAS1391I --> IDLETO=00015
NAS1391I THE FOLLOWING OPERANDS FOR SLU MCH15001 (DEFINED ON MCH MCH1
NAS1391I AS SVC5 ENTRY 0000) COME FROM MXT MXT0     RATHER THAN THE MCH
NAS1391I WHEN CONNECTION IS NOT ESTABLISHED VIA A <RMTNAME>
NAS1391I --> CUD=01111111
NAS1391I --> DCEADDR=1111
NAS1391I --> DTEADDR=9999
NAS1391I --> FAC=420808430404
NAS1391I --> IDLETO=00015
NAS1391I --> PADPARM=001/001 002/001 003/002 004/000 005/002 007/002 ..
NAS1391I THE FOLLOWING OPERANDS FOR SLU MCH15001 (DEFINED ON MCH MCH1
NAS1391I AS SVC5 ENTRY 0000) COME FROM MXT MXT1     RATHER THAN THE MCH
NAS1391I WHEN CONNECTION IS ESTABLISHED VIA <MXT1>
NAS1391I --> CUD=01222222
```

```
NAS1391I --> DCEADDR=2222
NAS1391I --> FAC=0101420A0A430202
NAS1391I --> PADPARM=001/001 002/001 007/002 012/001 013/007 021/000 ...
NAS1391I THE FOLLOWING OPERANDS FOR SLU MCH15002 (DEFINED ON MCH MCH1
NAS1391I AS SVC5 ENTRY 0001) COME FROM MXT MXT0     RATHER THAN THE MCH
NAS1391I WHEN CONNECTION IS ESTABLISHED VIA <MXT0>
NAS1391I --> CUD=01111111
NAS1391I --> DCEADDR=1111
NAS1391I --> DTEADDR=9999
NAS1391I --> FAC=420808430404
NAS1391I --> IDLETO=00015
NAS1391I --> PADPARM=001/001 002/001 003/002 004/000 005/002 007/002 ...
```

General Notes for NAS1391I:

1) The NAS1391I message for SLU MCH1P001 above only displays the FAC= operand for MXT0 even though other operands were specified. This is because only the FAC= operand is used as a PVC= SLU override operand.

2) The NAS1391I message for SLU MCH1P002 shows 'NO OVERRIDES' because the FAC= operand for was omitted for MXT2. Note that no NAS1391I message is issued for SLU MCH1P003 since no MXT was associated with this SLU.

3) The NAS1391I messages for the SVC3= operand above list MXT overrides when operands are omitted from the SPU. The order is MXT first, SPU then MCH. This only applies when SPU connections are established via the MCH and not by IDBLK/IDNUM matching which is MCH independent.

4) The SVC0= and SVC5= operands above are identical except for the SLU names. Note that the NAS1391I messages for the SVC0= and SVC5= operands are the same except that the PADPARM= operand is listed for SVC5= SLUs (when specified on the MXT) while it is not for SVC0 SLUs. This is because only SVC5= SLUs use the PADPARM= operand.

5) The NAS1391I messages are generated only when an SLU or SPU has an associated MXT as provided in the PVC= or SVC0|3|5= operands. If you wish to withhold the NAS1391I messages from the SYSPRINT log, specify ALRMFLTR=(...,NAS1391I(P),...) on the BUILD definition statement.

6) If you plan on filtering NAS1391I messages from SYSPRINT, we highly recommend that you first run a FASTRUN pass without filtering so that these important messages are at least displayed for your perusal anytime CDF changes are made.

Note: NAS1391I message support was introduced into 240 as Enhancement APAR 2400018.

NAS1700I VC ALLOCATION COMPLETE

EXPLANATION:

The initialization routine has allocated the pool of virtual circuit control blocks.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1701S PCE FOR REMOTE *rmtname* CAN'T BE FOUND, WILL CAUSE HALT

EXPLANATION:

An internal error has occurred during control block initialization for the REMOTE definition statement named ***rmtname***.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact Comm-Pro for assistance.

NAS1702S REMOTE *rmtname* CUD0= AND CTCP= COUNTS DIFFER

EXPLANATION:

The number of suboperands for the CUD0= and CTCP= operands for the REMOTE definition statement named ***rmtname*** do not match.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the error in the CDF then restart HNAS.

NAS1703S REMOTE *rmtname* INVALID VALUE IN CTCP= PARM (0-27,80,82,83,85 VALID)

EXPLANATION:

The value specified in the CTCP= operand for the REMOTE definition statement named ***rmtname*** are not valid.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Correct the error in the CDF then restart HNAS.

NAS1704S REMOTE *rmtname* INVALID VALUE IN LLC*i*=

EXPLANATION:

The value specified in the LLC***i***= operand (***i***=0, 3, 4 or 5) for the REMOTE definition statement named ***rmtname*** are not valid.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

The values specified for LLC0=, LLC3=, LLC4= and LLC5= operands are subaddress values that must be unique. Correct the error in the CDF then restart HNAS.

NAS1705S REMOTE *rmtname* CONNECT=SUBD REQUIRES SUBD=

EXPLANATION:

The CONNECT= operand for the REMOTE definition statement named ***rmtname*** specified a value of SUBD but the SUBD= operand was omitted. This error condition was detected during control block initialization.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact CommPro for assistance.

NAS1706S REMOTE *rmtname* CTCP= AND SUBD= MISMATCH

EXPLANATION:

The number of suboperands for the CUD0= and SUBD= operands for the REMOTE definition statement named ***rmtname*** do not match. This error condition was detected during control block initialization.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact CommPro for assistance.

NAS1706S REMOTE *rmtname* CTCP=/SUBD= VALUE ERROR

EXPLANATION:

The value specified in the CUD0= and SUBD= operands for the REMOTE definition statement named ***rmtname*** are not consistent or are invalid. This error condition was detected during control block initialization.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact CommPro for assistance.

NAS1707S REMOTE *rmtname* LUNAME=*sluname* NOT FOLLOWED BY FAST CONNECT COUNT

EXPLANATION:

A GATEFC SLU count was not specified following the MCH SLU named ***sluname*** in the LUNAME= operand for REMOTE definition statement named ***rmtname***. This error condition was detected during control block initialization.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact CommPro for assistance.

NAS1708W NO VC'S BEING ALLOCATED

(apar/new for V2R3M0)

EXPLANATION:

Indicates that processing of the CDF file did not result in the creation of any VC (Virtual Circuit) control blocks. A VC is required for each session with a remote device. VCs are created when SVC0=, SVC3=, SVC4=, SVC5= or PVC= parameters are processed.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

The message indicates a probable configuration error. Review SVCn and PVC coding.

Note: This configuration warning message was introduced into 230 with APAR 2300133 on May 18, 2005.

NAS1709I MCHINI FOR REMOTE *rmtname* HAD 0000 ERRORS

EXPLANATION:

The initialization routine has completed with no errors for the REMOTE definition statement named ***rmtname***.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1709S MCHINI FOR REMOTE *rmtname* HAD *count* ERRORS

EXPLANATION:

The initialization routine detected ***count*** errors for the REMOTE definition statement named ***rmtname***.

SYSTEM ACTION:

HNAS processing terminates after the CDF has been completely scanned.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact Comm-Pro for assistance.

NAS1710I REMOTE *rmtname* LU *ctlname* LAST FAST CONNECT LU NAME WAS *lastname*

EXPLANATION:

The initialization routine has completed the generation of the last GATEFC data session SLU named ***lastname*** for the MCH control session SLU named ***ctlname*** specified in the LUNAME= operand for the REMOTE definition statement named ***rmtname***.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1720W REMOTE *rmtname* PVC *subopnum* INV LLC (NOT 0, 4 OR 5) LLC4 REQUIRES GATE=GENERAL

NAS1720W REMOTE *rmtname* PVC *subopnum* INV LLC (NOT 0, 4 OR 5) LLC4 REQ CTCP INDEX (0-27)

NAS1720W REMOTE *rmtname* PVC *subopnum* INV LLC (NOT 0, 4 OR 5) LLC4 NO CTCP FOR GIVEN APPLID

NAS1720W REMOTE *rmtname* PVC *subopnum* INV LLC (NOT 0, 4 OR 5) LLC0 APPLNAME INDEX INVALID

NAS1720W REMOTE *rmtname* PVC *subopnum* INV LLC (NOT 0, 4 OR 5) LLC5 APPLNAME INDEX INVALID

NAS1720W REMOTE *rmtname* PVC *subopnum* INV LLC (NOT 0, 4 OR 5) PVC INVALID ON FAST CONN REMOTE

NAS1720W REMOTE *rmtname* PVC *subopnum* INV LLC (NOT 0, 4 OR 5) PVC CT > REMOTE'S VCLMT

EXPLANATION:

The initialization routine detected an error while processing suboperand number ***subop-num*** of the PVC= operand for the REMOTE definition statement named ***rmtname***.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

Collect the CDF and the SYSPRINT listing file from the HNAS run then contact Comm-Pro for assistance.

NAS1721I REMOTE *rmtname* PVC= PROCESSED, CT=*count*

EXPLANATION:

The initialization routine has completed the generation of ***count*** PVC control blocks from the PVC= operand for the REMOTE definition statement named ***rmtname***.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1730I REMOTE *rmtname* SVC*i*= PROCESSED

EXPLANATION:

The initialization routine has completed processing the SVC***i*** = operand (***i***=0, 3, 4 or 5) operand for the REMOTE definition statement named ***rmtname***.

SYSTEM ACTION:

HNAS processing continues.

PROGRAMMER ACTION:

None required.

NAS1999W Configuration Error Message
NAS1999E Configuration Error Message
NAS1999S Configuration Error Message

(new for V2R3M0)

EXPLANATION:

The NAS1999W|E|S message is generated whenever a configuration error message is generated that sets RC=4|8|12. This will allow error messages like NAS1121E ERROR: or NAS1131E INVALID:, etc., to be quickly located in the HNAS SYSPRINT log via find or search type commands.

SYSTEM ACTION:

HNAS processing continues for RC=4 and halts for RC=8|12.

PROGRAMMER ACTION:

Correct coding error and rerun program or FASTRUN process.

Alert Messages

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Alert Messages

HNAS produces alert messages for a variety of events ranging from simple HNAS non-error environment notifications to significant critical events. The alert events are categorized as Common Operational Utility processes, TCP/IP, VTAM, XOT, XTP and Authorization classes.

HNAS alert messages are generated in response to errors or events in real time. Alert messages set the HNAS system Return Code (**RC**) which is only displayed when HNAS ends. HNAS normally ends when the local console operator requests a shutdown. An RC value of 8 or less will not cause HNAS to terminate prematurely, however, an RC value of 12 or greater will. The last character of all alert messages identifiers (e.g., the ***s-value*** in NASinnn***s***, see Message Identifier Layout) provides the severity code for the alert. These severity codes are interpreted as follows:

Note: Alert and Alarm are used interchangeably throughout the document.

Message Severity Codes

An ***s-value*** of **I** identifies an informational message that does not alter the system Return Code (RC).

An ***s-value*** of **M** identifies an informational Monitor TAP message that does not alter the system Return Code (RC). These messages are generated when XOT TAP monitoring is enabled via the MONitor TAP console command. These special monitor messages are written to SYSPRINT and are not routed to SYSCONS (system operator console).

Note: NAS*xxxx*M messages cannot be filtered via the ALRMFLTR= operand. The M severity code is considered special. These messages can only be inhibited by issuing the MON TAP ALLOFF console command.

An ***s-value*** of **T** identifies an informational trace message that does not alter the system Return Code (RC). These messages are generated when session boundary tracing is enabled via the TRCMCH ICR|OCR|ICRF|ICLR|OCLR console command. These special trace messages are written to SYSPRINT and are not routed to SYSCONS (system operator console).

Note: NAS*xxxx*T messages cannot be filtered via the ALRMFLTR= operand. The T severity code is considered special. These messages can only be inhibited by issuing the TRCPRNT OFF console command.

An ***s-value*** of **W** identifies a problem that ***should not impact*** HNAS operation. RC=4 is set and real time processing continues. This ***s-value*** usually means that the event causing the alert is one that can occur during normal operations. However, the alert should be monitored to access whether the condition is transient or is symptomatic of a more serious problem.

An ***s-value*** of **E** identifies a problem that ***could impact*** HNAS operation. RC=8 is set and real time processing continues. This ***s-value*** usually means that the event causing the alert

is one that was not expected and could eventually affect the operation of the HNAS control program. Operation continues, however, the alert should be monitored to access whether the condition is transient or is indicative of a serious problem.

An ***s-value*** of **S** identifies a problem that ***will impact*** HNAS operation. RC=12 is set and real time processing is terminated. This ***s-value*** usually means that the event causing the alert is one that was not expected and will affect the operation of the HNAS control program. Continued operation is no longer possible. You should collect all pertinent diagnostic information (e.g., SYSPRINT and SYSUDUMP logs) then contact Comm-Pro immediately.

Message Presentation and Routing

Alert messages are sent to the SYSPRINT file and the system operator console (unless the HNAS start parameter SHOWOFF is enabled). Alert messages can also be sent to any remote console session when 'Alarm On' is enabled for an active session.

Message activity can be reduced or filtered when running under HNAS start parameter SHOWERR (show error only) or when using ALRMFLTR= (alarm ***filtering***) options. We suggest that users initially set the ***s-value*** for the alarm filters to an asterisk (*) so that all severity levels are either Allowed or Suppressed; i.e., NASnnnn*(A) or NASnnnn*(S). This will accommodate the occasional reassignment of Severity Levels as deemed appropriate in HNAS maintenance releases or upgrades.

Unlike the local system operator console, the remote console may have limited message reception capabilities due to terminal speed and/or other various factors. The remote alarm console logic will begin flushing alert messages when console output is being throttled (by the terminal or network) ***or when*** more alert messages are being generated than can be received or displayed at the remote console terminal. Under these circumstances an asterisk (*) will be recorded in the alert message between the time entry and message id. The asterisk indicates that some messages in the remote console delivery staging process were flushed while the current alert entry (identified with the asterisk) was successfully queued for delivery. We suggest that you suppress all un-necessary alert messages using the appropriate ALRMFLTR= suppress filters.

When the **PFXWTO** start parameter is specified or after the **PFXWTO ON** console command has been issued, all HNAS alert messages will be prefixed with the text provided by the **NASNAME** operand of the BUILD definition statement. This section lists the alert messages that can be produced by HNAS and the reason(s) for them.

Message Identifier Layout

The message identifier for each message begins with the string “NAS”. All messages have the following basic format:

NAS*innns* ...alert description

NAS is the Host NAS message identifier.

i is a component identifier.

0 indicates a system related message.
1 indicates a configuration related message.
2 indicates a TCP/IP related message.
3 indicates a VTAM related message.
4 indicates an LU related message.
5 indicates a VC related message.
6 indicates an XTP related message.
7 indicates an XOT related message.
8 indicates a QLLC related message.
9 indicates an authorization or security related message.

nnn is a message number.

s is a severity code.

I indicates information only (RC=max(RC,0)).
M indicates information monitor entry (RC=max(RC,0)).
T indicates information trace entry (RC=max(RC,0)).
W indicates a warning (RC=max(RC,4)).
E indicates an error (RC=max(RC,8)).
S indicates a severe error (RC=max(RC,12)).

Description (alert message description):

The alert message description area provides a text description of the event and may include the resource names, component types and error|sense|diagnostic reason codes.

An asterisk (*) or string of asterisk’s (********) representing the length of the entry being replaced will be recorded in the alert message description whenever a resource, state or code is unknown or unavailable at the time the alert entry was generated.

The following alert messages contain some examples of asterisks in the description:

```
NAS5704W RESET RECEIVED FOR MCH LR222801 VC 001BE008 ********
         LU ******** CAUSE/DIAG=005/002 (05/02) DIAGX=0000

NAS3799I LU EX006101 ENDING   SESSION ON MCH LR222801 HNAS
         CAUSE/DIAG=***/*** (**/**) DIAGX=****
```

Informational Alert Message Considerations

All alert messages are internally assigned a DEV=*value* (for target device). DEV=C for SYSCONS, DEV=P for SYSPRINT, DEV=B for both and DEV=F for both, Forced Alarms (ignores SHOW state). DEV=C|B is used to control the delivery of alert messages to the system operator console (SYSCONS).

When start parameter **SHOWON** is enabled (equivalent console command is **SHOW ON**), all messages are routed to the SYSCONS regardless of their severity (I|W|E|S) or their DEV=*value*.

When start parameter **SHOWERR** is enabled (equivalent console command is **SHOW ERR**), alert messages (W|E|S) with DEV=C|B are routed to the SYSCONS but information messages (I) with DEV=C|B are routed based on the default message disposition which is set by the first ALRMFLTR= operand value.

The NAS3798I and NAS3799I informational messages are invoked with DEV=F which bypasses the SHOWERR logic and hence are only subject to filtering by ALRMFLTR. When ALRMFLTR=(P,NAS*(A)) is specified, the default disposition is set to PURGE (for SHOWERR) but all messages are ALLOWed. In order to PURGE the NAS3798I and NAS3799I messages as their severity would suggest when SHOWERR is in affect, DEV=C|B would have to be specified for these messages so that the default message disposition would be used.

The following table lists **FORCED** alarm messages that are invoked via macros XFMSG DEV=F or XFWTO MSGSEV=U,DEST=BOTH. Since these alarm messages are FORCED, they will be sent to SYSCONS and SYSPRINT unconditionally regardless of the SHOW or PRNT state. However, XFMSG DEV=F messages are subject to ALRMFLTR= filtering while XFWTO MSGSEV=U messages are not. XFWTO MSGSEV=U messages cannot be inhibited.

Message ID	Message Description	Subject to ALRMFLTR
NAS0001I	HNAS initialization complete alert message	NO
NAS0013E	PARMFILE= errors	NO
NAS003*x*I	HNAS shutdown messages	NO
NAS0050A	Tracing suspended or snapshot dump taken by *consname*	NO
NAS0060W	Tracing resumed or snapshot dump resumed by *consname*	NO
NAS0070W	Trace trap action status changed by *consname*	NO
NAS0071W	Trace trap action status	NO
NAS0120I	SYSCONS error and info alarms enabled by *consname*	NO

Informational Alert Message Considerations

Message ID	Message Description	Subject to ALRMFLTR
NAS0121W	SYSCONS non-forced alarms disabled by *consname*	NO
NAS0122I	SYSCONS error alarms enabled by *consname*	NO
NAS0130W	SYSCONS alarm options modified by *consname*	NO
NAS0201E	SYSPRINT log record limit reached, logging terminated	NO
NAS0204E	SYSPRINT ABEND, logging terminated	NO
NAS0205I	SYSPRINT logging terminated by SHUTDOWN	NO
NAS0207W	SYSPRINT PRTSWLST= log datasets all used	NO
NAS0208I	SYSPRINT PRTSWLST= log dataset opened	NO
NAS0209E	SYSPRINT PRTSWLST= log dataset could not be opened	NO
NAS0210I	SYSPRINT PRTSWLST= log switch requested	NO
NAS0210I	SYSPRINT logging enabled by *consname*	NO
NAS0210W	SYSPRINT trace logging enabled by *consname*	NO
NAS0211I	SYSPRINT trace logging disabled by *consname*	NO
NAS0211W	SYSPRINT logging disabled by *consname*	NO
NAS0230W	SYSPRINT logging options modified by *consname*	NO
NAS0910I	End of day crossover message issued at midnight	NO
NAS2030I	TCP/IP stack API interrogation satisfied (stack existence test)	NO
NAS2031W	TCP/IP stack API connection must be deferred (stack inactive)	NO
NAS2032E	TCP/IP stack API interrogation failed (stack kernel inactive)	NO
NAS2050I	TCP/IP stack API connection established (stack active)	NO
NAS2051S	TCP/IP stack API establishment failed (stack inactive)	NO
NAS2060I	TCP/IP stack API connection terminated (HNAS shutdown)	NO
NAS2061S	TCP/IP stack API termination failed (stack inactive)	NO
NAS2102E	TCP/IP stack API sever (stack deactivated)	NO
NAS2103W	TCP/IP stack API quiesce (communications suspended)	NO
NAS2104I	TCP/IP stack API resume (communications restored)	NO
NAS2105S	TCP/IP stack API transfer failed (I/O request failure)	NO
NAS2109S	TCP/IP interrupt was unexpected	NO

Message ID	Message Description	Subject to ALRMFLTR
NAS2110S	TCP/IP reply ID is invalid	NO
NAS3796I	Gate Fast Connect LU session start alert message	YES
NAS3797I	SLU BIND received from PLU	YES
NAS3798I	LU session start alert message	YES
NAS3799I	LU session end alert message	YES
NAS5720I	Datafono LU session start alert message	YES
NAS5721I	Datafono leased LU normal session end alert message	YES
NAS5722W	Datafono leased LU error session end alert message	YES
NAS920*xs*	HNAS authorization messages	NO

Instead of changing the DEV=*value* for some of these FORCED informational alarm messages, they can be selectively eliminated when SHOWERR is active using the PURGE option for specific alarm filter entries. For example:

```
ALRMFLTR=(P,NAS3798I(P),NAS3799I(P),NAS*(A)).
```

Short versus Long Format Alert Messages

Many event alert messages require more than one line for their display. Effective with enhancement APAR 2400068, you can now force some of these messages to be displayed on single line. Using the new **BUILD OPTIONS=ALRMSGTXT=** operand, you can allow the original long format alarm message by specifying OPTIONS=ALRMSGTXT=LONG (the default) or the new short single line format by specifying OPTIONS=ALRMSGTXT=SHORT. Note that the OPTIONS=ALRMSGTXT= operand value can also be displayed or toggled using the new **ALARM MSGTXT={?|LONG|SHORT)** console command. The new OPTIONS=ALRMSGTXT= operand effects various error and informational alarms.

For callin/callout informational messages (**NAS7*nnn*I**), see their description later in this chapter.

For TCPIP (**NAS2*nnns***), VC (**NAS5*nnns***) and QLLC (**NAS8*nnns***) alarm messages that have the following LONG format:

```
NAScnnns comp=iii.iii.iii.iii(port) SOCKID=sockid PCEID=pceid NAME=compname
NAScnnns information text
```

The new SHORT format will appear as follows:

```
NAScnnns comp=iii.iii.iii.iii(port) NAME=compname information text
```

As you can see, the SOCKID= and PCEID= fields have been removed for the SHORT format so the alarm message can fit on a single line.

For these messages, ***c*** is the component ID (2|5|8), ***nnn*** is the message number, ***s*** is the message severity (I|W|E|S) and ***comp*** is the component type (SERVER or CLIENT).

Note: BUILD OPTIONS=ALRMSGTXT={SHORT|LONG} support was introduced into 240 as Enhancement APAR 2400068.

Note: Some single and multi-line alarm messages can exceed the length of a SYSPRINT record when OPTIONS=(TIMESTAMP=HH:MM:SS.THMI+D) is coded. If you require sub-second timestamp values, we suggest that you limit the timestamp resolution to TIMESTAMP=HH:MM:SS.THM (exclude the I level and +D date stamp). Alarm message text exceeding the SYSPRINT record length will be truncated.

Common Event Alerts

Most event alert messages that are generated by the common components of the HNAS system have unique formats based on the type of event being reported as follows:

NAS0000I HOST NAS STARTED AT *hh*:*mm*:*ss* ON *yyyy/mm/dd*

(changed for V2R2M0)

This message is issued as soon as HNAS receives control from the operating system.

Note: This alert message entry isn't provided in the ALARM LOG=? display because the message is generate before the table is created which occurs after the CDF scan completes.

NAS0001I HOST NAS INITIALIZATION COMPLETE,
ALL FUNCTIONS READY

(new for V2R2M0)

This message is issued after HNAS has completed all of its initialization processing.

Note: The 'NAS0001I Initialization Complete' (IC) message above will be withheld if problems occur while initializing the VTAM components (MCHs, LUs, VCs) or if any TCPIP server (LOCAL) component fails to come active. In all cases, additional alert messages will be generated that will indicate why a component did not complete its initialization. For example, while initializing a TCPIP server component, HNAS attempts to BIND the LOCAL IP address (its HOME IP address) to the stack. if the TCPIP BIND request fails, the following message is generated and the BIND is retried after a forced delay:

NAS2231W *comp*=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*compname*
NAS2231W BIND REQUEST FAILED, RC=*rc/errno*

If the ***rc/errno*** value in this message is FFFFFFFF 00000030 (EADDRINUSE=30), the BIND has failed either because the TCPIP 'linger timeout' has not expired ***or*** the same HOME IP address and Port number are being used by another HNAS image that is running under the same stack and the TCPIP SHAREPORT option is not active. For more information on the EADDRINUSE error condition, please see the description of the INIT= operand for the LOCAL definition statement in Chapter 4 of the HNAS Guide and Reference.

NAS0011I OPTIONS IN EFFECT:

This message is issued after HNAS interprets the start parameters that are supplied on the RUN statement (VM) or EXEC statement (MVS, OS/390 or Z/OS).

NAS0011W EXEC PARM *textstring* INVALID, IGNORED

(new for V2R2M0)

This message is issued if an invalid HNAS start parameter is coded.

The ***textstring*** value identifies the invalid parameter.

NAS0013E EXEC PARMFILE *pfddname errortext*,
END OF PARMS FORCED

(new for V2R2M0)

This message is issued if there is an error while processing the PARMFILE= start parameter.

The ***pfddname*** value identifies the parameter file DDNAME.

The ***errortext*** value identifies the error as follows:

errortext = 'INVALID, CANNOT POINT AT ITSELF' when an embedded PARMFILE= parameter points at the file it is embedded in.

errortext = 'LIMIT REACHED' when an more than 5 chained PARMFILE= parameters are specified.

errortext = 'INVALID, CANNOT BE OPENED' when the PARMFILE= parameter identifies a DDNAME that cannot be opened (usually because it is missing from the HNAS start JCL).

errortext = 'CONTAINS INVALID DATA' when the PARMFILE= parameter identifies a file that contains parameter data that cannot be parsed correctly.

NAS0020I CONFIGURATION FASTRUN, RC=*rc*

This message is issued after the successful interpretation of the HNAS Configuration Data File (CDF) if the FASTRUN start parameter was specified.

The ***rc*** value is the return code from NASCNFG. This message is generated when ***rc***<8 and is indicative of recoverable configuration errors. You should always check the HNAS log file to ensure that any RC=04 warnings are acceptable.

NAS0021A CONFIGURATION FAILURE, RC=*rc*

This message is issued after the unsuccessful interpretation of the HNAS Configuration Data File (CDF).

The ***rc*** value is the return code from NASCNFG. This message is generated when ***rc***>4 and is indicative of an unrecoverable configuration error that causes HNAS to ABEND. If you receive this message, contact Comm-Pro for assistance.

NAS0030I SHUTDOWN STARTED, RELEASING RESOURCES

(change for V2R4M0

This message is issued when QS, QQ/*password* or QE *ddname* are entered (no SNAP dump is taken). This is a fast shutdown.

NAS0031I SHUTDOWN STARTED, FORMATTING STORAGE, RELEASING RESOURCES

(new for V2R4M0)

This message is issued when QY/*password* is entered (SNAP dump is taken). The SNAP dump extends shutdown processing and adds to SYSPRINT content.

NAS0032I SHUTDOWN STARTED, FORCED ABEND REQUESTED

(new for V2R4M0)

This message is issued when QA/*password* is entered (ABEND dump is taken). The ABEND dump extends shutdown processing and adds to SYSPRINT content. This form of shutdown should only be used when requested by Comm-Pro.

NAS0035I SHUTDOWN COMPLETED, RC=*xx*

(new for V2R4M0)

This message is issued when the shutdown process completes.

The return code value reflects the highest severity code produced during the configuration scan or runtime processing:

RC=00 => No errors during the configuration scan or runtime processing. Only NAS*xxxx*I messages were issued.

RC=04 => Configuration or runtime warning messages were issued (NAS*xxxx*D or NAS*xxxx*W).

RC=08 => Configuration or runtime error messages were issued (NAS*xxxx*E). NAS1*xxx*E messages that are issued during the configuration scan will prevent HNAS from starting.

RC=12 => Severe configuration or runtime error messages were issued (NAS*xxxx*S). NAS1*xxx*S messages that are issued during the configuration scan will prevent HNAS from starting.

NAS0050A EXEC *ddname* SCHEDULED DUE TO TRAPPED *traptype text-string*

(new for V2R4M0)

This message is issued when a **TRCTRAP=** ALRMLIST=*alert-messages*, RCVLIST=*data* or XMTLIST=*data* trap condition has occurred. This condition causes the command list identified by *ddname* to be EXECuted when TRAPACTION=EXEC is in effect. Once the command

list is executed, another will not occur on trap hit until TRCTRAP EXEC processing is re-enabled. To re-enable TRCTRAP EXEC processing on another trap hit, enter **TRCTRAP RSMEEXEC** from the HNAS console.

The ***traptype*** value identifies the TRCTRAP= type. i.e. ALARM (for ALRMLIST), OUTPUT (for XMTLIST) and INPUT (for RCVLIST) for filters and traps.

The ***textstring*** value identifies the TRCTRAP= filters and traps.

NAS0050A SNAPSHOT DUMP TAKEN DUE TO TRAPPED *traptype textstring*

(apar/new for V2R3M0)

This message is issued when a **TRCTRAP=** ALRMLIST=*alert-messages*, RCVLIST=*data* or XMTLIST=*data* trap condition has occurred. This condition causes a SNAP dump to be taken when TRAPACTION=SNAP is in effect. Once the SNAP dump is taken, another will not occur on trap hit until TRCTRAP SNAP dump processing is re-enabled. To re-enable TRCTRAP SNAP dump processing on another trap hit, enter **TRCTRAP RSMESNAP** from the HNAS console.

The ***traptype*** value identifies the TRCTRAP= type. i.e. ALARM (for ALRMLIST), OUTPUT (for XMTLIST) and INPUT (for RCVLIST) for filters and traps.

The ***textstring*** value identifies the TRCTRAP= filters and traps.

NAS0050A TRACING SUSPENDED DUE TO TRAPPED *traptype textstring*

(apar/new for V2R3M0)

This message is issued when a **TRCTRAP=** ALRMLIST=*alert-messages*, RCVLIST=*data* or XMTLIST=*data* trap condition has occurred. This condition sets **TRCTRAP SUSP** mode to suspend active tracing without altering the HNAS trace state when TRAPACTION=SUSP is in effect. To re-enable tracing to trap another like condition, enter **TRCTRAP RSME** (resume active tracing) from the HNAS console.

The ***traptype*** value identifies the TRCTRAP= type. i.e. ALARM (for ALRMLIST), OUTPUT (for XMTLIST) and INPUT (for RCVLIST) for filters and traps.

The ***textstring*** value identifies the TRCTRAP= filters and traps.

NAS0050A TRACING SUSPENDED BY *consname*

(apar/new for V2R3M0)

This message is issued when a **TRCTRAP SUSP** or **TRCALL SUSP** is issued to manually suspend active tracing. ***consname*** identifies the name of the console that issued the TRCTRAP or TRCALL command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0060W TRACING RESUMED BY *consname*

(apar/new for V2R3M0)

This message is issued when a **TRCTRAP RSME** or **TRCALL RSME** is issued to resume a tracing that has been suspended. ***consname*** identifies the name of the console that issued the TRCTRAP or TRCALL command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0060W SNAPSHOT DUMP ACTION RESUMED BY *consname*

(apar/new for V2R3M0)

This message is issued when a **TRCTRAP RSMESNAP** is issued to resume a trace trap SNAP dump has already been performed. ***consname*** identifies the name of the console that issued the TRCTRAP command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0060W EXEC *ddname* ACTION RESUMED BY *consname*

(apar/new for V2R3M0)

This message is issued when a **TRCTRAP RSMEEXEC** is issued to resume a trace trap command list execution that has already been performed. ***ddname*** identifies the command list and ***consname*** identifies the name of the console that issued the TRCTRAP command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0070W TRACE TRAP FILTERING ACTIVE

(apar/new for V2R3M0)

This alert message is issued after the NAS0050A alert message (**TRCTRAP SUSP**) or NAS0060W alert message (**TRCTRAP SUSP**) to show that the current trace trap state is active. This message is also issued when the TRCTRAP= operand is specified on the BUILD definition statement in the CDF.

NAS0070W TRACE TRAP FILTERING INACTIVE

(apar/new for V2R3M0)

This alert message is issued after the NAS0050A alert message (**TRCTRAP SUSP**) or NAS0060W alert message (**TRCTRAP SUSP**) to show that the current trace trap state is inactive.

NAS0070W TRACE TRAP FILTERING ACTIVED BY *consname*

(apar/new for V2R3M0)

This message is issued when the **TRCTRAP** console command is used to activate trace trapping that was previously inactive. ***consname*** identifies the name of the console that issued

the TRCTRAP command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0070W TRACE TRAP FILTERING DEACTIVED BY *consname*

(apar/new for V2R3M0)

This message is issued when the **TRCTRAP** console command is used to deactivate trace trapping that was previously active (e.g., ALRMLIST=* RCVLIST=* XMTLIST=*). ***consname*** identifies the name of the console that issued the TRCTRAP command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0070W TRACE TRAP FILTERING UPDATED BY *consname*

(apar/new for V2R3M0)

This message is issued when the **TRCTRAP** console command is used to add trace trapping filters when trace trapping is already active. ***consname*** identifies the name of the console that issued the TRCTRAP command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0071W TRACE TRAP ACTIONS: *actionlist*

(apar/new for V2R3M0)

This message is issued when the **TRCTRAP SHOW** console command is used display current trace trapping actions. ***actionlist*** identifies the current trace trap actions in effect: SUSP|NOSUSP, SNAP|NOSNAP, EXEC=*ddname*.

NAS0101E BUFFER POOL DEPLETED, BFRCNT=*count* BFRLMT=*limit*

This message is issued when a buffer allocation request is processed and HNAS determines that the system buffer pool contains only 20% of its original available buffers. Buffer pool slowdown mode begins when 80% of the system I/O buffers are in use and ends when 40% become available.

The *count* value represents the number of available buffers in the pool. This message is indicative of a potentially serious problem that can eventually reduce HNAS throughput. If you receive this message, you should increase the value specified for the BFRLMT operand of the BUILD definition statement at your earliest convenience.

The *limit* value represents the number of system I/O buffers reserved for HNAS operation as specified by the BFRLMT operand of the BUILD definition statement

NAS0102I BUFFER POOL RESTORED, BFRCNT=*count* BFRLMT=*limit*

This message is issued when a buffer release request is processed and HNAS determines that the system buffer pool contains 40% of its original available buffers.

The *count* value represents the number of available buffers in the pool. This message is generated only after buffer pool slowdown mode is entered. See description of message NAS0101E BUFFER POOL DEPLETED for additional information.

The *limit* value represents the number of system I/O buffers reserved for HNAS operation as specified by the BFRLMT operand of the BUILD definition statement

NAS0105S BUFFER *addr* RELEASE REJECTED, BAD ADDRESS

(apar, new for V2R2M0)

This message is issued if an invalid HNAS buffer address is detected by the buffer release routine.

The ***addr*** value identifies the invalid buffer address.

This message is indicative of an unrecoverable error that causes a USER 198 ABEND. If you receive this message, contact Comm-Pro for assistance.

NAS0106S BUFFER *addr* RELEASE REJECTED, ALREADY FREE

(apar, new for V2R2M0)

This message is issued when a buffer is released that is already on the free queue.

The ***addr*** value identifies the buffer address.

This message is indicative of an unrecoverable error that causes a USER 198 ABEND. If you receive this message, contact Comm-Pro for assistance.

NAS0111W *count* ALARM MESSAGES LOST DURING LAST *time* SECOND INTERVAL

This message is issued whenever HNAS alarm limit logic detects that more messages are being generated than are permitted to be displayed. This logic was implemented to prevent excessive alarm event activity from inundating the system console (SYSCONS) log and will prevent potential depletion of the WTO buffer pool.

The *count* value represents the number of alarm messages that were discarded during the interval represented.

The *time* value represents the timer interval which is currently assigned a default value of 30 seconds.

Limits are now enforced on all messages written to the system console. Default values are as follows:

30 - **T**ime interval (in seconds) in which that limits are in effect.
20 - maximum number of **I**nformational messages allowed during interval.
10 - maximum number of **D**efault messages allowed during interval.
20 - maximum number of User **A**ction messages allowed during interval.
25 - maximum number of **W**arning messages allowed during interval.
30 - maximum number of **E**rror messages allowed during interval.
30 - maximum number of **S**evere Error messages allowed during interval.
10 - maximum number of all **O**ther messages allowed during interval.

The default values above can be replaced with user defined values using the ALRMLMTS operand on the BUILD definition statement (new for V2R2M0).

We suggest that you also refer to the ALRMFLTR (alarm filter) operand of the BUILD definition statement for information on our alarm message filtering logic. Filtering out unwanted **D**efault, **I**nformation, **W**arning or **E**rror messages can further reduce alarm message activity logging.

Note: Configuration messages (NAS1*xxx*s) are not subject to limits testing and will not cause the NAS0111W message to be generated during CDF scan processing.

Note: Although the NAS0111W message indicates that messages were lost, that is not delivered to the SYSCONS, they are included in the ALARM LOG because the log is updated before the limits tests are performed.

NAS0120I SYSCONS ERROR AND INFO ALARM OUTPUT ENABLED BY *consname*
(apar/new for V2R4M0)

This message is issued when the **SHOW ON** console command is entered. ***consname*** identifies the name of the console that issued the SHOW command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that error and informational alarms will now be written to the SYSCONS.

NAS0120I SYSCONS ERROR AND INFO ALARM AND CONSOLE OUTPUT ENABLED BY *consname*
(apar/new for V2R4M0)

This message is issued when the **SHOW ALLON** console command is entered. ***consname*** identifies the name of the console that issued the SHOW command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that error and informational alarms as well as console command output will now be written to the SYSCONS.

NAS0121W SYSCONS NON-FORCED ALARM OUTPUT DISABLED BY *consname*

(apar/new for V2R4M0)

This message is issued when the **SHOWOFF** start parameter or **SHOW OFF** console command is entered. ***consname*** identifies the name of the console that issued the SHOW command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that only forced alarm messages will be written to the SYSCONS. Non-forced (normal) error and informational alarms will be withheld from the SYSCONS.

NAS0121W SYSCONS NON-FORCED ALARM AND CONSOLE OUTPUT DISABLED BY *consname*

(apar/new for V2R4M0)

This message is issued when the **SHOW ALLOFF** console command is entered. ***consname*** identifies the name of the console that issued the SHOW command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that only forced alarm messages will be written to the SYSCONS. Non-forced (normal) error and informational alarms as well as console command output will be withheld from the SYSCONS.

NAS0122I SYSCONS ERROR ALARM OUTPUT ENABLED BY *consname*

(apar/new for V2R4M0)

This message is issued when the **SHOW ERR** console command is entered. ***consname*** identifies the name of the console that issued the SHOW command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that error and informational alarms will now be written to the SYSCONS.

NAS0130W SYSCONS ALARM OPTIONS MODIFIED BY *consname*

(apar/new for V2R4M0)

This message is issued when alarm display options are modified when the **SHOW MORE|LESS** console command is entered. ***consname*** identifies the name of the console that issued the SHOW command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that subsequent SYSCONS alarm display output will be effected by the SHOW command request.

NAS0200I *count sysprint* LOG RECORDS WRITTEN

(apar/changed for V2R4M0)

This message is issued when the number of records written to the HNAS SYSPRINT log file identified by DDNAME *sysprint* reaches a multiple of 16384 (X'4000').

The ***count*** value is the total number of SYSPRINT records already written.

NAS0201E *count sysprint* LOG RECORD LIMIT REACHED

(changed for V2R4M0)

This message is issued when the number of records written to the HNAS SYSPRINT log file identified by DDNAME *sysprint* reaches the value specified for the PRTLMT= operand of the BUILD definition statement. Further SYSPRINT logging is suspended in the dataset identified by DDNAME *sysprint*, however, logging can continue in a new dataset if the PRTSWLST= operand of the BUILD definition statement has been specified.

The ***count*** value is the PRTLMT= value and represents the number of SYSPRINT records already written.

NAS0202W *count sysprint* LOG RECORDS LOST

This message is issued after SYSPRINT logging has been suspended in the log file identified by DDNAME *sysprint* when the number of SYSPRINT requests reaches a multiple of 262144 (X'40000') above the value specified for the PRTLMT= operand of the BUILD definition statement.

The ***count*** value is the number of lost SYSPRINT records above the PRTLMT= value.

Note: This message will not be issued if alternate SYSPRINT file(s) have been defined via the PRTSWLST= operand of the BUILD definition statement because a new SYSPRINT log file will be opened automatically when the PRTLMT= value is reached.

NAS0204E SYSPRINT ABEND PARMLIST=*xxxxxxxx...xxxxxxxx*
NAS0204E *sysprint* DATASET IS FULL, LOGGING TERMINATED

This message is issued when an ABEND occurs while writing to the SYSPRINT log file identified by DDNAME *sysprint*.

The ***xxxxxxxx*** values represent the ABEND parameter list. If alternate SYSPRINT file(s) have been defined via the PRTSWLST= operand on the BUILD definition statement, a new

SYSPRINT log file will be opened automatically. Otherwise, the PRNT OPEN *ddname* console command will have to be used to manually open a new SYSPRINT log file.

NAS0205I *sysprint* LOGGING TERMINATED

(new for V2R4M0)

This message is issued after the SYSPRINT log file identified by DDNAME *sysprint* has been closed during SHUTDOWN processing.

NAS0207W ALL PRTSWLST DDNAMES HAVE BEEN USED, LOGGING TERMINATED

(new for V2R4M0)

This message is issued after the last SYSPRINT log file in the PRTSWLST= operand list has been closed and the stop action is in effect (PRTSWLST=(STOP,...) was specified).

The PRNT OPEN *ddname* console command will have to be used to manually open a new SYSPRINT log file.

Note: This message will not be issued if the LOOP action is in effect (PRTSWLST=(LOOP,...) was specified).

NAS0208I PRTSWLST=*sysprint* DATASET HAS BEEN ACTIVATED FOR LOGGING

(new for V2R4M0)

This message is issued when the SYSPRINT log file identified by DDNAME *sysprint* has been opened automatically as the next log file in the PRTSWLST= operand list.

NAS0209E PRTSWLST=*sysprint* DATASET COULD NOT BE OPENED

(new for V2R4M0)

This message is issued when the SYSPRINT log file identified by DDNAME *sysprint* could not be opened. If alternate SYSPRINT file(s) have been defined via the PRTSWLST= operand on the BUILD definition statement, a new SYSPRINT log file will be opened automatically. Otherwise, the PRNT OPEN *ddname* console command will have to be used to manually open a new SYSPRINT log file.

NAS0210I SYSPRINT LOGGING ENABLED BY *consname*

(apar/new for V2R4M0)

This message is issued when the **PRNT ON** console command is entered. ***consname*** identifies the name of the console that issued the PRNT command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that error and informational alarms as well as console command output will now be logged in SYSPRINT.

NAS0210I PRTSWLST SWITCHNOW REQUESTED BY *consname*
NAS0210I PRTSWLST SWITCHAFTERINIT ACTION INITIATED
NAS0210I PRTSWLST SWITCHAT*hh*00 ACTION INITIATED
NAS0210I PRTSWLST SWITCH ON FULL DATASET INITIATED
NAS0210I PRTSWLST SWITCH ON PRTLMT INITIATED

(new for V2R4M0)

This message is issued when the a switch occurs in the PRTSWLST= operand of the BUILD definition statement. The text indicates why the SYSPRINT log file switch was requested. ***consname*** identifies the name of the console that issued the PRNT command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0210*s* DDNAME(S) OF THE FORM DYN#*xxxx* WERE SPECIFIED,
PRTSWLST=DYNAMIC
NAS0210*s* WILL NOT BE ALLOWED, DDNAME(S) CONFLICT

(new for V2R4M0)

This message is issued with ***s***=W (warning) when HNAS starts if a DDNAME of the form DYN#*xxxx* (where *xxxx* is 0001, 0002, etc) was specified in the HNAS start JCL. This message is also issued with ***s***=E (error) if a PRTSWLST= switch is requested for a DYNAMIC entry. The reason for this message is that DDNAME(s) of this form are reserved for PRTSWLST=DYNAMIC support and thus cannot be specified as static DDNAMEs in the HNAS start JCL.

Note that in the latter case where ***s***=E, the DYNAMIC entry is skipped and the next non-DYNAMIC real DDNAME in the PRTSWLST= operand list is used. If there are no real DDNAMEs in the PRTSWLST= operand list, SYSPRINT logging is terminated (the STOP action is forced).

NAS0210W SYSPRINT TRACE LOGGING ENABLED BY *consname*,
MORE CPU CYCLES REQUIRED

(new for V2R2M0)

This message is issued when the **TRCPRNT** start parameter is specified or after the **TRCPRNT ON** console command is entered. ***consname*** identifies the name of the console that issued the TRCPRNT command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that the logging of trace records to SYSPRINT will induce additional CPU overhead.

NAS0211E DYNALLOC FAILED WITH RC=*xx*, S99RB FOLLOWS
NAS0211E *xxx ... xxx*

(new for V2R4M0)

This message is issued if an error occurs during dynamic SYSPRINT dataset allocation. If RC=00, the dataset was allocated but some element of the dynamic allocation request was not processed or was overridden by a system action. The message displays the parameter list that is passed to the dynamic allocation macro (DYNALLOC). This parameter list contains an information reason code returned by DYNALLOC that identifies the problem.

If you receive this message, please contact Comm-Pro for assistance.

NAS0211E SYSPRINT LOG FILE COULD NOT BE OPENED

(new for V2R4M0)

This message is issued when the **PRNT PRTSWLST=*ddname*** console command is entered and the dataset identified by *ddname* could not be opened. It normally indicates that *ddname* was spelled incorrectly or the DDNAME does not exist in the HNAS start JCL.

NAS0211I SYSPRINT TRACE LOGGING DISABLED BY *consname*

(new for V2R2M0)

This message is issued after the **TRCPRNT OFF** console command is entered. ***consname*** identifies the name of the console that issued the TRCPRNT command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that the logging of trace records to SYSPRINT has been terminated.

NAS0211W SYSPRINT LOGGING DISABLED BY *consname*

(apar/new for V2R4M0)

This message is issued when the **PRNTOFF** start parameter or the **PRNT OFF** console command is entered. ***consname*** identifies the name of the console that issued the PRNT command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that only forced alarm messages will be logged in SYSPRINT. Non-forced (normal) error and informational alarms as well as console command output will be withheld from SYSPRINT.

NAS0220W *newddname* LOG FILE OPENED BY *consname*

(new for V2R4M0)

This message is issued when the **PRNT {OPEN|CLSOPN}** ***newddname*** console command is used to open a new SYSPRINT file.

newddname is the new SYSPRINT DDNAME that was opened. ***consname*** identifies the name of the console that issued the PRNT command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0221W *olddname* LOG FILE CLOSED BY *consname*

(new for V2R4M0)

This message is issued when the **PRNT {CLOSE|CLSOPN *newddname*}** console command is used to close an old SYSPRINT file.

olddname is the old SYSPRINT DDNAME that was closed. ***consname*** identifies the name of the console that issued the PRNT command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0230W SYSPRINT LOGGING OPTIONS MODIFIED BY *consname*

(apar/new for V2R4M0)

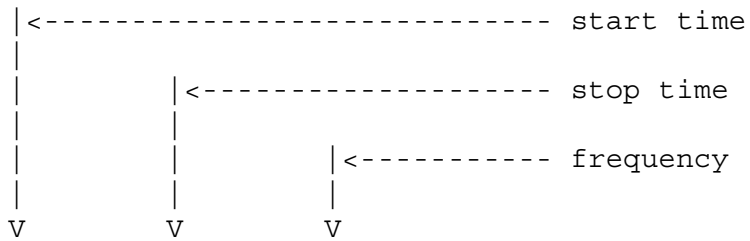
This message is issued when alarm display options are modified when the **PRNT DATE ON|OFF CNFG ON|OFF ...** console command is entered. ***consname*** identifies the name of the console that issued the PRNT command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

The message is intended to make the operator aware of the fact that subsequent SYSPRINT logging will be effected by the PRNT command request.

NAS0299I nas0299
HNAS PULSE TAKEN AT *hh*:*mm*:*ss* ON *yyyy*/*mm*/*dd*

(apar/new for V2R4M0)

This message is issued based on the parameters established by the PULSE= operand on the BUILD definition statement. The syntax is as follows:



PULSE=(*hh*:*mm*:*ss*,*hh*:*mm*:*ss*,*seconds*)

The message is issued at the frequency given by the *seconds* value within the interval specified by the start and stop times:

The purpose of the message is to provide an indication that HNAS is being dispatched on a regular basis. The SYSPRINT log will contain the NAS0299I message. The message can also be sent to SYSCONS if ALRMFLTR=(...,NAS0299I(FU),...) is also specified.

If the stop time is less than the start time, the interval wraps through midnight. If the start time and end time are equal, pulsing will be continuous.

Note: PULSE= operand support was introduced into 240 via APAR 2400021.

NAS0301E TIMER LOST INTERRUPT INDICATED,
TIMES=*hhmmssuu hhmmssuu*

This message is issued when the HNAS timer subtask has not been dispatched for over 2-seconds. The timer subtask is supposed to run once per second.

The ***hhmmssuu*** values represent the last time the timer subtask ran and the current time-of-day. This message is used primarily for debugging. It indicates that the HNAS may not be getting enough CPU cycles to perform all of its work. If you receive this message, verify that HNAS is running at the appropriate task dispatch priority as outlined in Chapter 2 (page 2-12), otherwise contact Comm-Pro for assistance.

Note: At some installations this message can be generated when end of day jobs introduce a heavy CPU load (first time value = 235959xx) or during Daylight Savings time-of-day clock changes. In either case, and in cases where the load is known to be heavy, the message can be ignored.

NAS0310W VARY ACTION=*action* TYPE=RMT RNM=*rmtname* BY *consname*
NAS0310W VARY ACTION=*action* TYPE=LCL LNM=*lclname* BY *consname*
NAS0310W VARY ACTION=*action* TYPE=LU LUNM=*sluname* BY *consname*
(new for V2R4M0)

This message is issued when the VARY console command is used to change a resource state.

The ***action*** value can be ON or OFF. ***rmtname***, ***lclname*** or ***sluname*** identify the name of RMT, LCL or LU resource be varied ON or FF. ***consname*** identifies the name of the console that issued the VARY command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number.

NAS0910I 3 BELLS AND ALL IS WELL AT *hh*:*mm*:*ss* ON *yyyy*/*mm*/*dd*

This message is issued at midnight to log the daily date cross over.

This message is used primarily for debugging so that trace information in the SYSPRINT log file can be grouped correctly. This message is now written to SYSCONS as well as SYSPRINT. Routing is no longer controlled by SHOWERR. Writing the message to SYSCONS now allows it to also be routed to NETVIEW which some customers wanted.

Note: This logic change was introduced into 230 under APAR 2300182.

NAS1051W *modname* MODULE NOT LOADED, *ddname* DATASET COULD NOT BE OPENED

(new for V2R2M0)

This message is issued when HNAS attempts to LOAD a module into memory but the dataset containing the module could not be opened. This normally occurs because the DD statement identifying the dataset is missing from the HNAS start JCL.

The *modname* value identifies the module name and the *ddname* identifies the dataset DDNAME.

NAS1052W *modname* MODULE NOT FOUND IN *ddname* DATASET, IGNORED AC=*aaaaaaaa* RC=*rrrrrrrr*

(new for V2R2M0)

This message is issued when HNAS attempts to LOAD a module into memory but the module could not be found in the target dataset. This normally occurs because the module name is incorrect or because the DD statement identifying the dataset is pointing at the wrong module library.

The *modname* value identifies the module name and the *ddname* identifies the dataset DDNAME. The ***aaaaaaaa*** and ***rrrrrrrr*** values are the ABEND Code and Return Code form the LOAD macro instruction.

NAS1105W ALARM LOGGING TABLE OVERFLOW, LIMIT=*count* TOO LOW

(new for V2R2M0)

This message is issued when HNAS attempts to log an alert/alarm message in the alarm logging table but not enough entries were reserved to hold the message ID. The size of the alarm logging table is determined from the ***Lcnt*** value in the **ALRMLMTS=** operand on the BUILD definition statement. When the ALRMLMTS= operand is omitted, a default ***Lcnt*** value of 256 is used.

The *count* value is the ***Lcnt*** value from the ALRMLMTS= operand.

TCP/IP Event and Command Alerts

Most event alert messages that are generated by the TCP/IP components of the HNAS system have unique formats based on the type of event being reported. In the case of command alert messages, most of these messages have the same basic format. Examples of common command alert message layouts (**NAS2*nnns***) are available on page ALRT-27 of this document.

Several HNAS TCP/IP event alerts generate a pair of messages. The first message provides the alert message number (***nnn***), severity code (***s-value***) and identifies the resource, for example, SERVER=*ipaddr*(*port*), SOCKID=, PCEID=, NAME=. The second message identifies the event, error condition and appropriate error/reason codes. For HNAS 220, the second message of a pair always used the same alert message number but had an ***s-value*** of '**I**' regardless of the ***s-value*** of the first message. Starting with 230, the entire message identifier for second message will be the same as for the first including the ***s-value***.

Note: Although the same message identifier is used for both messages of a pair, the alert is only counted once when alarm logging is active. See the ALRMLMTS= operand of the BUILD definition statement and the ALARM console command for more information on alarm logging.

TCP/IP Alert Message Field-id Descriptions

This table includes the standard alert message ***field-id*** names for various TCP/IP Alert message types. ***Field-id*** entries not listed in this table should be provided in their respective alert message description area. Sample alert message with field-id associations follows this table.

Field-id	**Description**
NAS*c*	is the message number prefix/component ID. (**NAS2*nnns***)
nnn	is the message number.
s	is the severity code (see page ALRT-4 for values). W is the standard value for common command alert messages.
comp	is the TCP/IP component type (SERVER or CLIENT).
iii.iii.iii.iii	is the IP address for the socket receiving the command.
port	is the TCP port number for the socket receiving the command.
sockid	is the TCP/IP stack internal socket identifier.
pceid	is the HNAS Process Control Element identifier for the TCP/IP socket.
compname	is the HNAS component name (LOCAL name for SERVER, REMOTE name for CLIENT).
cmd	is the TCP/IP command that failed.

Field-id	Description
rc / errno	is the TCP/IP stack **return code** (***rc***) and **error number** (***errno***) that describe the reason for command failure (see description of error numbers on page TCPIPERRNO-1 of this document).

```
NAS2nnns comp=iii.iii.iii.iii(port) SOCKID=sockid
         PCEID=pceid NAME=compname
NAS2nnns cmd REQUEST FAILED, RC=rc/errno
```

Note that all numeric displays are hexadecimal except for the IPADDR and PORT values. The ***rc*** and ***errno*** displays are both 4-byte values.

Many TCP/IP errors are recoverable and will be handled by HNAS error processors. Some TCP/IP errors are persistent and may require operator and/or system programmer intervention.

(note for V2R2M0)

In **220**, the TRCPRNT start parameter or TRCPRNT ON console command are used to control the display/logging of NAS2nnnI TCP/IP Event Informational Alert messages. These messages will no longer be displayed or logged in TRCPRNT OFF mode (TRCPRNT omitted from the HNAS Start Parameter or set off via TRCPRNT OFF console command). These informational messages are considered 'trace like' and are rarely required. Furthermore, they generate unnecessary Operator Console messages (when SHOWOFF or SHOWERR are omitted) and SYSPRINT activity. If TRCPRNT mode is required to capture other Alert Message activity we suggest that you eliminate these information messages using the ALRMFLTR=(SUPPRESS,NAS2***I(S),...) or ALRMFLTR=(PURGE,NAS2***I(S),...) alarm filter options. Note that TRCPRNT can be active when all other tracing is off to allow informational alert messages.

Warning: Users who wish to see the TCP/IP messages controlled by the TRCPRNT ON/OFF switch should be aware that when HNAS starts VC and LU traces to an internal table are started by default. If TRCPRNT ON is specified these traces will be recorded in SYSPRINT. If the system is active, the **SYSPRINT file will be very large**. The internal traces can be terminated with TRCALL STOP (via the operator console or HNAS BUILD operand CONCMDQ='TRCALL OFF'. Another option to stop traces at startup is to code Start Parameters PARM= TRCLU OFF and TRCVC OFF.

Common Command Alert Message Layout

NAS2*nnns* ***comp*=*iii.iii.iii.iii*(*port*) SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2*nnns* ***command* REQUEST FAILED, RC=*rc/errno***

(changed for V2R1M1)
(changed for V2R2M0)

These messages are generated for **TCP/IP Common Command Alert** events. Most command alert messages that are generated by the TCP/IP components of the HNAS system have the same basic format. These messages provide a **NAS2*nnns*** message number, the failing ***command***, the IPADDR, PORT and SOCKet IDentifiers for the TCPIP ***comp***onent (LOCAL or REMOTE resource) that issued the command and a reason for the failure. The description area for each alert message provides additional information on what event caused the alert message to be issued. The HNAS error description and user response recommendation are provided in the alert message description area or in the HNAS TCP/P Error Numbers (***errno***) table at the end of this section.

A partial list of the TCP/IP stack return code (***rc*=FFFFFFFF**) error number (***errno***) values that describe the HNAS provided error description and customers response for command failures can be located on page TCPIPERRNO-1 of this document. The complete list of TCP/IP stack ***errno*** return codes can be located in the IBM IP Application Programming Interface Guide (SC31-8788).

TCP/IP Event and Command Alert Messages

NAS2010I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2010I CLIENT INITIALIZATION COMPLETE

This message is issued after an HNAS server component connects to the TCP/IP stack and all client Process Control Elements (PCEs) have been initialized for the identified server component.

NAS2020I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2020I SERVER INITIALIZATION COMPLETE

This message is issued after an HNAS server component BINDs its IP address to the TCP/IP stack in order to LISTEN for remote router client connections.

Note: The 'NAS0001I Initialization Complete' (IC) message will be withheld if a NAS2020I or NAS2021W message is not generated for all servers.

NAS2021W SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2021W SERVER INITIALIZATION FAILED, LOCAL VARIED OFFLINE
(new for V2R2M0)

This message is issued after an HNAS server component fails to BIND its IP address to the TCP/IP stack after repeated retries.

Note: The 'NAS0001I Initialization Complete' (IC) message will be withheld if a NAS2021W or NAS2020I message is not generated for all servers.

NAS2030I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2030I API CONNECTION TO TCPNAME=*tcpname* VR=*vvrr*
CAN BE PERFORMED
(apar change for V2R4M0)

This message is issued after the successful execution of a GETIBMOPT command to interrogate the TCP/IP stack named by the TCPNAME operand of the LOCAL definition statement.

The ***tcpname*** value is the TCP/IP stack name and the ***vvrr*** value is its version/release level.

NAS2031W SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2031W API CONNECTION TO TCPNAME=*tcpname* IS BEING DEFERRED
(apar change for V2R4M0)

This message is issued after the successful execution of a GETIBMOPT command to interrogate the TCP/IP stack named by the TCPNAME operand of the LOCAL definition statement.

The ***tcpname*** value is the TCP/IP stack name. The result of the GETIBMOPT command indicated that the named TCP/IP stack was not active. Please ensure that the name specified for the TCPNAME= operand on the LOCAL definition statement identifies the correct host TCP/IP stack in the region where HNAS will reside.

NAS2032E SERVER=iii.iii.iii.iii(port) SOCKID=sockid
PCEID=pceid NAME=lclname
NAS2032E API CONNECTION TO TCPNAME=*tcpname* CANNOT BE PERFORMED,
RC=*rc/errno*
(apar change for V2R4M0)

This message is issued after the unsuccessful execution of a GETIBMOPT command to interrogate the TCP/IP stack named by the TCPNAME operand of the LOCAL definition statement.

The ***tcpname*** value is the TCP/IP stack name and the ***rc/errno*** value is the return code and error number for the GETIBMOPT command. For more information, please refer to the description of error numbers on page TCPIPERRNO-1 of this document. This message is indicative of a recoverable error that causes the connect attempt to be retried after a forced delay. If you receive this message, contact Comm-Pro for assistance.

NAS2040I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2040I IUCV CONNECTION TO TCPNAME=*tcpname* HAS BEEN ESTABLISHED
NAS2040I PATHID=*pathid* MSGLMT=*count*
(apar change for V2R4M0)

This message is issued after the successful execution of an IUCVCCOM CONNECT (VM) or IUCVMCOM CONNECT (MVS) request to establish an IUCV API path between HNAS and the TCP/IP stack.

The ***tcpname*** value is the TCP/IP stack name. The ***pathid*** value identifies the path that will be used for communication between the HNAS and TCP/IP address space and the *count* value represents the maximum number of commands that HNAS can give to the TCP/IP stack at any one time. This message can only be generated when the IUCV API is being used.

NAS2041E SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2041E IUCV CONNECTION TO TCPNAME=*tcpname* HAS FAILED,
RC=*rrrrrrrr eeeeeeee*
NAS2041E PARMLIST=*xxxxxxxx...xxxxxxxx*

(apar change for V2R4M0)

This message is issued after the unsuccessful execution of an IUCVCCOM CONNECT (VM) or IUCVMCOM CONNECT (MVS) request to establish an IUCV API path between HNAS and the TCP/IP stack.

The ***tcpname*** value is the TCPIP stack name. The ***rrrrrrrr eeeeeeee*** values are the ***rc*** and ***errno*** from the failed operation. The ***xxxxxxxx*** values represent parameter data used in the request. This message can only be generated when the IUCV API is being used. This message is indicative of a recoverable error that causes the connect attempt to be retried after a forced delay. If you receive this message, contact Comm-Pro for assistance.

NAS2050I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2050I API CONNECTION TO TCPNAME=*tcpname* HAS BEEN ESTABLISHED

(apar change for V2R4M0)

This message is issued after the successful execution of an INITAPI command to establish a path between an HNAS server component and the TCP/IP stack address space.

The ***tcpname*** value is the TCP/IP stack name.

NAS2051S SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2051S API CONNECTION TO TCPNAME=*tcpname* HAS FAILED,
RC=*rc/errno*

(apar change for V2R4M0)

This message is issued after the unsuccessful execution of an INITAPI command to establish a path between an HNAS server component and the TCP/IP stack address space.

The ***tcpname*** value is the TCP/IP stack name and the ***rc/errno*** value is the return code and error number for the INITAPI command. For more information, please refer to the description of error numbers on page TCPIPERRNO-1 of this document. This message is indicative of an unrecoverable error that causes HNAS to ABEND. If you receive this message, contact Comm-Pro for assistance.

NAS2060I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2060I API CONNECTION TO TCPNAME=*tcpname* HAS BEEN TERMINATED
(apar change for V2R4M0)

This message is issued after the successful execution of an TERMAPI command to relinquish the path between an HNAS server component and the TCP/IP stack address space.

The ***tcpname*** value is the TCP/IP stack name.

NAS2061S SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2061S API DISCONNECTION FROM TCPNAME=*tcpname* HAS FAILED,
RC=*rc/errno*
(apar change for V2R4M0)

This message is issued after the unsuccessful execution of an TERMAPI command to relinquish the path between an HNAS server component and the TCP/IP stack address space.

The ***tcpname*** value is the TCP/IP stack name and the ***rc/errno*** value is the return code and error number for the INITAPI command. For more information, please refer to the description of error numbers on page TCPIPERRNO-1 of this document. This message is indicative of an unrecoverable error that causes HNAS to ABEND. If you receive this message, contact Comm-Pro for assistance.

NAS2070W SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2070W IUCV CONNECTION TO TCPNAME=*tcpname* HAS BEEN SEVERED
(apar change for V2R4M0)

This message is issued after the successful execution of an IUCVCCOM SEVER (VM) or IUCVMCOM SEVER (MVS) request to break the connection between HNAS and the TCP/IP stack.

The ***tcpname*** value is the TCP/IP stack name.

NAS2071S SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2071S IUCV SEVER FROM TCPNAME=*tcpname* HAS FAILED,
RC=*rrrrrrrr eeeeeeee*
NAS2071S PARMLIST=*xxxxxxxx...xxxxxxxx*
(apar change for V2R4M0)

This message is issued after the unsuccessful execution of an IUCVCCOM SEVER (VM) or IUCVMCOM SEVER (MVS) request to break the connection between HNAS and the TCP/IP stack.

The ***tcpname*** value is the TCPIP stack name. The ***rrrrrrrr eeeeeeee*** values are the ***rc*** and ***errno*** from the failed operation. The ***xxxxxxxx*** values represent parameter data used in the request. This message can only be generated when the IUCV API is being used. This message is indicative of an unrecoverable error that causes HNAS to ABEND. If you receive this message, contact Comm-Pro for assistance.

NAS2090I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2090I IUCV INITIALIZATION FOR TCPNAME=*tcpname*
HAS BEEN COMPLETED

(apar change for V2R4M0)

This message is issued after the successful execution of an IUCVCCOM SEND (VM) or IUCVMCOM SEND (MVS) request to initialize the path between the HNAS and TCP/IP address spaces. This message can only be generated when the IUCV API is being used.

The ***tcpname*** value is the TCPIP stack name.

NAS2091S SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2091S IUCV INITIALIZATION FOR TCPNAME=*tcpname* HAS FAILED,
RC=*rrrrrrrr eeeeeeee*
NAS2091S PARMLIST=*xxxxxxxx...xxxxxxxx*

(apar change for V2R4M0)

This message is issued after the unsuccessful execution of an IUCVCCOM SEND (VM) or IUCVMCOM SEND (MVS) request to initialize the path between the HNAS and TCP/IP address spaces.

The ***tcpname*** value is the TCPIP stack name. The ***rrrrrrrr eeeeeeee*** values are the ***rc*** and ***errno*** from the failed operation. The ***xxxxxxxx*** values represent parameter data used in the request. This message can only be generated when the IUCV API is being used. This message is indicative of an unrecoverable error that causes HNAS to ABEND. If you receive this message, contact Comm-Pro for assistance.

NAS2101E TCPIP LOST INTERRUPT INDICATED, COUNT=*count*

(changed for V2R2M0)

This message is issued when an asynchronous API interrupt occurs and no interrupt buffer is available to save the interrupt information.

The ***count*** value represents the number of lost interrupts. This message is indicative of a serious problem that can eventually cause HNAS to ABEND. Ensure that HNAS is running at the appropriate task dispatching priority level (see Chapter 2 section ‘Starting Host NAS For

Z/OS, OS/390 and MVS' Notes for additional information). If the dispatching priority is correct and you still encounter this message please contact Comm-Pro for assistance.

NAS2102E SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2102E SEVER INDICATED FOR TCPNAME=*tcpname* PATHID=*pathid*
(changed for V2R2M0)
(apar change for V2R4M0)

This message is issued when an asynchronous interrupt occurs with an API sever indication (TCP/IP stack was deactivated). The ***tcpname*** value is the TCPIP stack name. The ***pathid*** value identifies the path that was used for communication between the HNAS and TCP/IP address space.

NAS2103W SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2103W QUIESCE INDICATED FOR TCPNAME=*tcpname*
(apar change for V2R4M0)

This message is issued when an asynchronous interrupt occurs with an API quiesce indication. All output is temporarily suspended until an API resume indication is received. The ***tcpname*** value is the TCPIP stack name.

NAS2104I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2104I TCPIP RESUME INDICATED FOR TCPNAME=*tcpname*
(apar change for V2R4M0)

This message is issued when an asynchronous interrupt occurs with an API resume indication. All temporarily suspended output is restarted. The ***tcpname*** value is the TCPIP stack name.

NAS2105S *comp*=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*compname*
NAS2105S TRANSFER TO TCPNAME=*tcpname* HAS FAILED,
RC=*rrrrrrrr eeeeeeee*
NAS2105S PARMLIST=*xxxxxxxx...xxxxxxxx*
(apar change for V2R4M0)

This message is issued after the unsuccessful execution of an IUCVCCOM SEND (VM) or IUCVMCOM SEND (MVS) request that was used to present a command to the TCP/IP stack.

The ***tcpname*** value is the TCPIP stack name. The ***rrrrrrrr eeeeeeee*** values are the ***rc*** and ***errno*** from the failed operation. The ***xxxxxxxx*** values represent parameter data used in the request. This message can only be generated when the IUCV API is being used. This mes-

sage is indicative of an unrecoverable error that causes HNAS to ABEND. If you receive this message, contact Comm-Pro for assistance.

```
NAS2109S  comp=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=compname
NAS2109S  UNEXPECTED TCPIP INTERRUPT, IGNORED
NAS2109S  IPARM=000185020000024001300FAD5C1E2E3F0E3E2D6
                0000D740004EA808004EAB900000000000508C00
                0000000001000000001348352413483533
                                                (apar/new for V2R4M0)
```

This message is issued when an ***unexpected TCPIP interrupt*** is presented and the **DBUG TCP** start parameter is in effect. The **IPARM** value above is the actual TCPIP external interrupt table entry at the time of the error, that is, the one that caused the problem.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section.

When DBUG TCP is not active, the following 0198 ABEND will occur when an unexpected TCPIP interrupt is presented:

```
HALT AT LOC 80065CB4 IN NASUTIL : TCPIP INTERRUPT UNEXPECTED
```

Note: The NAS2109S message was added as part of Enhancement APAR 2400102.

```
NAS2110S  comp=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=compname
NAS2110S  INVALID TCPIP INTERRUPT REPLY ID, IGNORED FOR command
NAS2110S  EXPECTED=0000001D PRESENTED=0000001C
NAS2110S  IPARM=000185020000001C001300FAD5C1E2E3F0E3E2D6
                0000D740004E8C18004E8FA000000000005187E0
                0000000000000000001209175512101732
                                                (apar/new for V2R4M0)
```

This message is issued when an ***invalid TCPIP reply ID*** is detected and the **DBUG TCP** start parameter is in effect. The expected and presented reply IDs are displayed for the ***command***. The **IPARM** value above is the actual TCPIP external interrupt table entry at the time of the error, that is, the one that caused the problem.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section.

When DBUG TCP is not active, the following 0198 ABEND will occur when an invalid TCPIP reply ID is presented:

```
HALT AT LOC 80070952 IN NASTCP  : TCPIP REPLY ID FAILURE
```

Note: The NAS2110S message was added as part of Enhancement APAR 2400102.

NAS2111S ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2111S IUCV REQUEST FAILED, IPAUDIT=*xxxxxx*

This message is issued after the unsuccessful completion of an IUCVCCOM SEND (VM) or IUCVMCOM SEND (MVS) request that was used to execute a command by the TCP/IP stack.

The ***xxxxxx*** value represents audit information for the completed request. This message can only be generated when the IUCV API is being used. This message is indicative of an error that can cause HNAS to ABEND. If you receive this message, contact Comm-Pro for assistance.

NAS2121W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2121W CANCEL REQUEST FAILED, RC=*rc/errno*

(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. THe **CANCEL** request is used to halt an outstanding TCP/IP command.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2152E ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2152E CANCEL REQUEST INTERRUPT LOST, NORMAL COMPLETION
ASSUMED FOR *command*

(apar/new for V2R4M0)

This message is issued if the **CANCEL** request that HNAS issues to halt the ***command*** does not end within 30 seconds.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section.

Note: The NAS2152E message was added as part of Enhancement APAR 2400102.

NAS2200I ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2200I SOCKET ASSIGNED BY SERVER

This message is issued after the successful execution of a SOCKET request to assign a TCP/IP internal socket for an HNAS component.

NAS2201W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2201W SOCKET REQUEST FAILED, RC=*rc/errno*

(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **SOCKET** request is used to acquire a TCP/IP internal socket.

We have observed the 'SOCKET FAILED' message in our own lab because the MAXFILEPROC parameter was set too low in the active BPXPRMxx member in SYS1.PARMLIB. This member contains parameters that supplement the TCPIP PROFILE file. You can set this parameter dynamically using the SETOMVS command as follows:

SETOMVS MAXFILEPROC=1600

If after increasing the value you still encounter the 'SOCKET FAILED' messages we suggest that you verify the values for MAXSOCKETS in the active BPSPRMxx file to ensure that an adequate number are defined.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2210I ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2210I SOCKET CONNECTION CLOSED

This message is issued after the successful execution of a CLOSE request to release a TCP/IP internal socket for an HNAS component.

NAS2211W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2211W CLOSE REQUEST FAILED, RC=*rc/errno*

(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **CLOSE** request is used to release a TCP/IP internal socket.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2231W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2231W BIND REQUEST FAILED, RC=*rc/errno*

(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **BIND** request is used to bind a TCP/IP internal socket to an IP address and TCP port number.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

Note: If the ***rc/errno*** value in this message is FFFFFFFF 0000000D (EACCESS=0D), the BIND has failed because HNAS image is not authorized to BIND the given IP address and Port number. For more information on the EACCESS error condition and security subsystem (RACF) requirements, please refer to the section entitled '**Security Subsystem Registration Considerations**' in Chapter 2 of the HNAS Guide and Reference.

NAS2241W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2241W LISTEN REQUEST FAILED, RC=*rc/errno*

(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **LISTEN** request is used to listen on a TCP/IP internal socket for a remote connection.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2251W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2251W SELECT REQUEST FAILED, RC=*rc/errno*

(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **SELECT** request used to detect activity on a TCP/IP internal socket.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2252E SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*compname*
NAS2252E SELECT REQUEST INTERRUPT LOST, RETRY WILL BE ATTEMPTED
(apar/new for V2R2M0)

This message is issued if the SELECT request that HNAS issues for a server component does not end within 60 seconds. The SELECT request used to detect activity on a TCP/IP internal socket. Normally, a SELECT ends when a new client connection is received or when a TCPIP managed timeout occurs. The TCPIP timeout is set to 30 seconds by HNAS when the SELECT is issued. Failure of the SELECT to end either by TCPIP timeout or when a client connection arrives means that the SELECT is hung. In this state, no new client connections can be established. To avoid this condition, HNAS runs its own SELECT timeout which, if it occurs, will cause this message to be generated and the hung SELECT to be cancelled. A new SELECT request is then issued to resume monitoring for new TCP/IP activity.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section.

NAS2252E CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*compname*
NAS2252E SELECT REQUEST INTERRUPT LOST, SOCKET MUST BE CLOSED
(apar/new for V2R2M0)

This message is issued if the SELECT request that HNAS issues for a client component does not end within 60 seconds. The SELECT request used to detect activity on a TCP/IP internal socket. Normally, a SELECT ends when client data is received or when a TCPIP managed timeout occurs. The TCPIP timeout is set to 30 seconds by HNAS when the SELECT is issued. Failure of the SELECT to end either by TCPIP timeout or when client data arrives means that the SELECT is hung. In this state, no new client data can be processed and the socket becomes unusable. To avoid this condition, HNAS runs its own SELECT timeout which, if it occurs, will cause this message to be generated and the hung SELECT to be cancelled. The socket is then closed in order to make it available again for a new client connection.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section.

```
NAS2260I  SERVER=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=lclname
NAS2260I  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS2260I  REMOTE CONNECTION ACCEPTED
```

This message is issued after the successful execution of an ACCEPT request to accept an incoming TCP/IP connection.

```
NAS2261W  comp=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=compname
NAS2261W  ACCEPT REQUEST FAILED, RC=rc/errno
                                        (doc change for V2R2Mn)
```

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **ACCEPT** request is used to accept an incoming remote connection.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

```
NAS2261W  SERVER=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=lclname
NAS2261W  ACCEPT REQUEST FAILED, RC=FFFFFFFF FFFFFFFF
NAS2262W  SERVER=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=lclname
NAS2262W  REMOTE=rrr.rrr.rrr.rrr(rmtport)
          NOT CONFIGURED, CONNECTION REJECTED
NAS2263I  IDLCNT=xxxxx ACTCNT=yyyyy SOCLMT=zzzzz
```

These messages are issued after the successful execution of an ACCEPT command for a source IP address that is not configured to HNAS or when all sockets for a specified IP address have been allocated. The socket ID over which the connection was accepted is recorded but the connection is ignored because no control block resources are available.

The ***rrr.rrr.rrr.rrr*** value identifies the IP address and the ***rmtport*** value identifies the TCP port number of the client requesting the connection.

For a configured router identified by the ***rrr.rrr.rrr.rrr*** value, the ***xxxxx*** value represents the number of client sockets that are marked idle (INIT=IDLE), the ***yyyyy*** value represents the number of client sockets that are marked active (INIT=ACTIVE) and the ***zzzzz*** value represents the maximum number of client sockets that are configured for the router (which is actually the sum of the VCLMT= operand values when multiple REMOTE definition statements with the same IP address are specified for the router). These counts are displayed when there are no available client sockets to handle the new connection (***zzzzz=yyyyy+xxxxx***).

If the ignored client connection ***should be accepted***, you must add a new REMOTE definition statement with the required IP address or, for Cisco routers only, IPADDR=DYNAMIC to the HNAS CDF and disable router access until the changed CDF is made active. In most cases, this condition occurs because there is a mismatch (probably due to a 'typo') between the client IP address configured in the router and the IP address specified for the IPADDR= operand on a REMOTE definition statement in the HNAS CDF. If you only want to allow specific routers to connect to HNAS, you must specify their exact IP address for the IPADDR= operand on a REMOTE definition statement.

If the ignored client connection ***should not be accepted*** (because you want to restrict connections to specific routers), you should reconfigure the router(s) so that their HOME IP address is not the TCP/IP stack that HNAS is connected to. With or without HNAS present, mis-configured routers can cause thrashing at the TCP/IP stack boundary which will affect overall CPU utilization.

These messages are generated because HNAS does not have the control blocks it needs to support the router connection. The required control blocks can be reserved if an appropriate REMOTE definition statement is specified in the CDF. For IBM or Cisco routers, this can be done by specifying a TYPE=XTP|XOT REMOTE definition statement with the exact IP address for the router. If you will be adding Cisco routers to your network and do not want to specifically identify each by its IP address in the HNAS CDF, specify a TYPE=XOT REMOTE definition statement with IPADDR=DYNAMIC and a VCLMT= operand value large enough to handle your expected router connection load. IPADDR=DYNAMIC allows the router IP address to be resolved dynamically so that the connection will not be rejected. This will prevent a recursive connect loop that can affect HNAS performance increase CPU utilization.

Note that the NAS2263I message above is displayed only when a client connection is rejected because the number of available sockets for the configured router has been reached. The ***yyyyy*** value represents the ***maximum available*** socket count for the router.

If the NAS2263I message ***is displayed***, you should increase the VCLMT= operand value for the active REMOTE definition statement (INIT=ACTIVE) or activate the idle REMOTE definition statement (INIT=IDLE) using the VARY console command. In the latter case, the VCLMT= operand value from the activated REMOTE definition statement will be added to the ***yyyyy*** count and subtracted from the ***xxxxx*** count (the ***zzzzz*** count will remain unchanged).

If the NAS2263I message ***is not displayed***, it means that no REMOTE definition statement exists for the router initiating the connection. In this case, you must either specify a REMOTE definition statement for the router in the CDF, reconfigure the router to use an available and previously unused REMOTE definition statement in the CDF or remove the router from the network.

Note: NAS2261W is the only TCP/IP Command Alert message that is also listed in with the TCP/IP Event Alerts. This was done because the group of messages depicted are generated simultaneously for the condition denoted.

NAS2268I CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS2268I ACCEPTED CONNECTION PASSED

(new for V2R1M1)

This message is issued after the successful execution of an ACCEPT, GETCLIENTID, GIVESOCKET and TAKESOCKET request sequence to establish an incoming TCP/IP connection.

NAS2270I SERVER=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*lclname*
NAS2270I CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS2270I REMOTE CONNECTION ESTABLISHED

This message is issued after the successful execution of a CONNECT request to establish an outgoing TCP/IP connection.

NAS2271W *comp*=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*compname*
NAS2271W CONNECT REQUEST FAILED, RC=*rc/errno*

(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **CONNECT** request is used to initiate an outgoing remote connection.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2280I CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS2280I REMOTE SOCKET NAME RESOLVED

(apar for V2R1M0/changed for V2R1M1)

This message is issued after the successful execution of an GETSOCKNAME request to resolve the remote TCP port number.

NAS2281W *comp*=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*compname*
NAS2281W GETSOCKNAME REQUEST FAILED, RC=*rc/errno*

(apar for V2R1M0/changed for V2R1M1)
(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **GETSOCKNAME** request is used to retrieve remote port number for a TCP socket that is established via the CONNECT command.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2291W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2291W SETSOCKOPT REQUEST FAILED, RC=*rc/errno*
(apar for V2R1M0/changed for V2R1M1)
(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **SETSOCKOPT** request is used to set an option for a TCP/IP internal socket (for example, to reset the TCP/IP LINGER timeout for a bound internal socket so that the IP address and TCP port number can be reused immediately).

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2301W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2301W GETCLIENTID REQUEST FAILED, RC=*rc/errno*
(new for V2R1M1)
(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **GETCLIENTID** request is used to retrieve the identifier by which HNAS is known to TCPIP stack.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2311W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2311W GIVESOCKET REQUEST FAILED, RC=*rc/errno*
(new for V2R1M1)
(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **GIVESOCKET** request is used to pass an allocated TCP/IP internal socket identifier to an HNAS subtask.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2321W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2321W TAKESOCKET REQUEST FAILED, RC=*rc/errno*

(new for V2R1M1)
(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **TAKESOCKET** request is used to retrieve an allocated TCP/IP internal socket identifier by an HNAS subtask.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2331W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2331W IOCTL REQUEST FAILED, RC=*rc/errno*

(apar for V2R1M0/changed for V2R1M1)
(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **IOCTL** request is used to set an I/O mode for a TCP/IP internal socket (specifically, non-blocking mode).

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2401W ***comp=iii.iii.iii.iii(port)*** **SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2401W RECEIVE REQUEST FAILED, RC=*rc/errno*

(apar for V2R1M0/changed for V2R1M1)
(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **RECEIVE** request is used to read data on a TCP/IP internal socket.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2411W ***comp*=*iii.iii.iii.iii*(*port*) SOCKID=*sockid***
PCEID=*pceid* NAME=*compname*
NAS2411W SEND REQUEST FAILED, RC=*rc/errno*
(apar for V2R1M0/changed for V2R1M1)
(doc change for V2R2Mn)

This message is issued after the unsuccessful completion of the noted TCP/IP Command request. The **SEND** request is used to transmit data on a TCP/IP internal socket.

The complete message layout for this Common Command Alert message entry is located on page ALRT-27 of this section. A list of common TCP/IP stack return code (***rc***) and error number (***errno***) that describe the reason for command failure can be located on page TCPIPERRNO-1 of this document.

NAS2501W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS2501W ROUTER KEEP ALIVE FAILURE
(apar for V2R1M0/changed for V2R1M1)

This message is issued after no response is received from the remote router after HNAS sends a 'keep alive' sequence. Keep alive messages are sent at an interval determined by the TAP= operand of the REMOTE definition statement. The keep alive response must be returned within an interval of twice the TAP= operand value (any input will satisfy the keep alive request).

For XTP, a Keep Alive packet is used as the keep alive request. For XOT, a special Call Request packet (sent on a special TCP socket) is used as the keep alive request.

If the displayed ***port*** value is 3065 (XTP) or 1998 (XOT), it indicates that the failure occurred while HNAS was attempting to establish a connection to the router. If the displayed ***port*** value is something other than 3065 (XTP) or 1998 (XOT), it indicates that the failure occurred after the connection to the router had been established. The actual TCP port number is assigned by the router and is solicited by HNAS after the router connection is established.

NAS2502E CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS2502E ROUTER CONTACT LOST, CLOSEONTAPFAILURE OPTION
IS IN EFFECT
(apar for V2R1M0/changed for V2R1M1)
(changed for V2R4M0)

This message is issued after two (2) consecutive 'keep alive' failures. All active connections to the router are purged (closed) and HNAS goes into a 'slow tap' mode attempting to reacquire contact with the router.

If the displayed ***port*** value is 3065 (XTP) or 1998 (XOT), it indicates that the failure occurred while HNAS was attempting to establish a connection to the router. If the displayed ***port*** value is something other than 3065 (XTP) or 1998 (XOT), it indicates that the failure occurred after the connection to the router had been established. The actual TCP port number is assigned by the router and is solicited by HNAS after the router connection is established.

CLOSEONTAPFAILURE is displayed to indicate that all active sockets will be closed as part of the contact lost processing.

Note: The NAS2502E message was modified to display CLOSEONTAPFAILURE option as part of Enhancement APAR 2400055.

NAS2503W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS2503W ROUTER CONTACT REACQUIRED

(apar for V2R1M0/changed for V2R1M1)
(apar for V2R2M0/changed for V2R2M0)

This message is issued after contact is reestablished to a router that was down. All connections to the router are reopened and HNAS goes into its normal 'keep alive' mode watching for loss of contact with the router.

In **220**, the severity code for this alert message was changed from **I** to **W**. This was done to ensure that the 'Router Contact ReAcquired' message is delivered to the network operator console for environments running with HNAS option **SHOWERR** enabled.

NAS2505E CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS2505E ROUTER CONTACT LOST, NOCLOSEONTAPFAILURE OPTION
IS IN EFFECT

(added for V2R4M0)

This message is issued after two (2) consecutive 'keep alive' failures. All active connections to the router remain open and HNAS goes into a 'slow tap' mode attempting to reacquire contact with the router.

If the displayed ***port*** value is 3065 (XTP) or 1998 (XOT), it indicates that the failure occurred while HNAS was attempting to establish a connection to the router. If the displayed ***port*** value is something other than 3065 (XTP) or 1998 (XOT), it indicates that the failure occurred after the connection to the router had been established. The actual TCP port number is assigned by the router and is solicited by HNAS after the router connection is established.

NOCLOSEONTAPFAILURE is displayed to indicate that all active sockets will be left active as part of the contact lost processing.

Note: The NAS2505E message was added to display NOCLOSEONTAPFAILURE option as part of Enhancement APAR 2400055.

```
NAS2507E  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS2507E  ROUTER CONTACT LOST, CLOSEONTAPFAILURE OPTION
          IS IN EFFECT
                                                (added for V2R4M0)
```

This message is identical to the NAS2502E message except for the message ID. It is only issue when the MRMT *rmtname* OPTIONS=CLOSEONTAPFAILURE command is entered when the NOCLOSEONTAPFAILURE is in effect and the router is already down (NAS2505E message previously issued).

Note: The NAS2507E message was added as part of Enhancement APAR 2400055.

```
NAS2601W  comp=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS2601W  SOCKET POOL DEPLETED, SOCCNT=count SOCLMT=limit
                                                (new for V2R3M0)
```

This message is issued when a TCP/IP socket allocation request is processed (SOCKET or ACCEPT call) and HNAS determines that the number of available sockets that the LOCAL can still support is only 20% of its original value.

The *count* value represents the number of available sockets in the pool. This message is indicative of a potentially serious problem that can eventually result in inbound and outbound client connections being rejected. If you receive this message, you should increase the value specified for the SOCLMT operand of the LOCAL definition statement at your earliest convenience.

The *limit* value represents the number of TCP/IP sockets reserved for client connections as specified by the SOCLMT operand of the LOCAL definition statement

```
NAS2602I  comp=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS2602I  SOCKET POOL RESTORED, SOCCNT=count SOCLMT=limit
                                                (new for V2R3M0)
```

This message is issued when a TCP/IP socket release request is processed (CLOSE call) and HNAS determines that the number of available sockets that the LOCAL can still support is 40% of its original value.

The *count* value represents the number of available sockets in the pool. This message is generated only after socket slowdown mode is entered. See description of message NAS2601W SOCKET POOL DEPLETED for additional information.

The *limit* value represents the number of TCP/IP sockets reserved for client connections as specified by the SOCLMT operand of the LOCAL definition statement.

```
NAS2711I  PCESOCDS=80000001 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 00000000 00000000
NAS2711I          00000000 00000000 0000
```

(added for V2R3M0)

The NAS2711I message is issued with alarm messages NAS2200I, NAS2201W, NAS2210I, NAS2211W, NAS2260I, NAS2261W, NAS2268I and NAS2321W (that is, anytime a socket is allocated or released) when the PRNTTCP and SHOWMORE options are in effect. PRNTTCP is set by default when HNAS starts but SHOWMORE must be specified as a start parameter or via the SHOW MORE console command.

This message provides a bit map for every socket in use for a HOME LOCAL. Socket numbers 31 to 0 are logged in the first fullword, sockets 63 to 32 are logged in the second fullword, and so on. The bit map is 250 bytes (2000 bits) in length which is the maximum number of sockets that a HOME LOCAL can support. The message is provided for diagnostic purposes only. Normally, the SHOWMORE option should not be used as it produces a voluminous amount of SYSPRINT data.

In the example above, only the first fullword contains socket descriptor bits which identifies socket numbers 31 and 0 as being in use. Note that socket 0 is normally the HOME LOCAL's LISTENing socket. Normally, inbound socket allocation starts from the lowest available socket number while outbound socket allocation starts from the highest available socket number. This is done in an attempt to avoid socket collisions.

TCP/IP Command Alerts History - Old Table Format

TCP/IP Command Alert messages were extracted from the following table and located in with the TCP/IP Alert Messages to ease viewing by provide all NAS2nnn* series messages in ascending order. This old table format will only be available during TCP/IP Alert and Command message integration which is expected to be completed with-in the next 30 days. Once message integration is completed this section will be removed from the documentation.

For the TCPIP requests (***cmd***) that fail, the following error message IDs are produced (listed alphabetically by command):

NAS2121W CANCEL	used to halt an outstanding TCP/IP command.
NAS2201W SOCKET	used to acquire a TCP/IP internal socket.
NAS2211W CLOSE	used to release a TCP/IP internal socket.
NAS2231W BIND	used to bind a TCP/IP internal socket to an IP address and TCP port number.
NAS2241W LISTEN	used to listen on a TCP/IP internal socket for a remote connection.
NAS2251W SELECT	used to detect activity on a TCP/IP internal socket.
NAS2261W ACCEPT	used to accept an incoming remote connection.
NAS2271W CONNECT	used to initiate an outgoing remote connection.
NAS2281W GETSOCKNAME	used to retrieve remote port number for a TCP socket that is established via the CONNECT command. (**apar for V2R1M0/changed for V2R1M1**)
NAS2291W SETSOCKOPT	used to set an option for a TCP/IP internal socket (for example, to reset the TCP/IP LINGER timeout for a bound internal socket so that the IP address and TCP port number can be reused immediately). (**apar for V2R1M0/changed for V2R1M1**)
NAS2301W GETCLIENTID	used to retrieve the identifier by which HNAS is known to TCPIP stack. (**new for V2R1M1**)
NAS2311W GIVESOCKET	used to pass an allocated TCP/IP internal socket identifier to an HNAS subtask. (**new for V2R1M1**)
NAS2321W TAKESOCKET	used to retrieve an allocated TCP/IP internal socket identifier by an HNAS subtask. (**new for V2R1M1**)

NAS2331W IOCTL	used to set an I/O mode for a TCP/IP internal socket (specifically, non-blocking mode). (**apar for V2R1M0/changed for V2R1M1**)
NAS2401W RECEIVE	used to read data on a TCP/IP internal socket. **(apar for V2R1M0/changed for V2R1M1)**
NAS2411W SEND	used to transmit data on a TCP/IP internal socket. (**apar for V2R1M0/changed for V2R1M1**)

TCP/IP TAP Monitor Event Alert Messages

Logic added by enhancement APAR 2300155 now allows router TAP (Keep Alive) processing to be monitored with status alert messages logged in SYSPRINT. The TAP monitor process can be started using the **MONTAP start parameter or MON TAP ALLON console command** for *global* (all REMOTEs) monitoring or the **MON TAP ON console command** for *local* (specific REMOTE(s)) monitoring. The TAP monitor status alert messages use a message ID of the form NAS251*x*M which are logged in SYSPRINT only and are described below.

Note: Effective with enhancement APAR 2400022, NAS251*x*M messages can now optionally be displayed on the SYSCONS using the ALRMFLTR=(...,NAS251*M(FU),...) operand on BUILD in the CDF or issuing the ALARM FILTER=(...,NAS251*M(FU),...) console command.

```
NAS2511M  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS2511M  XOT TAP TIMEOUT, RESPONSE NOT RECEIVED FOR
          pkttype (retryct)
```

(changed for V2R4M0)

This message is issued when HNAS has not received a response to TAP socket connection initiation or to a TAP packet transmission within the TAP timeout interval. The timeout interval is computed from the TAP= operand value divided by two plus one (TAP/2+1). The *pkttype* text at the end of the message identifies the cause of the timeout. The *pkttype* text can be '**CONNECTION SETUP**', '**CALL REQUEST**' or '**CLEAR REQUEST**' depending on where HNAS is in the TAP sequence. *retryct* represents the number of unsuccessful TAP requests since the last successful TAP request.

Note: The *retryct* was added to the NAS2511M message as part of Enhancement APAR 2400055.

```
NAS2513M  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS2513M  XOT TAP SEQUENCE status, TRANSMITTING pkttype
NAS2513M  PKT=xxxxxxxx...xxxxxxxx          <- PKTDATA
NAS2513M  DTEADDR=dd...dd DCEADDR=dd...dd <-MINDATA|MAXDATA
NAS2513M  FAC=xx...xx                      <- MAXDATA
NAS2513M  CUD=xx...xx                      <- MAXDATA
```

This message is issued when HNAS transmits a TAP packet. The *status* text can be '**IS STARTING**' if this is the first packet in the TAP sequence or '**IN PROGRESS**' if this is an intermediate packet in the TAP sequence. The *pkttype* text can be '**CALL REQUEST**', '**CLEAR REQUEST**' or '**CLEAR CONFIRM**' depending on where HNAS is in the TAP sequence. The *xxxxxxxx* data represents the raw packet that was transmitted starting with the 4-byte XOT packet length, 2-byte LCN, 1-byte packet type and packet payload. Up to 24-bytes of hexadecimal data are displayed. See sample TAP monitor log below for an illustration of a successful TAP sequence.

```
NAS2515M  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS2515M  XOT TAP SEQUENCE IN PROGRESS,
          RECEIVED pkttype
NAS2515M  PKT=xxxxxxxx...xxxxxxxx                    <- PKTDATA
NAS2515M  DTEADDR=dd...dd                      <-MINDATA|MAXDATA
```

This message is issued when HNAS receives a TAP packet. The *pkttype* text can be '**CLEAR REQUEST**' or '**CLEAR CONFIRM**' depending on where HNAS is in the TAP sequence. The *xxxxxxxx* data represents the raw packet that was received starting with the 4-byte XOT packet length, 2-byte LCN, 1-byte packet type and packet payload. Up to 24-bytes of hexadecimal data are displayed. See sample TAP monitor log below for an illustration of a successful TAP sequence.

```
NAS2517M  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS2517M  XOT TAP SEQUENCE COMPLETED NORMALLY
```

This message is issued when HNAS completes a TAP sequence and no errors or problems are detected. See sample TAP monitor log below for an illustration of a successful TAP sequence.

Note: NAS251*n*M DTEADDR=, DCEADDR=, FAC= and CUD= configuration data display support was introduced into 240 as Enhancement APAR 2400044.

Sample Tap Monitor Log Sequence

The following sample TAP monitor log sequence can be expected when **TAPWITHCLR is <u>not</u> in effect**, that is, when the first transmitted TAP packet is a Call Request.

```
NAS2513M CLIENT=010.117.056.100(02630) SOCKID=0001 PCEID=0008 NAME=XOTCLNT1
NAS2513M XOT TAP SEQUENCE IS STARTING, TRANSMITTING CALL REQUEST
NAS2513M PKT=0000001010010B000001000000C8D5C1E2E3C1D7

NAS2515M CLIENT=010.117.056.100(02630) SOCKID=0001 PCEID=0008 NAME=XOTCLNT1
NAS2515M XOT TAP SEQUENCE IN PROGRESS, RECEIVED CLEAR REQUEST
NAS2515M PKT=000000051001130342

NAS2513M CLIENT=010.117.056.100(02630) SOCKID=0001 PCEID=0008 NAME=XOTCLNT1
NAS2513M XOT TAP SEQUENCE IN PROGRESS, TRANSMITTING CLEAR CONFIRM
NAS2513M PKT=00000003100117

NAS2517M CLIENT=010.117.056.100(02630) SOCKID=0001 PCEID=0008 NAME=XOTCLNT1
NAS2517M XOT TAP SEQUENCE COMPLETED SUCCESSFULLY
```

TCP/IP TAP Monitor Log Sequence Example

The following sample TAP monitor log sequence can be expected when **TAPWITHCLR is in effect**, that is, when the first transmitted TAP packet is a Clear Request.

```
NAS2513M CLIENT=010.117.056.100(02630) SOCKID=0001 PCEID=0008 NAME=XOTCLNT1
NAS2513M XOT TAP SEQUENCE IS STARTING, TRANSMITTING CLEAR REQUEST
NAS2513M PKT=00000005100113000FF

NAS2515M CLIENT=010.117.056.100(02630) SOCKID=0001 PCEID=0008 NAME=XOTCLNT1
NAS2515M XOT TAP SEQUENCE IN PROGRESS, RECEIVED CLEAR CONFIRM
NAS2515M PKT=00000003100117

NAS2517M CLIENT=010.117.056.100(02630) SOCKID=0001 PCEID=0008 NAME=XOTCLNT1
NAS2517M XOT TAP SEQUENCE COMPLETED SUCCESSFULLY
```

General Notes for TAP Monitor Messages:

1) The NAS251*n*M monitor messages are normally written to SYSPRINT only but can also be routed to SYSCONS using the BUILD ALRMFLTR= operand the ALARM FILTER= command. For example, when FILTER=(NAS251*n*M(FC)) is specified, NAS251*n*M monitor messages will flow to SYSCONS if the SHOWON option is in effect. In addition, when FILTER=(NAS251*n*M(FU)) is specified, NAS251*n*M monitor messages will flow to SYSCONS unconditionally.

2) The NAS251*n*M monitor messages can be filtered from SYSPRINT and/or SYSCONS by the BUILD ALRMFLTR= operand or the ALARM FILTER= command. For example, when FILTER=(NAS251*n*M(P)) is specified, NAS251*n*M monitor messages will be purged from SYSPRINT and SYSCONS.

3) The NAS251*n*M monitor messages are in addition the existing Keep Alive alarm messages (NAS2501W, NAS2502E, NAS2503W) which are written to both SYSPRINT and the SYSCONS.

Note: The MON TAP ON console command causes special monitor messages to be written to SYSPRINT when the PRNT ON option is in effect. These special monitor messages start with a message ID of NAS251*n*M and are not normally sent to the SYSCONS (system operator console). However, these messages can be forced to go to SYSCONS by specifying the message IDs in the ALRMFLTR= list either via the CDF or the ALARM command.

For example, if ALRMFLTR=(...,NAS251*M(FU),...) is specified on the BUILD definition statement or if the ALARM FILTER=(...,NAS251*M(FU),...) console command is issued, TAP monitor messages will also go to SYSCONS.

TCP/IP PING Monitor Event Alert Messages

Logic added by enhancement APAR 2400022 now allows router PING processing to be monitored with status alert messages logged in SYSPRINT. The PING process is started using the **PING console command**. The PING monitor status alert messages use a message ID of the form NAS261*x*M which are logged in SYSPRINT only and are described below.

Note: Also effective with enhancement APAR 2400022, NAS261*x*M messages can now optionally be displayed on the SYSCONS using the ALRMFLTR=(...,NAS261*M(FU),...) operand on BUILD in the CDF or issuing the ALARM FILTER=(...,NAS261*M(FU),...) console command.

NAS2611M PING CALL TIMED OUT FOR SOCKET=*aaa.bbb.ccc.ddd*(*port*)
DTEADDR=*dd...dd* (*seqno*)

This message is issued when no response is received for a PING operation. This normally suggests that an invalid IP address/Port number was specified, the *called* DTE address is undefined or the target router/DTE does not exist. ***seqno*** is the PING sequence number that is used to correlate this PING termination message to the NAS2613M initialization message.

NAS2613M PINGING SOCKET=*aaa.bbb.ccc.ddd*(*port*) FOR
consname (*seqno*)
NAS2613M DTEADDR=*dd...dd* DCEADDR=*dd...dd*
NAS2613M FAC=*xx...xx*
NAS2613M CUD=*xx...xx*

This message is issued when the PING console command is issued to indicate the start of the PING process. SOCKET= identifies the target IP address and Port number for the PING operation. DTEADDR=, DCEADDR=, FAC= and CUD= identify, respectively, the *called* DTE address (target DTE), *calling* DTE address (source DTE), facilities data and call user data for the PING Call Request packet. These values come from a TYPE=DMY REMOTE that is specified for the PING command and/or override values that are specified with the PING command. ***consname*** identifies the name of the console that issued the PING command. For the local console (SYSCONS), this is WACONPCE. For a remote console, this is RCON*nnnn* where *nnnn* is the remote console number. ***seqno*** is the PING sequence number that is used to correlate this PING initiation message to the NAS2611M, NAS2615M and NAS2617M termination messages.

NAS2615M PING CALL CLEARED (*cc/dd*) FOR
SOCKET=*aaa.bbb.ccc.ddd*(*port*)
DTEADDR=*dd...dd* (*seqno*)

This message is issued when a Clear Request response is received for a PING operation. This normally suggests that the IP address/Port number are valid but something was wrong with the PING Call Request packet. The ***cc/dd*** values provide clear cause and diagnostic codes that will help determine what Call Request value(s) caused the clear (see sectioned

entitled Clear Cause and Reason Codes). ***seqno*** is the PING sequence number that is used to correlate this PING termination message to the NAS2613M initialization message.

NAS2617M PING CALL ACCEPTED FOR
SOCKET=*aaa.bbb.ccc.ddd*(*port*)
DTEADDR=*dd...dd* (*seqno*)

This message is issued when a Call Accept response is received for a PING operation. This indicates that the IP address/Port number are valid and that the Call Request packet caused the target DTE to connect to HNAS. ***seqno*** is the PING sequence number that is used to correlate this PING termination message to the NAS2613M initialization message.

Note: PING NAS261*n*M message support was updated to include the correlation sequence number (***seqno***) and IP and DTE addresses in the response messages effective with APAR 2400039.

General Notes for PING Monitor Messages:

1) The NAS261*n*M monitor messages are normally written to SYSPRINT only but can also be routed to SYSCONS using the BUILD ALRMFLTR= operand the ALARM FILTER= command. For example, when FILTER=(NAS261*n*M(FC)) is specified, NAS261*n*M monitor messages will flow to SYSCONS if the SHOWON option is in effect. In addition, when FILTER=(NAS261*n*M(FU)) is specified, NAS261*n*M monitor messages will flow to SYSCONS unconditionally.

2) The NAS261*n*M monitor messages can be filtered from SYSPRINT and/or SYSCONS by the BUILD ALRMFLTR= operand or the ALARM FILTER= command. For example, when FILTER=(NAS261*n*M(P)) is specified, NAS261*n*M monitor messages will be purged from SYSPRINT and SYSCONS.

Note: The PING console command causes special monitor messages to be written to SYSPRINT when the PRNT ON option is in effect. These special monitor messages start with a message ID of NAS261*n*M and are not normally sent to the SYSCONS (system operator console). However, these messages can be forced to go to SYSCONS by specifying the message IDs in the ALRMFLTR= list either via the CDF or the ALARM command.

For example, if ALRMFLTR=(...,NAS261*M(FU),...) is specified on the BUILD definition statement or if the ALARM FILTER=(...,NAS261*M(FU),...) console command is issued, PING monitor messages will also go to SYSCONS. PING monitor messages will also be routed to SYSCONS if the SHOWCONS ON option is in effect.

VTAM Event Alerts

Most event alert messages that are generated by the VTAM components of the HNAS system have unique formats based on the type of event being reported as follows:

NAS3700E *mchname* LU *sluname* BIND FOR FC GATE SESSION FAILED

This message is issued when a BIND issued to the MCH SLU named *sluname* associated with the GATE MCH named *mchname* fails. Communication with the GATEFC data session SLUs will not be possible.

NAS3701W *mchname* OPEN FAILED FOR *sluname* ACB. R15=*rc* ACBERFLG=*ef*

This message is issued when a VTAM OPEN error occurs for the MCH SLU named *sluname* associated with the GATE MCH named *mchname*. The OPEN return code ***rc*** and ACB error flags ***ef*** are also displayed.

Note that this event can occur when HNAS attempts a host connection when the Application Major Node File (AMNF) is not active. For a PVC, a connection is attempted under timer control. For an SVC, a connection is attempted when an incoming Call Request packet is received.

Common return codes are:

R15=08 ACBERFLG=56
ACB name found in VTAM but the name is not defined as an application (APPL) resource.

R15=08 ACBERFLG=58
ACB name already opened by another application

R15=08 ACBERFLG=5A
ACB name not in active VTAM application major node.

NAS3702W REQSESS FROM SLU *sluname* TO PLU *pluname*
FAILED R15=*xx* RO=*yy* FDB2=*zz* SENSE=*sense*

This message is issued when a REQSESS macro issued by HNAS to request a VTAM session with a PLU does not end normally. For resources such as GATE control sessions, GATE Fast Connect data sessions and LLC0/5 callout LUs, HNAS will retry the REQSESS based on the MCHTMR value (default: 60 seconds). For PVCs, after APAR 2400053, the operation will be retried ever 60 seconds. Prior to the APAR longer retry times were used. Callin sessions are terminated if a REQSESS fails.

sluname is the HNAS SLU name. This name appears in a VTAM application major node.

pluname is the name of the PLU HNAS wants to BIND from.

xx, ***yy***, ***zz*** and ***sense*** are the return codes indicating the reason for the failure. The codes are described in the VTAM Programming Manual (SC31-8373). Sense data values are described in VTAM V4R4 (GC31-8369).

Common combinations are:

R15=04 R0=10 FDB2=12 SENSE=0805xxxx
Session limit exceeded. This can occur when the PLU acquires an HNAS LU at the same time HNAS issues a REQSESS to ask the PLU for a BIND for the same LU. With the EDITRAN GATE PLU the problem can be solved by coding REQSESSDELAY=0.

R15=04 R0=10 FDB2=12 SENSE=080A0000
VTAM Session Manager Exit rejected the request.

R15=04 R0=14 FDB2=4B SENSE=08210002
Invalid LOGMODE entered.

R15=04 R0=10 FDB2=12 SENSE=08570001/08570002
SSCP could locate PLU but it's ACB is not open.

R15=04 R0=10 FDB2=12 SENSE=087D0001
SSCP could not locate PLU (application node not activated).

Other sense code combinations may exist, please consult the host VTAM and Application (PLU) documentation for additional information.

NAS3703W mch-nm VC *addr lu-nm* LU *addr* RECEIVED NOTIFY CODE=*aabbcc*00 SENSE=*ssssssss*

(apar/new for V2R3M0)

This message is issued when VTAM terminates a session startup sequence by sending a NOTIFY PIU to HNAS. This happens when HNAS issues a REQSESS macro to ask a PLU for a BIND and the REQSESS ends normally (SSCP sends a CINIT to the PLU). Subsequently the PLU rejects the session with a CLSDST macro. We have seen this where the PLU had an EXIT routine that checked SLU names and where HNAS was stopped and restarted in a different LPAR (the PLU had a record of the original location). The SENSE data returned is, in most cases, provided by the PLU. It does not need to conform to standard SNA sense code values (X'80xxyyyy'=Path Error, etc.).

mch-nm and *lu-nm* identify the HNAS MCH and LU resources. CODE= values are as follows:

```
aa = control vector type (X'03' expected)
bb = status 00 = OLU & DLU SSCPs not connected.
            01 = session terminated
            02 = session setup received
```

```
            03 = procedure error
cc = xxxxxxxx    BIT values
     ||||||||___ reserved
     |||||||____ 1 = session rejected at SSCP
     ||||||_____ reserved
     |||||______ 0 = setup procedure error
     ||||        1 = takedown procedure error
     ||||_______ 1 = setup rejected at SLU
     |||________ 1 = setup rejected at PLU
     ||_________ 1 = error sending BIND to SLU
     |__________ 1 = error sending CINIT to PLU
```

ssssssss = sense data from PLU or VTAM.

Note: This new message was introduced into 230 as Enhancement APAR 2300054.

NAS3704W *mch-nm* VC *addr lu-nm* LU 0013E3D0 RECEIVED CLEANUP CODE=*aa*00000

(apar/new for V2R3M0)

This message is issued when VTAM terminates an established session by sending a CLEANUP PIU to HNAS. If the PLU unexpectedly closes it's ACB a CLEANUP will result.

```
aa= xxxxxxxx Reason Bits
    ||_________ 1 = Network Manager
    |__________ 1 = Abnormal
```

For remaining bits see SNA Format & Protocol.

Note: This new message was introduced into 230 as Enhancement APAR 2300054.

NAS3705I LU *lu-name* REJECTING *cmd #seq* SENSE=*bbbbbbbb* LUBST1/2=*ccdd* LUBBST1/2=*eeff* REQ-RH-*gghhhhhh*

(apar/new for V2R3M0)

```
lu-name       = HNAS SLU name
cmd           = command being rejected (DATA, BID, etc.)
#seq          = VTAM sequence number
bbbbbbbb      = sense data (08130000 for bid reject)
ccdd & eeff   = internal state flags
gg            = internal command index
hhhhhh        = 3 byte RH for command (from PLU)
```

This message is issued when HNAS rejects a PIU from the PLU SENSE=0813xxxx or 0814xxxx. These values indicate that the PLU and the HNAS SLU are attempting to start a bracket at the same time. These rejects can be considered normal so the severity code is 'I' (follows 'NAS3705'). OPTIONS=(INHIBITBIDREJ,NORTRBIDREJ) may be coded to reduce the number of NAS3705I alerts with SENSE=0813/0814.

Note: This new message was introduced into 230 as APAR 2300177.

NAS3705W LU *lu-name* REJECTING *cmd #seq* SENSE=*bbbbbbbb*
LUBST1/2=*ccdd* LUBBST1/2=*eeff* REQ-RH-*gghhhhhh*
(apar/new for V2R3M0)

lu-name	= HNAS SLU name
cmd	= command being rejected (DATA, BID, etc.)
#seq	= VTAM sequence number
bbbbbbbb	= sense data (common values): 0801 resource not available (LU has no VC) 081C request not executable (VC clearing)
ccdd & ***eeff***	= internal state flags
gg	= internal command index
hhhhhh	= 3 byte RH for command (from PLU)

This message is issued when HNAS rejects a PIU from the PLU. HNAS rejection of a PLU should be investigated by Comm-Pro or your HNAS customer support provider to determine what the problem is.

Notes: This new message was introduced into 230 as APAR 2300144.
APAR 2300177 causes a NAS3705I (instead of NAS3705W) alert to be issued when the sense code is 0813xxxx or 0814xxxx. These sense values indicate bracket race condition that is recoverable. Please see NAS3705I (above) if APAR 2300177 is not on and 0813/0814 rejects are being reported.

When ***cmd*** is DATA and the sense is 0801 or 081C then the rejection may be due to a normal session end at the remote. For example if a TSO LOGOFF command is entered and the remote terminates the session then the TSO LOGGED OFF message will be rejected by HNAS.

NAS3710W GATE CTL SESSION LU *sluname* RECEIVE -RSP SENSE=*xxxxxxxx*
LUBST1/2=*yyyy* LUBSST1/2=*zzzz*

This message is issued when HNAS receives a negative response from the CTCP PLU for the MCH SLU named *sluname*. The sense data ***xxxxxxxx*** and LU state flags ***yyyy*** and ***zzzz*** are also displayed. Contact Comm-Pro for assistance.

NAS3711I LU *sluname* RECEIVE -RSP SENSE=*xxxxxxxx* FROM PLU
pluname* LUBST1/2=*yyyy* LUBSST1/2=*zzzz
(apar for V2R4M0)

This message is issued when HNAS receives a negative response from the PLU named ***pluname*** for the MCH SLU named ***sluname.*** The sense data ***xxxxxxxx*** and LU state flags ***yyyy*** and ***zzzz*** are also displayed. This alert records the fact that the -RSP was received.

The sense data did not warrant termination of the VTAM session. Sense data starting with 10 of PVC sense data starting with 0826 generate NAS3711I. This alert was introduced by APAR 2400031.

NAS3711W LU *sluname* RECEIVE -RSP SENSE=*xxxxxxxx* FROM PLU *pluname* LUBST1/2=*yyyy* LUBSST1/2=*zzzz*

(apar/new for V2R4M0)

This message is identical to NAS3711I except the severity level is 'W' to indicate that the sense data warrants HNAS termination of the VTAM session with CAUSE/DIAG=000/219. This alert was introduced by APAR 2400031. The following are common sense codes:

08260000 Function Not Supported
Used by IMS if an inbound transaction is missing a transaction ID or if the transaction requires use of a data base that is not up.

NAS3720S LU *lu-name* INBOUND X25 MESSAGE COULD NOT BE DELIVERED BY THE LU BUFFER LIST

(apar for V2R1M0)

This message is issued when the size of an inbound file transfer sequence exceed the size of our Buffer List Table. When this condition arises the file transfer that was in progress will fail. We observed this unusual condition during an inbound GATE file transfer that failed when the PLU aborts transfer.

An internal table used by HNAS to send data in a chain of packets to the PLU may not be large enough. When GATE is in use if the table is not large enough the result is that data the PLU expects to see in a single only-in-chain RU is sent in 2 only-in-chain RUs. This causes the file transfer to abort.

220 - The HNAS V2R2M0 product includes standard support to generate NAS3720S alert message and now includes a configuration parameter in the CDF to expand the buffer list tables as required to accommodate the special requirement. Please refer to configuration parameter OPTIONS=LUBLTCNT=value of the BUILD definition statement located in Chapter 4 of the HNAS Guide and Reference documentation.

211 - Standard logic is now available to detect this very unusual table overflow condition. If an overflow occurs, HNAS will generate the alert message. The message indicates that our standard buffer list tables will need to be expanded.

210 - Diagnostic APAR 2100013 available (210 Refresh > 05-17-2002)

Please contact your HNAS support representative for an enhancement to expand the tables, if required in V2R1M1/V2R1M0.

NAS3750W DISCARDING MSG FROM PLU *pluname* to SLU *sluname* ON MCH *mchname*

(new for V2R4M0)

This alert message indicates that the PLU has sent an invalid message to an HNAS datafono LU. Messages must begin with 'R', 'D', 'L' or 'M'. NAS3751W displays the first 80 characters of the message.

The PLU name ***pluname***, MCH name ***mchname*** and LU name ***sluname*** identify the resources affected by the error condition.

NAS3751W *text*

(new for V2R4M0)

This message ID is used to provide the message content associated with the NAS3750W DISCARDING MSG FROM PLU alert message.

text provides the first 80 characters of the message.

NAS3796I FC LU *sluname* ON MCH *mchname* REC'D CALL ACCEPT FROM *pluname* FOR SES WITH *ipaddr(port)*

(new for V2R4M0)

This message is issued when a GATE Fast Connect CTCP sends a call accept packet to HNAS on the FC data session LU. This indicates that a fast connect session is starting for an inbound call.

NAS3797I LU *sluname* RECEIVED BIND FROM PLU *pluname*

(apar/new for V2R3M0)

This message is issued when an LU for a PVC session or a GATE control session receives a BIND from the PLU. This message was added to make it easier to determine that the PVC or GATE control session is active. The console DLU lu-name command may also be used to display the LU status (DTA in the STAT column indicates bound with data traffic active).

NAS3798I LU *sluname* STARTING SESSION ON MCH *mchname* (*count*)

This message is issued when a VTAM session starts for the SLU named *sluname* associated with the MCH named **mchname**. The active VC connect counter ***count*** identifies the number of virtual circuits connected to the named MCH at the time the message is issued.

Note: The NAS3798I message is generated when an ACB for an SLU is successfully opened. When OPTIONS=CLOTINITYP=BIND is specified for a TYPE=SPU REMOTE definition statement, the ACBs are opened for all SLUs on the SPU. Opening the ACB and issuing a SETLOGON request for an SLU is required so that HNAS can accept a BIND that will

initiate a QLLC callout attempt. This activity occurs when the OPTIONS=MCHTMR=value expires for the first TYPE=MCH REMOTE definition statement in the CDF. This MCH may or may not be related to the SPU in question. Thus, using its name in the NAS3798I message can be misleading. For this reason, the *mchname* and *count* fields will be displayed as asterisks (********) for a QLLC SLU whose ACB is opened for BIND initiated callout.

In 230 the *count* value is represented in decimal while in previous releases the *count* value is represented in hexadecimal.

Session start occurs when a VTAM OPEN macro is issued for the VTAM ACB associated with the HNAS *sluname*.

For LLC0 and LLC5 callin resources, the SLU ACB OPEN is issued after a Call Request has been received, an SLU for the session has been allocated and the PLU name has been determined. After the OPEN, a REQSESS macro is issued to ask the PLU to issue a BIND/SDT sequence to start data flow.

For LLC0 and LLC5 callout resources, the SLU ACBs are kept open so that *sluname* is known to VTAM. This allows a PLU BIND the SLU in order to trigger an HNAS callout sequence using a called DTE address associated with *sluname* (see SVC0= & SVC5= REMOTE operands).

LLC4 non-fast connect data session SLU ACBs are opened when the CTCP accepts an inbound call (using the control session LU) or when a Call Accept is received for a Call Request sent by the CTCP.

LLC4 fast connect data session SLU ACBs are kept open so that HNAS can process inbound or outbound call requests from the CTCP.

LLC4 control session LUs are kept open.

LLC3 SLU ACBs are opened when a remote PU has activated, an LU on the PU has activated and the PLU name for the session has been determined (for example, via a USS Table).

In the above, "kept open" means that HNAS opens the ACB when HNAS starts. If the ACB is closed for any reason it is reopened by timer logic (see OPTIONS=MCHTMR=xx).

NAS3799I LU *sluname* ENDING SESSION ON MCH *mchname*
HNAS|RMT CAUSE/DIAG=*ddd*/*ddd* (*xx*/*xx*) DIAGX=*xxxx*

(changed for V2R3M0)

This message is issued when HNAS ends a session by closing the SLU ACB. The PLU/SLU session ends (UNBIND completes) for the SLU named *sluname* associated with the MCH named *mchname*. The string '**HNAS**' or '**RMT**' indicates whether HNAS or the remote cleared the call will the displayed cause and diagnostic codes. ***ddd***/***ddd*** is the cause and diagnostic in decimal while ***xx***/***xx*** provides the values in hexadecimal. When there is more than one session end cause information will be lost. For example, when HNAS receives a

clear from a remote an UNBIND is delivered to the PLU to terminate the VTAM session. If the UNBIND fails then the message will report that '**HNAS**' ended the session because of a error during a VTAM operation. The cause and diagnostic from the remote are not displayed.

Note: If clear cause/diag= codes or diagx= codes are not available when the LU Ending Session messages is generated an asterisk (*) or string of asterisk's (********) representing the length of the entry being replaced will be recorded in the alert message ddd/ddd (xx/xx) or xxxx message area.

This message was primarily designed to:

1) record the session end in the log to record session disconnect activity,
2) indicate who cleared the call ('HNAS' or 'RMT' after the MCH name), and
3) provide the clear cause & diagnostic received ('RMT') or sent ('HNAS').

In **230**, The extended diagnostic codes field **DIAGX=*xxxx*** was added to provide more specific event reason codes. The extended diagnostic reason codes descriptions are provided in the Clear Diagnostic Codes section of the HNAS Messages and Codes Debugging Guide.

LU Event Alerts

Most event alert messages that are generated by the LU components of the HNAS system have unique formats based on the type of event being reported as follows:

NAS4700W CONTROL SESSION LU *sluname* UNBOUND WITH *count* ACTIVE SESSIONS

This message is issued when a GATE CTCP control session sends an UNBIND to HNAS when HNAS has *count* active data sessions communicating (connected) with the CTCP. The data sessions are terminated. No message is issued if *count* is zero.

In 230 the ***count*** value is represented in decimal while in previous releases the ***count*** value is represented in hexadecimal.

sluname is the name of the GATE MCH control session SLU and ***count*** is the count of active (connected) data sessions.

NAS4701W CONTROL SESSION LU *sluname* RECEIVED CLEANUP WITH *count* ACTIVE SESSIONS

This message is issued when a GATE CTCP control session terminates abnormally when HNAS has ***count*** active data sessions communicating (connected) with the CTCP. The data sessions are terminated. No message is issued if ***count*** is zero.

In 230 the ***count*** value is represented in decimal while in previous releases the ***count*** value is represented in hexadecimal.

sluname is the name of the GATE MCH control session SLU and ***count*** is the count of active (connected) data sessions.

NAS4702W TIMER RELEASED IDLE LU *sluname*

This message is issued when HNAS timer logic detects an idle (non-connected) LU on an active queue. The LU is returned to the available queue. If you are encountering this message please notify your HNAS support representative for problem resolution/troubleshooting assistance.

sluname is the name of the GATE MCH control session SLU.

NAS4703W LU *sluname* BFR REQUEST OVERFLOW

(new for V2R2M0)

This message is issued when the LU packet request scheduling table for the SLU named ***sluname*** overflows. The request for an HNAS packet cannot be honored and the call is

cleared. If you receive this message, contact Comm-Pro for assistance.

NAS4704W ACTIVE LU *sluname* REJECTING NEW BIND (*xxxx*)

(apar, new for V2R2M0)

This message is issued when HNAS receives a BIND command for an LU that is already active. ***sluname*** identifies the active LU. *xxxx* is diagnostic information for use by Comm-Pro. This error indicates that the PLU thinks HNAS can support parallel sessions or that some event has caused the PLU to think the HNAS LU is not active. The new BIND is rejected and the current session (if any) is ended.

NAS4705W LU *sluname* CALLOUT REJECTED RC=*xx*

(new for V2R3M0)

This message is issued when an PIU build request is scheduled for a QLLC SLU but the request cannot be honored because the SLU is in the wrong state. *sluname* identifies the active LU. *xx* is a return code for the scheduling subroutine.

xx=04 => request could not be processed because callout initiation failed.
32 => request could not be processed because the PLU request was not BIND.
36 => request could not be processed because the SLU was not active or SPU was not connected through network.

NAS4706W LU *sluname* REJECTING BIND FROM PLU *pluname* SENSE=xxxxxxxx

(apar/new for V2R3M0)

This message is issued when HNAS rejects a bind command sent by the PLU. **xxxxxxxx** contains a sense code indicating the cause of the reject. See the “Bind Failure User Sense Codes (HNAS)” chapter (this document) for a description of the reject sense codes.

NAS4707W LU *sluname* GENERATING ERR/INFO PACKET FOR CTCP *pluname* GATE CMD RCV'D=*cc*, HNAS ERROR CODE=*ee*

(apar/new for V2R3M0)

This message is issued when HNAS receives an invalid packet on a GATE control or data session LU. In addition to the alert message an ERROR/INFORMATION REPORT message (not a DIAGNOSTIC message) will be sent to the CTCP on the control session LU.

sluname is the name of the HNAS GATE SLU that received the invalid message.

cc = X25 command byte received by HNAS.

ee = Error code:
1 = Invalid cmd on GATE control session.
2 = Invalid cmd on FC GATE control session.

3 = Invalid cmd on GATE data session.
4 = cmd on FC GATE data session does not meet minimum length requirement.
5 = cmd on GATE control session does not meet minimum length requirement.
6 = cmd on GATE data session does not meet minimum length requirement.

Note: This new message was introduced into 230 as APAR 2300178.

NAS4708W GATE FC CTL SES LU *luname* CLEARED BY CTCP *pluname* CAUSE/DIAG=*cc/dd*

(apar/new for V2R3M0)

This message is issued when HNAS receives a CLEAR packet on an FC control session LU a NAS4708W alert message will be issued and a CLEAR-CONFIRM will be returned to the CTCP. Data session LUs will not be affected.

luname is the name of the GATE MCH control session SLU

cc*/*dd = CTCP's CLEAR cause and diagnostic bytes (in hex).

Note: This new message was introduced into 230 as APAR 2300178.

NAS4709W REMOTE rmt-nm lu-nm LU lu-addr LUIQ TIMEOUT, LUIQ BFR CT=xxxx

(apar/new for V2R3M0)

This message is issued when HNAS has a message from the remote that has been waiting for delivery to the PLU for a period of 4 minutes. The alert indicates that there is something wrong with the VTAM session between the HNAS SLU and the PLU. After the ALERT the LU's VTAM session is ended (PLU will receive a NOTIFY). If there is an associated VC session it is cleared with DIAG=212. The alert will also occur if the remote starts an M-bit chain but does not complete it.

rmt-nm is the name of the HNAS TYPE=MCH REMOTE with the LU.

lu-nm is the HNAS LU name.

lu-addr is the LU's storage address.

xxxx is the number of buffers in the LU's input (from the remote device) input queue.

Note: This new message was introduced into 230 as APAR 2300180.

NAS4710W *luname* LU *lu-addr* SENDING DIAG PKT *text* BFR NEXT

(apar/new for V2R3M0)

This message is issued when HNAS sends a diagnostic packet to the CTCP. The most likely cause of NAS4710W is that the PLU is not a GATE CTCP.

luname is the name of the GATE MCH control session SLU
lu-addr is the storage address of the SLU
text provides the following error descriptions:
BFR NEXT indicates the buffer that triggered the error will be displayed in SYSPRINT.

text	Description
INVALID CTCP GATE CMD BYTE	HNAS has received an invalid GATE message from a GATE CTCP control session PLU.
FMD INV ON FC GATE CTL SES	HNAS has received an FMD PIU from a GATE FC PLU. FC GATE control session do not send FMD PIUs.
INVALID CTCP DATA SES CMD BYTE	HNAS has received an invalid GATE message from a GATE CTCP data session PLU.
GT FC LN ER	HNAS has received a PIU from a GATE FC PLU that is too short to be valid.
GT DS LN ER	HNAS has received a PIU from a GATE PLU that is too short to be valid.

NAS4720W WAIT FOR NON-M MESSAGE TIMEOUT ON LU *luname*

(new for V2R4M0)

When the IMS option is specified HNAS may enter a flush state waiting for IMS transmit queues to empty. This is signified by receipt of a non-M message from the PLU. If such a message is not received in 4 minutes this alert is issued.

Virtual Circuit Event Alerts

Most event alert messages that are generated by the Virtual Circuit components of the HNAS system have unique formats based on the type of event being reported as follows:

NAS5000I CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS5000I VC *vcb* STARTING CONSOLE SESSION ON MCH *mchname* (*count*)

This message is issued when a remote console session starts for the VC associated with the MCH named *mchname*. The VCB address ***vcb*** and active VC connect counter ***count*** are also displayed. The ***count*** value identifies the number of virtual circuits connected to the denoted MCH.

NAS5700E REMOTE *mchname* 2 MIN 2ND SEGMENT BFR WAIT.
NAS FREE CT=*count*

This message is issued when a request for a secondary buffer for the REMOTE named ***mchname*** is not satisfied after 2 minutes. This message indicates that the HNAS buffer pool is either depleted and should be enlarged or a session is hung. The current HNAS available buffer count ***count*** is also displayed. If you receive this message, contact Comm-Pro for assistance.

In 230 the *count* value is represented in decimal while in previous releases the *count* value is represented in hexadecimal.

NAS5701E REMOTE *mchname* 2 MIN HDR BFR WAIT. NAS FREE CT=*count*

This message is issued when a request for a header buffer for the REMOTE named ***mchname*** is not satisfied after 2 minutes. We attempt to allocate a buffer every 8 seconds until the time-out occurs. This message indicates that the HNAS buffer pool is either 80% depleted and should be enlarged or a session is hung. The current HNAS available buffer count ***count*** is also displayed. If the session appears hung and buffer counts appear acceptable, contact Comm-Pro for assistance.

In 230 the ***count*** value is represented in decimal while in previous releases the *count* value is represented in hexadecimal.

NAS5702E LU *sluname* ADDRESSES INV USSTAB

This message is issued when HNAS is searching USS Tables for a USSCMD or USSMSG macro for the SLU named ***sluname*.** When processing a USS Table, HNAS checks the byte at offset 0 in the USS Table CSECT. This byte must have the value X'BD'. If it does not NAS5702W is issued and the call is cleared with diagnostic code 209 (X'D1'). The message

indicates that the USS Table is corrupt or that a version not supported by HNAS is being used. If an out of data table is in use then reassemble the table with FORMAT=DYNAMIC (the default value) coded on the USSTAB macro. The invalid USSTAB may have been reached via the USSTAB= operand on a REMOTE TYPE=MXT, REMOTE TYPE=MCH or BUILD statement. The USSTAB= operands are processed when HNAS is looking for a USS Command or a USS Message.

NAS5703E LU *sluname* MISSING USSTAB

This message is issued when MCHSOL is selected by the SLU named ***sluname*** and HNAS is unable to locate a USS Table or Interpret Table in the APPLNAME= parameter list. If neither table can be located then NAS5703E is issued and the call is cleared with diagnostic code 210 (X'D2'). The message indicates that no table was coded or that the named table could not be loaded (does not exist).

NAS5704W RESET RECEIVED FOR MCH *mchname* VC *vcb* *sluname* LU *lub* CAUSE/DIAG=*ddd/ddd* (*xx/xx*)

(new for V2R2M0)

This message is issued when an X.25 Reset packet is received on the MCH named *mchname*. An X.25 reset indicates a problem at the X.25 packet level. For example, a default window size mismatch. The VCB address ***vcb***, SLU name ***sluname*** and LUB address ***lub*** identify the session in error. ***ddd/ddd*** are the reset cause and diagnostic codes in decimal while ***xx/xx*** provides the values in hexadecimal. If reset codes are not available, the string '*******' is used. HNAS Reset Cause and Diagnostic codes are located in the HNAS Messages and Codes documentation. If you receive this message, contact Comm-Pro for assistance.

NAS5705W RESET SCHEDULED ON MCH *mchname* VC *vcb* *sluname* LU *lub* CAUSE/DIAG=*ddd/ddd* (*xx/xx*) DIAGX=*xxxx*

(new for V2R2M0)
(changed for V2R3M0)
(changed for V2R4M0)

This message is issued when HNAS detects a condition that requires the transmission of a Reset packet to the remote DTE via the MCH named *mchname*. The VCB address ***vcb***, SLU name ***sluname*** and LUB address ***lub*** identify the session in error. ***ddd/ddd*** are the reset cause and diagnostic codes in decimal while ***xx/xx*** provides the values in hexadecimal. HNAS Reset Cause and Diagnostic codes are located in the HNAS Messages and Codes documentation.

In **230**, The extended diagnostic codes field **DIAGX=*xxxx*** was added to provide more specific event reason codes. The extended diagnostic reason codes descriptions are provided in the Clear Diagnostic Codes section of the HNAS Messages and Codes Debugging Guide.

For **PVC's**, an initial NAS5705W alert message will be generated with a HNAS CAUSE/DIAG=000/000 (00/00) DIAGX=0000 when the LU receives a SHUTD from the PLU (applica-

tion shutdown). This event will precede the NAS3799I ENDING SESSION message then a second NAS5705W alert message containing HNAS CAUSE/DIAG=000/211 (00/D3) DIAGX=0000 will be generated which is a normal condition for this sequence.

NAS5710E REMOTE *mchname* VC *vcb sluname* LU *lub*
ERR PKT: *xxxxxxxx xxxxxxxx*

This message is issued when an error packet is received for the REMOTE named *mchname*. The VCB address ***vcb***, SLU name *sluname***,** LUB address *lub* and received Error packet data ***xxxxxxxx xxxxxxxx*** are also displayed.

NAS5711E REMOTE *mchname* VC *vcb sluname* LU *lub*
INV Q-PKT: *xxxxxxxx xxxxxxxx*

This message is issued when a Qualified Data packet of unknown type is received for the REMOTE named ***mchname***. The VCB address ***vcb***, SLU name ***sluname***, LUB address ***lub*** and received Qualified Data packet data ***xxxxxxxx xxxxxxxx*** are also displayed.

NAS5720I DATAFONO SESSION STARTING ON LEASED LU *luname*
MCH *mchname (act-vc-count)* DFX *dfxname*

(new for V2R4M0)

Informational message indicating the start of a pseudo-leased session.

luname, mchname and ***dfxname*** name the HNAS SLU resource, the TYPE=MCH REMOTE and the TYPE=DFX REMOTE used for the session.

NAS5721I DATAFONO SESSION ENDED ON LEASED LU *luname (CLR*
RECV'D) CAUSE/DIAG=(*ccc/ddd)* (*cc/dd*) DIAGX=xxxx

(new for V2R4M0)

Informational message indicating the end of a pseudo-leased session caused by a Clear packet.

luname	identifies the LU.
ccc/ddd =	clear cause & diagnostic in decimal.
cc/dd =	clear cause & diagnostic in hex.
xxxx=	HNAS clear diagnostic extension.

Please refer to the HNAS Messages and Codes Guide for additional information on HNAS Clear Cause, Diagnostic and DIAGX= code descriptions and formats.

NAS5722I DATAFONO SESSION ENDING ON LEASED LU *luname* (UNEXP'D CLEAR RECV'D) CAUSE/DIAG=(*ccc/ddd*) (*cc/dd*) DIAGX=*xxxx*

(new for V2R4M0)

Informational message indicating the end of a pseudo-leased session caused by an unexpected Clear packet.

luname	identifies the LU.
ccc/ddd =	clear cause & diagnostic in decimal.
cc/dd =	clear cause & diagnostic in hex.
xxxx=	HNAS clear diagnostic extension.

Please refer to the HNAS Messages and Codes Guide for additional information on HNAS Clear Cause, Diagnostic and DIAGX= code descriptions and formats.

NAS5723W DATAFONO IDTST LU *lu-name* REC'D ID STRING W LENGTH > 11

(apar/new for V2R4M0)

When the Datafono IDTST option is specified, HNAS obtains the 6 or 11 character ID string for the session from the remote's R(3) initialization message. The string is delimited by X'23' and X'2D' ASCII characters in the R(3) message. The alert indicates that the ID string was too long. HNAS continues as though no ID string was received.

This new messages was added by enhancement APAR 2400074.

NAS5724W LU *lu-name* DID NOT RECEIVE 'M' MSG SYNC RESP FROM REMOTE

(apar/new for V2R4M0)

The PLU sent a Datafono 'M' message and the remote did not return a response in 40 seconds. The call is cleared with DIAG=223 (X'DF') DIAGX=08.

This new messages was added by enhancement APAR 2400074.

NAS5725W LU lu-name DISCARDING MSG W BAD ID FROM PLU plu-name

(apar/new for V2R4M0)

The Datafono IDTST option was specified and the PLU sent a message with a bad ID. The message is discarded (not sent to the remote device).

This new messages was added by enhancement APAR 2400074.

NAS5726W EMSGE MESSAGE SENT TO LU lu-name (16 SEC PLU DELAY)
(apar/new for V2R4M0)

The EMSGE option was specified for a Datafono session and the 16 second PLU response timer expired. The “ESPERE POR FAVOR” message was sent to the remote. This alert indicates the PLU is slow in generating responses to inbound messages.

This new message was added by enhancement APAR 2400097.

NAS5727E RECEIVED 2ND MESSAGE FROM RMT *rmtname* FOR LU *luname* ON MCH *mchname* DATA=*xxxxxxxx*
(new for V2R4M0)

An unexpected message was received by HNAS from the remote for the named SLU.

rmtname, ***luname*** and ***mchname*** identify the remote, LU and the MCH.

xxxxxxxx provides the first 8 characters of the message.

This message indicates the remote sent data when HNAS was not expecting it because of Datafono protocol rules. This can happen if the HNAS CDF has OPTIONS=DATAF and the PLU is not programmed to handle Datafono D-- M-Sync response messages. If this is the case code OPTIONS=DATAFAM to correct the problem. Otherwise, contact Comm-Pro Customer Support.

NAS5728E RECEIVED INV MESSAGE FROM RMT *rmtname* FOR LU *luname* ON MCH *mchname* DATA=*xxxxxxxx*
(new for V2R4M0)

A message that did not start with a valid Datafono protocol character was received from the remote.

rmtname, ***luname*** and ***mchname*** identify the remote, the HNAS SLU and the HNAS MCH used for the session.

xxxxxxxx is the first 8 characters from the remote.

The REMOTE may not be a Datafono device. If it is, Contact Comm-Pro Customer Support.

NAS5729E RECEIVED INV *msgtype* MESSAGE FROM RMT *rmtname*
FOR LU *luname* ON MCH *mchname* RECV ST=*rcvst*
SEND ST=*sndst*

(new for V2R4M0)

A Datafono message received from the remote is not valid for the current SEND/RECEIVE state of the HNAS SLU. Contact Comm-Pro customer support. This message was originally NAS5722E.

msgtype is the inbound message type (see below).

rmtname, luname and mchname identify HNAS resources.

rcvst is the current HNAS receive state (see below).

sndst is the current HNAS send state (see below).

Datafono Message Types (*msgtype*)

Host	Flow	Terminal	Description
	<---	R(3)	REQUEST REINITIALIZATION
R(4)	--->		RESPONSE REINIALIZATION
	<---	D(5)	DATA RESPONSE
D(6)	--->		DATA DEMAND
L(7)	--->		RESPONSE AND DISCONNECT
M(8)	--->		MULTIPLE RESPONSES
	<---	D(9)	MULTIPLE SYNCHRONISM

rcvst = R(3), D(5), D(9)) if last message received was of the type shown

sndst = R(4), D(6), M(8), L(7) if last message sent was of the type shown.
LWT if HNAS flushing IMS send queue.

NAS5999W SCHEDULING RELEASE FOR VC, MCH=*mch-name*
PREV LU=*lu-name*

(apar/new for V2R3M0)

This message is issued when the timer processor (MCHTMR) has detected the existence of an active VC control block that has no LU or PCE attachments. Such a VC is effectively lost

to the system. When one is found it is released and this VC alarm message is issued. The MCH name ***mch-name*** and LU name ***lu-name*** identify the resources affected by the error condition.

If you are receiving this alarm, please contact your HNAS support services representative.

XTP Event Alerts

Most event alert messages that are generated by the XTP components of the HNAS system have unique formats based on the type of event being reported as follows:

NAS6701E DISCARDING PVC INFO MSG FROM REMOTE *mchname*

This message is issued when HNAS receives an XTP PVC Information message for the REMOTE named *mchname* that cannot be processed. This message indicates that there is a probable configuration mismatch between HNAS and the IBM router. The packet is discarded.

NAS6702E XTP ROUTER WITH ADDR *iii.iii.iii.iii*(*port*) SENT MSG WITH INVALID VER

This message is issued when HNAS receives an XTP packet on router socket ***iii.iii.iii.iii*(*port*)** that contains an invalid version number. The packet is discarded.

NAS6703E XTP ROUTER WITH ADDR *iii.iii.iii.iii*(*port*) SENT MSG FROM NON-CONFIGURED INTERFACE *ifno* (HEX)

This message is issued when HNAS receives an XTP packet on router socket ***iii.iii.iii.iii*(*port*)** that contains an X.25 interface number ***ifno*** which is not configured to HNAS. The packet is discarded.

NAS6704E REMOTE *mchname* SENT MESSAGE WITH INVALID MSG TYPE=*xx*

This message is issued when HNAS receives an XTP packet for the REMOTE named ***mchname*** that contains an invalid message type ***xx***. The packet is discarded.

NAS6715W MCH *mchname* INBOUND CALL REQ FAILED, CLEAR DIAG=*ddd* (*xx*)

This error message is issued when an inbound XTP Call Request fails before HNAS is able to set up a session with the PLU.

mchname is the name of the MCH that the call arrived on. ***ddd*** and ***xx*** are the Clear Diagnostic codes in decimal and hex. HNAS Clear Cause and Diagnostic codes are located in the HNAS Messages and Codes documentation.

NAS6716W INBOUND GATE CALL REQ TO MCH *mchname* FAILED, CTCP CLEARED WITH CAUSE/DIAG=*ddd/ddd* (*xx/xx*) DIAGX=*xxxx*

(changed for V2R3M0)

This error message is issued when an inbound XTP GATE Call Request is cleared by the CTCP.

mchname is the name of the TYPE=XTP REMOTE statement that received the call. *ddd/ddd* are the clear cause and diagnostic codes in decimal while ***xx/xx*** provides the values in hexadecimal. If clear codes are not available, the string '***' is used. HNAS Clear Cause and Diagnostic codes are located in the HNAS Messages and Codes documentation.

In **230**, The extended diagnostic codes field **DIAGX=*xxxx*** was added to provide more specific event reason codes. The extended diagnostic reason codes descriptions are provided in the Clear Diagnostic Codes section of the HNAS Messages and Codes Debugging Guide.

NAS6717W OUTBOUND GATE CALL REQUEST VIA MCH *mchname* FAILED, CAUSE/DIAG=*ddd/ddd* (*xx/xx*)

(V2R1M1 and earlier releases)

NAS6717W LU *sluname* CALL TO DTE ADDR *d...d* VIA REMOTE *rmtname* FAILED, CAUSE/DIAG=*ddd/ddd* (*xx/xx*)

(apar, changed for V2R2M0)

NAS6717W LU *sluname* CALL TO DTE ADDR *d...d* VIA REMOTE *rmtname* FAILED
NAS6717W CAUSE/DIAG=*ddd/ddd* (*xx/xx*) DIAGX=*xxxx*

(changed for V2R3M0)

This error message is issued when an outbound XTP GATE Call Request fails to create a GATE DATA session.

mchname is the name of the TYPE=XTP REMOTE statement that received the call.

ddd/ddd are the clear cause and diagnostic codes in decimal while *xx/xx* provides the values in hexadecimal. If clear codes are not available, the string '***' is used. HNAS Clear Cause and Diagnostic codes are located in the HNAS Messages and Codes documentation.

sluname is the name of the LU resource that the call arrived on.

d...d is the called DTE address.

Common codes follow:

CAUSE/DIAG=000/130 (00/82)
No available VC or LU control block. Link to router not active?

CAUSE/DIAG=000/197 (00/C5) call accept not received from remote with-in 30 seconds.

Other values indicate that the remote end cleared the call.

In **230**, The extended diagnostic codes field **DIAGX=*xxxx*** was added to provide more specific event reason codes. The extended diagnostic reason codes descriptions are provided in the Clear Diagnostic Codes section of the HNAS Messages and Codes Debugging Guide. The message was also split into two entries due to overall message length restrictions.

In **220**, As of January 22, 2003 (APAR 2200011) all HNAS callout failures are alarmed, see (apar, changed for V2R2M0) entry for revised format.

XOT Event Alerts

Most event alert messages that are generated by the XOT components of the HNAS system have unique formats based on the type of event being reported as follows:

NAS7601W MCH *mchname* LU *sluname* DECODE RC=*rc*
TH/RH=*xxxxxxxx...xxxxxxxx*

(new for V2R2M0)

This message is issued when HNAS receives a QLLC PIU with an invalid RH via the MCH named ***mchname*** for the SLU named ***sluname***. ***rc*** is the return code from the HNAS XFRUDC service routine and ***xxxxxxxx...xxxxxxxx*** is the TH/RH from the invalid PIU. If you receive this message, contact Comm-Pro for assistance.

NAS7701W CALL FROM *iii.iii.iii.iii*(*port*) CAN'T ROUTE CALLED
ADDR *ldddddddd ddddddddd* [RTEIN CLEAR]

This message is issued when HNAS receives an XOT Call Request packet on router socket ***iii.iii.iii.iii*(*port*)** that contains an X.25 called DTE address ***ldddddddd ddddddddd*** which is not defined in the RTEIN operand of the TYPE=XOT LOCAL definition statement. The RTEIN operand is used for inbound routing. Note that for the called DTE address above, ***l*** is the called address digit count (in hex) and the ***dd...dd*** are the called address digits. The call is cleared with DIAG=202. The string '**RTEIN CLEAR**' will appear in the alert if the call was cleared because of a CLEAR request in the RTEIN= string (e.g. RTEIN=(...,CLEAR/7796,...).

This message is accompanied by special trace message **NAS7798T** when **TRCMCH ICR** trace option is enabled. The **NAS7798T** trace alert messages are written to sysprint and do not appear on SYSCONS (system operator console).

NAS7702W CALL REQ REFUSED - {NO VC BLOCKS|BUFFER SHORTAGE}
CLEAR DIAG=130 (82)

(changed for V2R4M0)

The above format of the message identifies the reason for the alert. Two different forms are now generated depending upon the failure. See below for additional information.

NAS7702W CALL REQ REFUSED - NO VC BLOCKS OR BUFFER SHORTAGE
CLEAR DIAG=130 (82)

This message is issued when HNAS clears a call with DIAG=130 (X'82') because of one of the following situations:

1) An XOT Call Request packet was received but no Virtual Circuit block (VC) was available (a VC is required to manage each X.25 virtual circuit session). The number of VC blocks

generated is controlled by the BUILD statement's VCLMT= parameter. If all your VCs are in use and a new call arrives the alert is normal. This can happen if the configuration creates a limited number of VCs and a new call arrives while HNAS is waiting for a VC to be released by a clear-confirm from the remote. The number of VCs may be increased with the VCLMT= BUILD parameter. This is the most likely reason for this message.

2) the slowdown threshold had been reached when a Call Request packet was received. The number of buffers allocated for HNAS operation is controlled by the BUILD statement's BFR-LMT= operand. An increase in the buffer count may be required if because of communications characteristics (large number M-bit chains receiver simultaneously.

NAS7703W DIAG FROM *iii.iii.iii.iii*(*port*)

This message is issued when HNAS receives an XOT Diagnostic packet on router socket ***iii.iii.iii.iii*(*port*)**. The Diagnostic packet is an indication of some type of conflict. The call is cleared.

Recommendation X.25 defines diagnostic events for packets occurring on an unassigned channel, receipt of some classes of malformed packets, non-standard usage of channel 0 for call setup or data traffic, and some protocol timeout events. An unexpected but harmless diagnostic packet may be received when the DTE station does not respond to a protocol event soon enough (for example, the DCE timed out waiting for a response to a Call, Clear or Reset message). The most common diagnostic event that might affect system operation is a mismatched configuration of the logical channel ranges between the two stations.

Recommended Action: If an attached station is delaying responses to protocol events, check if the appropriate timeout value is sufficient for expected network behavior, and if the connected station is unduly delaying its response. For unassigned logical channel events, verify that the logical channel assignments configured are correct and operational. These ranges must match those defined on the connected station. For the rare case where logical channel 0 is designated for non-standard call setup or data traffic, both stations must be configured to reflect that usage. A DTE cannot send a diagnostic packet.

NAS7704W REMOTE *iii.iii.iii.iii*(*port*) RESPONDED TO NAS PVC SETUP W/STATUS=*xx*

This message is issued when HNAS receives an XOT PVC Setup packet response on router socket ***iii.iii.iii.iii*(*port*)** that contains a reject indication. The PVC status code ***xx*** is also displayed. A description of these PVC status field states can be found in RFC1613 - XOT (X25 Over TCP).

We highly recommend that you refer to the PVC Setup Status Codes (RFC-1613) Reference Table on page **PVCSSCODES-1** of this documentation manual for additional information as it relates to **STATUS**=***xx*** codes in HNAS and Cisco router environments.

This message indicates that there is a probable configuration mismatch between HNAS and the Cisco router. The packet is discarded.

NAS7705W REMOTE *iii.iii.iii.iii*(*port*) SENT UNEXPECTED PVC SETUP W/STATUS=*xx*

This message is issued when HNAS receives an XOT PVC Setup packet on router socket ***iii.iii.iii.iii*(*port*)** that was not expected. The PVC state ***xx*** is also displayed. Please refer to RFC1613 - XOT (X25 Over TCP) for a complete list of PVC status field states. An overview of the **STATUS**=***xx*** codes is available on page **PVCSSCODES-1** of this documentation section.

This message indicates that there is a probable configuration mismatch between HNAS and the Cisco router. The packet is discarded.

NAS7706W DISCARDING XOT PVC SETUP FROM *iii.iii.iii.iii*(*port*) VERSION=vv STATUS=*xx*

This message is issued when HNAS receives an XOT PVC Setup packet on router socket ***iii.iii.iii.iii*(*port*)** that contains an invalid version or state. The version ***vv*** and PVC state ***xx*** are also displayed. Please refer to RFC1613 - XOT (X25 Over TCP) for a complete list of PVC status field states. An overview of the **STATUS**=***xx*** codes is available on page **PVCSSCODES-1** of this documentation section.

This message indicates that there is a probable protocol mismatch between HNAS and the Cisco router. The packet is discarded. If you receive this message, contact Comm-Pro for assistance.

NAS7707W XOT PVC SETUP FROM *iii.iii.iii.iii*(*port*) CAN'T START SESSION STATUS=*xx*

This message is issued when HNAS receives an XOT PVC Setup packet on router socket ***iii.iii.iii.iii*(*port*)** that contains information that does not match the HNAS configuration. The PVC state ***xx*** is also displayed. The packet is discarded. Please refer to RFC1613 - XOT (X25 Over TCP) for a complete list of PVC status field states. An overview of the **STATUS**=***xx*** codes is available on page **PVCSSCODES-1** of this documentation section. After APAR 2300151, this message will be followed by NAS7798T messages (in SYSPRINT) showing the content of the Setup packet that is failing.

NAS7708W XOT PVC SETUP INIT=*ininm* PVC=*pvc#*
RESP=*rspnm* PVC=*pvc#* LU=*luname*

(apar/changed for V2R3M0)

This message is issued when a PVC setup packet reject condition occurs. The initiator name ***ininm*** and responder name ***rspnm,*** the respective PVC ***pvc#*** and the LU ***luname*** are displayed. The router initiator|responder name is the serial interface name (i.e. SERIAL0/1) while the HNAS name is the MCH name with a prefix of SERIAL (i.e. SERIALMCH1). The ***luname*** field will display ******** if the lu name is not known.

The LU name display was added by enhancement APAR 2400074.

NAS7708W XOT PVC SETUP INIT=*ininm* RESP=*rspnm*

(pre-apar 2300196)

This message is issued when HNAS successfully processes a PVC setup packet. The initiator name ***ininm*** and responder name ***rspnm*** are displayed.

NAS7709W XOT PKT FROM *iii.iii.iii.iii*(*port*)
HAS INVALID XOT VER=*xxxx*

This message is issued when HNAS receives an XOT packet on router socket ***iii.iii.iii.iii*(*port*)** that contains an invalid version number ***xxxx***. This message indicates that there is a probable protocol mismatch between HNAS and the Cisco router. The packet is discarded.

NAS7710W XOT PKT FROM *iii.iii.iii.iii*(*port*) HAS INV PID/LCN

This message is issued when HNAS receives an XOT packet on router socket ***iii.iii.iii.iii*(*port*)** that contains an invalid packet ID and/or logical channel number. The packet is discarded.

NAS7711W *iii.iii.iii.iii*(*port*) SENT INV SES START PKT

This message is issued when HNAS receives an XOT packet other than Call Request on router socket ***iii.iii.iii.iii*(*port*)** when no virtual circuit session currently exists for the socket. This message indicates that HNAS and the router are not synchronized. The call is cleared.

NAS7712W *iii.iii.iii.iii*(*port*) SENT INV PKT

This message is issued when HNAS receives an XOT packet on router socket ***iii.iii.iii.iii*(*port*)** that contains an invalid packet type. The call is cleared.

NAS7713W SECOND CLEAR FROM *ip-addr(port)* ON *rmt-name*
MCH *mch-name* LU *lu-name*

(apar new for V2R3M0)

This message is issued when HNAS receives a second XOT clear packet on router socket ***ip-addr(port)*** on the named remote***. mch-name*** and ***lu-name*** identify the HNAS resources used for the call. The LU is released and a clear-confirm is set to the remote to ensure call termination. Contact technical support for further information.

NAS7715W *iii.iii.iii.iii*(*port*) CALL REQ TO MCH *mchname* FAILED, CLEAR DIAG=*ddd* (*xx*) DIAGX=xxxx

(apar/changed for V2R3M0)

This error message is generated when an **inbound** XOT Call Request fails before HNAS is able to set up a session with the PLU.

iii.iii.iii.iii*(*port*)** is the socket the call arrived on. *mchname* is the name of the MCH that the call was routed to by the RTEIN= operand of HOME LOCAL definition statement. ***ddd and ***xx*** are the Clear Diagnostic codes in decimal and hex.

In **230** effective July 7, 2004 (with APAR 2300053 applied), The extended diagnostic codes field **DIAGX=*xxxx*** was added to provide more specific event reason codes. The DIAGX= value provides the HNAS extended event reason code. HNAS Clear Cause and Diagnostic codes are located in the HNAS Messages and Codes documentation.

NAS7716W INBOUND GATE CALL REQ TO MCH *mchname* FAILED, CTCP CLEARED WITH CAUSE/DIAG=*ddd*/*ddd* (*xx*/*xx*)

(V2R1M1 and earlier releases)

NAS7716W INBOUND GATE CALL REQ FROM ipaddr TO MCH *mchname* FAILED, CTCP CLEARED WITH CAUSE/DIAG=*ddd*/*ddd* (*xx*/*xx*)

(apar, changed for V2R2M0)

Format when OPTIONS=ALRMSGTXT=LONG (the default, APAR 2400068) coded on BUILD:

NAS7716W INBOUND GATE CALL REQ FROM *ipaddr* TO MCH *mchname* FAILED, CTCP CLR'D VIA LU *sluname*
NAS7716W CAUSE/DIAG=*ddd*/*ddd*(*xx*/*xx*) DIAGX=*xxxx*

(changed for V2R4M0)

Format when OPTIONS=ALRMSGTXT=SHORT (APAR 2400068) coded on BUILD:

NAS7716W *ipaddr* TO MCH *mchname* FAILED, CTCP CLEAR VIA LU *sluname*
CAUSE/DIAG=*ddd*/*ddd*(*xx*/*xx*) DIAGX=*xxxx*

This error message is issued when an inbound XOT GATE Call Request is cleared by the CTCP. This happens when the CTCP finds fields in the call request packet that make the call unacceptable.

ipaddr is the IP address that sent the call request packet.

mchname is the name of the MCH that the call was routed to by the RTEIN= operand of HOME LOCAL definition statement.

sluname is the name of the LU resource that received the call.

ddd/ddd are the clear cause and diagnostic codes from the CTCP in decimal.

xx/xx provides the values in hexadecimal. If clear codes are not available, the string '*******' is used.

In **240**, enhancement APAR 2400068 (Feb 12, 2008) created a single line version of this alert when OPTIONS=ALRMSGTXT=SHORT is coded on BUILD.
In **230**, The extended diagnostic codes field **DIAGX=*xxxx*** was added to provide more specific event reason codes. The extended diagnostic reason codes descriptions are provided in the Clear Diagnostic Codes section of the HNAS Messages and Codes Debugging Guide. The message was also split into two entries due to overall message length restrictions.

In **220**, As of January 22, 2003 (APAR 2200011) this message was revised to include the IP address that sent the call request packet, see (apar, changed for V2R2M0) entry for revised format.

NAS7717W OUTBOUND GATE CALL REQUEST VIA MCH *mchname* FAILED,
CAUSE/DIAG=*ddd/ddd* (*xx/xx*)
(V2R1M1 and earlier releases)

NAS7717W LU *sluname* CALL TO *dteaddr* VIA *rmt-name* FAILED,
CAUSE/DIAG=*ddd/ddd* (*xx/xx*)
(apar, changed for V2R2M0)

NAS7717W LU *sluname* CALL TO DTE ADDR *dteaddr* VIA REMOTE
***rmtname* FAILED**
NAS7717W CAUSE/DIAG=*ddd/ddd* (*xx/xx*) DIAGX=*xxxx*
(changed for V2R3M0)

- OR -

Format when OPTIONS=ALRMSGTXT=LONG (the default, APAR 2400068) coded on BUILD:

NAS7717W LU *sluname* CALL TO DTE IDNT *desctxt* VIA REMOTE
***rmtname* FAILED**
NAS7717W CAUSE/DIAG=*ddd/ddd* (*xx/xx*) DIAGX=*xxxx*
(changed for V2R4M0)

Format when OPTIONS=ALRMSGTXT=SHORT (APAR 2400068) coded on BUILD:

NAS7717W LU *sluname* CALL TO DTE IDNT *desctxt* VIA RMT
rmtname* FAILED CAUSE/DIAG=*ddd/ddd* (*xx/xx*) DIAGX=*xxxx

This error message is issued when an **outbound** XOT Call Request fails to create a new session. The call failed with the cause and diagnostic bytes shown (in decimal (***ddd***) and hex (***xx***)). The call may fail because of a problem in HNAS (see HNAS Diagnostic codes (below), because no call accept was receive or because the remote returned a Clear packet to the HNAS Call Request packet.

Call requests occur when the PLU issues an OPNDST ACQUIRE for an HNAS SLU. The ACQUIRE causes VTAM to send a BIND to HNAS which causes an X25/XOT Call Request packet to be sent. If a Call accept is returned a +RSP to the BIND is sent to VTAM and the PLU/SLU session is active. If the call fails (no response or clear) the HNAS ACB is closed. This causes VTAM to send a NOTIFY to be PLU to inform it of the session start failure. A PLU message indicating the ACQUIRE failure may be seen.

mchname is the name of the MCH that issued the call.

ddd/ddd are the clear cause and diagnostic codes in decimal.

xx/xx provides the clear cause and diagnostic codes in hexadecimal.

While the HNAS Messages and Codes documentation manual provides general and HNAS specific clear cause and diagnostic codes, it is important for users to refer to the remote X.25 network or service provider as well as the routers documentation for their description of these codes especially when the diagnostic values are greater than X'80' (user defined code). This is because this alert message is generated when a clear request providing these codes is sent from the remote and delivered to HNAS.

sluname is the name of the LU resource that originated the call. For LLC0 and LLC5 sessions this will be the name of and outbound resource in an SVC0= or SVC5= parameter on a TYPE=XOT REMOTE statement. For GATE non-fast connect the name will be the name of the HNAS control session LU that received the call from the CTCP. For GATE fast connect the name will be the name of the data session LU that received the call from the CTCP.

dteaddr is the called DTE address. If the address is shown as '*****' then a VC or LU control block was not available for a GATE call.

desctxt is descriptor text that is provided in the RTEOUT= operand entry associated with the *dteaddr* (RTEOUT=(...,*rmtname*/*dteaddr*/*desctxt*,...)). If *desctxt* is specified, the DTE ADDR *dteaddr* text in the NAS7717W message above will be replaced with DTE IDNT *desctxt*. The *desctxt*, which can be from 1 to 15 characters in length, serves as a text description of the remote DTE.

rmtname is the name of the REMOTE TYPE=XOT statement used for the call. HNAS locates this name using the called DTE address and the RTEOUT= operand on a LOCAL TYPE=XOT definition statement. If the name is shown as '*****' then HNAS did not look for a callout REMOTE because there was no VC or LU control block available for the call. If HNAS looks for a callout REMOTE then message NAS7720W is issued if no callout ports are available.

In **230**, The extended diagnostic codes field **DIAGX=*xxxx*** was added to provide more specific event reason codes. The extended diagnostic reason codes descriptions are provided in the Clear Diagnostic Codes section of the HNAS Messages and Codes Debugging Guide. The message was also split into two entries due to overall message length restrictions.

In **220**, As of January 22, 2003 (APAR 2200011) all HNAS callout failures are alarmed, see (apar, changed for V2R2M0) entry for revised format.

HNAS diagnostic codes (HNAS **always** uses a cause of 000):

CAUSE/DIAG=000/130 (00/82)
No available VC (DIAGX=C or E) or LU control block (DIAGX=F). If NAS7720W is also issued, a VC and LU were available but there was no available TCP port on selected TYPE=XOT REMOTE (see RTEOUT= operand).

CAUSE/DIAG=000/142 (00/8E)
Call started by GATE CTCP failing because data session LU 's ACB could not be opened.

CAUSE/DIAG=000/197 (00/93)
HNAS unable to insert calling DTE address in GATE call request packet (buffer too short).

CAUSE/DIAG=000/197 (00/C5)
Call accept not received from remote with-in 30 seconds.

Other values indicate that the remote end cleared the call.

NAS7718T ***ii.iii.iii.iii*(*port*) {CALL REQ | PVCSETUP}**
TO MCH *mchname* LU *luname*

(apar/new for V2R3M0)

This special trace message is generated when an inbound XOT Call Request or PVC Setup is decoded and the **TRCMCH ICR** console command has been entered. The trace alert messages are written to SYSPRINT and do not appear on SYSCONS (system operator console). This message is accompanied by special trace **NAS7798T** messages showing the Call Request or PVC Setup packet contents.

***iii.iii.iii.iii*(*port*)** is the socket the call arrived on.

mchname is the name of the MCH that the call was routed to by the RTEIN= operand of HOME LOCAL definition statement.

luname is the name of the LU that received the call or pvc setup. If the *lu name* is not known '********' is displayed.

Tracing of Call Request packets was introduced by Enhancement APAR 2300046.
Tracing of PVC Setup packets was introduced by Enhancement APAR 2300151.
The LU name display was added by enhancement APAR 2400074.

Creation of this message is affected by the OPTIONS=ALRMSGTXT=SHORT parameter on BUILD (see alert message NAS7730I).

NAS7719T OUTBOUND {CALL REQ | PVCSETUP} GENERATED FOR LU *sluname* PLU=*pluname* REMOTE=*rmtname*

(apar/new for V2R3M0)

This special trace message is generated when an outbound XOT Call Request or PVC Setup packet is ready for transmission and the **TRCMCH OCR** console command has been entered. The trace alert messages are written to SYSPRINT and do not appear on SYSCONS (system operator console). This message is accompanied by special trace **NAS7798T** messages showing the Call Request or PVC Setup packet contents.

sluname is the name of the LU resource that originated the call. For GATE callout this will be the data session LU name. For LLC0 and LLC5 callout this will be the LU name that received the BIND that triggered the call.

pluname For GATE this will be the CTCP PLU name. For LLC0 and LLC5, this is the name of the PLU HNAS received the BIND from.

rmtname is the name of the REMOTE TYPE=XOT statement used for the call. HNAS locates this name using the called and or calling DTE addresses in conjunction with the RTE-OUT= operand on a LOCAL TYPE=XOT definition statement.

Tracing of Call Request packets was introduced as Enhancement APAR 2300046.
Tracing of PVC Setup packets was introduced by Enhancement APAR 2300151.
Creation of this message is affected by the OPTIONS=ALRMSGTXT=SHORT parameter on BUILD (see alert message NAS7731I).

NAS7720W *mchname* CALL OUT, CAN'T CALL CALLED ADDR=*ldddddddd* CALLING ADDR=*ldddddddd*

In the above ***ldddddddd ddddddddd*** are DTE addresses. ***l*** is the address digit count (in hex) and the ***dd...dd*** strings are the decimal address digits (trailing zeroes may be present). This message is generated when HNAS cannot find a TYPE=XOT REMOTE (via the LOCAL statement's RTEOUT= list) that can be used for an outbound call carrying the called and calling addresses shown in the alert. This can happen for two reasons:

1) There is no entry in the RTEOUT= that matches the called or calling address. The Called address is matched against 'T' RTEOUT entries. The calling address is matched against 'S' RTEOUT entries. This can happen if the called/calling addresses coded in HNAS are incorrect (LLC0/LLC3/LLC5) or if a GATE CTCP provides addresses that can't be found in RTE-OUT. It can also happen if an error was made coding RTEOUT.

2) There is a match in the RTEOUT= list but the addressed TYPE=XOT REMOTE was skipped because it had no available PCE for the call. This can happen because all PCEs are in use, because the TYPE=XOT REMOTE was configured with INIT=IDLE or because the HNAS TAP option has marked the PCEs as unavailable. The state of an XOT REMOTE's PCEs can be displayed with a DPCE rmt-name HNAS console command. The number of PCEs generated for an XOT REMOTE is specified by the VCLMT= operand.

For non-GATE sessions, the Call Request is created when the host application BINDs the HNAS SLU. In this case, the called DTE address comes from the SVC0 or SVC5 operand and the calling address comes from the MCH DCE= operand. For GATE sessions, the addresses are in the Call Request from the CTCP application. In either case, the application's call request is rejected.

NAS7730I ED:*called-dte-addr* ING:*calling-dte-addr*
CUD:*call-user-data* FAC:*ll-facilities-data*
MCH:*mch-name* IP:*a.b.c.d*

(apar/new for V2R4M0)

This message is issued when TRCMCH ICR ON has been issued and OPTIONS=ALRMSGTXT=SHORT is coded on BUILD (see APAR 2400068). The message is sent to the operator's console and to SYSPRINT. At most 4 bytes of CUD and 6 bytes of facilities data are displayed. The *ll* characters (after FAC:) are the facilities length byte. The NAS7718T and NAS7798T messages normally associated with TRCMCH ICR ON are not generated. This message is designed to make inbound call request packet information available to programs that process the job log.

NAS7731I ED:*called-dte-addr* ING:*calling-dte-addr*
CUD:*call-user-data* FAC:*ll-facilities-data*
RMT:*rmt-name* LU:*lu-name*

(apar/new for V2R4M0)

This message is issued when TRCMCH OCR ON has been issued and OPTIONS=ALRMSGTXT=SHORT is coded on BUILD (see APAR 2400068). The message is sent to the operator's console and to SYSPRINT. At most 4 bytes of CUD and 6 bytes of facilities data are displayed. The ***ll*** characters (after FAC:) are the facilities length byte. The NAS7719T and NAS7798T messages normally associated with TRCMCH OCR ON are not generated. This message is designed to make outbound call request packet information available to programs that process the job log.

NAS7774W PVCSETUP FAILED - REMOTE *rmt-nm* CLOSED TCP SESSION
IN RESPONSE TO SETUP FROM LU *lu-nm* MCH *mch-nm*

(apar/new for V2R3M0)

This message is issued when HNAS receives a TCP session CLOSE in response to an outbound PVC SETUP packet.

This alert was introduced into 230 as part of Enhancement APAR 2300151.

NAS7795T ***ii.iii.iii.iii*(*port*) {INBOUND | OUTBOUND} CLEAR. MCH *mchname* {LU | SPU} *sluname* CAUSE/DIAG=*ddd/ddd* (*xx/xx*)**

(apar/new for V2R3M0)

This special trace message is generated when an inbound (to HNAS, from the remote) or outbound XOT Clear Request is decoded and the **TRCMCH ICLR|OCLR** console command has been entered. DIAGX=values are not provided in this trace entry because the trace is generated as the outbound clear packet is sent (the DIAGX= value is not known at this time). Refer to the NAS3799I session end alert message for DIAGX= values as required, when available. There is no NAS3799I generated for remote console session disconnect activity.

The trace alert messages are written to SYSPRINT and do not appear on SYSCONS (system operator console).

***iii.iii.iii.iii*(*port*)** is the socket the call arrived on.

mchname is the name of the MCH that received or initiated the clear.

sluname is the name of the HNAS LLC0/4/5 LU or the name of the LLC3 SPU resource that received or initiated the clear. If '********' appears the LU/SPU resource name is not known. This can happen if no LU was located for the session.

ddd/ddd are the clear cause and diagnostic codes in decimal.

xx/xx provides the values in hexadecimal. HNAS Clear Cause and Diagnostic codes are located in the HNAS Messages and Codes documentation.

Tracing of Clear Request packets was introduced by Enhancement APAR 2300153.

Note: A similar tracing mechanism wasn't employed or required for inbound or outbound XOT Reset Requests because all occurrences of these events are recorded in NAS5704W and NAS5705W RESET alert messages.

NAS7797W CALL FROM *ip-addr.* PCE HAS VC AT *vc-addr* LCST=*st* LU=*lu-name* LU ADDR=*lu-addr*

(apar/new for V2R3M0)

This alert message indicates that HNAS may have failed to properly terminate an XOT TCP/IP session with a router. Please contact customer support if this alarm is received.

NAS7798T text

(apar/new for V2R3M0)

This message ID is used for trace records showing packet content. Packet content is displayed following other trace messages (NAS7718T, NAS7719T) and after some alert messages (NAS7707W).

For **Call Request packets** traced in SYSPRINT when **TRCMCH ICR|OCR** has been entered:

NAS7798T CALLED: *called-addr* CALLING: *calling-addr*
NAS7798T FAC-LN: *ll* FAC: facility-values
NAS7798T USER DATA: *pid+call-user-data*

(apar/new for V2R3M0

called-addr is the called (destination) dte address (up to 15 digits, sample 10260001)
calling-addr is the calling (originating) dte address (up to 15 digits, sample 20360005)
ll is the facilities address length in hexadecimal (00=no facilities although invalid for XOT calls, sample 06)
facilities-values are the call request's facilities field (sample 42070743 0707). At most 32 bytes of hexadecimal data are displayed.
pid-call-user-data contains the protocol id and remaining call user data (sample 01000000). At most 32 bytes of hexadecimal data are displayed

Tracing of Call Request packets was introduced as Enhancement APAR 2300046.

For **PVC Setup packets** traced in SYSPRINT when **TRCMCH ICR|OCR** has been entered:

NAS7798T PVC STATUS=*xx* INIT LCN:NM *init-lcn*:init-name
NAS7798T RESP LCN:NM *resp-lcn*:*resp-name*
NAS7798T (SENDER) IN.WIN=*wsz* OUT.WIN=*wsz* IN.PSZ (2N)=*psz***
OUT.PSZ (2N)=*psz***

(apar/new for V2R3M0

The above displays PVC Setup fields: status, initiator LCN and interface name, responder LCN and interface name and the packet and window sizes for the session. For a description of Setup fields please see RFC 1613. An overview of the **PVC Setup STATUS**=***xx*** codes is also available on page **PVCSSCODES-1** of this documentation section.

Tracing of PVC Setup packet tracing was introduced as Enhancement APAR 2300151.

Creation of the NAS7798T messages is affected by the OPTIONS=ALRMSGTXT=SHORT parameter on BUILD (see alert message NAS7730I and NAS7731I).

NAS7799I PKT=*xxxxxxxx xxxxxxxx...xxxxxxxx xxxxxxxx*

This message is issued following other XOT alert messages. The message displays the XOT packet data ***xxxxxxxx...xxxxxxxx*** that caused the alert.

NAS7801W LU luname ON MCH mchname LUBST1/2=xxxx MAY BE HUNG
(new for V2R4M0)

HNAS has located a pseudo-leased LU with no VC (X25 session) that is attached to a TYPE=MCH REMOTE. An LU in this state may be hung.

luname and ***mchname*** identify the LU and the MCH.
xxxx is the current LU state from the LU control block.

Please contact your customer support representative to report the problem.

NAS7802W LU luname ON MCH mchname LUBST1/2=xxxx STATE INVALID
(new for V2R4M0)

HNAS has located a pseudo-leased LU that is not bound but is attached to a TYPE=MCH REMOTE. This state is invalid.

luname and ***mchname*** identify the LU and the MCH.
xxxx is the current LU state from the LU control block.

Please contact your customer support representative.

QLLC Event Alerts

QLLC Event Alerts

Most event alert messages that are generated by the XOT QLLC components of the HNAS system have unique formats based on the type of event being reported as follows:

```
NAS8000I  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8000I  VC vcb STARTING SESSION ON MCH mchname (count)
NAS8000I  direction CLGADDR=ldd...dd CLDADDR=ldd...dd
                                                    (new for V2R2M0)
                                                (apar/new for V2R3M0)
```

This message is issued when a QLLC session starts for the VC associated with the MCH named ***mchname***. The VCB address ***vcb*** and active VC connect counter ***count*** are also displayed. The ***count*** value identifies the number of virtual circuits connected to the denoted MCH. The ***direction*** value identifies the call as being INBOUND to HNAS or OUTBOUND from HNAS. The Calling DTE address (CLGADDR) and Called DTE address (CLDADDR) are also displayed. For both, ***ldd...dd*** is the decimal DTE address (***dd...dd***) prefixed with the hexadecimal address length (***l***).

In 230 (as of APAR 2300039), the call direction (*direction*, *clgaddr* and *cldaddr) text* line was added to the NAS8000I message.

```
NAS8001I  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8001I  PU spuname STARTING SESSION ON MCH mchname (count)
                                                    (new for V2R2M0)
```

This message is issued when a QLLC session starts for the SPU named ***spuname*** associated with the MCH named ***mchname***. The active VC connect counter ***count*** is also displayed. The ***count*** value identifies the number of virtual circuits connected to the denoted MCH.

```
NAS8010I  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8010I  PU spuname ENDING SESSION ON MCH mchname (count)
                                                    (new for V2R2M0)
```

This message is issued when a QLLC session ends for the SPU named ***spuname*** associated with the MCH named ***mchname***. The active VC connect counter ***count*** is also displayed. The ***count*** value identifies the number of virtual circuits connected to the denoted MCH.

```
NAS8101W  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8101W  PU FOR DTEADDR=ldddddddddddddd
          IDBLK/IDNUM=xxxxxx ON MCH mchname
NAS8101W  WAS NOT CONFIGURED
```

(new for V2R2M0)

This message is issued when a QLLC XID response is received for the MCH named ***mchname*** and the IDBLK/IDNUM values identify a PU that was not configured.

ldddddddddddddd is the remote DTE address and ***xxxxxx*** is the IDBLK/IDNUM value from the XID response.

```
NAS8102W  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8102W  PU FOR DTEADDR=ldddddddddddddd
          IDBLK/IDNUM=xxxxxx ON MCH mchname
NAS8102W  WAS IN USE WHEN SELECTED
```

(new for V2R2M0)

This message is issued when a QLLC XID response is received for the MCH named ***mchname*** and the IDBLK/IDNUM values identify a PU that was currently allocated and in use.

ldddddddddddddd is the remote DTE address and ***xxxxxx*** is the IDBLK/IDNUM value from the XID response.

```
NAS8103W  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8103W  PU FOR DTEADDR=ldddddddddddddd
          IDBLK/IDNUM=xxxxxx ON MCH mchname
NAS8103W  TYPE DOES NOT MATCH CONFIGURATION
```

(new for V2R2M0)

This message is issued when a QLLC XID response is received for the MCH named ***mchname*** and the IDBLK/IDNUM values identify a PU whose type does not match the type carried in the XID response.

ldddddddddddddd is the remote DTE address and ***xxxxxx*** is the IDBLK/IDNUM value from the XID response.

```
NAS8104W  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8104W  PU FOR DTEADDR=ldddddddddddddd
          IDBLK/IDNUM=xxxxxx ON MCH mchname
NAS8104W  HAS NO CONFIGURED LU'S
```

(new for V2R2M0)

This message is issued when a QLLC XID response is received for the MCH named ***mchname*** and the IDBLK/IDNUM values identify a PU that has no LUs configured in the LUNAME= operand.

ldddddddddddddd is the remote DTE address and ***xxxxxx*** is the IDBLK/IDNUM value from the XID response.

```
NAS8110I  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8110I  ACTPU ENDED FOR PU spuname
```

(new for V2R2M0)

This message is issued when a QLLC ACTPU normal response is received for the SPU named ***spuname***.

```
NAS8111W  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8111W  ACTPU FAILED FOR PU spuname SENSE=xxxxxxxx
```

(new for V2R2M0)

This message is issued when a QLLC ACTPU exception response is received for the SPU named ***spuname***. ***xxxxxxxx*** is the exception response sense data.

```
NAS8120I  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8120I  DACTPU ENDED FOR PU spuname
```

(new for V2R2M0)

This message is issued when a QLLC DACTPU normal response is received for the SPU named ***spuname***.

```
NAS8121W  CLIENT=iii.iii.iii.iii(port) SOCKID=sockid
          PCEID=pceid NAME=rmtname
NAS8121W  DACTPU FAILED FOR PU spuname SENSE=xxxxxxxx
```

(new for V2R2M0)

This message is issued when a QLLC DACTPU exception response is received for the SPU named ***spuname***. ***xxxxxxxx*** is the exception response sense data.

NAS8125W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8125W REQDISCONT REQ FOR PU *spuname*

(new for V2R2M0)

This message is issued when a QLLC DISC request is received for the SPU named ***spuname***. The disconnect causes the PU session to be placed in CLOSED state and a QLLC UA is returned to the PU. HNAS then waits for subsequent activity from the PU.

NAS8141W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8141W INVALID REQ FOR PU *spuname*
RH/RU=*xxxxxxxx...xxxxxxxx* RC=*rc*

(new for V2R2M0)

This message is issued when an invalid QLLC request RU is received for the SPU named ***spuname***. ***rc*** is the return code from the HNAS XFRUDC service routine and ***xxxxxxxx... xxxxxxxx*** is the RH/RU from the invalid PIU. The ***rc*** values and their meanings are described in the following table.

rc	Description
00	RU cannot be decoded because PIU does not contain an RH (not first TH segment). The PIU is ignored.
04	RU cannot be decoded due to invalid TH mapping. The PIU is rejected with 8007 sense.
08	RU cannot be decoded due to invalid FID (was not FID2 for PUT2 or FID3 for PUT1). The PIU is rejected with 8006 sense.
0C	Invalid sequence number (FID2 normal flow only). The PIU is rejected with 2001 sense.
10	Non-formatted FMD PIU decoded (valid for normal flow only). The PIU is rejected with 0826 sense if the FMD is not supported.
14	Non-formatted NC, DFC or SC PIU decoded (invalid for all flows). The PIU is rejected with 1001 sense.
18	Lookup failure due to invalid RU category (FMD, NC, DFC or SC PIU was received for which the decode list did not contain any command in the given category). The PIU is rejected with 1007 sense.
1C	Invalid RU size for given category or command. The PIU is rejected with 1002 sense.

rc	Description
20	Lookup failure due to invalid RU command (FMD, NC, DFC or SC PIU was received for which the decode list did not have a matching command entry). The PIU is rejected with 1003 sense.
24	Invalid PIU flow for the given RU command (the RU command is only valid in the normal flow but was sent on the expedited flow or the RU command is valid in the expedited flow but was sent on the normal flow). The PIU is rejected with 4011 sense.
28	Invalid PIU chaining for given RU command (the RU command must be only in chain but both first in chain and last in chain indicators were not set). The PIU is rejected with 2002 sense.
2C	RU command processor was unresolved. The PIU is rejected with 081C sense.
30	RU was directed at an HNAS SLU component that has been disconnected from the host (unbound by the PLU). The PIU is rejected with 0831 sense.
34	RU command was received before the response to previous command was sent (violates the immediate request mode protocol). The PIU is rejected with 200D sense.

NAS8151W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8151W FRMR SENT TO PU *spuname* CF=*cf*

(new for V2R2M0)

This message is issued when a FRMR (frame reject) packet is transmitted in response to an invalid QLLC packet received for the SPU named ***spuname***. ***cf*** is the control field from the invalid packet.

NAS8191W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8191W *event* TIMEOUT FOR PU *spuname*

(new for V2R2M0)

This message is issued when a QLLC PU ***event*** timeout occurs for the SPU named ***spuname***.

event	Description
NOP	No action.
STMD	QSM (setmode) request sent but expected QUA response was not received within timeout interval.
DISC	QDISK (disconnect) request sent but expected QUA response was not received within timeout interval.
XID	QXID request sent but QXID response was not received within timeout interval.
TEST	QTEST request sent but QTEST response was not received within time-out interval.
RESP	ACTPU/DACTPU request sent but expected response was not received within timeout interval.
IN	M-bit chain input arriving but end of chain was not received within time-out interval.
OUT	FMD request sent but expected response was not received within time-out interval.

NAS8210I CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8210I ACTLU ENDED FOR LU *sluname* ON PU *spuname*
POWER *state*

(new for V2R2M0)

This message is issued when a QLLC ACTLU normal response is received for the SLU named ***sluname*** on the SPU named ***spuname***. ***state*** is ON or OFF as indicated by the control vector in the ACTLU response PIU.

NAS8211W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8211W ACTLU FAILED FOR LU *sluname* ON PU *spuname*
SENSE=*xxxxxxxx*

(new for V2R2M0)

This message is issued when a QLLC ACTLU exception response is received for the SLU named ***sluname*** on the SPU named ***spuname***. ***xxxxxxxx*** is the exception response sense data.

NAS8220I CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8220I DACTLU ENDED FOR LU *sluname* ON PU *spuname*

(new for V2R2M0)

This message is issued when a QLLC DACTLU normal response is received for the SLU named ***sluname*** on the SPU named ***spuname***.

NAS8221W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8221W DACTLU FAILED FOR LU *sluname* ON PU *spuname*
SENSE=*xxxxxxxx*

(new for V2R2M0)

This message is issued when a QLLC DACTLU exception response is received for the SLU named ***sluname*** on the SPU named ***spuname***. ***xxxxxxxx*** is the exception response sense data.

NAS8230I CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8230I NOTIFY REQ FOR LU *sluname* ON PU *spuname*
POWER *state*

(new for V2R2M0)

This message is issued when a QLLC NOTIFY request is received for the SLU named ***sluname*** on the SPU named ***spuname***. ***state*** is ON or OFF as indicated by the control vector in the NOTIFY request PIU.

NAS8241W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8241W INVALID REQ FOR LU *sluname* ON PU *spuname*
RH/RU=*xxxxxxxx...xxxxxxxx* RC=*rc*

(new for V2R2M0)

This message is issued when an invalid QLLC request RU is received for the SLU named ***sluname*** on the SPU named ***spuname***. ***rc*** is the return code from the HNAS XFRUDC service routine and ***xxxxxxxx...xxxxxxxx*** is the RH/RU from the invalid PIU. The ***rc*** values and their meanings are described in the table on page ALRT-93.

NAS8291W CLIENT=*iii.iii.iii.iii*(*port*) SOCKID=*sockid*
PCEID=*pceid* NAME=*rmtname*
NAS8291I *event* TIMEOUT FOR LU *sluname* ON PU *spuname*

(new for V2R2M0)

This message is issued when a QLLC LU ***event*** timeout occurs for the LU named ***sluname*** on the PU named ***spuname***. The message is used to inform of an LU timeout when the LU is in session with the HNAS SSCP. Contact your HNAS support representation should you encounter an of these errors.

See event description table below for additional information:

event	Description
NOP	No action.
DLAY	indicates that a delay timeout has occurred. The delay is enforced between a DACTLU and a subsequent ACTLU.
RESP	expected LU response was not received within timeout interval.
RQSS	REQSESS issued but BIND was not received from host within timeout interval.
RQSD	REQSHUT was issued but SHUTD was not received within timeout interval.

Authorization Event Alerts

This collection of event alert messages are associated with various authorization issues:

Note: After a severe authorization alert message is issued (MSGSEV=S), HNAS forces a 0198 ABEND (NASHALT). The authorization alert message text is also used for the NASHALT description. This new NASHALT description change was introduced into 230 as APAR 2300067. Prior to this APAR, a single 'catchall' NASHALT was issue with 'AC FAILURE' as the description. The new description allows the reason for authorization check failure to be displayed in the HNAS log in the event that the alert message is purged during ABEND processing.

Effective with APAR 2400089, HNAS authorization check processing has been modified to validate the End of Maintenance/Use Anniversary Date (EOMDATE) which heretofore was displayed for information only using the DNAS command.

```
MAINTENANCE/USE ANNIVERSARY DATE IS yyyy/mm/dd
```

For permanent users (AUTH=000 in the DNAS display), runtime code has been modified to accommodate this change which will now perform End of Maintenance/Use validation as part of authorization check processing based on EOMDATE=*yyyy*/*mm*/*dd*. This date reflects the Maintenance/Use license anniversary date that was in effect when HNAS was installed or refreshed. EOMDATE validation is intended to provide a 'heads up' notification as the HNAS Maintenance/Use license approaches it's anniversary date.

HNAS will now interrogate the EOMDATE everyday at noon and display the NAS9206*s* messages described below based on how the EOMDATE relates to the current date, that is, today's date (TODAYSDATE). Most EOMDATE processing is unconditional.

The SHIPID= field in DNAS display line 9 contains a Comm-Pro assigned customer reference number as well as flags depicting distribution types (SMP/E versus non-SMP) and the presence of custom user modifications (enhancements) within the distribution. The AUTH= field in DNAS display line 9 identifies whether or not the distribution has a trial period. A value of 000 indicates that the distribution is permanent (no expiration) while non-zero values identify the number of days, weeks or months when the distribution will operate beyond the 'CREATED AT *hh*:*mm*:*ss* ON *yyyy*/*mm*/*dd*' date.

```
SHIPID=distribution-type_CustomUserMod-flags_custref#
0000000011099999 <-- sample non-smpe with custom macro/object.
||    |||||    |
||    |||||    |<--- CUSTOMER ID REFERENCE NUMBER: nnnnn
||    |||||
||    |||||<-------- DATAFONO FLAG
||    ||||           1 => DATAFONO SUPPORT INCLUDED
||    ||||           0 => NO DATAFONO SUPPORT INCLUDED
||    ||||
||    ||||<--------- CUSTOBJ FLAG
||    |||            1 => CUSTOM OBJECT CHANGES INCLUDED
||    |||            0 => NO CUSTOM OBJECT CHANGES INCLUDED
||    |||
```

```
||     |||<---------- CUSTMAC FLAG
||     ||             1 => CUSTOM MACRO CHANGES INCLUDED
||     ||             0 => NO CUSTOM MACRO CHANGES INCLUDED
||     ||
||     ||<----------- CUSTSRC FLAG
||     |              1 => CUSTOM SOURCE CHANGES INCLUDED
||     |              0 => NO CUSTOM SOURCE CHANGES INCLUDED
||     |
||     |<------------ SMPDIST FLAG
||                    1 => SMP/E DISTRIBUTION
||                    0 => NON-SMP DISTRIBUTION
||
||<----------------- CP FLAGS
                      0|1 => INTERNAL USE

   AUTH=limit{M|W|D}     (limit=months|weeks|days, 0=>PERMANENT >0=>TRIAL)
```

Caution: Most authorization failures occur because the //AUTH DD statement in the HNAS start job is pointing at the wrong NASAUTH file. This typically occurs when a customer upgrades from an older to a newer release of HNAS.

NAS9201S HNAS AUTHORIZATION FILE COULD NOT BE OPENED, REQUIRED

(new for V2R2M0)

This message is issued when HNAS attempts to open the authorization file but the open request fails. The authorization file is identified to HNAS using the //AUTH DD statement. If you receive this message, it usually means that the //AUTH DD statement was missing from the HNAS start JCL.

NAS9202S HNAS AUTHORIZATION FILE EOD DETECTED, FILE CORRUPTED

(new for V2R2M0)

This message is issued when HNAS is reading the authorization file but encounters an early end of data condition. This indicates that the authorization file has been corrupted. If you receive this message, contact Comm-Pro for assistance.

NAS9203W HNAS EOMKEY IS INVALID, CUSTID DOES NOT MATCH, IGNORED
NAS9203W EMKYCID=*xxxxx* HNASCID=*yyyyy*

(apar/new for V2R4M0)

This message is issued when the customer ID contained in the EOMKEY (*xxxxx*) does not match the customer ID assembled into the HNAS load module (*yyyyy*). This indicates that the EOMKEY has been corrupted or is not correct for your installation. If you receive this message, contact Comm-Pro for assistance.

NAS9203W HNAS EOMKEY IS INVALID, EOMDATE IS TOO LOW, IGNORED
NAS9203W EMKYEOM=*xxxxxxxx* HNASEOM=*yyyyyyyy*

(apar/new for V2R4M0)

This message is issued when the EOMDATE contained in the EOMKEY (*xxxxxxxx*) is lower (back dated) than the EOMDATE assembled into the HNAS load module (*yyyyyyyy*). This indicates that the EOMKEY has been corrupted or is not correct for your installation. If you receive this message, contact Comm-Pro for assistance.

NAS9203S HNAS AUTHORIZATION FILE IS INVALID, AUTH LIMIT DOES NOT MATCH
NAS9203S AUTHLMT=*xxxx* HNASLMT=*yyyy*

(apar/new for V2R4M0)

This message is issued when the authorization limit (AUTH=) contained in the authorization file (*xxxx*) does not match the authorization limit assembled into the HNAS load module (*yyyy*). This indicates that the authorization file has been corrupted or is not correct for your installation. If you receive this message, contact Comm-Pro for assistance.

NAS9203S HNAS AUTHORIZATION FILE IS INVALID, CREATION DATE DOES NOT MATCH
NAS9203S AUTHDATE=*xxxxxxxx* HNASDATE=*yyyyyyyy*

(apar/new for V2R4M0)

This message is issued when the distribution creation date contained in the authorization file (*xxxxxxxx*) does not match the distribution creation date assembled into the HNAS load module (*yyyyyyyy*). This indicates that the authorization file has been corrupted or is not correct for your installation. If you receive this message, contact Comm-Pro for assistance.

NAS9203S HNAS AUTHORIZATION FILE IS INVALID, VERSION DOES NOT MATCH
NAS9203S AUTHVRM=*xxx* HNASVRM=*yyy*

(new for V2R3M0)

This message is issued when the VRM contained in the authorization file (*xxx*) does not match the VRM assembled into the HNAS load module (*yyy*). This indicates that the authorization file has been corrupted or is not correct for your installation. If you receive this message, contact Comm-Pro for assistance.

NAS9203S HNAS AUTHORIZATION FILE IS INVALID, SHIPID DOES NOT MATCH
NAS9203S AUTHSHID=*xxxxxxxxxxxxxxxx* HNASSHID=*yyyyyyyyyyyyyyyy*

(new for V2R2M0)

This message is issued when the SHIPID contained in the authorization file (*xx...xx*) does not match the SHIPID assembled into the HNAS load module (*yy...yy*). This indicates that the

authorization file has been corrupted or is not correct for your installation. If you receive this message, contact Comm-Pro for assistance.

NAS9205I HNAS AUTHORIZATION FILE IS PERMANENT

(new for V2R4M0)

This message is issued when HNAS is first started if the authorization file identifies a **permanent distribution**.

Note: This message is issued for a permanent distribution even if the Maintenance/Use Anniversary Date (EOMDATE) has expired. The following line is displayed using the DNAS command to show the actual EOMDATE whether expired, about to expire or not expired:

MAINTENANCE/USE ANNIVERSARY DATE IS *yyyy/mm/dd*

If the EOMDATE is expired or is about to expire, additional alarm messages are displayed on SYSCONS once per day at noon as an indication that the Maintenance/Use license needs to be renewed. For more information, please see **NAS9206*s*** messages below.

NAS9205*s* HNAS TRIAL AUTHORIZATION WILL EXPIRE IN *dddd* DAYS

(new for V2R2M0)

This message is issued when HNAS is first started and again at midnight each day thereafter for a **trial distribution**. It is issued as a reminder of the days remaining before the HNAS trial period expiration date (EOTDATE) is reached. The message severity will change for 'I' to 'S' as TODAYSDATE gets closer to the EOTDATE.

Specifically, the message ID will be generated as follows:

NAS9205I, when 45 >= EOTDATE-TODAYSDATE
NAS9205W, when 30 >= EOTDATE-TODAYSDATE
NAS9205E, when 15 >= EOTDATE-TODAYSDATE
NAS9205S, when 00 >= EOTDATE-TODAYSDATE

NAS9205*s* FORCED TERMINATION OF HNAS WILL OCCUR WHEN TRIAL AUTHORIZATION FILE EXPIRES

(apar/new for V2R4M0

This message is issued following the 'NAS9205*s* HNAS TRIAL AUTHORIZATION WILL EXPIRE IN *dddd* DAYS' message above when appropriate conditions are met.

NAS9205S HNAS TRIAL AUTHORIZATION HAS EXPIRED, NEW KEY REQUIRED

(new for V2R2M0)

This message is issued when the trial period expiration date (EOTDATE) contained in the authorization file is reached for a **trial distribution**. HNAS continues running, however if

stopped, it cannot be restarted. This means that a new trial distribution or an EOTKEY is required to allow HNAS to resume operation. If you receive this message, contact Comm-Pro for assistance.

NAS9206*s* HNAS MAINTENANCE/USE ANNIVERSARY DATE WILL EXPIRE IN *dddd* DAYS

(apar/new for V2R4M0

This message is issued when HNAS is first started and again at midday each day thereafter for a **permanent distribution** if TODAYSDATE is within 60 days of the HNAS Maintenance/Use Anniversary Date (EOMDATE). It is issued as a reminder of the days remaining before the EOMDATE expires. The message severity will change for 'I' to 'S' as TODAYSDATE gets closer to the EOMDATE.

Specifically, the message ID will be generated as follows:

NAS9206I, when 45 >= EOMDATE-TODAYSDATE
NAS9206W, when 30 >= EOMDATE-TODAYSDATE
NAS9206E, when 15 >= EOMDATE-TODAYSDATE
NAS9206S, when 00 >= EOMDATE-TODAYSDATE

Note: The NAS9206*s* message severity code change was incorporated into 240 by enhancement APAR 2400098.

NAS9206*s* FORCED TERMINATION OF HNAS WILL OCCUR XXX DAYS AFTER
NAS9206*s* MAINTENANCE/USE ANNIVERSARY DATE EXPIRES

(apar/new for V2R4M0

These messages are issued following the 'NAS9206*s* HNAS MAINTENANCE/USE ANNIVERSARY DATE WILL EXPIRE IN *dddd* DAYS' message above when appropriate conditions are met.

NAS9206S HNAS MAINTENANCE/USE ANNIVERSARY DATE EXPIRED *dddd* DAYS AGO

(apar/new for V2R4M0

This message is issued when HNAS is first started and again at midday each day thereafter for a **permanent distribution**. It is issued as a reminder that the HNAS Maintenance/Use Anniversary Date expired *dddd* days ago.

Specifically, when TODAYSDATE >= EOMDATE

```
NAS9206S  HNAS MAINTENANCE/USE ANNIVERSARY DATE (EOMDATE)
          HAS EXPIRED
NAS9206S  CONTACT YOUR HNAS PROVIDER IMMEDIATELY TO EXTEND
          YOUR EOMDATE
NAS9206S  BY RENEWING YOUR MAINTENANCE/USE LICENSE AND
          ORDERING ONE OF THE
NAS9206S  FOLLOWING EOMDATE SOLUTIONS
NAS9206S  1) A REFRESH DISTRIBUTION WITH A NEW EOMDATE
NAS9206S  2) AN EOMKEY TO EXTEND YOUR EXPIRED EOMDATE
                                                  (apar/new for V2R4M0
```

These messages are issued following the 'NAS9206S HNAS MAINTENANCE/USE ANNIVERSARY DATE EXPIRED *dddd* DAYS AGO' message above when appropriate conditions are met.

```
NAS9206S  FORCED TERMINATION OF HNAS WILL OCCUR IN XXX DAYS
                                                  (apar/new for V2R4M0
```

This message is issued after the last NAS9206S message above when appropriate conditions are met.

```
NAS9220I  HNAS AUTHORIZATION FILE ALLOWS DATAFONO SUPPORT
                                                  (apar/new for V2R4M0)
```

This message is issued when HNAS is first started if the authorization file allows optional Datafono support to be configured. This message was formerly assigned to NAS9206I.

Bind Failure User Sense Codes

(HNAS List)

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BIND Failure User Sense Codes (HNAS)

When a BIND is rejected by HNAS a 4 byte sense code is built consisting of a two byte SNA sense code followed by a two byte user sense code. The 2 byte SNA sense codes are described in the IBM Communication Server, IP and SNA Codes book. For the failures described below, the SNA code is **0821** (invalid parameter). The user sense codes built by HNAS contain four hexadecimal digits with the format 0Lnn. The L digit indicates the HNAS LU type as follows:

C=LLC0, 3=LLC3, 4=LLC4 Data Session, 5=LLC5, E=LLC4 Control Session.

The nn values (described below) identify the error HNAS found in the BIND image.

When HNAS rejects a BIND the BIND image sent by the PLU must be corrected.

BIND Failure User Sense Codes Reference Table

Code nn	Description
01	Format/type byte not equal to X'01' (format 0, non-negotiable)
02	FM or TS profiles is not equal to X'03'
03	PLU Protocol - delayed request mode not supported
04	PLU Protocol - compression not supported
05	SLU Protocol - delayed request mode not supported
06	SLU Protocol - compression not supported
07	Common FM Protocol - FM headers not supported
08	Common FM Protocol - alternate code not supported
09	Common FM Protocol - HDX/FF not allowed on GATE control session
0A	Common FM Protocol - HDX/Contention required on GATE control session
0B	Common FM Protocol - SLU contention winner not supported
0C	Common FM Protocol - symmetric recovery responsibility not supported
0D	PLU FM Protocol - PLU not able to end brackets
0F	Common PS Profile - LU type > 1 not supported
10	SLU FM Protocol - SLU can only send single element chains (multiple element chains required by HNAS)

Code nn	Description
	The following special 4 digit code follows SENSE=0805 (Session Limit Exceeded) condition
C5E7	BIND received for LU that is already bound.

TCP/IP Error Numbers

(HNAS List)

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TCP/IP Error Numbers (ERRNO)

TCP/IP stack command errors are normally reported to HNAS via a return code of minus-one (RC=FFFFFFFF) while TCP/IP stack error numbers qualify the return code. The following table contains a partial list of TCP/IP error numbers (ERRNOs) that may be presented to HNAS. Please contact your HNAS support organization if you are unable to locate an ERRNO value in this table or are unsure as to what action to take to correct the condition.

Please refer to the **IBM IP Application Programming Interface Guide** (SC31-8788) for the **complete listing** of TCP/IP error type assignments.

TCP/IP Error Numbers (ERRNO) Reference Table

HEX	DEC	NAME	Error Description	Customer Response
0001	1	EPERM	Permission denied. No owner exists.	Ensure that TCP/IP stack is active.
		EDOM	A command argument was too large. (Same values as 21|33)	Contact HNAS support vendor to check function call parameters.
0002	2	ERANGE	The result is too large. (Same values as 22|34)	Contact HNAS support vendor to check function call parameters.
0003	3	ESRCH	The process was not found. A table entry was not located.	Contact HNAS support vendor to check function call parameters.
0004	4	EINTR	A system call was interrupted.	Check that the socket connection and TCP/IP stack are still active.
0007	7	E2BIG	The argument list is too long. (Same values as 91|145)	Contact HNAS support vendor to check function call parameters.
0009	9	EBADF	The internal socket is already in use or the specified value is invalid. (Same values as 71|113)	Contact HNAS support vendor to check function call parameters.
000B	11	EAGAIN	There are no more processes.	Retry the operation. Data or condition may not be available at this time. Contact HNAS support vendor if problem persists.

TCP/IP Error Numbers (ERRNO) - HNAS List

HEX	DEC	NAME	Error Description	Customer Response
000D	13	EACCES	Permission denied, caller is not authorized to issue request.	Contact HNAS support vendor to check function call parameters.
000E	14	EFAULT	An invalid storage address or length was specified.	Contact HNAS support vendor to check function call parameters.
0010	16	EBUSY	LISTEN has already been called for this socket. Device or file to be accessed is busy.	Contact HNAS support vendor to check function call parameters.
0013	19	ENODEV	The specified device does not exist.	Contact HNAS support vendor to check function call parameters.
0016	22	EINVAL	A command argument was invalid. (Same values as 79|121)	Contact HNAS support vendor to check function call parameters.
0018	24	EMFILE	The socket ID separator table is full. Insufficient number of sockets defined in host.	Increase MAXSOCKETS and MAXFILEPROC limits or Contact HNAS support.
0019	25	ENOTTY	An incorrect device call was specified.	Contact HNAS support vendor to check IOCTL function parameters.
0020	32	EPIPE	The connection is broken. For socket write/send, peer has shutdown one or both directions.	Reconnect with the peer.
0021	33	EDOM	A command argument was too large. (Same values as 1|1)	Contact HNAS support vendor to check function call parameters.
0022	34	ERANGE	The result is too large. (Same values as 2|2)	Contact HNAS support vendor to check function call parameters.
0023	35	EWOULD-BLOCK	TCP/IP would force HNAS to WAIT but non-blocking mode is set.	Normal error when no work is pending. HNAS sets non-blocking mode to inhibit forced WAIT.
0024	36	EIN-PROGRESS	A socket is marked non-blocking and a connection cannot yet be completed.	This is not an error but simply a progress report.

HEX	DEC	NAME	Error Description	Customer Response
0025	37	EALREADY	A socket is marked non-blocking and a previous connection is not complete.	HNAS will automatically reissue the command.
0028	40	EMSGSIZE	The requested message length is too large (32767 is the maximum).	The LARGEENVELOPEPOOLSIZE statement in the TCPIP.PROFILE file may restrict this value.
0029	41	EPROTOTYPE	The requested protocol is incorrect for this socket.	Contact HNAS support vendor to check function call parameters.
002A	42	ENOPROTOOPT	The requested socket option or level is incorrect.	Contact HNAS support vendor to check function call parameters.
002B	43	EPROTONOSUP	The requested socket protocol is not supported.	Contact HNAS support vendor to check function call parameters.
002C	44	ESOCKNOSUP	The socket type is not supported.	Contact HNAS support vendor to check function call parameters.
002D	45	EOPNOTSUPP	The current command is not supported for the specified internal socket.	Contact HNAS support vendor to check function call parameters.
002F	47	EAFNOSUPPRT	A specified address family is not valid for the protocol.	Contact HNAS support vendor to check function call parameters.
0030	48	EADDRINUSE	The address is in a timed wait because a LINGER delay from a previous CLOSE is using the address. This condition can occur when HNAS is abruptly recycled before the host TCP/IP stack has quiesced completely.	The LINGER delay will be eliminated automatically so the address can be reused. No user action is required unless several of these events are observed. Contact HNAS support vendor if more than 3 occurrences in a five minute period.
0031	49	EADDRNOTAVL	A specified address is not available or cannot be reached. Check to ensure that the correct IP address is specified in the HNAS CDF member.	Verify IP address assignment. If correct, contact HNAS support vendor to check function call parameters.

TCP/IP Error Numbers (ERRNO) - HNAS List

HEX	DEC	NAME	Error Description	Customer Response
0032	50	ENETDOWN	The specified network is down.	Ensure that the client router on the network identified by its IPADDR is active.
0033	51	ENETUNREACH	The specified network address cannot be reached.	Ensure that the client router is on the network identified by its IPADDR.
0036	54	ECONNRESET	The connection to the destination host (router) is unavailable.	The physical connection to the remote host or router has been broken.
0037	55	ENOBUFS	No buffer space is available.	Increase region size for the HNAS address space or buffer requirement in the TCPIP.PROFILE file.
0038	56	EISCONN	A connection is already active for the internal socket.	Contact HNAS support vendor to check function call parameters.
0039	57	ENOTCONN	A connection is not active for the internal socket.	Contact HNAS support vendor to check function call parameters.
003C	60	ETIMEDOUT	The connection attempt timed out before it was completed.	Ensure that the client router is available and that the IP address is correct.
003D	61	ECONREFUSED	The requested connection was refused.	Ensure that the client router is available and that its PORT number is correct.
0040	64	EHOSTDOWN	The specified host is down.	Ensure that the client router on the network identified by its IPADDR is active.
0041	65	EHOSTUNREACH	The specified host address cannot be reached.	Ensure that the client router is on the network identified by its IPADDR.
0052	82	ENOLINK	The link has been severed.	Release the socket and reinitialize the client/server connection.

HEX	DEC	NAME	Error Description	Customer Response
0071	113	EBADF	The internal socket is already in use or the specified value is invalid. (Same values as 9|9)	Contact HNAS support vendor to check function call parameters.
0079	121	EINVAL	A command argument was invalid. (Same values as 16|22)	Contact HNAS support vendor to check function call parameters.
0091	145	E2BIG	The argument list is too long. (Same values as 7|7)	Contact HNAS support vendor to check function call parameters.
009C	156	EMVSINITIAL	All process initialization error (attempt to initialize again). This error condition can occur when the TCPNAME= and IPADDR= or userid aren't properly defined for the host security system (RACF, etc.) or TCPIP.PROFILE.	Ensure that HNAS LOCAL TCPNAME=TCPIP value is the correct stack name (BUILD default value); LOCAL IPADDR= value matches the HOME IP address, and user ID starting HNAS is registered with RACF, etc.). Contact HNAS if problems persist.
03EC	1004	EIBMIUCVERR	Command failed due to IUCV error.	Ensure VM IUCV or its MVS 'platform' simulation is active.
00403	1027	EIBMINVSOCKET	Command token that is not valid was detected. No such socket exists.	Contact HNAS support vendor to check function call parameters.
027DD	10205	EINUSE	Requested socket number is a duplicate. This condition indicates that the requested socket number given to the TCPIP stack during a SOCKET or ACCEPT request was already in use.	Contact HNAS support vendor to check function call parameters. Note: This was a problem in HNAS prior to APAR 2200067. This should not occur in releases with APAR 2200067 applied.

Note: 1) If an error number other than the ones listed above are reported in an alert message, contact Comm-Pro for further assistance. A detailed list of error numbers can be found in IBM publication number SC31-8788 'IP Application Program Interface Guide' (Appendix B - Return Codes).

2) A RECEIVE failed message can be issued with RC=00000000 and ERRNO=00000000. This indicates that a previously active connection has been lost.

PVC Setup Status Codes

(RFC-1613)

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PVC Setup Status Codes (RFC-1613)

PVC Setup Status Codes (RFC-1613) Reference Table

RFC1613 - XOT (X25 Over TCP) PVC Status Field Sense Codes

(added for V2R3M0)

The following table defines the hexadecimal PVC Status Codes and Meaning (Origin depicts ownership or implementation (blank=RFC, CISCO and HNAS) of the codes:

RFC1613 - XOT PVC Status Field Sense Codes

Status	Meaning	Origin
00	Waiting to connect	
08	Destination disconnected. HNAS is shutting down.	 HNAS
09	PVC/TCP connection refused. HNAS uses this code when the window size > 7 or the packet size > 4096.	 HNAS
0A	PVC/TCP routing error	
0B	PVC/TCP connect timed out	
0C	HNAS unable to locate an MCH matching the setup's responder field. Cisco debug text 'Unknown PVC Status' may be generated in the Cisco debug event message for this HNAS code.	HNAS
0D	HNAS unable to locate VC matching the setup's responder LCN. Cisco debug text 'Unknown PVC Status' may be generated in the Cisco debug event message for this HNAS code.	HNAS
0E	HNAS receive setup packet for a PVC that is already setup. Cisco debug text 'Unknown PVC Status' may be generated in the Cisco debug event message for this HNAS code.	HNAS

PVC Setup Status Codes (RFC-1613)

RFC1613 - XOT PVC Status Field Sense Codes

Status	Meaning	Origin
Note:	When Cisco routers receive a PVC status code response greater than X'0F' their 5 minute PVC Setup retry timer isn't activated so the router won't attempt another PVC Setup attempt until the router ios is reloaded or reconfigured.	
10	Trying to connect via TCP	
11	Awaiting PVC-SETUP reply	
12	Connected	
13	No such destination interface	
14	Destination interface is not up	
15	Non-X.25 destination interface	
16	No such destination PVC	
17	Destination PVC configuration mismatch HNAS - We have observed this condition when a second HNAS image is issuing a PVC Setup request to a router that already has an active PVC connection in place (two different HNAS programs erroneously configured for the same physical router).	
18	Mismatch flow control values	
19	Can't support flow control values	
1A	PVC setup protocol error	
1B	Mismatch IP address values - Code is not provided in the standard RFC-1613 and is believed to be an extended Cisco PVC Setup status reason code associated with Cisco debug event message 'wrong host for pvc'. Originating ipaddr of HNAS initiated PVC Setup doesn't match the router's destination ipaddr value defined on the serial interface PVC string. This condition does not occur for PVC SETUP requests from the router to HNAS because HNAS does not validate the originating ipaddr, only the destination ipaddr.	CISCO

We recommend that you refer to PVC Operational Notes and PVC Setup Considerations section in Chapter 3 of the HNAS Guide and Reference manual for noteworthy information on PVC Setup activity and processes.

Not all of these PVC status values are appropriate for a HNAS PVC Setup response packets.

Refer to the actual RFC1613 - XOT (X25 Over TCP) specification for a complete list and description of PVC status field states.

Note: APAR 2300151 introduced the following changes in the HNAS PVC Setup Status Code assignment:

X'13' = no such destination interface is now X'0C'.
X'14' = destination interface not up is now X'08'.
X'16' = no such destination PVC is now X'0D'.
X'19' = can't support flow control values, is now X'09.
X'1A' = PVC setup protocol error, is now X'0E'.

This was done because status codes greater than X'0F' cause the router to never retry the setup. The new codes allow the router to retry the setup every 4 minutes, or as appropriate.

PVC Setup Status Codes (RFC-1613)

Reset Cause and Diagnostic Codes

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Reset Cause and Diagnostic Codes

This section lists the Reset Cause and Diagnostic codes that may be present in the HNAS environment. The codes are provided by HNAS in Alert messages, trace and log entries. These codes can also be viewed via the router's monitor or debug mode. For Cisco routers, "debug x25 events" will log these events to the monitor console.

We do not list all X.25 Reset diagnostic codes and descriptions in this section. Users should also refer to the X.25 standards ITU-T/CCITT reference manuals or the related X.25 network, Pad and Host supplier manuals for implementation specific lists of Cause and Diagnostic codes. It's always a good idea to view the documentation of the originator of the Clear or Reset request for codes or notes specific to their implementation.

Comm-Pro continues to add non-HNAS originated codes to our lists if an effort to consolidate these codes in a common area as related to the operation of HNAS.

The tables list the codes in decimal and hexadecimal notation because X.25 equipment, software and router processes may provide the codes in either format.

For LLC0 and LLC 5 Integrated PAD an inbound RESET causes a SIGNAL PIU to be sent to the PLU. For GATE and LLC 5 Transparent PAD a RESET message is sent to the PLU. For LLC3 RESETs other than 015/000 (network operational) and 000/000 (restart) cause all PLU sessions associated with the VC to be ended (PLU receives NOTIFY).

Note: When HNAS has a condition that indicates that a call should be cleared a common clear scheduler is called. If the scheduler detects that the session is a PVC then the clear cause and diagnostic values are passed to the reset scheduler because PVCs can't be cleared. This means that the **RESET cause and diagnostic values displayed in HNAS alerts should be checked in the Clear Cause and Diagnostic table too**. In rare cases there are conflicts between reset and clear diagnostic values.

In 230, **Extended Event Reason Codes** are now provided in the Clear Diagnostic Code section and should be consulted for any Reset events with like Extended Event Reason Codes.

Reset Cause Code Ranges

Reset cause codes of X'00' and from X'8F' to X'FF' may be setup by a DTE. Values from X'01' to X'0E', which are reserved for the DCE, can be used by a DTE when the leftmost bit is set on, X'80'. For example; X'85' may mean local procedure error or X'89' may mean remote DTE operational. HNAS initiated resets contain cause code **000** or may provide the applications cause code value. HNAS doesn't generate non-zero cause code values.

Note: Please be sure and review the diagnostic codes (including 000 x'00') that accompany the cause code for additional information.

Host NAS Reset Cause and Diagnostic Codes

X.25 Reset Cause Codes Reference Table

DEC	HEX	Reason (see reset cause code ranges for DTE/DCE use codes)
000	00	DTE originated.
001	01	Out of order.
003	03	Remote procedure error.
005	05	Local procedure error.
007	07	Network congestion.
009	09	Remote DTE operational.
015	0F	Network operational. Refer to the respective reset diagnostic codes for additional information.
017	11	Incompatible destination.
029	1D	Network out of order.
nnn	xx	Cause codes **143** thru **255** (**8F-FF** Hex) may be generated by some applications, not HNAS.

X.25 Reset Diagnostic Codes Reference Table

DEC	HEX	Reason
000	00	No code provided, or - Cisco routers provides this XOT reset diagnostic code with cause code 015 x‘0F’ after a successful PVC set-up is exchanged irregardless of the serial interface state (XOT set-up exchange will occur when interface is shutdown or offline). This typically occurs each time HNAS or the router is restarted/reactivated/reloaded or the PVC XOT socket is recycled. - Some PADs (such as Black Box) provides this PVC XOT reset diagnostic code with cause code 001 x‘01’ after a maintenance mode channel reset is issued from the Pad operator console. This combination of diagnostic and cause code for a PVC will cause the LU session with the application PLU to be terminated (CLOSE ACB).

DEC	HEX	Reason
001	01	Invalid packet send sequence number P(S). - Cisco routers provide this XOT reset diagnostic code with cause code 003 x'03' after the router receives an inbound packet with a PS from the network serial interface or HNAS XOT that exceeds the packet level window size. The router sends the reset to both partners in the session. This condition typically occurs when there in a window size mismatch over the serial interface between the router and network. - Beyond initial configuration mismatches, we have observed this condition at a customer site after they migrated from NPSI to HNAS. While their file transfer successfully operated under NPSI with a window size mismatch, under HNAS timing sequences improved data delivery which caused the problem to surface. Solution was to correct the configuration mismatch. - Cisco router interface serial facilities (defaults or user defined) values must match those defined on the X.25 network, Pad or service that the interface is associated with.
002	02	Invalid packet receive sequence number P(R).
012	0C	Incorrect LLC type. IBM Communications Server (SNA).
016	10	Invalid packet.
017	11	Invalid packet for state R1
018	12	Invalid packet for state R2.
019	13	Invalid packet for state R3.
027	1B	Invalid packet for state P4D1.
028	1C	Invalid packet for state P4D2.
029	1D	Invalid packet for state P4D3.
032	20	Packet is not allowed.
033	21	Packet is not identifiable.
035	23	Packet is invalid for PVC.
037	25	REJ packet is not allowed.
038	26	Packet is too short.

Host NAS Reset Cause and Diagnostic Codes

DEC	HEX	Reason
039	27	Packet is too long. This condition typically occurs when the X.25 network default packetsize values don't match the router serial interface setting. The error condition may not be observed until a data packet is sent in either direction that is too large or too small (with an m-bit indicator setting).
041	29	Restart packet with non-zero LCN.
043	2B	Interrupt Confirmation packet is not authorized.
044	2C	Interrupt packet is not authorized.
045	2D	REJ packet is not authorized.
048	30	Time-out.
051	33	Time-out waiting for Reset Confirmation packet.
052	34	Time-out waiting for Restart Confirmation packet.
080	50	Miscellaneous.
081	51	Cause code from DTE is invalid.
082	52	Misaligned packet.
083	53	Q-bit setting is inconsistent.
112	70	International problem.
113	71	Remote network problem.
114	72	International protocol problem.
115	73	International link is out of order. This reset diagnostic code along with cause code 029 x'1D' typically occurs on PVC's when the serial interface physical X.25 link restarts, goes down or when the interface is shutdown. When HNAS receives this reset code for a PVC the LU session with the application PLU will be terminated (CLOSE ACB). (APAR 2300196)
122	7A	Maintenance action. Cisco routers can issue this XOT reset diagnostic code along with cause code 015 x'0F' as the result of a Cisco IOS 'clear xot ...' or 'clear x25 ...' command that will reset an XOT or x25 PVC. When HNAS receive this reset code for a PVC the LU session with the application PLU will be terminated (CLOSE ACB). (APAR 2300196)

DEC	HEX	Reason
126	7E	REJ packet received.
127	7F	XTP Reset due to Interrupt from CTCP.
128	80	Session setup specific problem.
140	8C	PLU unbound SLU or data arrived for PVC before timer initiated connection is established.
144	90	Time-out or retries exceeded.
145	91	Time-out or retries exceeded for Interrupt packet.
146	92	Time-out or retries exceeded for Data packet.
147	93	Time-out or retries exceeded for REJ packet.
148	94	Time-out after RNR packet received.
160	A0	DTE specific problems.
161	A1	DTE is operational.
162	A2	DTE is not operational.
163	A3	DTE resource constraint.
165	A5	Invalid partially filled Data packet.
166	A6	D-bit procedure is not supported.
167	A7	Packet received is longer than maximum allowed.
171	AB	Packet received with invalid P(S) value.
172	AC	Packet received with invalid P(R) value.
173	AD	Packet received with invalid D-bit setting.
176	B0	PLU specific problems.
178	B2	SIGNAL received from PLU.
179	B3	CANCEL received from PLU (RU chain aborted).

Host NAS Reset Cause and Diagnostic Codes

DEC	HEX	Reason
192	C0	PVC specific problems.
195	C3	Can occur as a result of a socket close condition such as when the HNAS 'VARY ID=type OFF FORCE' console command is issued to force the deactivation of a HNAS resource.
196	C4	DIAGX=0000: An HNAS SEND macro for a PVC session completed in error. This RESET indicates that PVC data was not delivered to the HOST. The PLU session is ended, the remote sees a DIAG=196 RESET. DIAGX=0001: PVC data arrived from the remote when the HNAS PVC does not have a session with the PLU. This DIAGX value was added by APAR 2400053 on Sept. 22, 2004.
211	D3	For PVCs: This diagnostic code indicates that a RESET was scheduled which would normally cause a DIAG=D3 CLEAR. Because the resource is a PVC, a CLEAR would be invalid and a RESET is sent in its place. The RESET causing the problem will be in a previous NAS5705W alert message for the same LU.
224	E0	OSI network service problem.
233	E9	Reset reason was not specified.
234	EA	Reset due to network congestion.
240	F0	Higher level initiated.
250	FA	User re synchronization.

Clear Cause and Diagnostic Codes

(with Extended Event Reason Codes)

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Clear Cause and Diagnostic Codes

This section lists the Clear Cause and Diagnostic codes that may be present in the HNAS environment. The codes are provided by HNAS in Alert messages, trace and log entries. Clear codes can also be viewed via the router's monitor or debug mode. For Cisco routers, "debug x25 events" will log these events to the monitor console.

We do not list all X.25 Clear diagnostic codes and descriptions in this section. Users should also refer to the X.25 standards ITU-T/CCITT reference manuals or the related X.25 network, Pad and Host supplier manuals for implementation specific lists of Cause and Diagnostic codes. It's always a good idea to view the documentation of the originator of the Clear or Reset request for codes or notes specific to their implementation.

Comm-Pro continues to add non-HNAS originated codes to our lists if an effort to consolidate these codes in a common area as related to the operation of HNAS.

The tables list the codes in decimal and hexadecimal notation because X.25 equipment, software and router processes may provide the codes in either format.

Clear Cause Code Ranges

In the 1980 X.25 Recommendation X'00' was the only value defined as a cause code set by the DTE. In the 1984 Recommendation Clear cause codes of X'**00**' and from X'**8F**' to X'**FF**' may be sent by a **DTE.** Values from X'**01**' to X'**0E**', which are reserved for the **DCE**, can be used by a **DTE** when the **left most bit** is set on, X'**80**'. For example; X'**85**' may mean congestion or X'**89**' may mean out of order. HNAS initiated clears contain cause code **000.** When a gate CTCP initiates a clear, the cause and diagnostic values come from the CTCP. HNAS does not generate non-zero cause code values.

Extended Event Reason Codes

(new for V2R3M0)

Extended event reason codes are now provided under the specific clear diagnostic code that the event is associated with. The extended codes are also present in appropriate alert and event messages. These additional codes can be used to pinpoint the cause of call request or session connect failures and disconnect conditions. Please refer to the X.25 Clear Diagnostic Code table entries (by clear diagnostic code) to identify the cause of the specific event.

The extended event reason code assignment in HNAS system (alert and event) messages and trace records is available beginning with the HNAS 230 release. The content is being included in with the HNAS 220 documentation because of the expanded reason descriptions which should improve the 220 problem determination process although not with the ease of reason code assignment in 230.

Host NAS Clear Cause and Diagnostic Codes

X.25 Clear Cause Codes Reference Table

DEC	HEX	Reason (see clear cause code ranges above for DTE/DCE codes)
000	00	DTE originated.
001	01	Number busy.
003	03	Invalid facility.
005	05	Network congestion.
007	07	Network operational.
009	09	Out of order.
011	0B	Access barred.
013	0D	Not obtainable.
017	11	Remote procedure error.
019	13	Local procedure error.
021	15	RPOA out of order.
025	19	Reverse charging not accepted.
033	21	Incompatible destination.
041	29	Fast select not accepted.
057	39	Ship absent.
nnn	xx	Cause codes **143** thru **255** (**8F-FF** Hex) may be generated by GATE applications, not HNAS.

X.25 Clear Diagnostic Codes Reference Table

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		FFnn	Special E**x**tended Event Reason Codes (FFnn codes not associated with HNAS Clear Diagnostic code)
		FF00	Gate - Clear Diagnostic generated from the ctcp **data** session

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		FF01	Gate - Clear Diagnostic generated from the ctcp **control** session
000	00		No code Provided. Cisco routers can generate an XOT Clear Request towards HNAS with a cause code **009** x'09' and diagnostic code **000** x'00' when an XOT data packet is received by the router and destined to an X.25 Serial Interface with a frame packet size smaller than the XOT packet size. The following Cisco debug codes can accompany this condition: '%LAPB-4-FRAMEERR: Interface Serial0/2/0, Frame error: CF 0x24, VS 2 C VR 2, Reason 0x4' '%LAPB-4-N1TOOBIG: Interface Serial0/2/0, N1 too large'. Condition causes link level restart on the X.25 serial interface. Packet size mismatch occurred because the Cisco router configuration was erroneously configured for a packet size of 512 while the X.25 network defaulted to 128.
001	01		Invalid P(S).
002	02		Invalid P(R).
012	0C		Incorrect LLC type. IBM Communications Server (SNA).
016	10		Invalid packet.
017	11		Invalid packet for state R1.
018	12		Invalid packet for state R2.
019	13		Invalid packet for state R3.
020	14		Invalid packet for state P1.
021	15		Invalid packet for state P2.
022	16		Invalid packet for state P3.
023	17		Invalid packet for state P4.
024	18		Invalid packet for state P5.
025	19		Invalid packet for state P6.
026	1A		Invalid packet for state P7.
032	20		Packet is not allowed.
033	21		Packet is not identifiable.
034	22		Call Request on one-way logical channel.

Host NAS Clear Cause and Diagnostic Codes

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
038	26		Packet is too short.
039	27		Packet is too long.
041	29		Restart packet with non-zero LCN.
042	2A		Packet type is incompatible with facility.
048	30		Time-out.
049	31		Time-out waiting for Call Accept packet. We have observed this condition when HNAS is not getting a response for a GATE call request sent to the CTCP. The inbound session eventually gets cleared after 10 minutes or so when the network sends the router a DIAG packet reporting the time-out condition.
050	32		Time-out waiting for Clear Confirmation packet.
051	33		Time-out waiting for Reset Confirmation packet.
052	34		Time-out waiting for Restart Confirmation packet.
053	35		Time-out waiting for call reflection.
064	40		Call setup problem. This diagnostic code along with cause code **x'0D' 013** typically indicates that either; - the X.25 link (interface) is down (Cisco command 'show interface' provides useful link status information) or; - the 'x25 route dteaddr/filter' didn't get a hit so routing wasn't possible in the XOT environment (Cisco command 'show x25 route' under recent ios levels depicts route filter match/use hit counts).
065	41		Facility value is not allowed.

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
066	42		Facility code is not allowed. - Incorrect or unsupported values, - When TAP=nn is coded on TYPE=XOT REMOTE statements the HNAS XOT TAP simulation logic causes the end point router to generate a Clear packet with Cause **003** Diag **x'42' 066** in response to an intentionally malformed HNAS call packet. The outbound call request packet is sent to force a protocol level response from the remote XOT router. Please refer to the TAP= operand of the REMOTE definition statement located in Chapter 4 of the HNAS Guide and Reference documentation.
067	43		Invalid called DTE address.
068	44		Invalid calling DTE address.
069	45		Invalid facility field length.
070	46		Incoming call barred.
071	47		No logical channel is available.
072	48		Call collision.
073	49		Duplicate facility was requested.
074	4A		Non-zero address length.
075	4B		Non-zero facility length.
076	4C		Expected facility was not provided.
077	4D		Invalid CCITT facility was specified.
078	4E		Maximum number of call deflections was exceeded.
080	50		Miscellaneous.
081	51		Cause code from DTE is invalid.
082	52		Misaligned packet.
084	54		Network user interface problem.

Host NAS Clear Cause and Diagnostic Codes

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
			HNAS QLLC Diagnostic Codes These HNAS QLLC clear request diagnostic codes x'50' thru x'5F' (080-095) are provided in QLLC clear packets transmitted by HNAS to the router/network. **These codes overlap standard X.25 clear request diagnostic codes**. It is important to review these values when debugging QLLC problems.
080	50		General QLLC Error
		01	FID3 PIU received, VC has no SPU
		02	FID3 PIU received, OAF too large (no LU).
		03	FID3 PIU received, HNAS LU for OAF is invalid.
		04	FID3 PIU received, no HNAS LU for OAF.
		05	FID2 PIU received, VC has no SPU.
		06	FID2 PIU received, OAF too large (no LU).
		07	FID2 PIU received, HNAS LU for OAF is invalid.
		08	FID2 PIU received, no HNAS LU for OAF.
		09	FMD for SSCP/SLU session received, MCH has no SVC3= entries.
		0A	XID received, MCH has no SVC3= entries.
		0B	No SPU found for IDNUM/BLK or DTE address.
081	51		QLLC command byte field invalid.
082	52		QLLC command byte unexpected DIAGX0=VCQLST).
		01	Set Mode invalid in CLOSED state.
		02	Set Mode invalid in OPENING state.
		03	Set Mode invalid in OPENED state.
		04	Disconnect invalid in CLOSED state.
		05	Disconnect invalid in OPENED state.
		06	XID invalid in CLOSED state.
		07	XID invalid in OPENING state.
		08	XID invalid in RECOVERY state.
		09	TEST request in CLOSED state, TEST request active.

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		0A	TEST request in closed state, XID expected.
		0B	TEST request in OPENING state, TEST request active.
		0C	TEST request in OPENING state, XID expected.
		0D	TEST request invalid in RECOVERY state.
		0E	RR invalid in CLOSED state.
		0F	RR invalid in OPENING state.
		10	RR invalid in RECOVERY state.
		11	UA invalid in closed state.
		12	UA response invalid in OPENING state.
		13	UA response invalid in RECOVERY state.
		14	US response invalid in OPENED state.
		15	DM response invalid in RECOVERY state.
		16	DM response invalid in OPENED state.
		17	RD response invalid in CLOSED state.
		18	RD response invalid in RECOVERY state.
		19	RD response invalid in CLOSING state.
		1A	RD response invalid in OPENED state.
		1B	XID response in CLOSED state, TEST response expected.
		1C	XID response invalid in OPENING state.
		1D	XID response invalid in RECOVERY state.
		1E	XID response in OPENED state, TEST response expected.
		1F	XID response invalid in OPENED state.
		20	TEST response in CLOSED state, XID expected.
		21	TEST response in OPENING state, XID expected.
		22	TEST response invalid in RECOVERY state.
		23	TEST response in OPENED state, XID response expected.
		24	TEST response invalid in OPENED state.

Host NAS Clear Cause and Diagnostic Codes

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		25	FRMR response invalid in RECOVERY state.
		26	FRMR response invalid in OPENED state.
083	53		QLLC I field missing.
		01	FID3 PIU too short
		02	FID2 PIU too short
		03	TEST request has no data field.
		04	TEST response has no data field.
		05	FRMR has no data field.
084	54		QLLC I-field Invalid or Undefined.
		01	XID PIU Type not 1 or 2.
		02	XID set PU Type 1, PIU from remote not FID 3.
		03	XID set PU Type 2, PIU from remote not FID 2.
		04	SET MODE has invalid data field.
		05	DISC has invalid data field.
		06	RR has invalid data field.
		07	UA has invalid data field.
		08	DM response has invalid data field.
		09	REQ DISC response has invalid data field.
085	55		QLLC I-field length error.
086	56		QLLC Frame Reject.
		01	FRMR in CLOSED state, XID/TEST Request expected.
		02	FRMR in OPENING state, Set Mode retry count exhausted.
		03	FRMR in CLOSING state, DISC request count exhausted.
087	57		QLLC header error.
		01	Q packet header missing.
		02	Q packet request from secondary invalid.
		03	Q packet response from primary invalid.

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		04	Invalid Q packet received from secondary.
088	58		QLLC data state error.
		01	Data in CLOSED state from primary.
		02	Data in closed state, XID / TEST REQ expected.
		03	Data in OPENING state from primary.
		04	Data in RECOVERY state.
089	59		QLLC Timeout
		01	SET MODE request.
		02	DISCONNECT request.
		03	XID request.
		04	TEST request.
		05	Response.
095	5F		QLLC data received after session end.
112	70		International Problem.
113	71		Remote network problem.
114	72		International protocol problem.
115	73		International link is out of order.
116	74		International link is busy.
117	75		Transit network facility problem.
118	76		Remote network facility problem.
119	77		International routing problem.
120	78		Temporary routing problem.
121	79		Called DNIC is unknown.
122	7A		Maintenance action. Cisco routers can issue this XOT reset diagnostic code as the result of a Cisco IOS ‘clear xot ...’ or ‘clear x25 ...’ command that will reset an XOT or X25 PVC.

Host NAS Clear Cause and Diagnostic Codes

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
128	80		Inbound XOT Call Request packet facilities set window or packet size to zero.
129	81		Inbound call request logic detected duplicate session.
		00	Inbound XTP Call Request found session with same I# and CID.
		01	Outbound Fast Connect call request to LU with active VC.
		02	Call Request received, XOT PCE already has VC.
		03	PVC Status received, XOT PCE already has VC.
		04	PVC Setup received, XOT PCE already has VC.
130	82		Inbound call request, no VC/LU block or XTP AVT slot available. (RTEOUT= filter mismatch or association with out of service router, HNAS REMOTE INIT=IDLE set, Router not accessible or shutdown, insufficient VCLMT= or SVCn= LU's configured, etc.)
		01	Inbound call request, no PCE for remote console session.
		02	Inbound call request, no LU for LLC0/LLC5 call.
		03	Inbound call request, no LU for LLC4 (GATE) session.
		04	Inbound call request, no LU for Fast Connect LLC4 session.
		05	Inbound call request, QLLC Call Request packet released during session set up.
			(FOLLOWING IN DTE ADDR MATCH LOOP)
		06	Inbound call, test mode QLLC, no SVC3= parameter on REMOTYE TYPE=MCH.
		07	Inbound call request, test mode QLLC, SVC3= does not address any SPUs.
		08	Inbound call, test mode QLLC, no available SPU.
			(FOLLOWING IN 'ANY' SPU SEARCH LOOP)
		09	Inbound call, test mode QLLC, no available SPU.
		0A	Inbound call, test Mode QLLC, no available SLU on available SPU.
		0B	Inbound call, CONSRCV module rejected console session.
		0C	No VC for Fast Connect GATE callout.

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		0D	No PCE for Fast Connect GATE callout.
		0E	No VC for GATE callout.
		0F	No LU for GATE callout.
		10	No PCE for GATE callout.
		11	No VC for inbound XOT call request.
		12	Inbound XOT call refused, HNAS buffer pool is depleted system in buffer slowdown mode)
		13	Inbound XOT call refused, shutdown in progress.
		14	Console session, buffer limit exceeded.
		15	Inbound call for console session, CONLMT=0 or RMTCONS or RMT-CONP not set. (2300061)
		16	Inbound call for console session, CONPSWD= not configured for remote access. (2300061)
131	83		Inbound call request, GATE CUD0 value invalid or omitted
		01	Inbound call request, CUD0 not in mapping table
		02	Inbound call request, CUD0 mapping table in error
		03	Inbound Datafono call request on non-XOT MCH
		04	Inbound call request, CTCP index for CUD0 > 120
		05	Inbound call request, DFXFNAME= entry for CTCP index generated by CUD0
		06	Inbound call request, TYPE=DFX REMOTE addressed by DFX-NAME= has invalid XID type (control block error, contact support)
		07	Inbound call request, TYPE=DFX REMOTE with XID=STD, IDNUM not available
		08	Inbound call request, TYPE=DFX REMOTE with XID=NO and NO DFLNAME= entries
		09	Inbound call request, TYPE=DFX REMOTE, XID=NO, no pseudo leased LU available
		0A	Inbound call request, TYPE=DFX REMOTE, XID=TAB/TABSTD & NRITAB not coded

Host NAS Clear Cause and Diagnostic Codes

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		0B	Inbound call request, TYPE=DFX REMOTE, XID=TAB, no IDNUM from table (NRI mapping failed)
		0C	Inbound call request, TYPE=DFX REMOTE, XID=TAB/TABSTD IDNUM from table in use
		0D	Inbound call request, TYPE=DFX REMOTE, XID=(mm,nn) IDNUM in use
132	84	00	Inbound call request, selected GATE CTCP not defined in CDF. With some programs, such as the RVS file transfer system, this code may indicate a PLU configuration error. When CUD0=ALL is coded there should be two CTCPs in the LUNAME= list. If there is only one CTCP in the list then calls with a CUD0 selecting the second CTCP will be cleared with this code.
133	85		Inbound call request, selected GATE CTCP not active.
134	86		Inbound call request, GATE/GATE-FC SUBD value not matched or incorrectly specified. The SUBD digits are sometimes referred to as PP-digits. This is an old X.25 expression denoting the last one or two digits of the called address.
		01	Inbound call request, GATE Fast Connect CON=SUBD coded, call request packet has no SUBD digits.
		02	Inbound call request, GATE Fast Connect CON=SUBD coded, Call Request has non-decimal SUBD digits.
		03	Inbound call request, GATE Fast Connect CON=SUBD coded, no CTCP for SUBD digits.
135	87		GATEFC CUD0 value invalid or omitted.
		01	Inbound call request, GATE Fast Connect CON=CUD0 coded, Call Request has no CUD0.
		02	Inbound call request, GATE Fast Connect CON=CUD0 coded, no CTCP for Call Request CUD0 value.
136	88		Inbound call request, GATE Fast Connect CTCP not defined in CDF.
137	89		-Inbound call request, non-GATE CUD0 value invalid. -Inbound call request, non-GATE CUD0 omitted from call packet. We have observed this condition in Cisco router x25 pvc (switched PVC to SVC) environments where the router doesn't provide a CUD. Try coding parameters GATE=GENERAL,CUD0=NULL,CTCP=80 to resolve this error for LLC0 or LLC5 sessions.

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		01	Inbound call request, no CUD0 byte to establish the LLC type.
		02	Inbound call request, CUD0 not in CUD0 to LLC type table.
138	8A		Inbound GATE or GATEFC call, control session not bound. This clear condition can result when HNAS is waiting for a BIND for the GATE control session LU. In cases where HNAS was reloaded with the PLU active we can get a condition where the BIND is not sent by the PLU. A solution to this condition is to code the PLU name on the LUNAME= operand LUNAME=(slu-name/plu-name,...). When this is done HNAS requests a BIND from the PLU -- this ensures the PLU know HNAS is active.
139	8B		Outbound GATE CTCP Call Request has connection ID which HNAS has 'in use'.
140	8C		UNBIND with reason code not equal to 01 received from PLU (01 reason code results in 00 clear diagnostic).
		00	UNBIND reason code was other than normal.
		01	Data session ended when CTCP unbound the GATE MCH-LU session.
141	8D		No host session for inbound message.
142	8E		OPEN for ACB in HNAS LU failed (NAS3701W also issued).
143	8F		REQSESS failed (VTAM session setup failed).
		01	LLC0/LLC4/LLC5 VTAM REQSESS ended in error.
		02	BIND requested by REQSESS did not arrive in 10 seconds.
144	90		VC table used to schedule packet requests overflowed.
145	91		Session ended by PLU NOTIFY.
146	92		HNAS sent UNBIND to PLU (LLC0/5 session ended by clear).
147	93		Calling address could not be inserted in GATE call request packet (OPTIONS=REPDCEADDR). Since we recommend a large HNAS buffer size this will only happen if a CTCP gives us a call request packet with something like 120 bytes of user data.
148	94		Clear caused by VARY mch-name OFF FORCE command. (new for 240)

Host NAS Clear Cause and Diagnostic Codes

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
149	95		Clear caused by VARY lu-name OFF FORCE command. (new for 240)
160	A0		DTE specific problems.
162	A2		DTE is not operational.
163	A3		DTE resource constraint.
164	A4		Fast Select is not authorized.
166	A6		D-bit procedure is not supported.
	Bn		CSFI Initiated Clear Diagnostic codes. 00 - Normal Disconnect.
180	B4		CSFI - User defined.
181	B5		CSFI - User defined.
182	B6		CSFI - User defined.
183	B7		CSFI - Reserved.
184	B8		CSFI - Initial transaction not found for D-layer (SNA).
185	B9		CSFI - X.25 incoming call refused by PACKMOD user exit.
186	BA		CSFI - Disconnect because of Abandon connection (ABCONN).
187	BB		CSFI - Initial transaction not found for N-layer (CTNEx).
188	BC		CSFI - N-layer transaction code illegal value.
189	BD		CSFI - CLSDST OPTCD=PASS failed.
190	BE		CSFI - Traffic not supported.
191	BF		CSFI - VC block not available, state invalid.
192	C0		Packet received is invalid in current state.
193	C1		Buffer shortage.

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
194	C2		BIND from PLU was rejected. A NAS3799I session end message will be issued with this code when BIND that triggers an LLC0/LLC5 HNAS callout is given a -RSP because the outbound call failed. A NAS7717W alert message will precede the NAS3799I.
195	C3		HNAS TCP link transmit failed. An hnas internally generated clear with this diagnostic is used to terminate a session after the TCP interface reports a transmit failure.
			Can occur as a result of a socket close condition such as when the HNAS 'VARY ID=type OFF FORCE' console command is issued to force the deactivation of a HNAS resource or when an incorrect router IP address is specified in the HNAS CDF.
196	C4		VTAM FMD send error.
197	C5		No Call Accept packet received from remote (30 second timeout). While this timer value defaults to 30 seconds it can now be altered via parameter OPTIONS=SVCALLTMR=secs|T21=secs introduced under APAR 2400069.
198	C6		Idle time-out (no activity). See IDLETO operand.
199	C7		Call refused. PSH (LLC2) session requested.
200	C8		Call refused. No entries in APPLNAME= list.
201	C9		QLLC remote unbound session.
202	CA		Can't route XOT called/calling DTE address to MCH (RTEIN= error). Ensure that RTEIN= DTE address or filter is properly configured.
203	CB		Invalid or unsupported GFI options in inbound call request packet. HNAS doesn't currently support Modulo 128 (XCM) mode.
204	CC		Invalid packet type byte in inbound packet.
205	CD		Diagnostic packet received.
206	CE		Data received with Q-bit data chain active.
207	CF		Q-bit data received with data chain active.
208	D0		Invalid packet for current state.

Host NAS Clear Cause and Diagnostic Codes

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
209	D1		USSTABLE invalid (validity byte not found). The USS table must be reassembled using a current USSTAB macro (normally found in SYS1.SISTMAC1). The USS table CSECT must start with the character X'BD'.
210	D2		USSTABLE missing. MCHSOL was unable to find any USS Table.
211	D3		Session End and Clear diagnostic code value indicating that VC RESET scheduled by HNAS requires a session CLEAR due to possible data loss. (2300140) OPTIONS=RESETINO (2400081) will now cause this condition. When this diagnostic code is in NAS3799I (Session End) the RESET causing the problem will be in a NAS5705W alert message.
212	D4		NAS4709W alert issued, HNAS unable to deliver data to PLU.
216	D8		VTAM SEND macro failed.
		01	OPENSEC completed in error.
		02	SESSIONC CONTROL=BIND completed in error.
		03	LUSTAT/SIGNAL/CANCEL/RTR/SHUTD-C complete with error.
		04	QLLC non-FMD SEND request completed in error.
		05	TERMSESS CONTROL=UNBIND completed in error.
		06	SETLOGON completed with error.
		07	FMD SEND completed in error.
		08	FMD SEND failed when issued.
		09	LUSTAT SEND failed when issued.
		0A	SIGNAL SEND failed when issued.
		0B	CANCEL SEND failed when issued.
		0C	RTR SEND failed when issued.
		0D	SHUTDOWN COMP SEND failed when issued.
		0E	UNBIND SEND failed when issued.
		0F	REQ SHUTDOWN SEND failed when issued.
		10	SETLOGON failed when issued.

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		11	SEND QLLC request failed when issued.
		12	SEND QLLC response failed when issued.
		13	RESETSR failed when issued.
		14	OPNSEC (BIND +R) failed when issued.
		15	SESSIONC (BIND -R) failed when issued.
		16	SEND response to expedited request failed when issued.
			DIAGX= entries 17 - 1A **(new for V2R4M0)**
		17	SEND routine entered RPL already busy.
		18	SEND VTAM MODCB macro failed.
		19	SEND routine received buffer with invalid QLLC FID type.
		1A	SEND routine received buffer with invalid QLLC LUSTAT request index.
217	D9		VTAM RECEIVE macro completed in error. These errors generally require a trace to determine the cause.
		01	RECEIVE SPEC SYN failed when issued.
		02	RECEIVE SPEC ASY failed when issued.
		03	RECEIVE SPEC completed with error.
		04	RECEIVE TRUNC failed when issued.
			DIAGX= entries 05 - 0B **(new for V2R4M0)**
		05	RECEIVE routine entered, receive RPL already busy.
		06	RECEIVE routine entered with invalid LUHNFREQ (normal flow request) value.
		07	RECEIVE routine entered, required buffer not allocated.
		08	RECEIVE completion routine entered, receive RPL flags do not indicate reason.
		09	RECEIVE completion routine entered, LUHNFREQ indicates command still active.

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
		0A	RECEIVE completion routine entered, RPL does not indicate command that was ended.
		0B	RECEIVE response completion routine entered, RPL does not indicate command response was for.
218	DA		Received TPEND from PLU. This can occur when the Application Major Node is terminated or the LU is deactivated.
219	DB		HNAS received a negative response to a PIU sent to the PLU. After APAR 2400031 (Mar 29, 2007), a -RSP causes a NAS3711W alert to be issued. The alert provides the PLU's sense data which indicates the reason for the -RSP.
220	DC		VTAM SEND response completed in error.
		01	SEND failed when issued.
		02	SEND completed with error.
		03	SESSIONC (+R SDT) failed when issued.
		04	SESSIONC (+R STSN) failed when issued.
221	DD		Timeout. CTCP did not UNBIND after receiving clear. (2300085)
222	DE		Second clear received from router for VC. (2300085)
223	DF		HNAS Datafono Clears (VCCDDTF). (230.c/240)
		01	Unexpected message received from remote. (VCDAT)
		02	Invalid (non-datafono) message received from remote.
		03	Invalid state for remote's R(3). (see Datafono Message Types, above)
		04	Invalid state for remote's D(9).
		05	Invalid state for remote's D(6).
		06	Unexpected Clear received from remote. (VCCLR)
		07	Wait for non-M message timer expired IMS queue flush). (MCHTMR)
		08	'M' message sync response not received from remote. (MCHTMR)
		09	PLU sent data to pseudo leased LU with no VC session.(MCHHL0RQ)

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
224	E0		OSI network service problem.
225	E1		Disconnect (transient problem).
226	E2		Disconnect (permanent problem).
227	E3		Connect reject, HNAS inactive or no TCP/IP session (transient problem).
228	E4		Connect reject, no reason (permanent problem).
229	E5		Connect reject, QOS unavailable (transient).
230	E6		Connect reject, QOS unavailable (permanent).
231	E7		Connect reject, NSAP unreachable (transient).
232	E8		Connect reject, NSAP unreachable (permanent).
235	EB		Connect reject, NSAP unknown (permanent problem).
238	EE		Class of Service could not be determined or Control Unit out of Service
240	F0		Higher level initiated.
241	F1		Disconnect, normal. We have observed this 'Invalid Subaddress' Clear code condition when a remote X.25 switch is unable to route a call from the remote DTE to the Public Network because the subaddress filter (sometimes up to 4 digits) does not match the incoming address digits.
242	F2		Disconnect, abnormal This diagnostic code is used to signal an internal Clear generated by the TCPIP interface when a socket connection has been lost. This HNAS internal Clear code is normally associated with NAS2210I SOCKET CLOSED and a NAS2401W RECEIVE REQUEST FAILED (ERNO=36) messages.
243	F3		Disconnect, incompatible CUD.
244	F4		Connect reject, no reason (transient problem).
245	F5		Connect reject, no reason (permanent problem).
246	F6		Connect reject, QOS unavailable (transient).
247	F7		Connect reject, QOS unavailable (permanent).

Host NAS Clear Cause and Diagnostic Codes

Dec	Hex	<- Hex	<- Clear Diagnostic Reason Codes (Dec/Hex) <- Extended Event Reason Codes [**DIAGX**] (Hex) (**new for V2R3M0**)
248	F8		Connect reject, incompatible CUD.
249	F9		Connect reject, protocol ID unrecognizable.
255	FF		Invitation to Clear received (LLC5). HNAS uses this internal clear code to identify that the Clear was caused by an Invitation-to-Clear.
		FFnn	Special E**x**tended Event Reason Codes (FFnn codes not associated with HNAS Clear Diagnostic code)
		FF00	Gate - Clear Diagnostic generated from the ctcp **data** session
		FF01	Gate - Clear Diagnostic generated from the ctcp **control** session

Cisco Messages

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Cisco Message Associations

The HNAS and Cisco X.25 XOT products provide an extensive variety of messages designed to convey operational events and alerts as they are encountered. This documentation section is being developed in an effort to provide a direct correlation between some of the Cisco Debug and Log messages and the HNAS events.

The Cisco Debug Command Reference documentation (along with the Internetwork Troubleshooting Guide) are invaluable debugging tools for use in researching router IOS system and debug message activity. We suggest that you consult these guide's for a complete description of status or error messages generated by Cisco in XOT environments.

Cisco Message Identifier Layout

The Cisco debug or log messages identified in this section have the following basic format:

<prefix> timestamp Identifier (service timestamps debug or log timestamp type)

<component> TCP/IP addresses, interface addresses, etc.

<description> debug or log text description

Please refer to the appropriate Cisco Systems documentation for a complete description of their debug and log messages formats.

Cisco Messages - HNAS Event Relationships

Following is a partial list of Cisco Debug or Log text messages (message prefix and component identifiers intentionally omitted) with a description of what HNAS process or event might have caused the condition. The message prefix and component identifier information isn't required in this discussion so the text was intentionally omitted to improve readability.

`Unknown PVC status`

`(added for V2R3M0)`

Occurs in Cisco debug messages when HNAS responds to a Cisco PVC Setup request with vendor specific status codes that are not defined in the Cisco specific debug codes.

Please refer to the **PVC STATUS=*value*** provided in various HNAS XOT Alert messages for a description of the PVC Setup status condition.

Wrong host for PVC

(added for V2R3M0)

Occurs when there is a mismatch between the ipaddr of the HNAS XOT host where the PVC Setup originated from (socket opened) and the ipaddr defined on the respective serial interface PVC string of the router ios configuration.

Refer to heading **Cisco %X25-n-type Messages** under item **%X25-4-XOTHOSTWRONG** in this chapter and the Cisco X.25 Error Messages section under entry **%X25-4-XOTHOST-WRONG** for additional information.

XOT cx closed

(added in V2R2M0)

This message can occur when an X.25 Call Request arrives with a valid 'x25 route' table entry for an XOT Host (HNAS) where there are no more host stack sockets available for inbound XOT connections. This is a very unusual condition because HNAS defaults to a SOCLMT=2000 count which typically exceeds the number of potential simultaneous XOT connections supported by users. HNAS isn't currently aware of this condition because the XOT Call Request packet doesn't make it past the host stack into HNAS so the XOT cx closed condition occurs instead of a HNAS XOT Clear Request when no stack sockets are available. The router generates and sends an X.25 Clear Request with Cause 0, Diag 0 across the serial interface where the call originated from.

This message can also occur when the router issues a close on an established XOT TCP/IP session. This condition can occur when the router keep-alive timer expires because the TCP/IP network connection between the router and the XOT host is inoperative. The host XOT TCP/IP session may not be aware of the router close condition so TCP/IP keepalive's or HNAS TAP=nn options should be enabled to ensure that the host XOT application sessions are aware of the router close condition. The close condition deactivates the routers XOT VC as well as sending a Clear Request to the serial X.25 VC network session.

Cisco global parameters 'service tcp-keepalives-in' and 'service tcp-keepalives-out' are used to enable the router keepalive support. The host stack keepalive option is located in the TCPIP PROFILE (refer to parameter 'TCPCONFIG INTERVAL xxx' or the older 'KEEPALIVEOPTIONS' statement). The HNAS TAP=nn (XOT<->XOT protocol level TAP keepalive) is provided on the TYPE=XOT REMOTE in the configuration data file.

XOT open failed (Connection refused by remote host)

(added for V2R2M0)

This message typically occurs when an inbound XOT Call Request or PVC Setup requested is sent to a host without XOT services enabled (HNAS not active).

For SVCs this condition occurs when an X.25 Call Request arrives with a valid 'x25 route' table entry for an XOT Host (HNAS) that isn't active. Note that if the Call Request packet

doesn't make it through the 'x25 route' filter than a Clear request with Cause 0, Diag 64 (DTE originated Call or Clear problem) is normally returned to the originator of the call.

For PVCs this condition occurs when the router attempts to open a socket (issue a PVC set-up packet sequence to condition the PVC for data) and the destination XOT service (HNAS in this case) isn't active.

This condition can also occur if the SYS1.PARMLIB file BPXPRMxx MAXSOCKETS and MAXFILEPROC parameters are set too low. Please refer to the TCP/IP Profile Considerations section in Chapter2 of the HNAS Guide and Reference for additional information.

XOT open failed (Connection timed out; remote host not responding)

(added for V2R2M0)

This message is generated by the router when an X.25 Call Request arrives with a valid 'x25 route' table entry for an XOT Host (HNAS) that has open sockets but no HNAS services are active or something is preventing TCP/IP session setup attempts to complete (request being ignored, timing out). There a number of causes for this message:

1) Ensure that HNAS is started, utilizing the correct LOCAL IP and PORT address.

2) Ensure that there are not any firewall's enabled between the remote router and HNAS where the TCPIP addresses or ports are being blocked.

3) Ensure that there are adequate Host TCP/IP resources defined. We have observed this condition when the SYS1.PARMLIB file BPXPRMxx MAXSOCKETS and MAXFILEPROC parameters are set too low. Please refer to the TCP/IP Profile Considerations section in Chapter2 of the HNAS Guide and Reference for additional information.

XOT receive error, End of data transfer

(added for V2R2M0)

Occurs when HNAS is abruptly halted (not shutdown gracefully). The router generates this message for each active (connected) XOT session with HNAS.

XOT vc timeout

(added for V2R2M0)

This message occurs after a TCP socket has been established with the router and no data (typically an XOT Call or Clear request) is received by the router with-in 200 seconds.

We have observed these messages in the past when HNAS TAP=(>200) logic is enabled and when the Cisco 'service tcp-keepalives-in' or 'service tcp-keepalives-out' feature is omitted from the router configuration. Please contact your HNAS support representative should you encounter this messages.

Cisco %X25-*n-type* Messages

Following is a partial list Cisco %X25-*n-type* debug messages. While information is provided in this section, please refer to the Cisco X.25 Error Messages documentation.

%X25-4-XOTHOSTWRONG

(added V2R4M0)

Occurs when there is a mismatch between the ipaddr of the HNAS XOT host where the PVC Setup originated from (socket opened) and the ipaddr defined on the respective serial interface PVC string of the router ios configuration.

Refer to heading **Cisco Messages - HNAS Event Relationships** under item **Wrong host for PVC** in this chapter and the Cisco X.25 Error Messages section under entry **%X25-4-XOTHOSTWRONG** for additional information.

%X25-7-DIAGEVENT
%X25-7-DIAGRX

(added V2R4M0)

Occurs when an X25 diagnostic packet in encountered on the routers serial interface. Further investigation via router 'debug x25 ...' for the respective serial interface is required to determine the cause of the problem.

Cisco Diagnostics - Debug and Show Samples

Please refer to the Cisco Router Diagnostics section in Appendix C of the HNAS Guide and Reference for some sample debug and show displays, and general debugging tips.

System (Host) Abend Codes

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System Abend Codes

When the operating system detects a program exception that is forced (see U0198 NASHALT below) or which occurs due to other factors, an ABEND of HNAS will result. All HNAS ABENDs indicate that a serious problem has occurred. Those that HNAS detects by itself result in a U0198 NASHALT ABEND.

Contact your HNAS support representative if:

1) you are unable to locate an APAR with corrective logic (PTF) or an Open Problem Log entry (pre APAR circumvention) addressing the ABEND condition or

2) are unable to resolve the problem with the recommendation provided here.

System Completion Abend Codes

The following is a partial list of the System Abend Codes. Please refer to your host system documentation for additional codes and information, as required:

ABEND=0000 U0198
SYSTEM COMPLETION CODE=000 USER 198 ABEND CODE

(added for V2R4M0)

This ABEND can occur when HNAS detects a potentially serious program or data validity check. Program validation errors messages are produced and displayed in the job log and SYSPRINT prior to the ABEND call in an effort to ease the debugging and error reporting process.

Please refer to section '**ABENDs, Troubleshooting, Problem Determination**' in **Chapter 2** (Installation, Activation and Runtime Procedures) of the HNAS Guide and Reference publication for additional information regarding HNAS Halt processing.

Please also refer to section '**HNAS Halt Messages**' in the **Messages and Codes Guide** for additional information regarding HNAS Halt processing.

If you receive this ABEND and cannot locate an APAR or PTF that corrects the problem, contact your HNAS support representative for assistance.

ABEND=S0Cx U0000 REASON=0000yyyy
SYSTEM COMPLETION CODE=0Cx REASON CODE=0000yyyy

(added for V2R4M0)

This ABEND indicates a serious logic problem within HNAS most likely the result of a blown register.

If you receive this ABEND and cannot locate an APAR or PTF that addresses the problem, contact your HNAS support representative for assistance.

```
ABEND=S878 REASON=00000010
IEA705I ERROR DURING GETMAIN SYS CODE = 878-10 HNASXEQ HNASXEQ 00
IEA705I 00FADE80 00AF1540 00AF1540 00005200 00003E88
```

or

```
ABEND=S80A REASON=00000010
IEA705I ERROR DURING GETMAIN SYS CODE = 80A-10 HNASXEQ HNASXEQ 00
IEA705I 00FADE80 00AF1540 00AF1540 00E61200 00005000
```

(added for V2R4M0)

This ABEND can occur when not enough virtual private area storage to satisfy HNAS control block allocation requests or to load the EZASMI macro service routine (EZASOH03).

SOLUTION: Ensure that enough virtual private memory is available for HNAS execution. Try specifying APFMEMSP=(229,230) in HNAS PARM= string.

```
ABEND=SEC6 U0000 REASON=0000FD1D
SYSTEM COMPLETION CODE=EC6  REASON CODE=0000FD1D
```

(added for V2R4M0)

This ABEND can occur when the TIME= parameter in the HNAS start JCL (JOBCARD or EXEC PGM=HNAS statement) or the MAXCPUTIME parameter in the BPXPRM*xx* member located in SYS1.PARMLIB is not set to it's maximum value. When HNAS has consumed the amount of execution time as specified or defaulted to by these parameters, the SEC6 ABEND will occur. Note that HNAS may actually have been running for days or weeks before this ABEND occurs. It is the CPU execution time and not the real time that determines whether the ABEND will occur.

SOLUTION: Set TIME=NOLIMIT|1440 in the HNAS start JCL or set MAXCPUTIME=86400 in the BPXPRMxx member located in SYS1.PARMLIB. Setting MAXCPUTIME=86400 disables the timer for all UNIX processes while setting TIME=NOLIMIT|1440 affects only the HNAS process.

HNAS Halt (Abend) Messages

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HNAS Halt Messages

When HNAS detects program exception or severe data validation exception the program will terminate with a user 198 ABEND code. Program validation errors messages are produced and displayed in the job log and SYSPRINT prior to the abend call in an effort to ease the debugging and error reporting process.

Please refer to section '**ABENDs, Troubleshooting, Problem Determination**' in **Chapter 2** (Installation, Activation and Runtime Procedures) of the HNAS Guide and Reference publication for additional information regarding HNAS Halt processing. The **System Abend Codes** section in this book (**Messages and Codes**) also contains an overview of the **`ABEND=0000 U0198`** conditions.

HNAS Halt Message Identifier Layout

The HNAS Halt messages identified in this section have the following basic format:

HALT AT LOC *xxxxxxxx* IN ***yyyyyyyy***: '*text*'

Where **HALT AT LOC** is the message heading,

Where ***xxxxxxxx*** is the storage location where the halt was initiated,

Where ***yyyyyyyy*** is the routine name and,

Where **'*text*'** is an error message describing the error (for example '**INV LU**').

HNAS Halt Messages

Following is a partial list of the HNAS Halt Messages:

`HALT AT LOC xxxxxxxx IN MCHHRQ: BIND TO ACTIVE LU`

`(updated in V2R4M0/added for V2R3M0)`

This message can occur when HNAS receives a BIND to an already active session. The error indicates a state mismatch between the PLU and HNAS's SLU.

Contact your HNAS support representative if you are unable to locate an APAR with corrective logic (PTF) addressing this issue.

HALT AT LOC xxxxxxxx IN NASCNFG: CNFGALOC ABEND

(updated V2R4M0/added for V2R3M0)

This message is issued when HNAS is starting and is unable to allocate the required system memory for the **configuration area** to support the resources identified in the configuration data file (CDF). This can occur when extensive changes are made to the CDF and insufficient memory is available.

We suggest that anytime configuration changes are made the increases resource requirement that you first execute HNAS with the FASTRUN option to determine the memory requirements and adjust the REGION=size value appropriately.

When high memory subpools are used for HNAS memory allocation, HNAS can generate an 0198 ABEND (NASHALT) when virtual storage is unavailable due to subpool coding errors in the APFMEMSP= start parameter.

Contact your HNAS support representative if 1) you are unable to locate an APAR with corrective logic (PTF) addressing this condition or 2) are unable to resolve the problem with the recommendation provided here.

HALT AT LOC xxxxxxxx IN NASMAIN: GETMAIN FAILURE

(updated V2R4M0/added for V2R3M0)

This message is issued when HNAS is starting and is unable to allocate the required system memory for the **HNAS buffer pool and dynamic PCE area** to support the resources identified in the configuration data file (CDF). This can occur when extensive changes are made to the CDF and insufficient memory is available.

We suggest that anytime configuration changes are made the increases resource requirement that you first execute HNAS with the FASTRUN option to determine the memory requirements and adjust the REGION=size value appropriately.

When high memory subpools are used for HNAS memory allocation, HNAS can generate an 0198 ABEND (NASHALT) when virtual storage is unavailable due to subpool coding errors in the APFMEMSP= start parameter.

Contact your HNAS support representative if 1) you are unable to locate an APAR with corrective logic (PTF) addressing this condition or 2) are unable to resolve the problem with the recommendation provided here.

HALT AT LOC xxxxxxxx IN MCHGETMI: GETMAIN UNABLE TO ALLOCATE VC/LU STORAGE

(updated V2R4M0/added for V2R3M0)

This message can occur when HNAS is starting and is unable to allocate the required system memory for the **MCH, VC and LU** areas to support the resources identified in the configura-

tion data file (CDF) for a successful activation. This can occur when extensive changes are made to the CDF and insufficient memory is available.

We suggest that anytime configuration changes are made the increases resource requirement that you first execute HNAS with the FASTRUN option to determine the memory requirements and adjust the REGION=size value appropriately.

When high memory subpools are used for HNAS memory allocation, HNAS can generate an 0198 ABEND (NASHALT) when virtual storage is unavailable due to subpool coding errors in the APFMEMSP= start parameter.

Contact your HNAS support representative if 1) you are unable to locate an APAR with corrective logic (PTF) addressing this condition or 2) are unable to resolve the problem with the recommendation provided here.

HALT AT LOC xxxxxxxx IN NAS920nS: HNAS AUTHORIZATION FILE...,

HALT AT LOC xxxxxxxx IN NAS9203S:
HNAS AUTHORIZATION FILE IS INVALID...,

(added for V2R3M0)

This message occurs when the HNAS Authorization file doesn't match the distribution is was generated for. This condition primarily occurs when a HNAS refresh or upgrade product is installed and execution is attempted under the new LOAD Module without first changing the JCL NASAUTH statement to point at the new library name. Review the JCL and correct as necessary.

Please refer to other **NAS920nS** message types in the HNAS Messages and Codes guide under the Alert Messages section for information concerning other Authorization failure codes and conditions.

Contact your HNAS support representative if you are unable to correct the conditions identified above.

HALT AT LOC xxxxxxxx IN VCRCLRC: INV LU-2

(added for V2R3M0)

This message can occur when a serious state mismatch occurs for a VC control block.

Contact your HNAS support representative if you are unable to locate an APAR with corrective logic (PTF) addressing this issue.

HNAS Console Command Response Error Messages

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Console Command Error Messages

The HNAS console subsystem produces diagnostic error messages during processing of some console commands. The message identifier for each message begins with the string “NASC”. The error messages are generated for the local SYSCONS (master operator console) as well as remote consoles. All messages have the following basic format:

NAS	*cdrms*		Description
NAS			**is the Host NAS console message identifier.**
	c		**is a component identifier.**
		C	indicates a console related message.
	d		**is a definition statement identifier.**
		0	indicates a problem unrelated to the type of resource.
		1	indicates a problem while processing a BUILD resource.
		2	indicates a problem while processing a LOCAL resource.
		3	indicates a problem while processing a REMOTE resource.
		4	indicates a problem while processing an SLU resource.
		5	indicates a problem while processing a command argument.
	r		**is a reason code.**
		0	indicates that an operand value was omitted.
		1	indicates that an operand value was invalid or in conflict.
		2	indicates that an operand value was in error.
		>2	indicates a miscellaneous error or informational message.
	m		**is a message number.**
	s		**is a severity code.**
		I	indicates information only.
		D	indicates a default action was taken.
		W	indicates a warning.
		E	indicates an error.

HNAS console error messages maintain the same format as HNAS configuration and alert messages. However, unlike HNAS configuration and alert messages, console error mes-

sages will not affect HNAS operation. Console error messages are generated solely to indicate why a command cannot be completely or partially executed.

NASC002E *cmdname* COMMAND REJECTED, PRIVILEGED

EXPLANATION:

The ***cmdname*** console command cannot be executed because it is a privileged command and the remote console operator does not have privileged status.

OPERATOR ACTION:

Logoff (Quit) the remote console session then logon again entering the console password *backwards* to obtain privileged status.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC003E DECODE FAILURE: *badcmd...*, RE-ENTER

EXPLANATION:

The console command ***badcmd*** contains a spelling or syntax error. This can also occur if a non-printable character was inadvertently entered.

OPERATOR ACTION:

Correct the error then re-enter the command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

Note: Many commands accept a resource name following the command. For example, DRMT *rmtname* SVC0. If *rmtname* is spelled incorrectly or if it is not defined in CDF on a REMOTE definition statement, the command may be rejected for the lack of a valid RNM= or ID= modifier which will cause the *rmtname* to be processed as the *badcmd*. This is because commands that are rejected for a missing or erroneous LUNM=, LNM= RNM=, or ID= modifier, return control to the console input parser which will continue processing the current input record from the end of the rejected command. In the example above, this would be after DRMT which means that *rmtname* would be processed as if it were a new command resulting in the NASC003E message above.

NASC005W *cmdname* ABORTED DUE TO OPERATOR INPUT

(new for V2R4M0)

EXPLANATION:

During the execution of the console command ***cmdname***, input was entered that terminated the current command. Input entered during any command is interpreted as an attention signal that pre-empts the current command thus allowing a new command to be executed.

OPERATOR ACTION:

None.

SYSTEM ACTION:

The input is processed as a new command.

NASC006W *cmdlist* COMMAND LIST INTERRUPTED

(new for V2R4M0)

EXPLANATION:

During the execution of the console command list ***cmdlist*** (e.g. **EXEC *ddname***), input was entered that terminated the current command within the *cmdlist*. Input entered during any command is interpreted as an attention signal that pre-empts the current command thus allowing a new command to be executed.

OPERATOR ACTION:

None.

SYSTEM ACTION:

The input is processed as a new command which interrupts but does not abort the current *cmdlist*.

NASC013E UNSUPPORTED FUNCTION, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***cmdname*** console command requested an operation that could not be performed or is not supported.

OPERATOR ACTION:

Correct the error then re-enter the command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC014E FUNCTION ALREADY ACTIVE, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***cmdname*** console command requested an operation that is supposed to activate a component but the component was already active when the command was issued.

OPERATOR ACTION:

None. The request is ignored.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC015E FUNCTION ALREADY INACTIVE, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***cmdname*** console command requested an operation that is supposed to deactivate a component but the component was already inactive when the command was issued.

OPERATOR ACTION:

None. The request is ignored.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC020W RESOURCE BUSY, RETRY *cmdname* COMMAND LATER

EXPLANATION:

The ***cmdname*** console command was issued by two (2) different console operators and both reference the same resource (e.g., **MRMT *mchname* LUNAME=*sluname*/...**). Only one ***cmdname*** command at a time is allowed to operate on a resource (first come, first served).

OPERATOR ACTION:

Wait a moment then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC021W RESOURCE UNAVAILABLE, RETRY *cmdname* COMMAND LATER

EXPLANATION:

The ***cmdname*** console command requires a resource such as a buffer or TCP/IP PCE for its execution (e.g., **PING *ipaddr***) but none were available.

OPERATOR ACTION:

Wait a moment then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC022W RESOURCE ONLINE, VARY OFFLINE THEN RETRY *cmdname* COMMAND

(new for V2R4M0)

EXPLANATION:

The ***cmdname*** console command requires a resource such as TYPE=XOT REMOTE to be offline for its execution (e.g., **MRMT *rmtname* IPADDR=*ipaddr***) but the REMOTE was currently online.

OPERATOR ACTION:

Issue the **VARY *rmtname* FORCE** command to force the REMOTE offline then retry the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC023W RESOURCE OFFLINE, VARY ONLINE THEN RETRY *cmdname* COMMAND

(new for V2R4M0)

EXPLANATION:

The ***cmdname*** console command requires a resource such as TYPE=XOT REMOTE to be online for its execution but the REMOTE was currently offline.

OPERATOR ACTION:

Issue the **VARY *rmtname* ON** command to force the REMOTE online then retry the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC030E *opname opval* HAS INVALID FORMAT, *cmdname* COMMAND ABORTED

(apar/new for V2R4M0)

EXPLANATION:

The ***cmdname*** console command specified an operand ***opname*** whose value ***opval*** has an invalid format or is inconsistent for the ***opname*** operand. For example, if **MRMT *rmtname* LOGTAB=ISTINCDT** is entered, this message will be issued because ISTINCDT is a standard USSTAB not a LOGATB.

OPERATOR ACTION:

Re-enter the ***cmdname*** command with a valid ***opval*** for the ***opname***.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC031E *opname opval* IS CURRENTLY IN USE, RETRY *cmdname* COMMAND LATER

(apar/new for V2R4M0)

EXPLANATION:

The ***cmdname*** console command specified an operand ***opname*** whose value ***opval*** is currently being used so it cannot be changed or update. For example, if **MRMT *rmtname* USSTAB=ISTINCDT-R** is entered to force ISTINCDT to be reloaded, this message

will be if a USSMSG within ISTINCDT is currently being transmitted. The USSTAB cannot be reloaded if a USSMSG transmission is in progress because this could cause an addressing exception ABEND if establish USSMSG addresses are changed during the transmission.

OPERATOR ACTION:

Wait a moment then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC050E EXEC *ddname* INVALID, CANNOT POINT AT ITSELF, EXEC COMMAND ABORTED

(new for V2R4M0)

EXPLANATION:

The ***ddname*** specified for the EXEC console command identifies a file that contains the same **EXEC *ddname*** specification. This would create an infinite command loop which is not permitted.

OPERATOR ACTION:

Remove the **EXEC *ddname*** statement from the specified file then re-enter the command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC051E *cmdname ddname* INVALID, CANNOT BE OPENED, *cmdname* COMMAND ABORTED

(new for V2R4M0)

EXPLANATION:

The ***ddname*** specified for the ***cmdname*** console command (EXEC or ECHEDULE) identifies a DDNAME that does not exist in the HNAS start JCL which prevents the associated DCB from being opened. This is most likely due to a spelling error.

OPERATOR ACTION:

Enter a valid ***ddname*** that exists in the HNAS start JCL for the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

Note: This connsole warning message was changed after the initial 240 release by APAR 2400064.

NASC052W EXEC COMMAND LIST WAS NOT PROVIDED, EXEC COMMAND ABORTED

(apar/new for V2R4M0)

EXPLANATION:

The ***ddname*** was omitted for the EXEC LIST console command which means there is no command list to display.

OPERATOR ACTION:

Enter a valid ***ddname*** that exists in the HNAS start JCL for the EXEC LIST command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

Note: This connsole warning message was changed after the initial 240 release by APAR 2400064.

NASC053E EXEC *ddname* FILE IS NULL, EXEC COMMAND ABORTED

(apar/new for V2R4M0)

EXPLANATION:

A ***ddname*** was specified for the EXEC console command but the referenced command list file is empty (contains no commands or display comments (# text) but may contain non-display comments ('* text')).

OPERATOR ACTION:

Enter a valid ***ddname*** that identifies a non-empty command list file for the EXEC command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC054E ***cmdname ddname*** **COMMAND QUEUE LIMIT** ***count/limit*** **EXCEEDED,** ***cmdname*** **COMMAND ABORTED**

(new for V2R4M0)

EXPLANATION:

The ***ddname*** specified for the ***cmdname*** console command (EXEC or ECHEDULE) identifies a file that contains more command data than can be queued for execution. Currently ***limit*** is set to 512 bytes. ***count*** is the number of bytes that is required to hold the ***cmdname*** file data.

For the **EXEC** command, assume ***ddname*** identifies a file containing the following statements:

```
DNAS APAR                       <- 9 characters
DPCE TYPE=CONS                  <- 14 characters
DVC                             <- 3 characters
```

For this file, the internal console command queue would look as follows:

```
001D                            <- 29 total bytes
09                              <- first command length
C4D5C1E240C1D7C1D9              <- DNAS APAR
0E                              <- second command length
C4D7C3C540E3E8D7C57EC3D6D5E2    <- DPCE TYPE=CONS
03                              <- third command length
C4E5C3                          <- DVC
```

For the **SCHEDULE** command, assume ***ddname*** identifies a file containing the following statements:

```
(12:00:00,ALARM LOG=?)          <- time=6, command=11 characters
(06:00:00,TRCPCE ALLON)         <- time=6, command=12 characters
(07:00:00,TRCPCE ALLOFF)        <- time=6, command=13 characters
```

For this file, the internal console command queue would look as follows:

```
0039                            <- 57 total bytes
120000120005                    <- first command time
0B                              <- first command length
C1D3C1D9D440D3D6C77E6F          <- ALARM LOG=?
060000060005                    <- second command time
0C                              <- second command length
E3D9C3D7C3C540C1D3D3D6D5        <- TRCPCE ALLON
070000070005                    <- third command time
0D                              <- third command length
E3D9C3D7C3C540C1D3D3D6C6C6      <- TRCPCE ALLOFF
```

OPERATOR ACTION:

The ***cmdname*** command list cannot be executed. Reduce the number of commands in the command list file then re-enter the command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

Note: This connsole warning message was changed after the initial 240 release by APAR 2400064.

NASC055I *cmdname ddname* COMMAND LIST HAS BEEN PROCESSED, IT WILL NOW BE *action*

(new for V2R4M0)

EXPLANATION:

The ***ddname*** specified for the ***cmdname*** console command (EXEC or ECHEDULE) identifies a valid command list file. The file has been read and the specified ***action*** (EXECUTED or LISTED) will be taken.

OPERATOR ACTION:

None.

SYSTEM ACTION:

The ***cmdname*** command list will now run.

Note: This connsole warning message was changed after the initial 240 release by APAR 2400064.

NASC090E NEWDEFN ARRAY IS FULL, MAXIMUM RECORD COUNT OF *ddddd* HAS BEEN REACHED

EXPLANATION:

The console command (e.g., **MLCL** or **MRMT**) attempted to update the NEWDEFN array because of an addition to a LOCAL or REMOTE operand but no available NEWDEFN records were available. HNAS allocates the NEWDEFN array after the CDF is scanned based on the number of records in the CDF. Currently, the NEWDEFN record count is fixed at 3 times the number of records in the CDF (***ddddd***).

OPERATOR ACTION:

None. Contact Comm-Pro for assistance.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC091E NEWDEFN ARRAY LOOKUP FAILED, PARMLIST FOLLOWS
REMOTE *rmtname opname xx...xx*

EXPLANATION:

The console command (e.g., **MLCL** or **MRMT**) attempted to update the NEWDEFN array because of an addition, deletion or change to a LOCAL or REMOTE operand but the NEWDEFN update routine could not resolve the operand in the CDF. This is a severe error.

OPERATOR ACTION:

None. Contact Comm-Pro for assistance.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC092E SEARCH LIST OMITTED, REQUIRED FOR *cmdname* EXECUTION

EXPLANATION:

The ***cmdname*** console command (e.g., **DNWDF**) requires a search list but none was generated during configuration processing.

OPERATOR ACTION:

The ***cmdname*** command cannot be executed.

For DNWDF processing, stop then restart HNAS with GENNWDF specified as a start parameter and //NEWDEFN as a DDNAME.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC093E SEARCH ARGUMENT NOT FOUND, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***cmdname*** console command processor was given a lookup argument (e.g., **DNAS APAR *aparid***) but the argument could not be found.

OPERATOR ACTION:

Enter a valid search argument then retry the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC100E ID= OMITTED, REQUIRED FOR *cmdname* EXECUTION

(added for V2R3M0)

EXPLANATION:

The ***cmdname*** console command (e.g., **TRCLU**) requires the LUNM=, RNM= or ID= modifier but all were omitted. The ID= modifier is only used for TRCLU when LUNM= and RNM= are not set. If ID= is also omitted, the command cannot be executed.

OPERATOR ACTION:

Supply a valid LUNM=, RNM=, LNM= or ID= value (as appropriate) then re-enter the ***cmdname*** command.

Note: For most commands, ID= omitted and ID=0 are treated identically. Exceptions are for TRCLUQ, TRCMCH, TRCPCE, TRCVC, TRCVCQ, VARY RMT and MON TAP where an ID= value must be supplied when RNM= is omitted, for TRCLU and TRCMCHX where an ID= value must be supplied when RNM= and LUNM= are omitted and for VARY LCL where an ID= value must be supplied when LNM= is omitted.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC100E ID= AND OTHER MODIFIERS OMITTED, REQUIRED FOR *cmdname* EXECUTION
NASC100E ID= IS REQUIRED WHEN NO OTHER RESOURCE IDENTIFICATION IS SPECIFIED
NASC100E IF COMMAND OPERATES ON LNM=, RNM= OR LUNM=, ENSURE THAT RESOURCE NAME
NASC100E IS SPECIFIED BEFORE ANY COMMAND OPERANDS (EXAMPLE: V LUNM=*sluname* OFF)

(apar/change for V2R4M0)

EXPLANATION:

The ***cmdname*** console command (e.g., **VARY**) requires the LUNM=, RNM=, LNM= or ID= modifier but all were omitted. The ID= modifier is only used for VARY when LUNM=, RNM= and LNM= are not set. If ID= is also omitted, the command cannot be executed.

OPERATOR ACTION:

Supply a valid LUNM=, RNM=, LNM= or ID= value (as appropriate) then re-enter the ***cmdname*** command.

Note: For most commands, ID= omitted and ID=0 are treated identically. Exceptions are for TRCLUQ, TRCMCH, TRCPCE, TRCVC, TRCVCQ, VARY RMT and MON TAP where an ID= value must be supplied when RNM= is omitted, for TRCLU and TRCMCHX where an ID= value must be supplied when RNM= and LUNM= are omitted and for VARY LCL where an ID= value must be supplied when LNM= is omitted.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC110E ID=*lo-hi* INVALID, *cmdname* COMMAND ABORTED

(added for V2R4M0)

EXPLANATION:

The ***cmdname*** console command requires an ID= value but the specified value is not valid because is exceeds the maximum configured PCEID value or the given *lo-hi* range identifies PCEs that are invalid for the given command.

OPERATOR ACTION:

Supply a valid ID= value then re-enter the ***cmdname*** command.

Note: For most commands, ID= omitted and ID=0 are treated identically. Exceptions are for TRCLUQ, TRCMCH, TRCPCE, TRCVC, TRCVCQ, VARY RMT and MON TAP where an ID= value must be supplied when RNM= is omitted, for TRCLU and TRCMCHX where an ID= value must be supplied when RNM= and LUNM= are omitted and for VARY LCL where an ID= value must be supplied when LNM= is omitted.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC121E DDNAME *ddname* CANNOT BE OPENED, CHECK HNAS START JCL

EXPLANATION:

The TRCTRAP console command processor was given a TRAPACTION argument of **EXEC=*ddname*** but the specified ***ddname*** could not be opened.

OPERATOR ACTION:

Enter a valid ***ddname*** that exists in the HNAS start JCL for the EXEC command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC200E LNM= OMITTED, REQUIRED FOR *cmdname* EXECUTION

EXPLANATION:

A LOCAL definition statement name is required for the ***cmdname*** console command (e.g., **MLCL**) but none was not provided.

OPERATOR ACTION:

Supply a valid LOCAL definition statement name using the LNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC204E *ddname* ABEND PARMLIST=*xxxxxxxx ... xxxxxxxx*

(new for V2R4M0)

EXPLANATION:

The ***ddname*** specified for the EXEC console command or TRAPACTION=EXEC= operand identifies a file that cannot be read. For example, it points at a member of a partitioned dataset that does not exist. The PARMLIST value provides the ABEND code and reason.

OPERATOR ACTION:

The EXEC command list cannot be executed. Correct the error then re-enter the command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC210E LNM=*lclname* INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***lclname*** specified for the LNM= modifier for the ***cmdname*** console command does not identify a LOCAL definition statement. This is most likely due to a spelling error.

OPERATOR ACTION:

Supply a valid LOCAL definition statement name using the LNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC211E LNM=*lclname* TYPE=*type* INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

A valid LOCAL definition statement name was provided for the ***cmdname*** console command (e.g., **MLCL**) but it identifies a LOCAL having the wrong ***type*** (e.g., TYPE=XTP when TYPE=XOT is required).

OPERATOR ACTION:

Supply a LOCAL definition statement name having the correct ***type*** using the LNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC212E LNM=*lclname* CONFIG INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

A valid LOCAL definition statement name was provided for the ***cmdname*** console command (e.g., **MLCL**) but it identifies a LOCAL having a configuration error (e.g., RTE-OUT= operand is required but was not specified).

OPERATOR ACTION:

Supply a LOCAL definition statement name that has the correct configuration operands using the LNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC300E RNM= OMITTED, REQUIRED FOR *cmdname* EXECUTION

EXPLANATION:

A REMOTE definition statement name is required for the ***cmdname*** console command (e.g., **MRMT**) but none was not provided.

OPERATOR ACTION:

Supply a valid REMOTE definition statement name using the RNM= modifier then re-enter the ***cmdname*** command.

Note: Console commands that require RNM= have always been rejected with the NASC300E message. This message will now also be issued for a command that requires either RNM= or ID= and both are omitted. For example, MON TAP requires either RNM=*rmtname* or ID=*lo*[-*hi*] to be provided. If both RNM= and ID= are omitted (not initialized), the command will be rejected and the NASC300E message will be issued.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC310E RNM=*rmtname* INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***rmtname*** specified for the RNM= modifier for the ***cmdname*** console command does not identify a REMOTE definition statement. This is most likely due to a spelling error.

OPERATOR ACTION:

Supply a valid REMOTE definition statement name using the RNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC311E RNM=*rmtname* TYPE=*type* INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

A valid REMOTE definition statement name was provided for the ***cmdname*** console command (e.g., **MRMT**) but it identifies a REMOTE having the wrong ***type*** (e.g., TYPE=XTP when TYPE=MCH is required).

OPERATOR ACTION:

Supply a REMOTE definition statement name having the correct ***type*** using the RNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC312E RNM=*rmtname* CONFIG INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

A valid REMOTE definition statement name was provided for the ***cmdname*** console command (e.g., **MRMT**) but it identifies a REMOTE having a configuration error (e.g., SVC5= is operand required but was not specified).

OPERATOR ACTION:

Supply a REMOTE definition statement name that has the correct configuration operands using the RNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC313W REMOTE *rmtname* NOT FOUND, *cmdname* COMMAND ABORTED

EXPLANATION:

A valid REMOTE definition statement name was specified for an operand entry (LUNAME=, SVC0=, SVC3= or SVC5=) but the corresponding REMOTE definition statement named ***rmtname*** could not be found in the CDF.

OPERATOR ACTION:

Supply a REMOTE definition statement name that represents an MXT then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC313W REMOTE *rmtname* IS NOT TYPE=MXT, *cmdname* COMMAND ABORTED

EXPLANATION:

A valid REMOTE definition statement name was specified for an operand entry (LUNAME=, SVC0=, SVC3= or SVC5=) but the corresponding REMOTE definition statement named ***rmtname*** was not TYPE=MXT.

OPERATOR ACTION:

Supply a REMOTE definition statement name that represents an MXT then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC400E LUNM= OMITTED, REQUIRED FOR *cmdname* EXECUTION

EXPLANATION:

An LU name is required for the ***cmdname*** console command (e.g., **MRMT**) but one was not provided.

OPERATOR ACTION:

Supply a valid LU name using the LUNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC410E LUNM=*sluname* INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***sluname*** specified for the LUNM= modifier for the ***cmdname*** console command does not identify an LU resource. This is most likely due to a spelling error.

OPERATOR ACTION:

Supply a valid LU name using the LUNM= modifier then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC421E REMOTE SLU *sluname* IS NOT IDLE, MRMT COMMAND ABORTED

EXPLANATION:

An **MRMT** request to modify an operand entry (LUNAME=, SVC0=, SVC4= or SVC5=) of a TYPE=MCH|XTP|SPU REMOTE definition statement referenced an SLU named ***sluname*** that was active which precludes changing its configuration at the current time. The SLU must be inactive in order for it to be removed or renamed.

OPERATOR ACTION:

Force the SLU inactive using the VTAM **VARY NET,INACT,ID=*sluname*** command then retry the **MRMT** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC422E REMOTE SLU *sluname* ALREADY EXISTS, MRMT COMMAND ABORTED

EXPLANATION:

An **MRMT** request to add an operand entry (LUNAME=, SVC0=, SVC4= or SVC5=) of a TYPE=MCH|XTP|SPU REMOTE definition statement referenced an SLU named ***sluname*** that already exists and thus cannot be added again. The new SLU name must be unique.

OPERATOR ACTION:

Supply a unique SLU name then re-enter the **MRMT** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC423E REMOTE SLU *sluname* COULD NOT BE ALLOCATED, MRMT COMMAND ABORTED

EXPLANATION:

An **MRMT** request to add an operand entry (LUNAME=, SVC0=, SVC4= or SVC5=) of a TYPE=MCH|XTP|SPU REMOTE definition statement could not be satisfied because all SLUs in the LU Dynamic Reconfiguration Pool (LUDRPOOL) were already allocated.

OPERATOR ACTION:

None. The command cannot be executed.

Increase the number of free SLUs in the LUDRPOOL using the LUDRPOOLCNT= suboperand of the OPTIONS operand on the BUILD definition statement. This will require that HNAS be shutdown and restarted.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC500E DEFAULT PARAMETER OMITTED, REQUIRED FOR *cmdname* EXECUTION

EXPLANATION:

The ***cmdname*** console command (e.g., **PING**) requires default parameter value(s) when no arguments are specified but none were provided using the command modifiers.

OPERATOR ACTION:

Enter default values using the command modifiers or as arguments for the ***cmdname*** command then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC511E PARAMETERS CONFLICT, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***cmdname*** console command requested an operation that could not be performed based on the current resource configuration (e.g., **VARY *spuname* ACT** issued but OPTIONS=CLOTINITYP=NONE is in affect for the named SPU) or conflicting or mutually exclusive arguments were specified (e.g., **PRNT ON OFF**).

OPERATOR ACTION:

Ensure that the ***cmdname*** command is correct for the configuration (set OPTIONS=CLOTINITYP=CONSOLE using the MRMT command for the VARY command) and ensure that mutually exclusive arguments are not specified then retry the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC512E PARAMETERS DUPLICATED, *cmdname* COMMAND ABORTED

(new for V2R4M0)

EXPLANATION:

The ***cmdname*** console command argument has been specified more than once for the command (e.g., **PRNT ON ON**).

OPERATOR ACTION:

Re-enter the ***cmdname*** command with the correct arguments specified.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC513E PARAMETER LIMIT EXCEEDED, *cmdname* COMMAND ABORTED

(new for V2R4M0)

EXPLANATION:

The ***cmdname*** console command list argument has been specified that causes an array to reach it's limit which cannot be allowed (e.g., **PRNT SWITCH=(*ddnmlist*)**).

OPERATOR ACTION:

Re-enter the ***cmdname*** command with fewer elements specified or reset the array then re-enter the list (e.g., **PRNT SWITCH=* PRNT SWITCH=(*ddnmlist*)**).

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC515E STATE CONFLICT, ISSUE THE RESUME FUNCTION THEN RETRY THE *cmdname* COMMAND

(new for V2R4M0)

EXPLANATION:

The ***cmdname*** console command action could not be performed due to the state of the target resource or configuration parameter (e.g., **PRNT NEXTPRSW** was specified when the PRTSWLST= operand on the BUILD definition statement was in the STOPped state (last DDNAME had been used)).

OPERATOR ACTION:

Enter the resume function for the ***cmdname*** command that issued this message (e.g., enter **PRNT RSMEPRSW**).

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC520E LIST ENTRY NAME INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***cmdname*** console command list form argument specifies a resource name (e.g., **MRMT SVC0=*sluname***) that contains a spelling, syntax or length error. This could also occur if a non-printable character was inadvertently entered.

OPERATOR ACTION:

Supply a valid resource name then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC521E LIST ENTRY INDEX INVALID, *cmdname* COMMAND ABORTED

EXPLANATION:

The ***cmdname*** console command list form argument specifies an entry index (e.g., **MRMT *rmtname* LUNAME=(*locaddr*,...)**) that is invalid or too large for the list form configuration operand.

OPERATOR ACTION:

Supply a valid list from operand index then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC531E PARAMETER DATA OMITTED, REQUIRED FOR *cmdname* COMMAND EXECUTION

(new for V2R4M0)

EXPLANATION:

The ***cmdname*** console command argument is required but was not provided.

OPERATOR ACTION:

Re-enter the ***cmdname*** command with the required argument.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC532E PARAMETER DATA INVALID: *baddata, cmdname* COMMAND ABORTED

(changed for V2R4M0)

EXPLANATION:

The ***cmdname*** console command specifies a parameter that is invalid due to a spelling, value or syntax error. ***baddata*** represents up to 8 bytes before and after the parameter data that is in error.

OPERATOR ACTION:

Correct the parameter in error then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC533E *ddname* FILE DATA INVALID: *baddata, cmdname* COMMAND ABORTED

(added for V2R4M0)

EXPLANATION:

The ***ddname*** file specified for the ***cmdname*** console command (EXEC or SCHEDULE) identifies a file that contains a record with invalid data due to a spelling, value or syntax error. ***baddata*** represents up to 8 bytes before and after the parameter data that is in error.

OPERATOR ACTION:

Correct the ***ddname*** file parameter data in error then re-enter the ***cmdname*** command.

SYSTEM ACTION:

Additional parsing of the current ***ddname*** file is terminated and the console input prompt message is issued to solicit a new command.

NASC611W DISPLAY MEMORY ADDRESSING EXCEPTION,
DMEM COMMAND ABORTED

EXPLANATION:

The **DMEM** console command referenced an address that HNAS is not authorized to display (address is invalid for machine configuration).

OPERATOR ACTION:

Correct the memory address argument and re-enter the **DMEM** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC611W FIND MEMORY ADDRESSING EXCEPTION,
FIND COMMAND ABORTED

EXPLANATION:

The **FIND** console command referenced an address that HNAS is not authorized to display (address is invalid for machine configuration).

OPERATOR ACTION:

Correct the memory address argument and re-enter the **FIND** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

NASC611W MODIFY MEMORY ADDRESSING EXCEPTION, MMEM COMMAND ABORTED

EXPLANATION:

The **MMEM** console command referenced an address that HNAS is not authorized to modify (address is invalid for machine configuration or address is not in the same storage key as HNAS).

OPERATOR ACTION:

Correct the memory address argument and re-enter the **MMEM** command.

SYSTEM ACTION:

Additional parsing of the current input record is terminated and the console input prompt message is issued to solicit a new command.

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