eNetwork Communications Server
Version 6.0 for Windows NT
and
eNetwork Personal Communications
Version 4.2
for Windows 95 and Windows NT

Configuration File Reference

SC31-8655-00

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Note

Before using this information and the product it supports, read the information in “Appendix I. Notices” on page 245.

First Edition (July 1998)

This edition applies to Version 6.0 of IBM eNetwork Communications Server for Windows NT, Version 4.2 of Personal Communications for Windows 95 and Windows NT, and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

About This Book

IBM eNetwork Communications Server for Windows NT (referred to in this book as *Communications Server*) is a communications services platform. This platform provides a wide range of services for Windows NT workstations that communicate with host computers and with other workstations. Communications Server users can choose from among a variety of remote connectivity options.

IBM eNetwork Personal Communications for Windows 95 and Windows NT (referred to in this book as *Personal Communications*) is a full-function emulator. In addition to host terminal emulation, it provides these useful features:

- File transfer
- Dynamic configuration
- An easy-to-use graphical interface
- APIs for SNA-based client applications
- An API allowing TCP/IP-based applications to communicate over an SNA-based network.

The *Configuration File Reference* contains information about creating configuration files and using them to configure Communications Server or Personal Communications remotely. It lists configuration file keywords and shows a sample keyword definition. Each keyword parameter and the values that can be specified for the parameter are explained.

The format of an ASCII configuration file is governed by the OCDNTS50.DAT file. This file is stored in the installation directory of the product. Not all of the keywords and parameters in the OCDNTS50.DAT file are documented in this manual, because they are not configured by the user.

The keywords and parameters described in this manual were complete at the time of publication. However, changes to the product after publication of this manual may have added or changed keywords, parameters, or values. The OCDNTS50.DAT file contains the most accurate listing of the keywords, parameters, and values.

For Communications Server, it is assumed that you are using Windows NT V4.0 as your base operating system.

For Personal Communications, it is assumed that you are using Windows 95 or Windows NT as your base operating system.

Who Should Use This Book

This book is a reference for network administrators who install, reinstall, or upgrade Communications Server or Personal Communications on a group of remote workstations from a central site.

How to Use This Book

The *Configuration File Reference* helps you install, reinstall, or upgrade Communications Server or Personal Communications with ASCII configuration files.

This book contains the following:

- An introduction to ASCII configuration files
- Instructions for creating or editing a configuration file
- Instructions for verifying a configuration file
- The kinds and types of keywords used in a configuration file
- Descriptions of keywords, parameters, and values used in configuration files.

Icons

In this book, when it is necessary to communicate special information, the following icons appear:

This icon appears when the information applies only to the Communications Server program.

This icon appears when the information applies only to the Personal Communications program.

Text Conventions

Bold	Bold type indicates the following: • Verbs, functions, and parameters that you can use in a program or at a command prompt. These values are case sensitive and should be entered exactly as they appear in the text. • The names of window controls, such as lists, check boxes, entry fields, push buttons, and menu choices.
Italics	Italic type indicates the following: • A variable that you supply a value for. • Book titles. • A letter is being used as a letter or a word is being used as a word. **Example**: When you see an *a*, make sure it is not supposed to be an *an*.
Bold italics	Bold italic type is used to emphasize a word.
UPPERCASE	Uppercase indicates constants, file names, keywords, and options that you can use in a program or at a command prompt. You can enter these values in uppercase or lowercase.
`Example type`	Example type indicates information that you are instructed to type at a command prompt or in a window.

Number Conventions

Decimal numbers	Decimal numbers over 4 digits are represented in metric style. A space is used rather than a comma to separate groups of 3 digits. For example, the number sixteen thousand, one hundred forty-seven is written 16 147.
Hexadecimal numbers	Represented in text as hex xxxx or X'xxxx' ("The address of the adjacent node is hex 5D, which is specified as X'5D'.")

Where to Find More Information

For more information, see *Quick Beginnings*, which contains a complete description of both the Communications Server library and related publications.

To view a specific book after Communications Server has been installed, use the following path from your desktop:

1. Programs
2. IBM Communications Server
3. Documentation
4. Choose from the list of books

The Communications Server books are in Portable Document Format (PDF), which is viewable with the Adobe Acrobat Reader. If you do not have a copy of this program on your machine, you can install it from the Documentation list.

The Communications Server home page on the Internet has general product information as well as service information about APARs and fixes. To get to the home page using an Internet browser, go to the following URL:

http://www.software.ibm.com/enetwork/commserver/about/csnt.html

For more information, see *Quick Beginnings*, which contains a complete list of both the Personal Communications library and related publications.

To view a specific book after Personal Communications documentation has been installed, use the following path from the start menu:

1. Programs
2. IBM Personal Communications
3. Product Information
4. Choose from the list of books

The Personal Communications books are in BookManager format (BOO), which is viewable with the IBM Library Reader. If you do not have a copy of this program on your machine, you can install it from the eNetwork Personal Communications CD-ROM.

The Personal Communications home page on the Internet has general product information as well as service information about APARs and fixes. To get to the home page using an Internet browser, go to the following URL:

http://www.software.ibm.com/enetwork/pcomm/

Chapter 1. Introduction to ASCII Configuration

This chapter describes the ASCII configuration provided by Communications Server and Personal Communications. The ASCII configuration provides a method of creating, storing, and accessing configuration information. This method uses ASCII files instead of binary files to store configuration records. This enables users to create and modify a configuration file without using the **Node Configuration** application.

The format of an ASCII configuration file, whether it is created by the **Node Configuration** application or by an ASCII editor, is governed by the OCDNTS50.DAT file. This file is stored in the installation directory of the product. Not all of the keywords and parameters in the OCDNTS50.DAT file are documented in this manual, because they should not be configured by the user.

ASCII Configuration File Structure

The ASCII configuration (.ACG) file is a standard ASCII file containing assignment statements that are generally in the form of *keyword = value*. The *keyword* is always placed on the left side of the statement and identifies the configuration parameter. The *value* is placed on the right side of the statement and is either a string of characters or a list of one or more *keyword = value* lines.

For example:

```
keyword = value

keyword = (
            keyword = value
            keyword = value
            ...
          )
```

Kinds and Types of Keywords

To help understand how to read and interpret the data in the ASCII configuration file, a description follows of the kinds and types of keywords.

Kinds of Keywords

There are two kinds of keywords:

Simple keyword
A keyword that does not contain other keywords; that is, it has no embedded keywords. It is of the form keywordname = value; where value is not a left parenthesis. In the following example, FQ_CP_NAME and NODE_TYPE are simple keywords, but NODE is not.

```
NODE=(
     FQ_CP_NAME=USIBMNM.NT265
     NODE_TYPE=END_NODE
)
```

Complex keyword
Contains embedded simple or complex keywords. In the following example, PORT and PORT_LAN_SPECIFIC_DATA are complex keywords.

```
PORT=(
     PORT_NAME=LAN1_04
     DLC_NAME=LAN
     PORT_LAN_SPECIFIC_DATA=(
          ADAPTER_ID=LAN1
          ADAPTER_NAME=0001
     )
)
```

Types of Keywords

There are six types of simple keywords:

Boolean — A keyword that can only have a Boolean (0 or 1) value.

Enumerated — A keyword that has several values to choose from. Valid values are listed in the description of the keyword.

Hexadecimal number — A keyword that has a hexadecimal number value.

Hexadecimal string — A keyword that has a string of hexadecimal characters as its value.

Signed number — A keyword that has a signed number value.

String — A keyword that has a string of characters as its value.

Unsigned number — A keyword that has an unsigned number value.

Labels Used in Keyword Descriptions

Default — Specifies the default value for a given keyword. If the keyword is not specified in the configuration file, the default value is used for the configuration.

Key name — Specifies the key name parameter for the keyword. The key name parameter uniquely identifies it from other keywords of the same type.

Length — Specifies the valid length for a string or hexadecimal string keyword.

Multiples allowed — Specifies whether the keyword or parameter can be defined in the configuration file more than once, and subsequent definitions do not override the previous definitions.

Range — Specifies the minimum and maximum valid values for a number or hexadecimal number keyword.

Required — Specifies whether a given keyword is required in a definition. However, if a default value is specified, it is automatically added.

String characters — Specifies the valid characters for a string keyword. SNA Type A characters are required.

The SNA Type A character set includes:

- Uppercase A–Z (lowercase is accepted and translated to uppercase)
- Numbers 0–9

- Special characters $, #, and @

An SNA type A character string can not begin with a digit (0–9).

Template File and Response File Keywords

When creating configurations for a large number of servers to implement, the network administrator can create a template configuration file that represents the common configuration elements for all servers. Using a response file with only those changes necessary for each server, the administrator can distribute the template and response file and merge the two to create the target configuration. Template files and response files can specify the following keywords:

DELETE The DELETE keyword causes all information associated with a keyword to be removed. When the DELETE keyword is encountered in a list, all other keywords in the list are ignored.

INCLUDE A response file is merged into a template file by specifying the INCLUDE keyword at the end of the template file. The original template configuration file is left unchanged, if a new target file name is specified during verification.

For detailed information on how to use template files and response files for configuration and installation, refer to the *Network Administration Guide* for Communications Server or *Quick Beginnings* for Personal Communications.

ASCII Configuration File Syntax Rules

The syntax rules for ASCII configuration (.ACG) files are:

- An opening parenthesis, used to begin a list of values, must follow the *keyword* = on the same line.
- A closing parenthesis, used to delimit a list, must be on its own line.
- Because an opening parenthesis begins a list, you can not assign a single opening parenthesis as a value to a keyword.
- ASCII configuration (.ACG) files are not column dependent.

  You can use indentation or blank lines to make the files more readable. An ASCII configuration (.ACG) file does not have any column-specific or indentation restrictions.
- You can include a comment in an ASCII configuration (.ACG) file by using an asterisk (*) or semicolon (;) as the first nonblank character in a line. However, within a value list only the semicolon (;) can be used because the asterisk (*) can be a valid value within the list.
- Comments must always appear as separate lines within a ASCII configuration (.ACG) file.
- Keywords are not case sensitive.
- Each keyword must appear on a separate line.
- If a keyword or parameter is specified multiple times in a configuration file, but multiple definitions of that keyword is not allowed, the last specification of the keyword is used in the configuration.

Chapter 2. Verifying and Editing an ASCII Configuration File

You can create an ASCII configuration file with the **Node Configuration** application. The ASCII configuration file is an ASCII representation of your configuration, with a file extension of .ACG.

You can edit the ASCII configuration file to match your configuration needs. You can use any editor that creates an ASCII file to edit an ASCII configuration file.

ASCII Configuration Verify Utility

The ASCII configuration verify utility checks your configuration file to ensure that there are no errors. If there are errors, you must edit the file without going through the **Node Configuration** application.

Verifying a Configuration File

Communications Server and Personal Communications provide two utilities for verifying a configuration file:

- Console verification (command line) utility
- **Configuration Verification** application

Console Verification

The console verification method runs as a Windows DOS application. You can start this by issuing the following command line syntax from a DOS prompt:

```
vacgcon <filename> <target_file_name>
```

where <*filename*> is the name of the .ACG file and <*target_file_name*> is the name you want the file to have. The <*target_file_name*> is optional. If you specify a <*target_file_name*>, the original file is left unchanged.

The verification is performed and a message is generated indicating if the verification was successful. Messages and errors are written to the DOS console screen. The output from the command line utility can be redirected to a file.

Configuration Verification Application

The **Configuration Verification** application runs as a Windows application. You can start this application by either selecting the Verification icon located within the product folder, or by issuing the following command line syntax:

```
vacgwin <filename>
```

where <*filename*> is the .ACG file.

If you use the command option, the file is automatically opened and verified. If you select the icon, use the Windows menu or toolbar functions to verify the file. Do the following:

1. Select and open a configuration file.
2. Verify the file.
3. View any errors and messages.

Editing a Configuration File

If either verification utility (console or the **Configuration Verification** application) generated errors, edit the .ACG file using any ASCII text editor. To edit a configuration file:

- From the menu bar:
  1. Select **File**.
  2. Select **Edit**.
  3. Launch an ASCII editor with the configuration filename selected.
  4. Edit the file as needed.
  5. **Save** the file.
  6. **Re-verify** the file.
- From the icon toolbar:
  1. Select the **Edit** icon (pencil).
  2. Launch an ASCII editor with the configuration filename selected.
  3. Edit the file as needed.
  4. **Save** the file.
  5. **Re-verify** the file.

See the online help for specific details on how to use the selections on the menu bar or toolbar for the **Configuration Verification**.

Chapter 3. ADJACENT_NODE

This chapter describes the parameter keywords and values you can specify for the ADJACENT_NODE keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	FQ_CP_NAME
Multiples Allowed?	Yes, but each ADJACENT_NODE keyword must have a unique FQ_CP_NAME parameter

ADJACENT_NODE Sample

The following is a sample of the ADJACENT_NODE keyword:

```
ADJACENT_NODE=(
     FQ_CP_NAME=USIBMNM.PARTNER
     LU_ENTRY = (
         FQ_LU_NAME=USIBMNM.PARTLU
     )
)
```

ADJACENT_NODE Parameter Keywords

FQ_CP_NAME

Required?	Yes	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each ADJACENT_NODE keyword	

The FQ_CP_NAME parameter specifies the fully qualified name of the control point in the adjacent end node. This should match the name the node sends on its XIDs (if supported), and the adjacent control point name (FQ_ADJACENT_CP_NAME) specified on the LINK_STATION keyword for the node link.

The fully qualified CP name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP

name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the network qualified CP name.

This parameter is required.

FQ_LU_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—17
Multiples Allowed?	Yes, one for each LU_ENTRY parameter

The FQ_LU_NAME parameter specifies the LU name to be defined. If this name is not fully qualified, the network ID of the CP name is assumed.

The fully qualified LU name is a 17-byte character string. The fully qualified name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string.

This parameter is required.

LU_ENTRY

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The LU_ENTRY parameter is a complex keyword comprised of the following parameter keywords:

- FQ_LU_NAME
- WILDCARD_LU

See the descriptions of the parameter keywords to define the LU_ENTRY parameter.

WILDCARD_LU

The WILDCARD_LU parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LU_ENTRY parameter

The WILDCARD_LU parameter indicates whether the LU name specified on the LU_ENTRY parameter is to be considered a wildcard name. Valid values are:

0 The LU name is not a wildcard name.

1 The LU name is a wildcard name.

This parameter is required. The default is 0; the LU name is not a wildcard name.

Wildcard LU names are used to identify the location of all LUs whose names match the wildcard. A wildcard character (asterisk) is appended to the name. Wildcards can not be made out of a full LU name (the LU name portion of the fully qualified name is 8 characters long). Only one full wildcard is allowed (where only the wildcard (asterisk) is specified). If WILDCARD_LU is set to 1, the only other valid option is the fully qualified CP name, and it is required.

Chapter 4. AS400_COMMON

This chapter describes the parameter keywords and values you can specify for the AS400_COMMON keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	FQ_CP_NAME
Multiples Allowed?	No

AS400_COMMON Sample

The following is a sample of the AS400_COMMON keyword:

```
AS400_COMMON=(
     LU_NAME=LABREC4
     MODE_NAME=QPCSUPP
     PASSWORD=BF84DC3CAC50B856748B
     USER_ID=REDOPR
)
```

AS400_COMMON Parameter Keywords

LU_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The LU_NAME parameter specifies the logical unit (LU) name used for all sessions with AS/400s. If you do not specify this parameter, the name of the CP LU is used.

LU_NAME is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

MODE_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The MODE_NAME parameter specifies the name of the default mode used for all sessions to AS/400s.

This parameter is optional.

MODE_NAME is a 1- to 8-byte SNA Type A character string. You can specify one of the following:

- BLANK
- #BATCH
- #BATCHSC
- #INTER
- #INTERSC
- QPCSUPP
- SNASVCMG
- A unique mode name for each mode you define. If you define your own mode name, valid characters are:
  - All blanks
  - The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
  - The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

The mode name is used by the session initiator to designate the allocated session characteristics for the conversation. The mode defines a set of characteristics that can apply to one or more sessions. These characteristics include: traffic-pacing values, message-length limits, synchronization point and cryptography options, and the class of service within the transport network.

PASSWORD

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—20
Multiples Allowed?	No

The PASSWORD parameter specifies the default password used with the USER_ID parameter for accessing all AS/400s. This password is supplied by an application, such as a TN5250 application, attempting to access the AS/400. The password supplied by the application is converted to a 20-character hexadecimal string by the encryption process. To override this value for a specific AS/400, specify the password for that AS/400 in the definition of the AS/400.

Note: Since this value is encrypted, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the **Node Configuration** application.

This parameter is optional.

USER_ID

Required?	No
Keyword Type:	String
Field Length	1—10
Multiples Allowed?	No

The USER_ID parameter specifies the default user ID for all AS/400s. The user ID is supplied by an application, such as a TN5250 application, attempting to access the AS/400. To override this value for a specific AS/400, specify the user ID for that AS/400 in the definition of the AS/400.

This parameter is optional.

USER_ID is a 1- to 10-byte EBCDIC character string. Valid characters are:

- Alphanumeric:
  - A - Z
  - a - z
  - 0 - 9
- Special characters:
  - blank (space)
  - ((left parenthesis)
  -) (right parenthesis)
  - . (period)
  - , (comma)
  - ; (semicolon)
  - : (colon)
  - - (dash)
  - / (slash)
  - % (percent)
  - ? (question mark)
  - ’ (apostrophe)
  - ″ (quotation mark)
  - = (equal sign)
  - > (greater than)
  - < (less than)
  - _ (underline)

AS400_COMMON

Chapter 5. AS400_SERVER

This chapter describes the parameter keywords and values you can specify for the AS400_SERVER keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	SERVER_NAME
Multiples Allowed?	Yes, but each AS400_SERVER keyword must have a unique SERVER_NAME parameter

AS400_SERVER Sample

The following is a sample of the AS400_SERVER keyword:

```
AS400_SERVER=(
     SERVER_NAME=USIBMNM.RTP02EN
     DEFAULT_SERVER=0
```

AS400_SERVER Parameter Keywords

DEFAULT_SERVER

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each AS400_SERVER keyword

The DEFAULT_SERVER parameter specifies whether this AS/400 is the default AS/400.

Valid values are:

0 This AS/400 is not the default AS/400.

1 This AS/400 is the default AS/400.

This parameter is optional. The default is 0; this AS/400 is not the default AS/400.

DEVICE

Required?	No
Keyword Type:	String
Field Length	1
Multiples Allowed?	Yes, one for each SHARED_FOLDER parameter

The DEVICE parameter specifies the name of an available local server disk device to associate with the AS/400 folder. The server shares the disk device to enable clients to access it using a NET USE command. By sharing a disk device, a client can connect to the AS/400 folder as if were a disk on their workstation.

The value for DEVICE must be a valid drive letter between D and Z (upper or lower case). The values A, B, and C (both upper and lower case) are reserved by the system and cannot be used.

This parameter is optional.

PASSWORD

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—20
Multiples Allowed?	Yes, one for each AS400_SERVER keyword or SHARED_FOLDER parameter

The PASSWORD parameter specified outside of the SHARED_FOLDER parameter is used with the USER_ID parameter to validate AS/400 access. This password is supplied by an application, such as a TN5250 application, attempting to access the AS/400. The password supplied by the application is converted to a 20-character hexadecimal string by the encryption process.

Note: Since this value is encrypted, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the Node Configuration application.

The PASSWORD parameter specified for the SHARED_FOLDER parameter validates AS/400 folder access, and overrides the PASSWORD parameter supplied by an application. You can further restrict access to AS/400 resources or grant users the same access rights as they already have on the AS/400.

This parameter is optional.

PATH

Required?	No
Keyword Type:	String
Field Length	1—256
Multiples Allowed?	Yes, one for each SHARED_FOLDER parameter

The PATH parameter specifies the path to a folder in the AS/400 Integrated File System (IFS). For example, if you specify QSYSLIB, the user has access to all resources available under QSYSLIB.

The value is a 1-256 character string.

This parameter is optional.

SERVER_NAME

Required?	Yes
Keyword Type:	String
Field Length	3—17
Multiples Allowed?	Yes, one for each AS400_SERVER keyword

The SERVER_NAME parameter specifies the fully qualified CP name of the AS/400.

The fully qualified server name is a 17-byte character string. The fully qualified server name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the ***network qualified CP name***.

This parameter is required.

SHARED_FOLDER

Required?	No
Keyword Type:	Complex
Key Name:	N/A
Multiples Allowed?	Yes

The SHARED_FOLDER parameter is a complex keyword comprised of the following parameter keywords:

- DEVICE
- PASSWORD
- PATH
- USER_ID

See the descriptions of the parameter keywords to define the SHARED_FOLDER parameter.

USER_ID

Required?	No
Keyword Type:	String
Field Length	1—10
Multiples Allowed?	Yes, one for each AS400_SERVER keyword or SHARED_FOLDER parameter

The USER_ID parameter specified outside of the SHARED_FOLDER parameter validates AS/400 access. The user ID is supplied by an application, such as a TN5250 application, attempting to access the AS/400.

The USER_ID parameter specified for the SHARED_FOLDER parameter validates AS/400 folder access and overrides the USER_ID parameter supplied by a TN5250 application. You can further restrict access to AS/400 resources or grant users the same access rights as they already have on the AS/400.

AS400_SERVER

This parameter is optional.

USER_ID is a 1- to 10-byte EBCDIC character string. Valid characters are:

- Alphanumeric:
  - A - Z
  - a - z
  - 0 - 9
- Special characters:
  - blank (space)
  - ((left parenthesis)
  -) (right parenthesis)
  - . (period)
  - , (comma)
  - ; (semicolon)
  - : (colon)
  - - (dash)
  - / (slash)
  - % (percent
  - ? (question mark)
  - ’ (apostrophe)
  - ″ (quotation mark)
  - = (equal sign)
  - > (greater than)
  - < (less than)
  - _ (underline)

Chapter 6. CONNECTION_NETWORK

This chapter describes the parameter keywords and values you can specify for the CONNECTION_NETWORK keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	FQCN_NAME
Multiples Allowed?	Yes, but each CONNECTION_NETWORK keyword must have a unique FQCN_NAME parameter

CONNECTION_NETWORK Sample

The following is a sample of the CONNECTION_NETWORK keyword:

```
CONNECTION_NETWORK=(
     FQCN_NAME=USIBMNR.CONNET
     PORT_NAME=LAN0_04
)
```

CONNECTION_NETWORK Parameter Keywords

FQCN_NAME

Required?	Yes	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each CONNECTION_NETWORK keyword	

The FQCN_NAME parameter specifies the name of the virtual network node through which sessions appear to be routed between two nodes in the same connection network. Two nodes participating in the same connection network must specify the same connection network name.

This parameter is required.

The fully qualified connection network name is a 17-byte character string. The fully qualified connection network name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA

CONNECTION_NETWORK

Type A character string. The CP name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the network qualified CP name.

Valid characters are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

PORT_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes

The PORT_NAME parameter specifies the name of the physical connection to the link hardware. A port is sometimes referred to as an ***adapter***. One or more ports can be controlled by a single data link control (DLC) process.

This parameter is optional.

PORT_NAME is a 1- to 8-byte EBCDIC character string.

Chapter 7. CPIC_SIDE_INFO

This chapter describes the parameter keywords and values you can specify for the CPIC_SIDE_INFO keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	SYM_DEST_NAME
Multiples Allowed?	Yes, but each CPIC_SIDE_INFO keyword must have a unique SYM_DEST_NAME parameter

CPIC_SIDE_INFO Sample

The following is a sample of the CPIC_SIDE_INFO keyword:

```
CPIC_SIDE_INFO=(
     SYM_DEST_NAME=APINGD
     CONVERSATION_SECURITY_TYPE=NONE
     MODE_NAME=#INTER
     PARTNER_LU_NAME=USIBMNM.PARTNER1
     TP_NAME=APINGD
     TP_NAME_TYPE=APPLICATION_TP
)
```

CPIC_SIDE_INFO Parameter Keywords

CONVERSATION_SECURITY_TYPE

Required?	No
Keyword Type:	Enumerated
Default	NONE
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The CONVERSATION_SECURITY_TYPE parameter specifies the type of conversation security to be used. Valid values are:

NONE Attach manager sends the partner LU an allocation request that includes no security information.

SAME Attach manager sends the partner LU an allocation request that includes the same level of access security information as that in the request received from the partner LU.

PROGRAM Attach manager sends the partner LU an allocation request that includes a security user ID and security password that you define.

STRONG Attach manager sends the partner LU an allocation request that includes a password substitution created by using the password you defined. This enables a more secure conversation. The password substitution must be supported on both ends.

This parameter is optional. The default is NONE.

MODE_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The MODE_NAME parameter specifies the name of the mode to be used for the session.

This parameter is optional.

MODE_NAME is a 1- to 8-byte SNA Type A character string. You can specify one of the following:

- BLANK
- #BATCH
- #BATCHSC
- #INTER
- #INTERSC
- QPCSUPP
- SNASVCMG
- A unique mode name for each mode you define. If you define your own mode name, valid characters are:
  - All blanks
  - The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
  - The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

The mode name is used by the session initiator to designate the allocated session characteristics for the conversation. The mode defines a set of characteristics that can apply to one or more sessions. These characteristics include: traffic-pacing values, message-length limits, synchronization point and cryptography options, and the class of service within the transport network.

PARTNER_LU_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—17
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The PARTNER_LU_NAME parameter specifies the fully qualified name of the partner LU.

The fully qualified name is a 17-byte character string. The fully qualified name consists of two parts: the network name and the LU name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The LU name is a 1- to 8-byte SNA Type A character string.

This parameter is required.

SECURITY_PASSWORD

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—20
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The SECURITY_PASSWORD parameter specifies the 1-20 character password used to enforce conversation-level security. The security password is used with the SECURITY_USER_ID parameter for access validation to the remote program by the partner logical unit (LU). The password is converted to a 20-character hexadecimal string by the encryption process.

Note: Since this value is encrypted, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the **Node Configuration** application.

This parameter is optional.

SECURITY_USER_ID

Required?	No
Keyword Type:	String
Field Length	1—10
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The SECURITY_USER_ID parameter specifies the 1-10 character user ID used to enforce conversation-level security.

This parameter is optional.

The security user identifier is used for access validation to the remote program by the partner logical unit (LU).

SYM_DEST_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The SYM_DEST_NAME parameter specifies the 1-8 character symbolic destination name that identifies the side information entry.

This parameter is required.

The symbolic destination name is the name used by common programming interface for communications (CPI-C) applications to identify the side information definition and to access the network resources.

TP_NAME

Required?	No
Keyword Type:	String
Field Length	1—64
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The TP_NAME parameter specifies the 1-64 character transaction program name that provides information about accepting incoming Attaches and optionally starting workstation programs. Valid characters are any locally displayable characters using the native encoding of the local system. The TP name may also refer to a service transaction program.

This parameter is optional.

A transaction program (TP) uses the advanced program-to-program communications (APPC) system to communicate with a partner application program at the partner node.

TP_NAME_TYPE

Required?	Yes
Keyword Type:	Enumerated
Default	APPLICATION_TP
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The TP_NAME_TYPE parameter specifies the type of transaction program used. Valid values are:

APPLICATION_TP The transaction program name supplied is not a service transaction program. All characters specified in the transaction program name must be valid characters in the locally displayable character set.

SNA_SERVICE The transaction program name supplied is a service transaction program. All characters, except the first, specified in the transaction program name must be valid characters in the locally displayable character set. The first character must be a hexadecimal digit in the range X'01'—X'3F', excluding X'0E' and X'0F'.

This parameter is required. The default is APPLICATION_TP.

USER_DATA

Required?	No
Keyword Type:	String
Field Length	1—32
Multiples Allowed?	Yes, one for each CPIC_SIDE_INFO keyword

The USER_DATA parameter specifies the 1-32 character data string returned on the **QUERY_CPIC_SIDE_INFO** command, but it is not used or interpreted by Communications Server.

This parameter is optional.

Chapter 8. DLUR_DEFAULTS

This chapter describes the parameter keywords and values you can specify for the DLUR_DEFAULTS keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

DLUR_DEFAULTS Sample

The following is a sample of the DLUR_DEFAULTS keyword:

```
DLUR_DEFAULTS=(
     BKUP_DLUS_NAME=USIBMNR.DLURBACK
     DEFAULT_PU_NAME=NT265
     DLUS_RETRY_LIMIT=3
     DLUS_RETRY_TIMEOUT=5
     FQ_DLUS_NAME=USIBMNM.DLURSRV
)
```

DLUR_DEFAULTS Parameter Keywords

BKUP_DLUS_NAME

Required?	No	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	No	

The BKUP_DLUS_NAME parameter specifies the backup dependent logical unit server name the Communications Server or Personal Communications automatically tries to establish a connection with if the primary DLUS connection fails.

The fully qualified backup DLUS name consists of two parts: the network name and the LU name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The LU name is a 1- to 8-byte SNA Type A character string. Type a 1- to 8-byte character string for each.

This parameter is optional. If you do not specify this parameter, the current backup default DLUS is revoked.

When AnyNet is configured, the routing preference assigned for the DLUS is the node default routing preference. If you want to override the routing preference for the DLUS, use **Configure Devices for the AnyNet SNA/IP DLC**.

DEFAULT_PU_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DEFAULT_PU_NAME parameter specifies the default DLUR PU name. The name is a 1- to 8-byte character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

DLUS_RETRY_LIMIT

Required?	Yes
Keyword Type:	Unsigned Number
Default	3
Range	1—65 535
Multiples Allowed?	No

The DLUS_RETRY_LIMIT parameter specifies the maximum number of attempts to reconnect a DLUS without receiving an acknowledgment in the time set by the DLUS_RETRY_TIMEOUT parameter.

The value for the retry limit is an integer in the range 1—65 535.

This parameter is required. The default is 3. If zero is specified, the default value is used. If X'FFFF' is specified, the product retries indefinitely.

DLUS_RETRY_TIMEOUT

Required?	Yes
Keyword Type:	Unsigned number
Default	5
Range	1—65 535
Multiples Allowed?	No

The DLUS_RETRY_TIMEOUT parameter specifies the interval, in seconds, between second and subsequent attempts to contact a DLUS. The interval between the initial attempt and the first retry is always one second.

The value for the timeout is an integer in the range 1—65 535 seconds.

This parameter is required. The default is 5 seconds. If zero is specified, the default value is used.

FQ_DLUS_NAME

Required?	No
Keyword Type:	String
Field Length	3—17 
Field Length	1—17 
Multiples Allowed?	No

The FQ_DLUS_NAME parameter specifies the fully qualified DLUS name of the primary dependent logical unit server a connection is to be established with.

The fully qualified DLUS name is a 17-byte character string. The fully qualified DLUS name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string.

This parameter is required.

Chapter 9. DOWNSTREAM_LU

This chapter describes the parameter keywords and values you can specify for the DOWNSTREAM_LU keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	DSLU_NAME
Multiples Allowed?	Yes, but each DOWNSTREAM_LU keyword must have a unique DSLU_NAME parameter

DOWNSTREAM_LU Sample

The following is a sample of the DOWNSTREAM_LU keyword:

```
DOWNSTREAM_LU=(
     DSLU_NAME=GR08005
     DSPU_NAME=GR08
     HOST_LU_NAME=PUBLIC
     NAU_ADDRESS=5
)
```

DOWNSTREAM_LU Parameter Keywords

DSLU_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each DOWNSTREAM_LU keyword

The DSLU_NAME parameter specifies the downstream LU name. The name is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is required.

DSPU_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each DOWNSTREAM_LU keyword

The DSPU_NAME parameter specifies the component name that manages and monitors the resources (such as attached links and adjacent link station) associated with a downstream node. The name is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is required.

HOST_LU_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each DOWNSTREAM_LU keyword

The HOST_LU_NAME parameter is the host LU name or host LU pool name to which the downstream LU is being mapped. The name is a 1- to 8-byte SNA Type A character string.

This parameter is required.

NAU_ADDRESS

Required?	Yes
Keyword Type:	Unsigned number
Range	1—255
Multiples Allowed?	Yes, one for each DOWNSTREAM_LU keyword

The NAU_ADDRESS parameter specifies the network addressable unit address of the downstream LU. The value is an integer in the range 1-255.

This parameter is required.

A network addressable unit (NAU) address is the address of a logical unit (LU), physical unit (PU), control point (CP), or system services control point (SSCP). It is the address of the origin or destination of information transmitted by the path control network.

Chapter 10. DSPU_TEMPLATE

This chapter describes the parameter keywords and values you can specify for the DSPU_TEMPLATE keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	TEMPLATE_NAME
Multiples Allowed?	Yes, but each DSPU_TEMPLATE keyword must have a unique TEMPLATE_NAME parameter

DSPU_TEMPLATE Sample

The following is a sample of the DSPU_TEMPLATE keyword:

```
DSPU_TEMPLATE=(
     TEMPLATE_NAME=DOWN
     MAX_INSTANCE=0
     NUMBER_OF_DSLU_TEMPLATES=1
     DSLU_TEMPLATE=(
          HOST_LU=PUBLIC
          MAX_NAU=5
          MIN_NAU=1
     )
)
```

DSPU_TEMPLATE Parameter Keywords

DSLU_TEMPLATE

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The DSLU_TEMPLATE parameter is a complex keyword comprised of the following parameter keywords:

- HOST_LU
- MAX_NAU
- MIN_NAU

See the descriptions of the parameter keywords to define the DSLU_TEMPLATE parameter.

HOST_LU

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each DSLU_TEMPLATE parameter

The HOST_LU parameter specifies the host LU name or host LU pool name to which all downstream LUs are being mapped.

The name is a 1- to 8-byte SNA Type A character string.

This parameter is optional.

MAX_INSTANCE

Required?	No
Keyword Type:	Unsigned number
Range	0—65 535
Multiples Allowed?	Yes, one for each DSPU_TEMPLATE keyword

The MAX_INSTANCE parameter specifies the maximum number of instances of the template concurrently active. While the number of instances is equal to the value specified, no new instances can be created.

The range for this value is 0-65 535. If zero is specified, there is no limit to the number of concurrent instances of the template.

This parameter is optional.

MAX_NAU

Required?	No
Keyword Type:	Unsigned number
Range	1—255
Multiples Allowed?	Yes, one for each DSLU_TEMPLATE parameter

The MAX_NAU parameter specifies the maximum network addressable unit address in the range.

The range for this value is 1-255.

This parameter is optional.

MIN_NAU

Required?	No
Keyword Type:	Unsigned number
Range	1—255
Multiples Allowed?	Yes, one for each DSLU_TEMPLATE parameter

The MIN_NAU parameter specifies the minimum network addressable unit address in the range.

The range for this value is 1-255.

This parameter is optional.

NUMBER_OF_DSLU_TEMPLATES

Required?	No
Keyword Type:	Unsigned number
Range	0—255
Multiples Allowed?	Yes, one for each DSPU_TEMPLATE keyword

The NUMBER_OF_DSLU_TEMPLATES parameter specifies the number of DSLU template overlays which follow the DSPU template.

The range for this value is 0-255.

This parameter is optional.

TEMPLATE_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each DSPU_TEMPLATE keyword

The TEMPLATE_NAME parameter specifies the eight character name of the DSPU template. This corresponds to the IMPLICIT_DSPU_TEMPLATE parameter on the PORT keyword.

All eight characters must be specified. Valid characters are any locally displayable characters.

This parameter is required.

Chapter 11. FOCAL_POINT

This chapter describes the parameter keywords and values you can specify for the FOCAL_POINT keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	MS_CATEGORY
Multiples Allowed?	Yes, but each FOCAL_POINT keyword must have a unique MS_CATEGORY parameter

FOCAL_POINT Sample

The following is a sample of the FOCAL_POINT keyword:

```
FOCAL_POINT=(
     BKUP_FP_FQCP_NAME=USIBMNR.BACKUP
     BKUP_MS_APPL_NAME=23F0F1F6
     FP_FQCP_NAME=USIBMNR.FOCAL
     MS_APPL_NAME=23F0F1F6
     MS_CATEGORY=23F0F1F7
)
```

FOCAL_POINT Parameter Keywords

BKUP_FP_FQCP_NAME

Required?	No	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each FOCAL_POINT keyword	

The BKUP_FP_FQCP_NAME parameter specifies the backup focal point fully qualified control point name.

The fully qualified control point name is a 17-byte character string. The fully qualified name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string.

This parameter is optional.

FOCAL_POINT

The backup focal point control point (CP) specifies the node in the APPN network to which management services data is forwarded for processing, if the primary focal point is unavailable. If the backup focal point is being revoked, do not specify this parameter.

BKUP_MS_APPL_NAME

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—16
Multiples Allowed?	Yes, one for each FOCAL_POINT keyword

The BKUP_MS_APPL_NAME parameter specifies the backup focal point application name.

The application name can either be one of the 4-byte architecturally defined values for management services applications, or an 8-byte type 1134 EBCDIC installation-defined name.

This parameter is optional.

If the backup focal point is being revoked, do not specify this parameter.

If you are defining a focal point for forwarding alerts, the values are:

23F0F3F1 Alert / Network Operations for the management services category

23F0F3F0 Entry Point Alert for the application name

Valid application names are:

23F0F1F4 Entry Point Common Operations

23F0F1F5 Common Operations / Network Operations

23F0F1F6 Entry Point Operations

23F0F1F7 Operations Management

23F0F3F0 Entry Point Alert

23F0F3F1 Alert / Network Operations

FP_FQCP_NAME

Required?	Yes	
Required?	No	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each FOCAL_POINT keyword	

The FP_FQCP_NAME parameter specifies the focal point fully qualified control point name. The primary focal point control point (CP) specifies the node in the APPN network to which management services data is forwarded for processing.

The fully qualified CP name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the network qualified CP name.

 This parameter is required.

 This parameter is optional.

If the focal point is being revoked, do not specify this parameter.

MS_APPL_NAME

Required?	Yes	
Required?	No	
Keyword Type:	Hexadecimal string	
Field Length	1—16	
Multiples Allowed?	Yes, one for each FOCAL_POINT keyword	

The MS_APPL_NAME parameter specifies the primary focal point application name.

The application name can either be one of the 4-byte architecturally defined values for management services applications, or an 8-byte type 1134 EBCDIC installation-defined name.

This parameter is required.

This parameter is optional.

If the focal point is being revoked, do not specify this parameter.

If you are defining a focal point for forwarding alerts, the values are:

23F0F3F1 Alert / Network Operations for the management services category

23F0F3F0 Entry Point Alert for the application name

Valid application names are:

23F0F1F4 Entry Point Common Operations

23F0F1F5 Common Operations / Network Operations

23F0F1F6 Entry Point Operations

23F0F1F7 Operations Management

23F0F3F0 Entry Point Alert

23F0F3F1 Alert / Network Operations

MS_CATEGORY

Required?	Yes
Keyword Type:	Hexadecimal string
Field Length	1—16
Multiples Allowed?	Yes, one for each FOCAL_POINT keyword

The MS_CATEGORY parameter specifies the management services category, an identifier that associates related management services data for network management.

The application name can either be one of the 4-byte architecturally defined values for management services applications, or an 8-byte type 1134 EBCDIC installation-defined name.

This parameter is required.

If you are defining a focal point for forwarding alerts, the values are:

23F0F3F1 Alert / Network Operations for the management services category

23F0F3F0 Entry Point Alert for the application name

Valid application names are:

23F0F1F4 Entry Point Common Operations

23F0F1F5 Common Operations / Network Operations

23F0F1F6	Entry Point Operations
23F0F1F7	Operations Management
23F0F3F0	Entry Point Alert
23F0F3F1	Alert / Network Operations

FOCAL_POINT

Chapter 12. HS_CRITICAL_SERVER

This chapter describes the parameter keywords and values you can specify for the HS_CRITICAL_SERVER keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	SERVER_NAME
Multiples Allowed?	Yes, but each HS_CRITICAL_SERVER keyword must have a unique SERVER_NAME parameter

HS_CRITICAL_SERVER Sample

The following is a sample of the HS_CRITICAL_SERVER keyword:

```
HS_CRITICAL_SERVER=(
     SERVER_NAME=SERVER1
     HOST_LINK_NAME=LINK0000
     HOST_LINK_NAME=LINK0001
     HOST_LINK_NAME=LINK0002
     HOST_LINK_NAME=LINK0003
)
```

HS_CRITICAL_SERVER Parameter Keywords

HOST_LINK_NAME

Required?	Yes, minimum of one
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes

The HOST_LINK_NAME parameter specifies the connection definition activated when a failure is detected with the server specified by the SERVER_NAME parameter.

HOST_LINK_NAME is a 1- to 8-byte character string.

A minimum of one specification of this parameter is required.

SERVER_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—15
Multiples Allowed?	Yes, one for each HS_CRITICAL_SERVER keyword

The SERVER_NAME parameter specifies the critical server TCP/IP host name. The critical server is the server being backed up by the local node. When connection to the server is lost, the connection specified by the HOST_LINK_NAME parameter is activated and provides the functions of the critical server.

SERVER_NAME is a 1- to 15-byte character string.

This parameter is required.

Chapter 13. INTERNAL_PU

This chapter describes the parameter keywords and values you can specify for the INTERNAL_PU keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	PU_NAME
Multiples Allowed?	Yes, but each INTERNAL_PU keyword must have a unique PU_NAME parameter

INTERNAL_PU Sample

The following is a sample of the INTERNAL_PU keyword:

```
INTERNAL_PU=(
     PU_NAME=NT265
     NODE_ID=05D00000
     STARTUP=1
)
```

INTERNAL_PU Parameter Keywords

BKUP_DLUS_NAME

Required?	No	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each INTERNAL_PU keyword	

The BKUP_DLUS_NAME parameter specifies the fully qualified name of the DLUS node that serves as the backup DLUS for this PU. Communications Server or Personal Communications automatically tries to establish a connection with the backup DLUS server if the primary DLUS connection fails.

The fully qualified backup DLUS name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the LU name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The LU name is a 1- to 8-byte SNA Type A character string. The fully qualified LU name is also known as the network qualified LU name.

If you do not specify this parameter, the value specified for the BKUP_DLUS_NAME on the DLUR_DEFAULTS keyword is used (if it has been defined.)

This parameter is optional.

DEPENDENT_LU_COMPRESSION

The DEPENDENT_LU_COMPRESSION parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each INTERNAL_PU keyword

The DEPENDENT_LU_COMPRESSION parameter specifies whether data compression is used for conventional LU (LU 0 to 3) sessions dependent on this PU. Valid values are:

0 Data compression is not used.

1 Data compression is used if the host requests compression. DEPENDENT_LU_COMPRESSION=1 is ignored if the node does not support compression.

This parameter is optional. The default is 0.

DEPENDENT_LU_ENCRYPTION

The DEPENDENT_LU_ENCRYPTION parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Enumerated
Default	OPTIONAL
Multiples Allowed?	Yes, one for each INTERNAL_PU keyword

The DEPENDENT_LU_ENCRYPTION parameter specifies whether session level encryption is required for conventional LU (LU 0 to 3) sessions dependent on this PU. Valid values are:

MANDATORY Session level encryption is performed if an import key is available to the LU. If an import key is not available, encryption must be performed by the application using the LU.

Note: If the DSPU_SERVICES parameter is specified as PU_CONCENTRATION, encryption is performed by a downstream LU.

NONE Session level encryption is not performed.

OPTIONAL	Session level encryption is performed by request from the adjacent node.

This parameter is required. The default is OPTIONAL.

FQ_DLUS_NAME

Required?	No
Keyword Type:	String
Field Length	3—17
Field Length	1—17
Multiples Allowed?	Yes, one for each INTERNAL_PU keyword

The FQ_DLUS_NAME parameter specifies the fully qualified DLUS name.

The fully qualified DLUS name is a 17-byte character string. The fully qualified name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string.

This parameter is optional.

NODE_ID

Required?	Yes
Keyword Type:	Hexadecimal string
Field Length	1—8
Multiples Allowed?	Yes, one for each INTERNAL_PU keyword

The NODE_ID parameter specifies the node ID. This ID consists of a block ID of 3 hexadecimal characters and a PU ID of 5 hexadecimal characters. This value must match the PU ID configured at the host.

This parameter is required.

PU_NAME

Required?	Yes
Keyword Type:	String
Default	N/A
Field Length	1—8
Multiples Allowed?	Yes, one for each INTERNAL_PU keyword

The PU_NAME parameter specifies the name of the internal PU that manages and monitors the resources (such as attached links and adjacent link station) associated with a node.

PU_NAME is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is required.

STARTUP

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each INTERNAL_PU keyword

The STARTUP parameter specifies whether this PU is started when Communications Server or Personal Communications is started.

Valid values are:

0 This PU is not started when the product is started.

1 This PU is started when the product is started.

This parameter is required. The default is to automatically start the PU.

Chapter 14. LINK_STATION

This chapter describes the parameter keywords and values you can specify for the LINK_STATION keyword.

The LINK_STATION keyword should contain one of the Link_Station_*_Specific_Data keywords. Which Link_Station_*_Specific_Data keyword to use is dependent on the value of PORT_NAME. For example, if the value of PORT_NAME refers to a LAN port, a LINK_STATION_LAN_SPECIFIC_DATA keyword should be included.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	LS_NAME
Multiples Allowed?	Yes, but each LINK_STATION keyword must have a unique LS_NAME parameter

LINK_STATION Samples

The following are samples of the LINK_STATION keyword:

```
LINK_STATION=(
     LS_NAME=LINK0000
     ACTIVATE_AT_STARTUP=0
     ADJACENT_NODE_TYPE=LEARN
     AUTO_ACTIVATE_SUPPORT=1
     CP_CP_SESS_SUPPORT=1
     DEFAULT_NN_SERVER=0
     DEST_ADDRESS=40000000000004
     DISABLE_REMOTE_ACT=0
     DSPU_SERVICES=NONE
     HPR_LINK_LVL_ERROR=0
     HPR_SUPPORT=0
     LIMITED_RESOURCE=NO
     LINK_DEACT_TIMER=0
     LINK_STATION_ROLE=USE_ADAPTER_DEFAULTS
     MAX_IFRM_RCVD=0
     MAX_SEND_BTU_SIZE=65535
     NODE_ID=05D00000
     PORT_NAME=LAN0_04
     SOLICIT_SSCP_SESSION=0
     SUPPRESS_CP_NAME=NO
     TG_NUMBER=0
     USE_DEFAULT_TG_CHARS=1
     LINK_STATION_LAN_SPECIFIC_DATA=(
          TEST_RETRY_INTERVAL=8
          TEST_RETRY_LIMIT=5
          XID_RETRY_INTERVAL=8
          XID_RETRY_LIMIT=5
     )
)
LINK_STATION=(
     LS_NAME=LINK0001
     ACTIVATE_AT_STARTUP=0
     ADJACENT_NODE_TYPE=DSPU_XID
```

```
        AUTO_ACTIVATE_SUPPORT=0
        CP_CP_SESS_SUPPORT=1
        DEFAULT_NN_SERVER=0
        DEST_ADDRESS=40000000000104
        DISABLE_REMOTE_ACT=0
        DSPU_NAME=LINK0001
        DSPU_SERVICES=PU_CONCENTRATION
        HPR_LINK_LVL_ERROR=0
        HPR_SUPPORT=0
        LIMITED_RESOURCE=NO
        LINK_DEACT_TIMER=0
        LINK_STATION_ROLE=USE_ADAPTER_DEFAULTS
        MAX_IFRM_RCVD=0
        MAX_SEND_BTU_SIZE=65535
        NODE_ID=05D00000
        PORT_NAME=LAN0_04
        SOLICIT_SSCP_SESSION=0
        STARTUP=1
        SUPPRESS_CP_NAME=NO
        TG_NUMBER=0
        USE_DEFAULT_TG_CHARS=1
        LINK_STATION_LAN_SPECIFIC_DATA=(
             TEST_RETRY_INTERVAL=8
             TEST_RETRY_LIMIT=5
             XID_RETRY_INTERVAL=8
             XID_RETRY_LIMIT=5
        )
)
```

LINK_STATION Parameter Keywords

ACTIVATE_AT_STARTUP

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The ACTIVATE_AT_STARTUP parameter specifies whether the link is activated when the product is started.

Valid values are:

0 The link is not activated when the product is started.

1 The link is activated when the product is started.

This parameter is required. The default is to activate the link.

ACTIVATION_DELAY_TIMER

The ACTIVATION_DELAY_TIMER parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Signed number
Default	-1
Range	-1—3 600
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The ACTIVATION_DELAY_TIMER parameter specifies the number of seconds between automatic retry attempts, and between application-driven activation attempts if the DELAY_APPLICATION_RETRIES parameter is specified.

The value is an integer in the range of -1—3 600.

- If -1 is specified, the value specified on the ACTIVATION_DELAY_TIMER parameter of the PORT keyword is used.
- If 0 is specified, a default value of 30 seconds is used.

This parameter is required. The default is -1.

ADJACENT_BRANCH_EXTENDER_NODE

The ADJACENT_BRANCH_EXTENDER_NODE parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Enumerated
Default	PROHIBITED
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The ADJACENT_BRANCH_EXTENDER_NODE parameter specifies whether the node adjacent to a local branch extender node can also be a branch extender node. This parameter is only valid if the NODETYPE parameter on the NODE keyword is specified as BRANCH_EXTENDER_NODE and the ADJACENT_NODE_TYPE parameter on the LINK_STATION keyword is specified as LEARN or NETWORK_NODE. Valid values are:

OPTIONAL The definition of the adjacent node as a branch extender node in optional.

PROHIBITED The adjacent node must not be a branch extender node, or the link activation fails.

REQUIRED The adjacent node must be a branch extender node, or the link activation fails.

Note: If ADJACENT_NODE_TYPE=NETWORK_NODE and AUTO_ACTIVATE_SUPPORT=1 on the LINK_STATION keyword, this parameter must be specified as either REQUIRED or PROHIBITED.

This parameter is required. The default is PROHIBITED.

ADJACENT_NODE_ID

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—8
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The ADJACENT_NODE_ID parameter specifies the node ID of the adjacent node. An adjacent node is directly connected to this node via this link definition.

Specify a block ID of 3 hexadecimal characters and a PU ID of 5 hexadecimal characters.

This parameter is optional.

Notes:

1. If ADJACENT_NODE_TYPE indicates that the adjacent node is a T2.1 node (END_NODE, LEARN, NETWORK_NODE, or SUBAREA_LEN), this parameter is ignored unless it is non-zero, and either ADJACENT_NODE_TYPE is set to SUBAREA_LEN or the adjacent node does not send a network name control vector in its XID3.
2. If ADJACENT_NODE_TYPE is specified as HOST_DEP_LU_ONLY or HOST_XID0, this parameter is ignored.
3. If ADJACENT_NODE_TYPE is specified as DSPU_XID and this parameter is specified as non-zero, it is used to check the identity of the downstream PU.
4. If ADJACENT_NODE_TYPE is specified as DSPU_NO_XID and DSPU_SERVICES is specified as PU_CONCENTRATION, this parameter is ignored.
5. If ADJACENT_NODE_TYPE is specified as DSPU_NO_XID and DSPU_SERVICES is specified as DLUR, this parameter is used to identify the downstream PU to the DLUS.

Notes:

1. If ADJACENT_NODE_TYPE indicates that the adjacent node is a T2.1 node (APPN_NODE, BACK_LEVEL_LEN_NODE, END_NODE, or NETWORK_NODE), this parameter is ignored unless it is non-zero, and either ADJACENT_NODE_TYPE is set to BACK_LEVEL_LEN_NODE or the adjacent node does not send a network name control vector in its XID3.
2. If ADJACENT_NODE_TYPE is specified as HOST_XID0 or HOST_XID3, this parameter is ignored.

ADJACENT_NODE_TYPE

Required?	Yes
Keyword Type:	Enumerated
Default	LEARN
Default	APPN_NODE
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The ADJACENT_NODE_TYPE parameter identifies the SNA node type of the adjacent CP. Valid values are:

DSPU_NO_XID The adjacent node is a downstream PU and the product does not include XID exchange in link activation.

DSPU_XID The adjacent node is a downstream PU and the product includes XID exchange in link activation.

END_NODE The adjacent node is an APPN end node or an up-level node.

HOST_DEP_LU_ONLY The adjacent node is a host and the product responds to a polling XID from the node with a format 3 XID.

HOST_XID0 The adjacent node is a host and the product responds to a polling XID from the node with a format 0 XID. For a link using the AnyNet DLC supporting dependent LU sessions, you must specify this value.

LEARN The adjacent node is an APPN network node, an APPN end node, or an up-level node. The node type is learned during XID exchange.

NETWORK_NODE The adjacent node is an APPN network node.

SUBAREA_LEN The adjacent node does not send the control point name in the XID. For a link using the AnyNet DLC supporting independent LU sessions, you must specify this value.

APPN_NODE	The adjacent node is an APPN network node, an APPN end node, or an up-level node. The node type is learned during XID exchange.
BACK_LEVEL_LEN_NODE	The adjacent node does not send the control point name in the XID. For a link using the AnyNet DLC supporting independent LU sessions, you must specify this value.
END_NODE	The adjacent node is an APPN end node or an up-level node.
HOST_XID0	The adjacent node is a host and the product responds to a polling XID from the node with a format 0 XID. For a link using the AnyNet DLC supporting dependent LU sessions, you must specify this value.
HOST_XID3	The adjacent node is a host and the product responds to a polling XID from the node with a format 3 XID.
NETWORK_NODE	The adjacent node is an APPN network node.

Note: Independent LU 6.2 (APPC) traffic is only allowed over links with the ADJACENT_NODE_TYPE parameter specified as END_NODE, LEARN, NETWORK_NODE, or SUBAREA_LEN.

Note: Independent LU 6.2 (APPC) traffic is only allowed over links with the ADJACENT_NODE_TYPE parameter specified as APPN_NODE, BACK_LEVEL_LEN_NODE, END_NODE, or NETWORK_NODE.

For the Enterprise Extender (EE) DLC and Multi-Path Channel (MPC) DLC, ADJACENT_NODE_TYPE must be specified as END_NODE, LEARN, or NETWORK_NODE.

This parameter is required.

The default is LEARN.

The default is APPN_NODE.

AUTO_ACTIVATE_SUPPORT

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The AUTO_ACTIVATE_SUPPORT parameter specifies whether the link is activated automatically when required by a session. Valid values are:

0 The link is not activated automatically.

1 The link is activated automatically when required by a session.

This parameter is optional.

If the link is not to an APPN node, this parameter can always be specified as 1.

If the link is to an APPN node, this parameter can not be specified as 1 if the link also supports CP-CP sessions. The parameter can be set to 1 if TG_NUMBER is defined for the link, and the specified value of TG_NUMBER is between 1 and 20. This allows an inactive link configured with AUTO_ACTIVATE_SUPPORT to be used when determining the best route for a session, then activating the link when it is needed. TG numbers are normally assigned only to active links (TGs).

BKUP_DLUS_NAME

Required?	No	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each LINK_STATION keyword	

The BKUP_DLUS_NAME parameter specifies the fully qualified backup DLUS name for the downstream PU, with which Communications Server or Personal Communications automatically tries to establish a connection if the primary DLUS connection fails.

The fully qualified backup DLUS name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the LU name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The LU name is a 1- to 8-byte SNA Type A character string. The fully qualified LU name is also known as the network qualified LU name.

If you do not specify this parameter, the value specified for the BKUP_DLUS_NAME on the DLUR_DEFAULTS keyword is used (if defined.) This parameter is ignored if DSPU_SERVICES is not set to DLUR.

This parameter is optional.

BRANCH_EXTENDER_LINK

The BRANCH_EXTENDER_LINK parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The BRANCH_EXTENDER_LINK parameter specifies whether this connection is designated as a branch extender link. This parameter is only valid if the NODETYPE parameter on the NODE keyword is specified as BRANCH_EXTENDER_NODE and the ADJACENT_NODE_TYPE parameter on the LINK_STATION keyword is specified as END_NODE, LEARN, NETWORK_NODE, or SUBAREA_LEN. Valid values are:

0 This connection is not designated as a branch extender link.

1 This connection is designated as a branch extender link. The link connects to another network from the local branch network. This is only valid value if the ADJACENT_NODE_TYPE parameter on the LINK_STATION keyword is specified as NETWORK_NODE.

This parameter is optional. The default is 0.

CP_CP_SESS_SUPPORT

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The CP_CP_SESS_SUPPORT parameter specifies whether CP-CP sessions are supported on this connection. This parameter is only relevant if the link is to an APPN node.

If ADJACENT_NODE_TYPE is specified as HOST_XID0, HOST_DEP_LU_ONLY, or SUBAREA_LEN, or if LIMITED_RESOURCE is specified as YES, this parameter is ignored and is assumed to be specified as 0.

If ADJACENT_NODE_TYPE is specified as BACK_LEVEL_LEN_NODE, HOST_XID0, or HOST_XID3, or if LIMITED_RESOURCE is specified as YES, this parameter is ignored and is assumed to be specified as 0.

Valid values are:

0 CP-CP sessions are not supported.

1 CP-CP sessions are supported.

For the Multi-Path Channel (MPC) DLC, CP_CP_SESS_SUPPORT must be specified as 1.

This parameter is optional.

DEFAULT_NN_SERVER

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The DEFAULT_NN_SERVER parameter specifies whether a link can be automatically activated by an end node to support CP-CP sessions to a network node server. The link must be defined to support CP-CP sessions for this parameter to effective. Valid values are:

0 CP-CP sessions are not supported.

1 CP-CP sessions are supported.

This parameter is optional.

DELAY_APPLICATION_RETRIES

The DELAY_APPLICATION_RETRIES parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The DELAY_APPLICATION_RETRIES parameter specifies whether link activation retries initiated by applications are delayed by the value specified for the ACTIVATION_DELAY_TIMER parameter. Valid values are:

0 Link activation retries initiated by applications are not delayed.

1 Link activation retries initiated by applications are delayed.

This parameter is optional.

DEPENDENT_LU_COMPRESSION

The DEPENDENT_LU_COMPRESSION parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The DEPENDENT_LU_COMPRESSION parameter specifies whether data compression is used for conventional LU (LU 0 to 3) sessions on this connection. This parameter is only valid for connections supporting conventional LU sessions. Valid values are:

0 Data compression is not used.

1 Data compression is used if the host requests compression. DEPENDENT_LU_COMPRESSION=1 is ignored if the node does not support compression.

This parameter is optional. The default is 0.

DEPENDENT_LU_ENCRYPTION

The DEPENDENT_LU_ENCRYPTION parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Enumerated
Default	OPTIONAL
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The DEPENDENT_LU_ENCRYPTION parameter specifies whether session level encryption is required for conventional LU (LU 0 to 3) sessions on this connection. This parameter is only valid for connections supporting conventional LU sessions. Valid values are:

MANDATORY Session level encryption is performed if an import key is available to the LU. If an import key is not available, encryption must be performed by the application that uses the LU.

Note: If the DSPU_SERVICES parameter is specified as PU_CONCENTRATION, encryption is performed by a downstream LU.

NONE Session level encryption is not performed.

OPTIONAL Session level encryption is performed by request from the adjacent node.

This parameter is required. The default is OPTIONAL.

DEST_ADDRESS

The DEST_ADDRESS parameter specifies information specific to the DLC you are using.

For information on defining the DEST_ADDRESS parameter for the DLC, refer to the following sections:

- “Appendix A. AnyNet Specific Data” on page 161
- “Appendix B. LAN Specific Data” on page 163
- “Appendix C. OEM Specific Data” on page 171
- “Appendix D. SDLC Specific Data” on page 183
- “Appendix E. Twinaxial Specific Data” on page 197.

DISABLE_REMOTE_ACT

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The DISABLE_REMOTE_ACT parameter specifies whether remote activation of this link is supported. Valid values are:

0 Remote activation is supported.

1 Remote activation is not supported.

This parameter is required. The default is 0; remote link activation is supported.

DLUS_NAME

Required?	No	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each LINK_STATION keyword	

The DLUS_NAME parameter is the name of the primary dependent logical unit server with which a connection is to be established.

This parameter is optional.

The fully qualified DLUS name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the LU name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The LU name is a 1- to 8-byte SNA Type A character string. The fully qualified LU name is also known as the network qualified LU name.

If you do not specify this parameter, the value specified for the BKUP_DLUS_NAME on the DLUR_DEFAULTS keyword is used (if defined.) If BKUP_DLUS_NAME on the DLUR_DEFAULTS keyword has not been defined, the DLUR does not initiate SSCP contact when the link is activated. This parameter is ignored if DSPU_SERVICES is not specified as DLUR.

DSPU_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The DSPU_NAME parameter specifies the downstream PU name.

The downstream physical unit (PU) manages and monitors the resources (such as attached links and adjacent link station) associated with a downstream node.

DSPU_NAME is a 1- to 8-byte character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter must be specified if DSPU_SERVICES is specified as PU_CONCENTRATION or DLUR. Otherwise, the parameter is ignored.

DSPU_SERVICES

Required?	Yes
Keyword Type:	Enumerated
Default	NONE
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The DSPU_SERVICES parameter specifies the local node services provided to the downstream PU across this link. Valid values are:

NONE	Local node provides no services for this downstream PU.
DLUR	Local node provides DLUR services for the downstream PU.
PU_CONCENTRATION	Local node provides PU concentration for the downstream PU.

This parameter is required. The default is NONE.

Notes:

1. The DSPU_NAME parameter must also be specified if this parameter is specified as PU_CONCENTRATION or DLUR.
2. This parameter must be specified as PU_CONCENTRATION or DLUR if the adjacent node is defined as a downstream PU (that is, NODE_TYPE is specified as DSPU_XID or DSPU_NO_XID).
3. This parameter can be specified as PU_CONCENTRATION or DLUR on a link to an APPN node if SOLICIT_SSCP_SESSION is specified as 0.
4. This field is ignored if the adjacent node is defined as a host.

ETHERNET_FORMAT

The ETHERNET_FORMAT parameter keyword applies to Personal Communications only.

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The ETHERNET_FORMAT parameter specifies whether the LAN destination address is transmitted in token-ring format (unmodified) or Ethernet format (byte-reversal).

Note: The Ethernet format may not be appropriate for some Ethernet connections.

Valid values are:

0 The LAN destination address is transmitted in token-ring format.

1 The LAN destination address is transmitted in Ethernet format.

This parameter is required. The default is 0; transmit the LAN destination address in token-ring format.

FQ_ADJACENT_CP_NAME

Required?	No	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each LINK_STATION keyword	

The FQ_ADJACENT_CP_NAME parameter specifies the fully qualified control point (CP) name that is directly connected to your workstation across this link.

The fully qualified CP name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the network qualified CP name.

This parameter is optional.

Notes:

1. This field is only relevant for links to APPN nodes and is otherwise ignored.
2. For links to APPN nodes, do not specify this parameter unless the TG_NUMBER parameter is specified as a number in the range 1-20 or the ADJACENT_NODE_TYPE parameter is specified as SUBAREA_LEN (Communications Server) or BACK_LEVEL_LEN_NODE (Personal Communications).

   If you specify this parameter, it is checked against the name received from the adjacent node during XID exchange, unless the ADJACENT_NODE_TYPE

parameter is specified as SUBAREA_LEN (Communications Server) or BACK_LEVEL_LEN_NODE (Personal Communications), in which case it is used to identify the adjacent node.

HPR_LINK_LVL_ERROR

The HPR_LINK_LVL_ERROR parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The HPR_LINK_LVL_ERROR parameter specifies whether HPR traffic should be sent on this link using link-level error recovery. This parameter is ignored if HPR_SUPPORT is specified as 0. Valid values are:

0 HPR traffic should not be sent on this link using link-level error recovery.

1 HPR traffic should be sent on this link using link-level error recovery.

This parameter is optional.

HPR_SUPPORT

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The HPR_SUPPORT parameter specifies whether HPR is supported on this link. This field is only relevant if the link is to an APPN node and is otherwise ignored. Valid values are:

0 HPR is not supported on this link.

1 HPR is supported on this link.

For the Enterprise Extender (EE) DLC and Multi-Path Channel (MPC) DLC, HPR_SUPPORT must be specified as 1.

This parameter is optional. The default is not to support HPR.

INHERIT_PORT_RETRY_PARMS

The INHERIT_PORT_RETRY_PARMS parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The INHERIT_PORT_RETRY_PARMS parameter specifies whether the values specified on the PORT keyword are used for the following parameters (if they are not specified for the LINK_STATION keyword):

- DELAY_APPLICATION_RETRIES
- RETRY_LINK_ON_DISCONNECT
- RETRY_LINK_ON_FAILED_START
- RETRY_LINK_ON_FAILURE

Valid values are:

0 The values specified on the PORT keyword are not used.

1 The values specified on the PORT keyword are used.

This parameter is optional.

LIMITED_RESOURCE

Required?	Yes
Keyword Type:	Enumerated
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The LIMITED_RESOURCE parameter specifies whether this link station is deactivated when there are no active sessions. Valid values are:

NO The link is not a limited resource and is not be deactivated automatically.

YES The link is a limited resource and is deactivated automatically when there are no active sessions. A limited resource link station can be configured for CP-CP session support. (This is done by setting this field to YES and CP_CP_SESS_SUPPORT to 1.) In this case, if CP-CP sessions are brought up over the link, Communications Server or Personal Communications does not treat the link as a limited resource (and does not bring the link down).

INACTIVITY The link is a limited resource and is deactivated automatically when there are no active sessions, or when no data has flowed on the link for the time period specified by the LINK_DEACT_TIMER parameter. Note that link stations on a nonswitched port can not be configured as limited resources.

For the Multi-Path Channel (MPC) DLC, LIMITED_RESOURCE must be specified as NO.

This parameter is required.

LINK_DEACT_TIMER

Required?	No
Keyword Type:	Unsigned number
Default	10
Default	No default
Range	0—1 000
Range	No defined range
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The LINK_DEACT_TIMER parameter specifies the time, in seconds, that this link can be idle before it automatically deactivates. The link deactivation timer is only used when the LIMITED_RESOURCE parameter is specified as INACTIVITY.

The value is an integer in the range of 0—1 000 seconds. The default is 10 seconds.

There is no defined range nor default.

This parameter is optional.

Note: If zero is specified, the default value of 30 is used. Otherwise, the minimum value is 5. (If it is set any lower, the specified value is ignored and 5 is used.)

LINK_SPEC_DATA_LEN

The LINK_SPEC_DATA_LEN parameter keyword applies to Personal Communications only.

Required?	No
Keyword Type:	Unsigned number
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The LINK_SPEC_DATA_LEN parameter should always be set to 0.

This parameter is optional. The default is zero.

LINK_STATION_ROLE

Required?	No
Keyword Type:	Enumerated
Default	NEGOTIABLE 
Default	No default 
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The LINK_STATION_ROLE parameter defines the responsibility that the link station has for controlling the communication with its adjacent link stations. Valid values are:

NEGOTIABLE	When the connection is established, the local link station becomes either a primary or secondary link station.
PRIMARY	The primary link station controls the conversation on the link.
SECONDARY	The secondary link station must wait to be polled by the primary link station before data is sent.
USE_ADAPTER_DEFAULTS	Use the value specified on the PORT keyword.

 The default is NEGOTIABLE.

 There is no default.

This parameter is optional.

Notes:

1. If DLC_NAME on the PORT keyword is specified as TWINAX, only SECONDARY is valid.
2. If DLC_NAME on the PORT keyword is specified as ANYNET, and LS_NAME is $ANYNET$, PRIMARY is not valid.

LS_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The LS_NAME parameter specifies the 1- to 8-byte name used to identify a connection.

All eight characters must be specified. Valid characters are any locally displayable characters using the native encoding of the local system.

This parameter is required.

Note: During device configuration, the link station name $ANYNET$ is automatically defined when the AnyNet SNA over TCP/IP device is configured. This has the effect of informing the **SNA Node Operations** application that this is the link station to which independent LU session traffic that is to be routed by the AnyNet DLC should be sent. A link station of this name must be defined on a port over the AnyNet DLC if AnyNet routing is required. This definition can not be changed or deleted.

MAX_ACTIVATION_ATTEMPTS

The MAX_ACTIVATION_ATTEMPTS parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Signed number
Default	-1
Range	-1—127
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The MAX_ACTIVATION_ATTEMPTS parameter specifies the number of retry attempts allowed when the remote node is not responding, or the port is inactive. The attempts include both automatic retries and application-driven activation attempts. When this limit is reached, no further activation retries are attempted. The number of retries attempted is reset by a successful activation, or when a link station, port, or DLC is deactivated.

The value is an integer in the range of -1—127.

- If -1 is specified, the value specified on the MAX_ACTIVATION_ATTEMPTS parameter of the PORT keyword is used.
- If 0 is specified, there is no limit.

This parameter is required. The default is -1.

This parameter is ignored unless one of the following parameters is specified:

- DELAY_APPLICATION_RETRIES
- INHERIT_PORT_RETRY_PARMS
- RETRY_LINK_ON_DISCONNECT
- RETRY_LINK_ON_FAILED_START
- RETRY_LINK_ON_FAILURE

MAX_IFRM_RCVD

Required?	No
Keyword Type:	Unsigned number
Range	0—127
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The MAX_IFRM_RCVD parameter determines the maximum number of I-frames that can be received by the local link stations before an acknowledgment is sent.

The value is an integer in the range of 0-127 frames.

If MAX_IFRM_RCVD is set to zero, the default value from the PORT keyword is used.

For the Multi-Path Channel (MPC) DLC, MAX_IFRM_RCVD must be specified as 0.

This parameter is optional.

MAX_SEND_BTU_SIZE

Required?	No
Keyword Type:	Unsigned number
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The MAX_SEND_BTU_SIZE parameter specifies the maximum BTU size that can be sent from this link station. This value is used to negotiate the maximum BTU size that can be transmitted between a link station pair.

This parameter is optional.

Notes:

1. If the link is not HPR-capable, this value must be set to a value greater than or equal to 99.
2. If the link is HPR-capable, this value must be set to a value greater than or equal to 768.

For the Multi-Path Channel (MPC) DLC, MAX_SEND_BTU_SIZE should be specified as 32 768 to allow the DLC to determine the size. When the configuration file is generated by the **Node Configuration** application, MAX_SEND_BTU_SIZE defaults to 32 768.

NODE_ID

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—8
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The NODE_ID parameter specifies the node ID sent in XIDs on this link station. This ID consists of a block ID of 3 hexadecimal characters and a PU ID of 5 hexadecimal characters.

This parameter is optional.

Notes:

1. If this field is set to zero, the NODE_ID is used in XID exchanges.
2. If this field is nonzero, it replaces the value for XID exchanges on this link station.

PORT_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The PORT_NAME parameter specifies the 1- to 8-byte name of the port associated with this link station.

All eight characters must be specified. Valid characters are any locally displayable characters.

For the Enterprise Extender (EE) DLC, PORT_NAME should be specified as ***UDPLDLC***.

For the Multi-Path Channel (MPC) DLC, PORT_NAME should be specified as ***IBM-MPC***.

This parameter is required.

Note: The PORT_NAME specified on the LINK_STATION keyword must match the PORT_NAME defined by the PORT keyword.

PU_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The PU_NAME parameter specifies the name of the local PU that uses this link if the adjacent node is defined to be a host or if the SOLICIT_SSCP_SESSIONS is specified as 1 on a link to an APPN node. If the adjacent node is not defined to be a host, and is not defined as an APPN node with SOLICIT_SSCP_SESSIONS=1, this field is ignored.

PU_NAME is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

RETRY_LINK_ON_DISCONNECT

The RETRY_LINK_ON_DISCONNECT parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The RETRY_LINK_ON_DISCONNECT parameter specifies whether link activation is retried when the link is stopped normally by the remote node. Valid values are:

0 Link activation is not retried.

1 Link activation is retried.

This parameter is optional.

RETRY_LINK_ON_FAILED_START

The RETRY_LINK_ON_FAILED_START parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The RETRY_LINK_ON_FAILED_START parameter specifies whether link activation is retried if no response is received from the remote node when activation is attempted. If the port is inactive when activation is attempted, an attempt is made to activate it. Valid values are:

0 Link activation is not retried.

1 Link activation is retried.

This parameter is optional.

RETRY_LINK_ON_FAILURE

The RETRY_LINK_ON_FAILURE parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The RETRY_LINK_ON_FAILURE parameter specifies whether link activation is retried if the link fails while in an active or pending active state. If the port fails, an attempt is made to activate it.Valid values are:

0 Link activation is not retried.

1 Link activation is retried.

This parameter is optional.

REVERSE_ADDRESS_BYTES

The REVERSE_ADDRESS_BYTES parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The REVERSE_ADDRESS_BYTES parameter specifies whether the bytes of the destination address are swapped at runtime. Many SNA devices, such as Ethernet routers, require that the destination address be byte-swapped before use. The destination address displayed remains the same regardless of the value of this field. Valid values are:

0 Do not byte-swap the address.

1 Byte-swap the address at runtime.

This parameter is optional.

SOLICIT_SSCP_SESSION

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The SOLICIT_SSCP_SESSION parameter specifies whether SSCP sessions are initiated on this link. Valid values are:

0 Requests no sessions with the SSCP on this link.

1 Requests the adjacent node to initiate sessions between the SSCP and the local control point and dependent LUs. If this value is specified, the PU_NAME parameter must be specified.

This parameter is optional.

Notes:

1. The SOLICIT_SSCP_SESSION parameter is only valid if the link is to an APPN node and is otherwise ignored.
2. If the adjacent node is defined to be a host (ADJACENT_NODE_TYPE is specified as HOST_DEP_LU_ONLY (Communications Server), HOST_XID3 (Personal Communications), or HOST_XID0), the product always requests the host to initiate sessions between the SSCP and the local control point and dependent LUs. The PU_NAME parameter must be specified.

For the Multi-Path Channel (MPC) DLC, SOLICIT_SSCP_SESSION must be specified as 0.

TARGET_PACING_COUNT

The TARGET_PACING_COUNT parameter keyword applies to Personal Communications only.

Required?	No
Keyword Type:	Unsigned number
Range	1—32 767
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The TARGET_PACING_COUNT parameter indicates the desired pacing window size for BINDs on this TG. The number is only significant when fixed bind pacing is being performed. The value is an integer in the range 1—32 767.

This parameter is optional.

TG_NUMBER

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—20
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The TG_NUMBER parameter specifies a pre-assigned TG number. This field is only relevant if the link is to an adjacent APPN node and is otherwise ignored.

This parameter is optional. The default is 0.

Notes:

1. If ADJACENT_NODE_TYPE is specified as SUBAREA_LEN (Communications Server) or BACK_LEVEL_LEN_NODE (Personal Communications), TG_NUMBER is ignored and assumed to be specified as 1.
2. For links to adjacent APPN nodes, TG_NUMBER must be set in the range 1-20. This number is used to represent the link when the link is activated. Communications Server does not accept any other number from the adjacent node during activation of this link.
3. To avoid link-activation failure because of a mismatch of pre-assigned TG numbers, the same TG number must be defined by the adjacent node on the adjacent link station (if using pre-assigned TG numbers).
4. If a preassigned TG number is specified, the FQ_ADJACENT_CP_NAME must also be defined (and can not be set to all zeros) and the ADJACENT_NODE_TYPE must be specified as NETWORK_NODE or END_NODE.
5. If zero is entered, the TG number is not pre-assigned and is negotiated when the link is activated.

USE_PU_NAME_IN_XID

The USE_PU_NAME_IN_XID parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The USE_PU_NAME_IN_XID parameter specifies whether the PU_NAME value in this LINK_STATION keyword should be used instead of the FQ_CP_NAME value from the NODE keyword during XID3 negotiation at link startup. Valid values are:

0 Use the CP name in XID3 negotiation

1 Use the PU name instead of the CP name in XID3 negotiation

This field is ignored unless ADJACENT_NODE_TYPE is specified as HOST_DEP_LU_ONLY or SUBAREA_LEN (Communications Server), or BACK_LEVEL_LEN_NODE or HOST_XID3 (Personal Communications).

This parameter is optional. The default is 0; use the node CP name during XID3 negotiation.

LINK_STATION_ANYNET_SPECIFIC_DATA

For information on defining the parameters for the LINK_STATION_ANYNET_SPECIFIC_DATA parameter, refer to “Appendix A. AnyNet Specific Data” on page 161.

LINK_STATION_LAN_SPECIFIC_DATA

For information on defining the parameters for the LINK_STATION_LAN_SPECIFIC_DATA parameter, refer to “Appendix B. LAN Specific Data” on page 163.

LINK_STATION_OEM_SPECIFIC_DATA

For information on defining the parameters for the LINK_STATION_OEM_SPECIFIC_DATA parameter for the Enterprise Extender (EE) DLC, the Multi-Path Channel (MPC) DLC, or an OEM DLC, refer to “Appendix C. OEM Specific Data” on page 171.

For information on defining the parameters for an OEM DLC, refer to “Appendix C. OEM Specific Data” on page 171.

LINK_STATION_SDLC_SPECIFIC_DATA

For information on defining the parameters for the LINK_STATION_SDLC_SPECIFIC_DATA parameter, refer to “Appendix D. SDLC Specific Data” on page 183.

LINK_STATION_X25_SPECIFIC_DATA

For information on defining the parameters for the LINK_STATION_X25_SPECIFIC_DATA parameter, refer to “Appendix F. X.25 Specific Data” on page 201.

Chapter 15. LOAD_BALANCING

This chapter describes the parameter keywords and values you can specify for the LOAD_BALANCING keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

LOAD_BALANCING Sample

The following is a sample of the LOAD_BALANCING keyword:

```
LOAD_BALANCING=(
     ADVERTISE_FREQUENCY=1
     APPC_LU_LOAD_FACTOR=0
     ENABLE_LOAD_BALANCING=1
     HOST_LU_LOAD_FACTOR=0
     LOAD_VARIANCE=3
     SCOPE_NAME=SCOPE1
)
```

LOAD_BALANCING Parameter Keywords

ADVERTISE_FREQUENCY

Required?	No
Keyword Type:	Unsigned number
Default	1
Range	1-60
Multiples Allowed?	No

The ADVERTISE_FREQUENCY parameter specifies how often, in minutes, the server checks the APPC and host session loads to determine if the threshold value specified on the LOAD_VARIANCE parameter has been reached.

The value is an integer in the range of 1-60 minutes.

This parameter is required. The default is one minute.

APPC_LU_LOAD_FACTOR

Required?	No
Keyword Type:	Signed number
Default	0
Range	-100—100
Multiples Allowed?	No

The APPC_LU_LOAD_FACTOR parameter specifies the factor used when the APPC session load for the server is calculated. Specifying a negative number decreases the calculated session load, and specifying a positive number increases the calculated session load. For example, if this server has a relatively fast CPU, you can decrease the load factor to increase the number of sessions the server manages.

The value is an integer in the range of -100—100.

This parameter is optional. The default is 0.

DEFAULT_MAX_LU62_SESSIONS

Required?	Yes
Keyword Type:	Unsigned number
Default	512
Range	0—65 535
Multiples Allowed?	No

The DEFAULT_MAX_LU62_SESSIONS parameter specifies the default maximum number of independent LU 6.2 sessions allowed per LU. This value is used when a maximum is not specified in the LU definition itself.

DEFAULT_MAX_LU62_SESSIONS is used to determine the congestion in a node during load balancing calculations. As the number of active independent sessions per LU nears this value, the congestion in the node increases.

The value is an integer in the range of 0—65 535.

This parameter is required. The default is 512.

ENABLE_LOAD_BALANCING

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The ENABLE_LOAD_BALANCING parameter specifies whether this server participates in load balancing.

If you specify ENABLE_LOAD_BALANCING=1 and you do not specify a value on the SCOPE_NAME parameter, the server participates in load balancing but it is *unscoped*.

This parameter is optional. The default is that the server does not participate in load balancing.

HOST_LU_LOAD_FACTOR

Required?	No
Keyword Type:	Signed number
Default	0
Range	-100—100
Multiples Allowed?	No

The HOST_LU_LOAD_FACTOR parameter specifies the factor used when the host session load for the server is calculated. Specifying a negative number decreases the calculated session load, and specifying a positive number increases the calculated session load. For example, if this server has a relatively slow CPU, you can increase the load factor to limit the number of sessions the server manages.

The value is an integer in the range of -100—100.

This parameter is optional. The default is 0.

LOAD_VARIANCE

Required?	No
Keyword Type:	Unsigned number
Default	3
Range	0—100
Multiples Allowed?	No

The LOAD_VARIANCE parameter specifies a percentage threshold that changes in APPC and host session loads reach before load information is updated.

The value is an integer in the range of 0—100.

This parameter is optional. The default is 3.

SCOPE_NAME

Required?	No
Keyword Type:	String
Field Length	1—128
Multiples Allowed?	Yes

The SCOPE_NAME parameter specifies the name of a group to which the server belongs, enabling the server to participate in load balancing. A server can participate in a maximum of 10 scopes, or it can be ***unscoped***.

LOAD_BALANCING

The value is an 1- to 128-byte character string.

This parameter is optional.

Clients reach the SNA network through servers that are configured with the same scope or that are unscoped; clients must be configured to participate in load balancing through a single scope or through unscoped servers.

Chapter 16. LOCAL_LU

This chapter describes the parameter keywords and values you can specify for the LOCAL_LU keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes, but each LOCAL_LU keyword must have a unique LU_NAME parameter

LOCAL_LU Sample

The following is a sample of the LOCAL_LU keyword:

```
LOCAL_LU=(
     LU_NAME=LOCLU62
     LU_ALIAS=LOCALIAS
     LU_SESSION_LIMIT=0
     NAU_ADDRESS=0
     ROUTE_TO_CLIENT=0
)
```

LOCAL_LU Parameter Keywords

LU_ALIAS

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LOCAL_LU keyword

The LU_ALIAS parameter specifies an alternate 1- to 8-byte name for the local LU. Local applications can use this name, instead of the fully qualified LU name, to refer to the local LU.

All eight characters must be specified. Valid characters are any locally displayable characters using the native encoding of the local system.

This parameter is required.

Alias names are used for convenience of writing applications, such as transaction programs and management services programs. Local programs can use alias names instead of network names to refer to network resources, such as the local CP, a local LU, and a partner LU. Changes can be made to the network names of these resources without affecting the alias names. A network administrator can change the fully qualified name of a CP or LU without affecting the local applications that use the alias names for these resources.

LU_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LOCAL_LU keyword

The LU_NAME parameter specifies the name of a type of network accessible unit (NAU) that enables end users to communicate with each other and gain access to network resources.

LU_NAME is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is required.

LU_SESSION_LIMIT

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—65 535
Multiples Allowed?	Yes, one for each LOCAL_LU keyword

The LU_SESSION_LIMIT parameter specifies the maximum number of sessions supported by the LU.

The value for the session limit is an integer in the range 0—65 535. Zero means no limit.

This parameter is required. The default is 0.

Notes:

1. If the LU is independent, LU_SESSION_LIMIT can be set to any value in the range.
2. If the LU is dependent, LU_SESSION_LIMIT must be set to 1.

MODEL_NAME

The MODEL_NAME parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	String
Field Length	1—7
Multiples Allowed?	Yes, one for each LOCAL_LU keyword

The MODEL_NAME parameter identifies a string used to search for an LUSEED operand in a VTAM switched major node definition that specifies the characteristics of LUs being created dynamically. This parameter only applies to dependent LUs.

MODEL_NAME is a 1- to 7-byte SNA Type A character string. Valid characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

Note: If a value other than all zeros (0) is specified and the host system supports SDDLU (self-defining dependent LU), the node generates an unsolicited PSID NMVT reply. If the specified string matches a VTAM LUSEED operand, a dynamic LU is created at the host.

NAU_ADDRESS

Required?	No
Keyword Type:	Unsigned number
Range	0—255
Multiples Allowed?	Yes, one for each LOCAL_LU keyword

The NAU_ADDRESS parameter specifies the network addressable unit address of the LU. The value is an integer in the range 0-255.

This parameter is optional.

Notes:

1. Zero implies the LU is an independent LU.
2. A nonzero value implies the LU is a dependent LU.

PU_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LOCAL_LU keyword

The PU_NAME parameter specifies the PU name this LU uses.

This field is only used by dependent LUs, and should be set to all binary zeros for independent LUs.

PU_NAME is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

ROUTE_TO_CLIENT

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each LOCAL_LU keyword

The ROUTE_TO_CLIENT parameter specifies whether all incoming application requests over sessions with this LU are routed to the client. Valid values are:

0 This LU is meant to be used by a server-based TP.

1 Application requests are handled by SNA Client Services and forwarded to any SNA API client that has logged into Communications Server or Personal Communications and has registered its transaction programs with this LU.

This parameter is optional.

SYNCPT_SUPPORT

The SYNCPT_SUPPORT parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LOCAL_LU keyword

The SYNCPT_SUPPORT parameter specifies whether a sync point manager is available for this LU. Valid values are:

0 A sync point manager is not available.

1 A sync point manager is available.

This parameter is optional. The default is that a sync point manager is not available.

This value should always be specified as 0, unless a sync point manager is available for this LU.

Chapter 17. LU_0_TO_3

This chapter describes the parameter keywords and values you can specify for the LU_0_TO_3 keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	LU_NAME
Multiples Allowed?	Yes, but each LU_0_TO_3 keyword must have a unique LU_NAME parameter

LU_0_TO_3 Sample

The following is a sample of the LU_0_TO_3 keyword:

```
LU_0_TO_3=(
     LU_NAME=LUA2

     LU_MODEL=3270_DISPLAY_MODEL_2
     NAU_ADDRESS=2
     PRIORITY=MEDIUM
     PU_NAME=NT265
)
```

LU_0_TO_3 Parameter Keywords

APPLICATION_TYPE

Required?	No	
Keyword Type:	Enumerated	
Default	UNASSIGNED	
Default	No default	
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword	

The APPLICATION_TYPE parameter specifies which LU 0 to 3 LUs are enabled for TN3270E clients. The TN3270E Server may make use of an LU 0 to 3 LU definition to allow non-native (TCP/IP) clients to communicate with a host. Valid values are:

TN3270E
This LU is enabled for TN3270E or TN3270 client use.

UNASSIGNED
Only normal SNA 3270 clients may use this LU.

Note: LUs with an application type of TN3270E may also be used for normal SNA 3270 client traffic as long as the LU is not already in use by a TN3270E or TN3270 client.

This parameter is optional.

The default is UNASSIGNED.

There is no default.

ASSOC_PRINTER

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The ASSOC_PRINTER parameter identifies the printer associated with an explicit workstation or an LU in a pool of implicit workstations. This list contains the LU names for all printer LUs that are unassigned and, if previously defined, the name of the printer currently assigned to this workstation LU.

ASSOC_PRINTER is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

CLASS_TYPE

Required?	No
Keyword Type:	Enumerated
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The CLASS_TYPE parameter indicates how this LU or pool is used. Valid values are:

TN_ASSOC_PRINTER
Use for connections that require a printer associated with an explicit workstation or an LU in a pool of implicit workstations.

TN_EXPLICIT_PRINTER
Use for connections that require a specific printer device name.

TN_EXPLICIT_WORKSTATION
Use for connections that require a specific workstation device name.

TN_IMPLICIT_PRINTER
Use for connections that do not require a specific printer device name.

TN_IMPLICIT_WORKSTATION
Use for connections that do not require a specific workstation device name.

TN_UNASSIGNED
Use to delete the TN3270E definition for the selected LU or pool.

This parameter is optional.

LU_MODEL

Required?	Yes
Keyword Type:	Enumerated
Default	3270_DISPLAY_MODEL_2
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The LU_MODEL parameter specifies the display model type to use with this LU. Valid values are:

3270_DISPLAY_MODEL_2	3270 Display 2 - 24 x 80
3270_DISPLAY_MODEL_2	3270 Display 3 - 32 x 80
3270_DISPLAY_MODEL_4	3270 Display 4 - 43 x 80
3270_DISPLAY_MODEL_5	3270 Display 5 - 27 x 132
RJE_WKSTN	Remote job entry workstation
PRINTER	Printer
UNKNOWN	Dependent LU type, such as LU6.2

This parameter is required. The default is 3270_DISPLAY_MODEL_2.

Note: If a value other than UNKNOWN is specified and the host system supports SDDLU (self-defining dependent LU), the node generates an unsolicited PSID NMVT reply and dynamically defines the local LU at the host.

If the MODEL_NAME parameter is specified, the LU_MODEL parameter is ignored.

LU_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The LU_NAME parameter specifies the name of a type of network accessible unit (NAU) that enables end users to communicate with each other and gain access to network resources.

LU_NAME is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).

- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is required.

MODEL_NAME

The MODEL_NAME parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	String
Field Length	1—7
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The MODEL_NAME parameter identifies a string used to search for an LUSEED operand in a VTAM switched major node definition that specifies the characteristics of LUs being created dynamically.

MODEL_NAME is a 1- to 7-byte SNA Type A character string. Valid characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

Note: If a value other than all zeros (0) is specified and the host system supports SDDLU (self-defining dependent LU), the node generates an unsolicited PSID NMVT reply. If the specified string matches a VTAM LUSEED operand, a dynamic LU is created at the host.

NAU_ADDRESS

Required?	Yes
Keyword Type:	Unsigned number
Range	1—255
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The NAU_ADDRESS parameter specifies the network addressable unit address of the LU. The value is an integer in the range 1-255.

This parameter is required.

POOL_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The POOL_NAME parameter specifies the name of LU pool to which this LU belongs. The name of the pool is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

PRIORITY

Required?	Yes
Keyword Type:	Enumerated
Default	MEDIUM
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The PRIORITY parameter specifies the data priority for the LU when sending to the host. Valid values are:

LOW Used for #BATCH, #BATCHSC, and other class of service definitions typically used when throughput is preferred but not at the expense of interactive traffic.

MEDIUM Used for #CONNECT and other class of service definitions typically used when connectivity is preferred over response time and throughput

HIGH Used for #INTER, #INTERSC, and other class of service definitions typically used for interactive traffic where good response time is preferred

NETWORK Reserved for CPSVCMG, SNASVCMG, RSETUP, and other class of service definitions used for connections that carry SNA network control messages

This parameter is required. The default is MEDIUM.

PU_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each LU_0_TO_3 keyword

The PU_NAME parameter specifies the name of the internal PU that manages and monitors the resources (such as attached links and adjacent link station) associated with a node.

PU_NAME is a 1- to 8-byte SNA Type A character string. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is required.

Chapter 18. LU_LU_PASSWORD

This chapter describes the parameter keywords and values you can specify for the LU_LU_PASSWORD keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	LU_PAIR
Multiples Allowed?	Yes, but each LU_LU_PASSWORD keyword must have a unique LU_PAIR parameter

LU_LU_PASSWORD Sample

The following is a sample of the LU_LU_PASSWORD keyword:

```
LU_LU_PASSWORD=(
     LU_PAIR=NT265,USIBMNM.PARTLU
     PASSWORD=460C7761C854E0E6
)
```

LU_LU_PASSWORD Parameter Keywords

LU_PAIR

Required?	Yes	
Keyword Type:	String	
Field Length	4—26	
Field Length	1—26	
Multiples Allowed?	Yes, one for each LU_LU_PASSWORD keyword	

The LU_PAIR parameter is comprised of the local LU name and the fully qualified partner LU name separated by a comma.

The local logical unit (LU) name is the name that identifies your workstation and gives transaction programs access to the network. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

LU_LU_PASSWORD

The partner logical unit (LU) name is the name of the LU where the partner program is located. This LU name is the name of the remote LU recognized by the local LU for the purpose of allocating a conversation.

The fully qualified partner LU name is a 17-byte character string. The fully qualified partner LU name consists of two parts: the network name and the LU name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The LU name is a 1- to 8-byte SNA Type A character string. The fully qualified LU name is also known as the network qualified LU name.

This parameter is required.

PASSWORD

Required?	Yes
Keyword Type:	Hexadecimal string
Field Length	1—16
Multiples Allowed?	Yes, one for each LU_LU_PASSWORD keyword

The PASSWORD parameter is the password defined for a partner logical unit (LU) and used on a partner LU basis. One LU-LU password is established between each LU pair. The password is converted to a 16-character hexadecimal string by the encryption process.

Note: Since this value is encrypted, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the **Node Configuration** application.

This parameter is required.

LU-LU passwords are kept secure by the workstation. They are not sent outside the workstation, nor can a program or user obtain them from the workstation.

Chapter 19. MODE

This chapter describes the parameter keywords and values you can specify for the MODE keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	MODE_NAME
Multiples Allowed?	Yes, but each MODE keyword must have a unique MODE_NAME parameter

MODE Sample

The following are samples of the MODE keyword:

```
MODE=(
     MODE_NAME=BLANK
     AUTO_ACT=0
     COS_NAME=#CONNECT
     CRYPTOGRAPHY=NONE
     DEFAULT_RU_SIZE=1
     MAX_NEGOTIABLE_SESSION_LIMIT=8
     MAX_RU_SIZE_UPPER_BOUND=1024
     MIN_CONWINNERS_SOURCE=4
     PLU_MODE_SESSION_LIMIT=8
     RECEIVE_PACING_WINDOW=3
)
MODE=(
     MODE_NAME=#INTER
     AUTO_ACT=0
     COS_NAME=#INTER
     CRYPTOGRAPHY=NONE
     DEFAULT_RU_SIZE=1
     MAX_NEGOTIABLE_SESSION_LIMIT=8
     MAX_RU_SIZE_UPPER_BOUND=4096
     MIN_CONWINNERS_SOURCE=4
     PLU_MODE_SESSION_LIMIT=8
     RECEIVE_PACING_WINDOW=20
)
```

MODE Parameter Keywords

AUTO_ACT

Required?	Yes
Keyword Type:	Unsigned number
Default	0
Range	0—32 767
Multiples Allowed?	Yes, one for each MODE keyword

The AUTO_ACT parameter specifies how many sessions are auto-activated for this mode. This value is used when change number of sessions (CNOS) exchange is initiated implicitly. The value is an integer in the range 0—32 767.

This parameter is required. The default is 0.

COMPRESS_IN_SERIES

The COMPRESS_IN_SERIES parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each MODE keyword

The COMPRESS_IN_SERIES parameter specifies whether the LZ compression preceded by RLE compression is requested.

0 LZ compression preceded by RLE compression is not requested.

1 LZ compression preceded by RLE compression is requested.

Notes:

1. If COMPRESS_IN_SERIES is specified as 1, the MAX_COMPRESSION_LEVEL parameter must be specified as LZ9 or LZ10.
2. COMPRESS_IN_SERIES=1 is ignored if COMPRESS_IN_SERIES=1 is not specified on the NODE keyword.

This parameter is optional. The default is 0.

COMPRESSION

Required?	Yes
Keyword Type:	Enumerated
Default	PROHIBITED
Multiples Allowed?	Yes, one for each MODE keyword

The COMPRESSION parameter specifies whether data compression is enabled for sessions that use this mode. Valid values are:

PROHIBITED Data compression is prohibited for sessions using this mode.

REQUESTED Data compression is requested for sessions using this mode.

This parameter is required. The default is PROHIBITED.

COS_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each MODE keyword

The COS_NAME parameter specifies the name of the class of service to request when activating sessions on this mode. The name is a 1- to 8-byte SNA Type A character string.

This parameter is required.

CRYPTOGRAPHY

Required?	No	
Required?	Yes	
Keyword Type:	Enumerated	
Default	NONE	
Multiples Allowed?	Yes, one for each MODE keyword	

For migration purposes, valid values are:

MANDATORY Session-level cryptography is mandatory.

NONE No session-level cryptography is used.

Valid values are:

MANDATORY Session-level cryptography is mandatory.

NONE No session-level cryptography is used.

This parameter is optional.

This parameter is required.

The default is NONE.

DEFAULT_RU_SIZE

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each MODE keyword

The DEFAULT_RU_SIZE parameter specifies whether a default upper bound for the maximum RU size is used. Valid values are:

0 The value for the MAX_RU_SIZE_UPPER_BOUND parameter is used.

1 The value for the MAX_RU_SIZE_UPPER_BOUND parameter is ignored. The upper bound for the maximum RU size is set to the link basic transmission unit (BTU) size, minus the size of the transmission header (TH) and the request/response unit header (RH).

This parameter is required. The default is 1.

ENCRYPTION_SUPPORT

The ENCRYPTION_SUPPORT parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Enumerated
Default	NONE
Multiples Allowed?	Yes, one for each MODE keyword

The ENCRYPTION_SUPPORT parameter specifies whether session-level cryptography is used. Valid values are:

MANDATORY Session-level cryptography is mandatory.

NONE No session-level cryptography is used.

This parameter is optional. The default is NONE.

MAX_INCOMING_COMPRESSION_LEVEL

The MAX_INCOMING_COMPRESSION_LEVEL parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Enumerated
Default	NONE
Multiples Allowed?	Yes, one for each MODE keyword

The MAX_INCOMING_COMPRESSION_LEVEL parameter specifies the maximum level of decompression supported for data coming into this node. The level of decompression specified must be less than or equal to the value specified on the MAX_COMPRESSION_LEVEL parameter on the NODE keyword. Valid values are:

NONE	This node does not support decompression.
RLE	This node supports RLE decompression.
LZ9	This node supports RLE and LZ9 decompression.
LZ10	This node supports RLE, LZ9, and LZ10 decompression.

Note: If compression is negotiated using a non-extended BIND, the decompression level used is LZ9.

This parameter is required. The default is NONE.

MAX_NEGOTIABLE_SESSION_LIMIT

Required?	Yes
Keyword Type:	Unsigned number
Default	128
Range	0—32 767
Multiples Allowed?	Yes, one for each MODE keyword

The MAX_NEGOTIABLE_SESSION_LIMIT parameter specifies the maximum number of sessions allowed in this mode between any local logical unit (LU) and partner LU. This value is used when change number of sessions (CNOS) exchange is initiated implicitly. The value is an integer in the range 0—32 767.

A value of zero (0) means no implicit CNOS exchange.

This parameter is required. The default is 128.

MAX_OUTGOING_COMPRESSION_LEVEL

The MAX_OUTGOING_COMPRESSION_LEVEL parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Enumerated
Default	NONE
Multiples Allowed?	Yes, one for each MODE keyword

The MAX_OUTGOING_COMPRESSION_LEVEL parameter specifies the maximum compression level supported for data being sent from this node. The level of decompression specified must be less than or equal to the value specified on the MAX_COMPRESSION_LEVEL parameter on the NODE keyword. Valid values are:

NONE	This node does not support compression.
RLE	This node supports RLE compression.
LZ9	This node supports RLE and LZ9 compression.
LZ10	This node supports RLE, LZ9, and LZ10 compression.

Note: If compression is negotiated using a non-extended BIND, the compression level used is RLE.

This parameter is required. The default is NONE.

MAX_RU_SIZE_UPPER_BOUND

Required?	Yes
Keyword Type:	Unsigned number
Default	4 096 
Default	No default 
Range	4 096
Multiples Allowed?	Yes, one for each MODE keyword

The MAX_RU_SIZE_UPPER_BOUND parameter specifies the maximum size of the request/response units (RUs) sent and received on the sessions in this mode and is negotiated during session activation.

The value is an integer in the range 256—61 440.

This parameter is required.

 The default is 4 096.

 There is no default.

MAX_RU_SIZE_UPPER_BOUND is ignored if the DEFAULT_RU_SIZE parameter is specified as 1.

MIN_CONWINNERS_SOURCE

Required?	Yes
Keyword Type:	Unsigned number
Default	16
Range	0—32 767
Multiples Allowed?	Yes, one for each MODE keyword

The MIN_CONWINNERS_SOURCE parameter specifies the minimum number of sessions that can be activated by a local logical unit (LU) using this mode to win a contention with a partner. When your workstation is the contention winner, it can allocate a conversation on that session without requesting permission from the partner LU to use the session. The number you enter must be less than or equal to the PLU_MODE_SESSION_LIMIT. The value is an integer in the range 0—32 767.

This parameter is required. The default is 16.

A value of zero (0) means no implicit change number of sessions (CNOS) exchange.

MODE_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each MODE keyword

The MODE_NAME parameter specifies the name of the mode to be used for the session.

This parameter is required.

MODE_NAME is a 1- to 8-byte SNA Type A character string. You can specify one of the following:

- BLANK
- #BATCH
- #BATCHSC
- #INTER
- #INTERSC
- QPCSUPP
- SNASVCMG
- A unique mode name for each mode you define. If you define your own mode name, valid characters are:
  - All blanks
  - The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
  - The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

The mode name is used by the initiator of the session to designate the characteristics for the session allocated for the conversation. The mode defines a set of characteristics that can apply to one or more sessions. These characteristics include traffic-pacing values, message-length limits, synchronization point and cryptography options, and the class of service within the transport network.

PLU_MODE_SESSION_LIMIT

Required?	Yes
Keyword Type:	Unsigned number
Default	32
Range	0—32 767
Multiples Allowed?	Yes, one for each MODE keyword

The PLU_MODE_SESSION_LIMIT specifies the maximum number of concurrently active LU-LU sessions that a particular LU can support. The value is an integer in the range 0—32 767.

This parameter is required. The default is 32.

A value of zero (0) means no implicit change number of sessions (CNOS) exchange.

Notes:

1. Increase the number if your most important application programs are coming up too slowly.
2. Decrease the number to improve overall system response time.

RECEIVE_PACING_WINDOW

Required?	Yes
Keyword Type:	Unsigned number
Default	1
Range	1—63
Multiples Allowed?	Yes, one for each MODE keyword

The RECEIVE_PACING_WINDOW parameter indicates to the partner logical unit (LU) how many request units (RUs) it can send before receiving a pacing response. The value is an integer in the range 1-63. The value zero is not allowed.

This parameter is required. The default is 1.

Session pacing helps to prevent local buffers from overrunning. The receive pacing window size is the session pacing limit for sessions in this mode. The actual value used may be negotiated between the nodes when the session is started.

For fixed pacing, this value specifies the receive pacing window. For adaptive pacing, this value is used as an initial receive window size. Communications Server always uses adaptive pacing unless the adjacent node specifies that it does not support it.

Chapter 20. NODE

This chapter describes the parameter keywords and values you can specify for the NODE keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

NODE Sample

The following is a sample of the NODE keyword:

```
NODE=(
     ANYNET_SUPPORT=ACCESS_NODE
     CP_ALIAS=NT265
     DEFAULT_PREFERENCE=NATIVE
     DISCOVERY_GROUP_NAME=<NONE>
     DISCOVERY_SUPPORT=DISCOVERY_CLIENT
     FQ_CP_NAME=USIBMNM.NT265
     NODE_ID=05D00000
     NODE_TYPE=END_NODE
     REGISTER_WITH_CDS=1
     REGISTER_WITH_NN=1
)
```

NODE Parameter Keywords

ANYNET_SUPPORT

Required?	Yes	
Keyword Type:	Enumerated	
Default	NONE	
Default	ANYNET_SUPPORTED	
Multiples Allowed?	No	

The ANYNET_SUPPORT parameter specifies the level of support for the AnyNet DLC. Valid values are:

ACCESS_NODE This node supports AnyNet access node functions.

GATEWAY This node supports AnyNet gateway functions. This value is only valid if the NODE_TYPE parameter is specified as NETWORK_NODE.

NONE No AnyNet function is supported. The DEFAULT_PREFERENCE parameter must be specified as NATIVE.

ACCESS_NODE This node supports AnyNet access node functions.

ANYNET_SUPPORTED No AnyNet function is supported. The DEFAULT_PREFERENCE parameter must be specified as NATIVE.

GATEWAY This node supports AnyNet gateway functions. This value is only valid if the NODE_TYPE parameter is specified as NETWORK_NODE.

This parameter is required.

The default is NONE.

The default is ANYNET_SUPPORTED.

COMPRESS_IN_SERIES

The COMPRESS_IN_SERIES parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The COMPRESS_IN_SERIES parameter specifies whether the LZ compression preceded by RLE compression is allowed.

0 LZ compression preceded by RLE compression is not allowed.

1 LZ compression preceded by RLE compression is allowed.

This parameter is optional. The default is 0.

CP_ALIAS

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The CP_ALIAS parameter specifies an alternate 1- to 8-byte name for the local CP. Local applications can use this name, instead of the fully qualified CP name, to refer to the local CP.

All eight characters must be specified. Valid characters are any locally displayable characters using the native encoding of the local system.

This parameter is optional.

Alias names are used for convenience of writing applications, such as transaction programs and management services programs. Local programs can use alias names instead of network names to refer to network resources, such as the local CP, a local LU, and a partner LU. Changes can be made to the network names of these resources without affecting the alias names. A network administrator can change the fully qualified name of a CP or LU, without affecting the local applications that use the alias names for these resources.

DEFAULT_PREFERENCE

Required?	Yes
Keyword Type:	Enumerated
Default	NATIVE
Multiples Allowed?	No

The DEFAULT_PREFERENCE parameter specifies the type of routing that you want the node to use by default when initiating sessions to partner LUs for which DEFAULT_PREFERENCE is specified. Valid values are:

NATIVE
Use native (APPN) routing protocols only.

NONNATIVE
Use non-native (AnyNet) protocols only.

Note: This value is only meaningful when an AnyNet DLC is available to the Node Operator Facility, and there is an AnyNet link station defined. (See the LINK_STATION keyword).

NATIVE_THEN_NONNATIVE
Try native (APPN) protocols, and if the partner LU can not be located, retry session activation using non-native (AnyNet) protocols.

Note: This value is only meaningful when an AnyNet DLC is available to the Node Operator Facility, and there is an AnyNet link station defined. (See the LINK_STATION keyword).

NONNATIVE_THEN_NATIVE
Try non-native (AnyNet) protocols, and if the partner LU can not be located, retry session activation using native (APPN) protocols.

Note: This value is only meaningful when an AnyNet DLC is available to the Node Operator Facility, and there is an AnyNet link station defined. (See the LINK_STATION keyword).

This parameter is required. The default is NATIVE.

DISCOVERY_GROUP_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DISCOVERY_GROUP_NAME parameter specifies the group name to be used on discovery functions utilized by the node. DISCOVERY_GROUP_NAME is a 1- to 8-byte character string.

If you do not specify this parameter, the default group name is used.

This parameter is optional.

DISCOVERY_SUPPORT

Required?	Yes
Keyword Type:	Enumerated
Default	DISCOVERY_CLIENT
Multiples Allowed?	No

The DISCOVERY_SUPPORT parameter specifies whether discovery functions are to be utilized by this node. Valid values are:

NO No discovery functions are to be used by this node.

DISCOVERY_CLIENT Discovery client function is used to try to dynamically configure and activate a link to a network node server when necessary. This value is only valid if the NODE_TYPE parameter is specified as END_NODE.

DISCOVERY_SERVER Discovery server function is used to respond to searches from clients. This value is only valid if the NODE_TYPE parameter is specified as NETWORK_NODE.

This parameter is required. The default is DISCOVERY_CLIENT.

DLUR_SUPPORT

The DLUR_SUPPORT parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Enumerated
Default	NORMAL
Multiples Allowed?	No

The DLUR_SUPPORT parameter specifies the level of support for DLUR provided by the node. Valid values are:

MULTI_SUBNET	DLUR full multi-subnet is supported.
NORMAL	DLUR full multi-subnet is not supported.

This parameter is required. The default is NORMAL.

FQ_CP_NAME

Required?	Yes	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	No	

The FQ_CP_NAME parameter specifies the fully qualified node name of the control point.

The fully qualified CP name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the network qualified CP name.

This parameter is required.

MAX_LS_EXCEPTION_EVENTS

The MAX_LS_EXCEPTION_EVENTS parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Unsigned number
Default	200
Range	0—200
Multiples Allowed?	No

The MAX_LS_EXCEPTION_EVENTS parameter specifies the maximum number of LS_EXCEPTION entries recorded by the node.

The value is an integer in the range 0-200.

This parameter is required. The default is 200.

NODE_ID

Required?	Yes
Keyword Type:	Hexadecimal string
Default	X'05D00000'
Field Length	1—8
Multiples Allowed?	No

The NODE_ID parameter specifies the ID of the node. This ID consists of a block ID of 3 hexadecimal characters and a PU ID of 5 hexadecimal characters.

This parameter is required. The default is X'05D00000'.

NODE_TYPE

Required?	Yes
Keyword Type:	Enumerated
Default	END_NODE
Multiples Allowed?	No

The NODE_TYPE specifies the APPN node type of this node. Valid values are:

BRANCH_EXTENDER_NODE Defines this node as a branch extender node.

END_NODE Defines this node as an end node.

NETWORK_NODE Defines this node as a network node.

END_NODE is the required value for Personal Communications.

This parameter is required. The default is END_NODE.

REGISTER_WITH_CDS

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	No

The REGISTER_WITH_CDS parameter specifies whether resources are registered with a central directory server.

If NODE_TYPE is specified as an END_NODE, valid values are:

0 The network node server is not allowed to register end node resources with a central directory server.

1 The network node server is allowed to register end node resources with a central directory server.

Note: The REGISTER_WITH_CDS parameter is ignored if REGISTER_WITH _NN is set to 0.

If NODE_TYPE is specified as a NETWORK_NODE, valid values are:

0 Local and domain resources can not be registered with a central directory server.

1 Local and domain resources can optionally be registered with a central directory server.

This parameter is required. The default is 1.

REGISTER_WITH_NN

Required?	Yes	
Keyword Type:	Enumerated	
Keyword Type:	Boolean	
Default	ALL	
Default	1	
Multiples Allowed?	No	

The REGISTER_WITH_NN parameter specifies whether resources are registered with the network node server.

REGISTER_WITH_NN is only valid if NODE_TYPE is specified as END_NODE or BRANCH_EXTENDER_NODE.

REGISTER_WITH_NN is only valid if NODE_TYPE is specified as END_NODE.

NODE

Valid values are:

ALL

- If NODE_TYPE=END_NODE, the network node server only forwards directed locates to the end node.
- If NODE_TYPE=BRANCH_EXTENDER_NODE, local LUs and LUs within the branch domain are registered with the network node server.
  Note: LUs registered to a branch extender node from end nodes consider the local branch extender node to be the network node server.

LOCAL_ONLY

Only LUs resident on the local node are registered with the network node server. This value is only valid if NODE_TYPE is specified as BRANCH_EXTENDER_NODE.

NONE

- If NODE_TYPE=END_NODE, the network node server forwards all broadcast searches to the end node.
- If NODE_TYPE=BRANCH_EXTENDER_NODE, no LU resources are registered with the network node server.

1 The network node server only forwards directed locates to the end node.

0 The network node server forwards all broadcast searches to the end node.

This parameter is required.

The default is ALL.

The default is 1.

Chapter 21. PARTNER_LU

This chapter describes the parameter keywords and values you can specify for the PARTNER_LU keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	FQ_PLU_NAME
Multiples Allowed?	Yes, but each PARTNER_LU keyword must have a unique FQ_PLU_NAME parameter

PARTNER_LU Sample

The following is a sample of the PARTNER_LU keyword:

```
PARTNER_LU=(
     FQ_PLU_NAME=USIBMNM.DLURSRV
     CONV_SECURITY_VERIFICATION=1
     MAX_MC_LL_SEND_SIZE=32767
     PARALLEL_SESSION_SUPPORT=1
     PARTNER_LU_ALIAS=DLURSRV
     PREFERENCE=USE_DEFAULT_PREFERENCE
)
```

PARTNER_LU Parameter Keywords

ADJACENT_CP_NAME

Required?	No	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each PARTNER_LU keyword	

The ADJACENT_CP_NAME parameter is the name of the CP directly connected to your workstation across this link.

The fully qualified adjacent CP name is a 17-byte character string. The fully qualified adjacent CP name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the network qualified CP name.

This parameter is optional.

CONV_SECURITY_VERIFICATION

Required?	No
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each PARTNER_LU keyword

The CONV_SECURITY_VERIFICATION parameter specifies whether the partner LU is authorized to validate user IDs on behalf of local LUs; that is, whether the partner LU can set the already verified indicator in an Attach request. Valid values are:

0 The partner LU is not authorized to validate user IDs on behalf of local LUs.

1 The partner LU is authorized to validate user IDs on behalf of local LUs.

This parameter is optional. The default is 1.

FQ_PLU_NAME

Required?	Yes	
Keyword Type:	String	
Field Length	3—17	
Field Length	1—17	
Multiples Allowed?	Yes, one for each PARTNER_LU keyword	

The FQ_PLU_NAME parameter specifies the fully qualified name of the partner LU.

The fully qualified partner LU name is a 17-byte character string. The fully qualified partner LU name consists of two parts: the network name and the LU name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The LU name is a 1- to 8-byte SNA Type A character string. The fully qualified LU name is also known as the network qualified LU name.

This parameter is required.

MAX_MC_LL_SEND_SIZE

Required?	No
Keyword Type:	Unsigned number
Default	32 767
Range	1—32 767
Multiples Allowed?	Yes, one for each PARTNER_LU keyword

The MAX_MC_LL_SEND_SIZE parameter specifies the maximum size of line length (LL) records sent by and received by mapped conversation services at the partner LU.

The value is an integer in the range of 1—32 767.

This parameter is optional. The default is 32 767.

The maximum line length (LL) record size is the maximum size of the logical record in the data stream for basic conversations. Basic conversations allow programs to exchange data in a standardized format. This format is a stream of data containing 2-byte length fields (referred to as LLs) that specify the amount of data to follow before the next length field.

PARALLEL_SESSION_SUPPORT

Required?	No
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each PARTNER_LU keyword

The PARALLEL_SESSION_SUPPORT parameter specifies whether the partner LU supports parallel sessions. Valid values are:

0 The partner LU does not support parallel sessions.

1 The partner LU does support parallel sessions.

This parameter is optional. The default is 1.

The parallel session support specifies whether the partner LU supports two or more currently active sessions between the same two LUs using different pairs of network addresses or session identifiers.

PARTNER_LU_ALIAS

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each PARTNER_LU keyword

The PARTNER_LU_ALIAS parameter specifies an alternate 1- to 8-byte name for the partner LU. Local applications can use this name, instead of the fully qualified LU name, to refer to the partner LU.

All eight characters must be specified. Valid characters are any locally displayable characters using the native encoding of the local system.

Do not specify this parameterfor a partner LU that has no alias associated with it.

This parameter is optional.

Alias names are used for convenience of writing applications, such as transaction programs and management services programs. Local programs can use alias names

instead of network names to refer to network resources, such as the local CP, a local LU, and a partner LU. Changes can be made to the network names of these resources without affecting the alias names. A network administrator can change the fully qualified name of a CP or LU without affecting the local applications that use the alias names for these resources.

PREFERENCE

Required?	Yes
Keyword Type:	Enumerated
Default	USE_DEFAULT_PREFERENCE
Multiples Allowed?	Yes, one for each PARTNER_LU keyword

The PREFERENCE parameter specifies the type of routing that you want the node to use by default. Valid values are:

NATIVE
Use native (APPN) routing protocols only.

NONNATIVE
Use non-native (AnyNet) protocols only.

Note: This value is only meaningful when an AnyNet DLC is available to the Node Operator Facility, and there is an AnyNet link station defined. (See the LINK_STATION keyword).

NATIVE_THEN_NONNATIVE
Try native (APPN) protocols, and if the partner LU can not be located, retry session activation using non-native (AnyNet) protocols.

Note: This value is only meaningful when an AnyNet DLC is available to the Node Operator Facility, and there is an AnyNet link station defined. (See the LINK_STATION keyword).

NONNATIVE_THEN_NATIVE
Try non-native (AnyNet) protocols, and if the partner LU can not be located, retry session activation using native (APPN) protocols.

Note: This value is only meaningful when an AnyNet DLC is available to the Node Operator Facility, and there is an AnyNet link station defined. (See the LINK_STATION keyword).

USE_DEFAULT_PREFERENCE
Use the default preference defined when the node was started. (This can be recalled by QUERY_NODE.)

This parameter is required. The default is USE_DEFAULT_PREFERENCE.

Chapter 22. PORT

This chapter describes the parameter keywords and values you can specify for the PORT keyword.

The PORT keyword should contain one of the Port_*_Specific_Data_ keywords. Which Port_*_Specific_Data keyword to use is dependent on the value of DLC_NAME. For example, a PORT keyword with DLC_NAME=LAN should include a PORT_LAN_SPECIFIC_DATA keyword.

The OEM parameters are also used to specify values for the Enterprise Extender (EE) DLC and Multi-Path Channel (MPC) DLC .

OEM port specific data for an OEM communications device is not configurable through the ASCII configuration.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	PORT_NAME
Multiples Allowed?	Yes, but each PORT keyword must have a unique PORT_NAME parameter

PORT Samples

The following are samples of the PORT keyword:

```
PORT=(
     PORT_NAME=ANYNET
     DLC_NAME=ANYNET
     IMPLICIT_DEACT_TIMER=0
     IMPLICIT_DSPU_SERVICES=NONE
     IMPLICIT_HPR_SUPPORT=0
     IMPLICIT_LIMITED_RESOURCE=NO
     MAX_IFRM_RCVD=127
     MAX_RCV_BTU_SIZE=9216

     PORT_TYPE=SATF
)
PORT=(
     PORT_NAME=LAN0_04
     DLC_DATA=00000000000004
     DLC_NAME=LAN
     IMPLICIT_DEACT_TIMER=0
     IMPLICIT_DSPU_SERVICES=NONE
     IMPLICIT_HPR_SUPPORT=1
     IMPLICIT_LIMITED_RESOURCE=NO
     MAX_IFRM_RCVD=8
     MAX_RCV_BTU_SIZE=65535

     PORT_TYPE=SATF
     PORT_LAN_SPECIFIC_DATA=(
          ACK_DELAY=100
          ACK_TIMEOUT=1000
          ADAPTER_ID=LAN0
```

```
                ADAPTER_NAME=0000
                BUSY_STATE_TIMEOUT=15
                IDLE_STATE_TIMEOUT=30
                OUTSTANDING_TRANSMITS=16
                POLL_TIMEOUT=3000
                REJECT_RESPONSE_TIMEOUT=10
                TEST_RETRY_INTERVAL=8
                TEST_RETRY_LIMIT=5
                XID_RETRY_INTERVAL=8
                XID_RETRY_LIMIT=5
        )
)
```

PORT Parameter Keywords

ACTIVATION_DELAY_TIMER

The ACTIVATION_DELAY_TIMER parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Unsigned number
Range	0—3 600
Multiples Allowed?	Yes, one for each PORT keyword

The ACTIVATION_DELAY_TIMER parameter specifies the seconds between automatic retry attempts, and between application-driven activation attempts if the DELAY_APPLICATION_RETRIES parameter is specified.

The value is an integer in the range of 0—3 600. If 0 is specified, a default value of 30 seconds is used.

This parameter is optional.

DELAY_APPLICATION_RETRIES

The DELAY_APPLICATION_RETRIES parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each PORT keyword

The DELAY_APPLICATION_RETRIES parameter specifies whether link activation retries initiated by applications are delayed by the value specified for the ACTIVATION_DELAY_TIMER parameter. Valid values are:

0 Link activation retries initiated by applications are not delayed.

1 Link activation retries initiated by applications are delayed.

This parameter is optional.

DLC_DATA

The DLC_DATA parameter specifies information specific to the DLC you are using.

For information on defining the DLC_DATA parameter for the DLC, refer to the following sections:

- "Appendix B. LAN Specific Data" on page 163
- "Appendix C. OEM Specific Data" on page 171
- "Appendix D. SDLC Specific Data" on page 183
- "Appendix F. X.25 Specific Data" on page 201.

DLC_NAME

The DLC_NAME parameter specifies the communication adapter or protocol you are using.

For information on defining the DLC_NAME parameter, refer to the following sections:

- "Appendix A. AnyNet Specific Data" on page 161
- "Appendix B. LAN Specific Data" on page 163
- "Appendix C. OEM Specific Data" on page 171
- "Appendix D. SDLC Specific Data" on page 183
- "Appendix F. X.25 Specific Data" on page 201.

IMPLICIT_BRANCH_EXTENDER_LINK

The IMPLICIT_BRANCH_EXTENDER_LINK parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each PORT keyword

The IMPLICIT_BRANCH_EXTENDER_LINK parameter specifies whether incoming calls are designated as branch extender links. Valid values are:

0 The incoming calls are treated as normal links.

1 The incoming call is treated as a branch extender link. The link connects to another network from this local branch network. This value is only valid if the incoming call is from an end node.

Note: Incoming calls from network nodes are always treated as branch extender links, if NODETYPE=BRANCH_EXTENDER_NODE is specified for the local node.

This parameter is optional. The default is 0.

IMPLICIT_CP_CP_SESS_SUPPORT

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each PORT keyword

The IMPLICIT_CP_CP_SESS_SUPPORT parameter specifies whether CP-CP sessions are permitted for implicit link stations off this port. Valid values are:

0 CP-CP sessions are not permitted.

1 CP-CP sessions are permitted.

For the Multi-Path Channel (MPC) DLC, IMPLICIT_CP_CP_SESS_SUPPORT must be specified as 1.

This parameter is optional.

IMPLICIT_DEACT_TIMER

Required?	No	
Keyword Type:	Unsigned number	
Default	10	
Default	No default	
Range	0—1 000	
Range	No defined range	
Multiples Allowed?	Yes, one for each PORT keyword	

The IMPLICIT_DEACT_TIMER parameter specifies the time, in seconds, that this link can be idle before it automatically deactivates.

The implicit link deactivation timer is only used when IMPLICIT_LIMITED_RESOURCE is specified as INACTIVITY.

The value is an integer in the range of 0—1 000 seconds. The default is 10 seconds.

There is no defined range nor default.

This parameter is optional.

IMPLICIT_DSPU_SERVICES

Required?	Yes
Keyword Type:	Enumerated
Default	NONE
Multiples Allowed?	Yes, one for each PORT keyword

The IMPLICIT_DSPU_SERVICES parameter specifies the services the local node provides to the downstream PU across implicit links activated on this port. Valid values are:

DLUR The local node provides DLUR services for the downstream PU (using the default DLUS specified on the DLUR_DEFAULTS keyword).

NONE The local node provides no services for the downstream PU.

PU_CONCENTRATION The local node provides PU concentration for the downstream PU (and puts definitions in place as specified by the DSPU template named on the IMPLICIT_DSPU_TEMPLATE keyword.

This parameter is required. The default is NONE.

IMPLICIT_DSPU_TEMPLATE

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each PORT keyword

The IMPLICIT_DSPU_TEMPLATE parameter specifies the 1- to 8-byte name of the DSPU template, defined on the DSPU_TEMPLATE keyword, which is used for definitions if the local node is to provide PU concentration for an implicit link activated on this port. If the specified template does not exist (or is already at its instance limit) when the link is activated, activation fails.

If the IMPLICIT_DSPU_SERVICES parameter is not set to PU_CONCENTRATION, this field is ignored.

All eight characters must be specified. Valid characters are any locally displayable characters using the native encoding of the local system.

This parameter is optional.

IMPLICIT_HPR_SUPPORT

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each PORT keyword

The IMPLICIT_HPR_SUPPORT parameter specifies whether HPR should be supported on implicit links. Valid values are:

0 HPR should not be supported on implicit links.

1 HPR should be supported on implicit links.

For the Enterprise Extender (EE) DLC and Multi-Path Channel (MPC) DLC, IMPLICIT_HPR_SUPPORT must be specified as 1.

IMPLICIT_LIMITED_RESOURCE

Required?	No
Keyword Type:	Enumerated
Multiples Allowed?	Yes, one for each PORT keyword

The IMPLICIT_LIMITED_RESOURCE parameter specifies whether implicit link stations off this port should be deactivated when there are no sessions using the link. Valid values are:

INACTIVITY Implicit links are a limited resource and are deactivated automatically when no active sessions are using them, or when no data has followed on the link for the time period specified by the IMPLICIT_DEACT_TIMER parameter.

NO Implicit links are not limited resources and are not deactivated automatically.

YES Implicit links are a limited resource and are deactivated automatically when no active sessions are using them.

For the Multi-Path Channel (MPC) DLC, IMPLICIT_LIMITED_RESOURCE must be specified as NO.

This parameter is optional.

IMPLICIT_LINK_LVL_ERROR

The IMPLICIT_LINK_LVL_ERROR parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each PORT keyword

The IMPLICIT_LINK_LVL_ERROR parameter specifies whether HPR traffic should be sent on implicit links using link-level error recovery.

Note: The IMPLICIT_LINK_LVL_ERROR parameter is ignored if IMPLICIT_HPR_SUPPORT is set to 0.

Valid values are:

0 Do not route HPR traffic on implicit links using link-level error recovery.

1 Route HPR traffic on implicit links using link-level error recovery.

LINK_STATION_ROLE

Required?	No
Keyword Type:	Enumerated
Default	NEGOTIABLE 
Default	No default 
Multiples Allowed?	Yes, one for each PORT keyword

The LINK_STATION_ROLE parameter defines the responsibility that the link station has for controlling the communication with its adjacent link stations. Valid values are:

NEGOTIABLE When the connection is established, the local link station becomes either a primary or secondary link station.

PRIMARY The primary link station controls the conversation on the link.

SECONDARY The secondary link station must wait to be polled by the primary link station before data is sent.

This parameter is optional.


The default is NEGOTIABLE.


There is no default.

Notes:

1. If DLC_NAME is specified as TWINAX, only SECONDARY is valid.
2. If DLC_NAME is specified as ANYNET, and LS_NAME on the LINK_STATION keyword is $ANYNET$, PRIMARY is not valid.

MAX_ACTIVATION_ATTEMPTS


The MAX_ACTIVATION_ATTEMPTS parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Unsigned number
Range	0—127
Multiples Allowed?	Yes, one for each PORT keyword

The MAX_ACTIVATION_ATTEMPTS parameter specifies the number of retry attempts allowed when the remote node is not responding or the port is inactive. The attempts include both automatic retries and application-driven activation

attempts. When this limit is reached, no further activation retries are attempted. The number of retries attempted is reset by a successful activation, or when a link station, port, or DLC is deactivated.

The value is an integer in the range of 0-127. A zero means no limit.

This parameter is optional.

This parameter is ignored unless the LINK_STATION keyword referencing this port specifies MAX_ACTIVATION_ATTEMPTS=-1 and one of the following parameters on the LINK_STATION keyword is specified:

- DELAY_APPLICATION_RETRIES
- INHERIT_PORT_RETRY_PARMS
- RETRY_LINK_ON_DISCONNECT
- RETRY_LINK_ON_FAILED_START
- RETRY_LINK_ON_FAILURE

MAX_IFRM_RCVD

Required?	No
Keyword Type:	Unsigned number
Range	0—127
Multiples Allowed?	Yes, one for each PORT keyword

The MAX_IFRM_RCVD parameter determines the maximum number of I-frames that can be received by the local link stations before an acknowledgment is sent.

The value is an integer in the range of 0-127 frames.

This parameter is optional.

MAX_RCV_BTU_SIZE

Required?	No	
Keyword Type:	Unsigned number	
Range	No defined range.	
Range	99—32 767	
Multiples Allowed?	Yes, one for each PORT keyword	

The MAX_RCV_BTU_SIZE parameter specifies the maximum BTU size that can be received. If implicit HPR-capable links are not supported on the port, this must be set to a value greater than or equal to 99. If implicit HPR-capable links are supported on the port, this must be set to a value greater than or equal to 768. If this port is for the AnyNet DLC, you must use 9 216.

For the Multi-Path Channel (MPC) DLC, MAX_RCV_BTU_SIZE should be specified as 32 768 to allow the DLC to determine the size. When the configuration file is generated by the **Node Configuration** application, MAX_RCV_BTU_SIZE defaults to 32 768.

There is no defined range.

The value is an integer in the range of 99—32 767.

This parameter is optional.

PORT_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each PORT keyword

The PORT_NAME parameter specifies the 1- to 8-byte name of the port associated with the link station.

All eight characters must be specified. Valid characters are any locally displayable characters.

For the Enterprise Extender (EE) DLC, PORT_NAME should be specified as ***UDPLDLC***.

For the Multi-Path Channel (MPC) DLC, PORT_NAME should be specified as ***IBM-MPC***.

This parameter is required.

Note: The PORT_NAME specified on the PORT keyword must match the PORT_NAME defined by the LINK_STATION keyword.

PORT_TYPE

Required?	No
Keyword Type:	Enumerated
Multiples Allowed?	Yes, one for each PORT keyword

The PORT_TYPE parameter specifies the type of line used by the port. Valid values are:

NONSWITCHED Connections are using leased, direct point-to-point connections. Nonswitched routes are statically defined by the direct line between the two end nodes of the connection.

SATF Connections are using shared access transport facility (SATF). SATF describes a network transport with shared contention-based or token-based

access, such as Ethernet or token-ring. Typically, SATF networks are called local area networks (LAN).

SWITCHED Connections are using dial-up services, requiring the use of a modem, a packet switched network (such as a long distance telephone network), and remote dial-up addressing (such as a telephone number). Switched routes are dynamically determined at runtime through the packet switched network.

This parameter is optional.

Note: If this parameter is specified as SATF, the LS_ROLE parameter must be specified as NEGOTIABLE.

RETRY_LINK_ON_DISCONNECT

The RETRY_LINK_ON_DISCONNECT parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each PORT keyword

The RETRY_LINK_ON_DISCONNECT parameter specifies whether link activation is retried when the link is stopped normally by the remote node. Valid values are:

0 Link activation is not retried.

1 Link activation is retried.

This parameter is optional.

RETRY_LINK_ON_FAILED_START

The RETRY_LINK_ON_FAILED_START parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each PORT keyword

The RETRY_LINK_ON_FAILED_START parameter specifies whether link activation is retried if no response is received from the remote node when activation is attempted. If the port is inactive when activation is attempted, an attempt is made to activate it. Valid values are:

0 Link activation is not retried.

1 Link activation is retried.

This parameter is optional.

RETRY_LINK_ON_FAILURE

The RETRY_LINK_ON_FAILURE parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each PORT keyword

The RETRY_LINK_ON_FAILURE parameter specifies whether link activation is retried if the link fails while in an active or pending active state. If the port fails, an attempt is made to activate it.Valid values are:

0 Link activation is not retried.

1 Link activation is retried.

This parameter is optional.

PORT_LAN_SPECIFIC_DATA

For information on defining the parameters for the PORT_LAN_SPECIFIC_DATA parameter, refer to “Appendix B. LAN Specific Data” on page 163.

PORT_OEM_SPECIFIC_DATA

For information on defining the parameters for the PORT_OEM_SPECIFIC_DATA parameter for the Enterprise Extender (EE) DLC, the Multi-Path Channel (MPC) DLC, or an OEM DLC, refer to “Appendix C. OEM Specific Data” on page 171.

For information on defining the parameters for an OEM DLC, refer to “Appendix C. OEM Specific Data” on page 171.

PORT_SDLC_SPECIFIC_DATA

For information on defining the parameters for the PORT_SDLC_SPECIFIC_DATA parameter, refer to “Appendix D. SDLC Specific Data” on page 183.

PORT_TWINAX_SPECIFIC_DATA

For information on defining the parameters for the PORT_TWINAX_SPECIFIC_DATA parameter, refer to “Appendix E. Twinaxial Specific Data” on page 197.

PORT_X25_SPECIFIC_DATA

For information on defining the parameters for the PORT_X25_SPECIFIC_DATA parameter, refer to “Appendix F. X.25 Specific Data” on page 201.

Chapter 23. SHARED_FOLDERS

This chapter describes the parameter keywords and values you can specify for the SHARED_FOLDERS keyword.

Keyword Definition

Required?	Yes
Keyword Type:	Complex
Multiples Allowed?	No

SHARED_FOLDERS Sample

The following is a sample of the SHARED_FOLDERS keyword:

```
SHARED_FOLDERS=(
    EXTENSION_LIST=(
       EXTENSION=TXT
       EXTENSION=BAT
   )
    CACHE_SIZE=256
)
```

SHARED_FOLDERS Parameter Keywords

CACHE_SIZE

Required?	Yes
Keyword Type:	Unsigned number
Default	256
Multiples Allowed?	No

The CACHE_SIZE parameter specifies the number of kilobytes (KB) of AS/400 data buffered in the read-ahead cache on the server.

This parameter is required. The default is 256.

AS/400 data can be retrieved in amounts that are first cached locally on the server. The server retrieves the data from the cache to populate the local device. This read-ahead caching reduces the number of times the server has to access the AS/400 to retrieve the data.

EXTENSION

Required?	No
Keyword Type:	String
Field Length	1—255
Multiples Allowed?	Yes

The EXTENSION parameter specifies the 1- to 255-character file extensions of files on an AS/400. You can specify more than one EXTENSION parameter in the EXTENSION_LIST parameter. The code pages of files with the specified extensions are translated from the EBCDIC code page to the ASCII code page when the file is transferred between the AS/400 and the server.

For example, if TXT is specified, the code page of a readable file on an AS/400 named README.TXT is translated when the file is transferred to the server. The file is readable on the server. If TXT is not specified, the code page of the README.TXT file is not translated and the file is not readable on the server.

The value is a 1- to 255-byte character string.

This parameter is optional.

EXTENSION_LIST

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The EXTENSION_LIST parameter is a complex keyword comprised of the EXTENSION parameter keyword.

See the description of the EXTENSION parameter keyword to define the EXTENSION_LIST parameter.

Chapter 24. SPLIT_STACK

This chapter describes the parameter keywords and values you can specify for the SPLIT_STACK keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

SPLIT_STACK Sample

The following is a sample of the SPLIT_STACK keyword:

```
SPLIT_STACK=(
     STARTUP=1
)
```

SPLIT_STACK Parameter Keywords

POOL_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The POOL_NAME parameter specifies the 1- to 8-character default pool name from which SNA API clients obtain available LU 0 to 3 LUs if an explicit one is not required. If one is specified, all new host LUs created are added to this pool by default. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

STARTUP

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	No

The STARTUP parameter specifies whether LU 6.2 sessions can be configured for a remote client at run time. Valid values are:

SPLIT_STACK

0 LU 6.2 sessions can still be configured for a remote client, but can not be established at run time.

1 LU 6.2 sessions can be configured and established for a remote client.

This parameter is required. The default is 1.

Chapter 25. TN3270E_DEF

This chapter describes the parameter keywords and values you can specify for the TN3270E_DEF keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	FQ_CP_NAME
Multiples Allowed?	No

TN3270E_DEF Sample

The following is a sample of the TN3270E_DEF keyword:

```
TN3270E_DEF=(
     AUTO_LOGOFF=1
     DEFAULT_POOL_NAME=POOL1
     FREQUENCY=60
     KEEPALIVE_TYPE=TN_NOP
     LOGOFF=30
     PORT=23
     TIMER=10
)
```

TN3270E_DEF Parameter Keywords

AUTO_LOGOFF

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The AUTO_LOGOFF parameter specifies whether the connection is automatically terminated when the value of the TIMER parameter is reached. Valid values are:

0 The connection is not terminated.

1 The connection is terminated.

This parameter is required. The default is 0.

DEFAULT_POOL_NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DEFAULT_POOL_NAME parameter identifies the name of the pool of unassigned workstations or pool of implicit workstations that is used when the TN3270E client does not specify an LU name. The name of the pool is a 1- to 8-byte character string.

This parameter is optional.

ENABLE_FILTERING

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The ENABLE_FILTERING parameter specifies whether TN3270E filtering is enabled. Valid values are:

0 TN3270E filtering is not enabled. Any TCP/IP workstation is granted access to available host resources (that is, those host resources which have been defined as TN3270E resources.)

1 TN3270E filtering is enabled. Only TCP/IP workstations matching the IP address and subnet mask of at least one of the filter definitions are allowed access to the host resources defined in the appropriate filter(s).

This parameter is required. The default is 0.

FILTER_PREFERENCE

Required?	No
Keyword Type:	Enumerated
Default	HOSTNAME_FIRST
Multiples Allowed?	No

The FILTER_PREFERENCE parameter specifies the filter record processing order used when determining a match with an incoming client request. Valid values are:

HOSTNAME_FIRST
Specifies that all filters specifying either a TCP/IP host name or domain name should be processed and checked against the client's hostname or domain name before processing filters specifying a TCP/IP address.

IP_ADDR_FIRST
Specfies that all filters specifying a TCP/IP address should be processed before processing filters specifying either a host name or domain name.

This parameter is optional. The default is HOSTNAME_FIRST.

FREQUENCY

Required?	Yes
Keyword Type:	Unsigned number
Default	60
Range	1—65 535
Multiples Allowed?	No

The FREQUENCY parameter specifies the seconds to wait after data has been sent or received on a connection before beginning keepalive detection. Choosing a high number means that the connections are checked less often and the resulting network traffic is reduced. Choosing a low frequency means that the connections are checked more frequently and connections are freed more rapidly.

The value is an integer in the range 1—65 535.

This parameter is required. The default is 60.

KEEPALIVE_TYPE

Required?	Yes
Keyword Type:	Enumerated
Default	TN_NONE
Multiples Allowed?	No

The KEEPALIVE_TYPE parameter specifies the method used to free connections. Valid values are:

TN_NONE Do not use either the TN_NOP nor the TN_TIMING_MARK methods to free connections.

TN_NOP Use if it is not necessary to free connections after a specific amount of time. Detection and freeing of the connection take an unpredictable amount of time. When the time specified on the FREQUENCY parameter is reached, the connection is tested to see if it is broken.

TN_TIMING_MARK Use if it is necessary to define when connections are freed and additional traffic on the network is acceptable. Detection and freeing of the connection take place as specified by the TIMER parameter. When the specified time is reached and the client has not responded, the connection is freed.

This parameter is required. The default is TN_NONE.

LOGOFF

Required?	Yes
Keyword Type:	Unsigned number
Default	30
Range	1—65 535
Multiples Allowed?	No

The LOGOFF parameter specifies the maximum time, in seconds, that SNA over TCP/IP waits to receive a multiprotocol transport network (MPTN) connection or connection response packet after the TCP connection is established. This limit prevents the connecting node from waiting too long for a session partner to send a packet.

The value is an integer in the range 1—65 535.

This parameter is required. The default is 30.

PORT

Required?	Yes
Keyword Type:	String
Default	23
Field Length	1—5
Multiples Allowed?	No

The PORT parameter specifies the port number the TN3270E client uses to connect to the server.

PORT is a 1- to 5-byte character string.

This parameter is required. The default is 23.

Normally, the TN3270E server uses port 23. Telnet typically uses port 23, so if **TELNETD** is running and is using port 23, you need to change the default. If two applications (**TELNETD** and **TN3270E**) use the same port number, one of the applications fails.

Note: If you change the port number from 23, the port number defined on TN3270E clients must be changed to the number specified here.

SECURE_PORT

Required?	No
Keyword Type:	String
Field Length	1—5
Multiples Allowed?	No

The SECURE_PORT parameter specifies the TCP/IP port number that TN3270E uses for secure connections. TN3270E clients requiring secure sockets layer (SSL) services should connect to the TN3270E server using this port number.

SECURE_PORT is a 1- to 5-byte character string.

This parameter is optional.

TIMER

Required?	Yes
Keyword Type:	Unsigned number
Default	10
Range	1—65 535
Multiples Allowed?	No

The TIMER parameter specifies the number of seconds to wait for a response to a timing mark before the connection is freed.

The value is an integer in the range 1—65 535.

This parameter is required. The default is 10.

Chapter 26. TN3270E_FILTER

This chapter describes the parameter keywords and values you can specify for the TN3270E_FILTER keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	IP_ADDR_MASK_PAIR
Multiples Allowed?	Yes, but each TN3270E_FILTER keyword must have a unique IP_ADDR_MASK_PAIR parameter

TN3270E_FILTER Sample

The following is a sample of the TN3270E_FILTER keyword:

```
TN3270E_FILTER=(
     CLIENT_ID_TYPE=HOST_NAME
     IP_ADDR_MASK_PAIR=nfl.raleigh.ibm.com
     FILTER_ENTRY=(
          CLASS_TYPE=TN_IMPLICIT_WORKSTATION
          IS_POOL=1
          NAME=PUBLIC
     )
)
```

TN3270E_FILTER Parameter Keywords

CLASS_TYPE

Required?	No
Keyword Type:	Enumerated
Multiples Allowed?	Yes, one for each FILTER_ENTRY parameter

The CLASS_TYPE parameter indicates how this LU or pool is used. Valid values are:

TN_ASSOC_PRINTER
Use for connections that require a printer associated with an explicit workstation or an LU in a pool of implicit workstations.

TN_EXPLICIT_PRINTER
Use for connections that require a specific printer device name.

TN_EXPLICIT_WORKSTATION
Use for connections that require a specific workstation device name.

TN_IMPLICIT_PRINTER
Use for connections that do not require a specific printer device name.

TN_IMPLICIT_WORKSTATION
Use for connections that do not require a specific workstation device name.

TN_UNASSIGNED
Use to delete the TN3270E definition for the selected LU or pool.

This parameter is optional.

CLIENT_ID_TYPE

Required?	No
Keyword Type:	Enumerated
Default	IP_ADDRESS
Multiples Allowed?	Yes, one for each TN3270E_FILTER keyword

The CLIENT_ID_TYPE parameter indicates the type of client the value of the IP_ADDR_MASK_PAIR parameter specifies. Valid values are:

DOMAIN_NAME The value of the IP_ADDR_MASK_PAIR parameter specifies a domain name.

HOST_NAME The value of the IP_ADDR_MASK_PAIR parameter specifies a host name.

IP_ADDRESS The value of the IP_ADDR_MASK_PAIR parameter specifies the source IP address and subnet mask of a TCP/IP workstation.

This parameter is optional. The default is IP_ADDRESS.

FILTER_ENTRY

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The FILTER_ENTRY parameter is a complex keyword comprised of the following parameter keywords:

- CLASS_TYPE
- IS_POOL
- NAME

See the descriptions of the parameter keywords to define the FILTER_ENTRY parameter.

IP_ADDR_MASK_PAIR

Required?	Yes
Keyword Type:	String
Field Length	1—256
Multiples Allowed?	Yes, one for each TN3270E_FILTER keyword

The IP_ADDR_MASK_PAIR parameter specifies one of the following:

- The domain name to which you wish to restrict host resources (LUs)
- The host name to which you wish to restrict host resources (LUs)
- The source IP address and subnet mask of the TCP/IP workstation(s) to which you wish to restrict host resources (LUs). The IP address and the subnet mask values are separated by a comma. Only those clients matching the IP address and subnet mask combination are granted access to the list of resources represented by this filter.

Whether the value you specify is a domain name, host name, or IP address and subnet mask is determined by the CLIENT_ID_TYPE parameter.

The value is a 1- to 256-character string.

This parameter is required.

If you wish to restrict host resources to a specific workstation, specify that workstation IP address and the subnet mask of 255.255.255.255. If you wish to restrict host resources to all workstations in a particular IP subnetwork, such as a local office LAN, specify one of the workstation IP addresses and a subnet mask to identify the IP address values that are significant for identifying the subnetwork. For example, to restrict host resources for all workstations in the subnet 9.57.0.0, you might specify a source IP address of 9.57.126.4 and a subnet mask of 255.255.0.0. If you specify a specific IP address and full subnet mask (filtering for a specific workstation), that workstation is granted access to the first available host resource, whether it be an explict LU or an LU from a pool of LUs. If the filter is designated for workstations on a particular subnetwork, these workstations are only granted use of available host resources from pool definitions in this filter; no use of explict LUs is granted. Ordering of host LUs and host LU pools in the filter list is important. The order implies the ordering of workstations' access to host resources. In other words, if the first LU or pool on the list is in use, access is granted to the next resource on the list. All LUs from within a pool must be in use before the pool is considered in use.

If a full subnet mask is specified (255.255.255.255), host resources are being chosen for use by the specific workstation whose address is specified. If a partial subnet mask is specified (such as 255.0.0.0), any workstation from the subnetwork (identified by the significant fields of the IP address as specified by the subnet mask) may have access to host resources specified in the filter.

IS_POOL

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each FILTER_ENTRY parameter

The IS_POOL parameter specifies whether the NAME value in the same FILTER_ENTRY complex keyword refers to a host LU name or a host LU pool name. Valid values are:

0 NAME refers to a host LU name.

1 NAME refers to a host LU pool name.

This parameter is required. The default is 0.

NAME

Required?	No
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	Yes, one for each FILTER_ENTRY parameter

The NAME parameter specifies either a 1- to 8-character host LU name (LU_0_TO_3 definition) or a 1- to 8-character host LU pool name, specified by a collection of LU_0_TO_3 definitions. The value of the IS_POOL parameter specifies whether NAME refers to a host LU name or a host LU pool name.

This parameter is optional.

Chapter 27. TN5250_DEF

This chapter describes the parameter keywords and values you can specify for the TN5250_DEF keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

TN5250_DEF Sample

The following is a sample of the TN5250_DEF keyword:

```
TN5250_DEF=(
     AUTO_LOGOFF=0
     DYNAMIC_LU_SUPPORT=1
     ENABLE_FILTERING=0
     FILTER_PREFERENCE=HOSTNAME_FIRST
     FREQUENCY=60
     KEEPALIVE_TYPE=TN_NONE
     LOGOFF=10
     LU_PREFIX=TN52
     NUMBER_OF_DYNAMIC_LUS=10
     TIMER=10
)
```

TN5250_DEF Parameter Keywords

AUTO_LOGOFF

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The AUTO_LOGOFF parameter specifies whether the connection is automatically terminated when the value of the TIMER parameter is reached. Valid values are:

0 The connection is not terminated.

1 The connection is terminated.

This parameter is required. The default is 0.

DYNAMIC_LU_SUPPORT

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The DYNAMIC_LU_SUPPORT parameter specifies whether the TN5250 server should dynamically generate independent LU 6.2 local LU definitions for supporting sessions with AS/400 servers. Valid values are:

0 Dynamic LUs are not supported. Sessions with AS/400s only use statically defined independent local LUs, including the CP LU.

1 Dynamic LUs are supported. The TN5250 server automatically generates as many LUs as indicated by the NUMBER_OF_DYNAMIC_LUS parameter, using the LU_PREFIX parameter value as the common naming prefix for each LU (so that they can easily be identified as dynamically generated LUs).

This parameter is required. The default is 0.

Since each AS/400 supports a maximum of 512 concurrent sessions with any one local LU, it may be desirable to have a number of LUs available if more than 512 sessions are active at any given time.

ENABLE_FILTERING

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The ENABLE_FILTERING parameter specifies whether TN5250 filtering is enabled. Valid values are:

0 TN5250 filtering is not enabled. Any TCP/IP workstation is granted access to available host resources (that is, those host resources which have been defined as TN5250 resources.)

1 TN5250 filtering is enabled. Only TCP/IP workstations matching the IP address and subnet mask of at least one of the filter definitions are allowed access to the host resources defined in the appropriate filter(s).

This parameter is required. The default is 0.

FILTER_PREFERENCE

Required?	No
Keyword Type:	Enumerated
Default	HOSTNAME_FIRST
Multiples Allowed?	No

The FILTER_PREFERENCE parameter specifies the filter record processing order used when determining a match with an incoming client request. Valid values are:

HOSTNAME_FIRST
Specifies that all filters specifying either a TCP/IP host name or domain name should be processed and checked against the client's hostname or domain name before processing filters specifying a TCP/IP address.

IP_ADDR_FIRST
Specfies that all filters specifying a TCP/IP address should be processed before processing filters specifying either a host name or domain name.

This parameter is optional. The default is HOSTNAME_FIRST.

FREQUENCY

Required?	Yes
Keyword Type:	Unsigned number
Default	60
Range	1—65 535
Multiples Allowed?	No

The FREQUENCY parameter specifies the number of seconds to wait after data has been sent or received on a connection before beginning keepalive detection. Choosing a high number means that connections are checked less often and the resulting network traffic is reduced. Choosing a low frequency means that connections are checked more frequently and connections are freed more rapidly.

The value is an integer in the range 1—65 535.

This parameter is required. The default is 60.

KEEPALIVE_TYPE

Required?	Yes
Keyword Type:	Enumerated
Default	TN_NONE
Multiples Allowed?	No

The KEEPALIVE_TYPE parameter specifies the method used to free connections. Valid values are:

TN_NONE Do not use either the TN_NOP nor the TN_TIMING_MARK methods to free connections.

TN_NOP Use if it is not necessary to free connections after a specific amount of time. Detection and freeing of the connection take an unpredictable amount of time. When the time specified on the FREQUENCY parameter is reached, the connection is tested to see if it is broken.

TN_TIMING_MARK Use if it is necessary to define when connections

are freed and additional traffic on the network is acceptable. Detection and freeing of the connection take place as specified by the TIMER parameter. When the specified time is reached and the client has not responded, the connection is freed.

This parameter is required. The default is TN_NONE.

LOGOFF

Required?	Yes
Keyword Type:	Unsigned number
Default	30
Range	1—65 535
Multiples Allowed?	No

The LOGOFF parameter specifies the maximum time, in seconds, that SNA over TCP/IP waits to receive a multiprotocol transport network (MPTN) connection or connection response packet after the TCP connection is established. This limit prevents the connecting node from waiting too long for a session partner to send a packet.

The value is an integer in the range 1—65 535.

This parameter is required. The default is 30.

LU_PREFIX

Required?	Yes
Keyword Type:	String
Field Length	1—5
Multiples Allowed?	No

The LU_PREFIX parameter specifies the common naming prefix for each LU (so that they can easily be identified as dynamically generated LUs).

LU_PREFIX is a 1- to 5-byte SNA Type A character string.

This parameter is optional.

NUMBER_OF_DYNAMIC_LUS

Required?	No
Keyword Type:	Unsigned number
Default	8
Range	0—1 000
Multiples Allowed?	No

The NUMBER_OF_DYNAMIC_LUS parameter specifies how many dynamic LUs can be automatically generated by the TN5250 server.

The value is an integer in the range 0—1 000.

This parameter is optional. The default is 8.

TIMER

Required?	Yes
Keyword Type:	Unsigned number
Default	10
Range	1—65 535
Multiples Allowed?	No

The TIMER parameter specifies the number of seconds to wait for a response to a timing mark before the connection is freed.

The value is an integer in the range 1—65 535.

This parameter is required. The default is 10.

Chapter 28. TN5250_FILTER

This chapter describes the parameter keywords and values you can specify for the TN5250_FILTER keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	IP_ADDR_MASK_PAIR
Multiples Allowed?	Yes, but each TN5250_FILTER keyword must have a unique IP_ADDR_MASK_PAIR parameter

TN5250_FILTER Sample

The following is a sample of the TN5250_FILTER keyword:

```
TN5250_FILTER=(
     IP_ADDR_MASK_PAIR=195.67.99.1,255.255.255.0
     CLIENT_ID_TYPE=IP_ADDRESS
     AS400_SERVER_ENTRY=
)
```

TN5250_FILTER Parameter Keywords

AS400_SERVER_ENTRY

Required?	No
Keyword Type:	String
Field Length	3—17
Multiples Allowed?	Yes

The AS400_SERVER_ENTRY parameter specifies the fully qualified CP name of the AS/400. Access is granted to TN5250 clients that match this filter definition, as specified in the IP_ADDR_MASK_PAIR parameter.

Note: The AS400_SERVER_ENTRY must specify a server which has been defined using an AS400_SERVER keyword.

The fully qualified CP name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the network qualified CP name.

This parameter is optional.

Up to 32 AS400_SERVER_ENTRIES are allowed. The order of the entries in the TN5250_FILTER keyword determines the order used to establish a session between a TN5250 client and an available AS/400.

CLIENT_ID_TYPE

Required?	No
Keyword Type:	Enumerated
Default	IP_ADDRESS
Multiples Allowed?	Yes, one for each TN5250_FILTER keyword

The CLIENT_ID_TYPE parameter indicates the type of client the value of the IP_ADDR_MASK_PAIR parameter specifies. Valid values are:

DOMAIN_NAME The value of the IP_ADDR_MASK_PAIR parameter specifies a domain name.

HOST_NAME The value of the IP_ADDR_MASK_PAIR parameter specifies a host name.

IP_ADDRESS The value of the IP_ADDR_MASK_PAIR parameter specifies the source IP address and subnet mask of a TCP/IP workstation.

This parameter is optional. The default is IP_ADDRESS.

IP_ADDR_MASK_PAIR

Required?	Yes
Keyword Type:	String
Field Length	1—256
Multiples Allowed?	Yes, one for each TN5250_FILTER keyword

The IP_ADDR_MASK_PAIR parameter specifies one of the following:

- The domain name to which you wish to restrict host resources (LUs)
- The host name to which you wish to restrict host resources (LUs)
- The source IP address and subnet mask of the TCP/IP workstation(s) to which you wish to restrict host resources (LUs). The IP address and the subnet mask values are separated by a comma. Only those clients matching the IP address and subnet mask combination are granted access to the list of resources represented by this filter

Whether the value you specify is a domain name, host name, or IP address and subnet mask is determined by the CLIENT_ID_TYPE parameter.

The value is a 1- to 256-byte character string.

This parameter is required.

If you wish to restrict host resources to a specific workstation, specify that workstation's IP address and the subnet mask of 255.255.255.255. If you wish to restrict host resources to all workstations in a particular IP subnetwork, such as a local office LAN, specify one of the workstation IP addresses and a subnet mask to identify the IP address values that are significant for identifying the subnetwork.

For example, to restrict host resources for all workstations in the subnet 9.57.0.0, you might specify a source IP address of 9.57.126.4 and a subnet mask of 255.255.0.0. If you specify a specific IP address and full subnet mask (filtering for a specific workstation), that workstation is granted access to the first available host resource, whether it be an explict LU or an LU from a pool of LUs. If the filter is designated for workstations on a particular subnetwork, these workstations are only granted use of available host resources from pool definitions in this filter; no use of explict LUs is granted. Ordering of host LUs and host LU pools in the filter list is important. The order implies the ordering of workstations' access to host resources. In other words, if the first LU or pool on the list is in use, access is granted to the next resource on the list. All LUs from within a pool must be in use before the pool is considered in use.

If a full subnet mask is specified (255.255.255.255), host resources are being chosen for use by the specific workstation whose address is specified. If a partial subnet mask is specified (such as 255.0.0.0), any workstation from the subnetwork (identified by the significant fields of the IP address as specified by the subnet mask) may have access to host resources specified in the filter.

Chapter 29. TN5250_PORT_DEF

This chapter describes the parameter keywords and values you can specify for the TN5250_PORT_DEF keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	PORT
Multiples Allowed?	Yes, but each TN5250_PORT_DEF keyword must have a unique PORT parameter

TN5250_PORT_DEF Sample

The following is a sample of the TN3270E_PORT_DEF keyword:

```
TN5250_PORT_DEF=(
     PORT=23
     DEFAULT_SERVER=USIBMNM.RTP02EN
     ENCRYPTION=0
)
```

TN5250_PORT_DEF Parameter Keywords

DEFAULT_SERVER

Required?	No
Keyword Type:	String
Field Length	3—17
Multiples Allowed?	Yes, one for each TN5250_PORT_DEF keyword

The DEFAULT_SERVER parameter specifies the fully qualified CP name of the default AS/400 used by TN5250 clients connecting into the specified port without requesting a specific AS/400. The AS/400 must be specified in an AS400_SERVER keyword. If DEFAULT_SERVER in this TN5250_PORT_DEF keyword is left blank, the default AS/400 specified as the DEFAULT_SERVER in the AS400_SERVER keyword is used. Only one AS400_SERVER keyword can be marked as the default AS/400 Server.

The fully qualified CP name is a 17-byte character string. The fully qualified CP name consists of two parts: the network name and the CP name, concatenated with a period. The network name is a 1- to 8-byte SNA Type A character string. The CP name is a 1- to 8-byte SNA Type A character string. The fully qualified CP name is also known as the network qualified CP name.

This parameter is optional.

ENCRYPTION

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each TN5250_PORT_DEF keyword

The ENCRYPTION parameter specifies whether encryption is enabled for TN5250 communication sessions on the specified port. Valid values are:

0 Encryption is not enabled for TN5250 communication sessions.

1 Encryption is enabled for TN5250 communication sessions.

This parameter is required. The default is 0.

PORT

Required?	Yes
Keyword Type:	Unsigned number
Default	23
Range	1—65 535
Multiples Allowed?	Yes, one for each TN5250_PORT_DEF keyword

The PORT parameter specifies the number of the port that the TN5250 client uses to connect to the AS/400.

The value is an integer in the range 1—65 535.

This parameter is required. The default is 23.

Normally, the TN5250 server uses port 23. Telnet typically uses port 23, so if **TELNETD** is running and is using port 23, you need to change the default. If two applications (**TELNETD** and **TN5250**) use the same port number, one of the applications fails.

Note: If you change the port number from 23, the port number defined on TN5250 clients must be changed to the number specified here.

Chapter 30. TP

This chapter describes the parameter keywords and values you can specify for the TP keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	TP_NAME
Multiples Allowed?	Yes, but each TP keyword must have a unique TP_NAME parameter

TP Sample

The following is a sample of the TP keyword:

```
TP=(
     TP_NAME=MYTP
     CONVERSATION_TYPE=EITHER
     DUPLEX_SUPPORT=EITHER_DUPLEX
     DYNAMIC_LOAD=1
     INCOMING_ALLOCATE_TIMEOUT=30
     LOAD_TYPE=0
     PATHNAME=d:\tps\mytp.exe
     PIP_ALLOWED=1
     QUEUED=0
     RECEIVE_ALLOCATE_TIMEOUT=3600
     SECURITY_RQD=1
     SYNC_LEVEL=EITHER
     TP_INSTANCE_LIMIT=0
)
```

TP Parameter Keywords

API_CLIENT_USE

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each TP keyword

The API_CLIENT_USE parameter specifies whether the transaction program resides on a SNA API client and can not be locally attached. Valid values are:

0 The transaction program is local.

1 The transaction program resides on a SNA API client.

If you specify API_CLIENT_USE=1, attaches for this transaction program are routed to the SNA API client.

This parameter is required. The default is 0.

The default is 0.

CONVERSATION_TYPE

Required?	Yes
Keyword Type:	Enumerated
Default	EITHER
Multiples Allowed?	Yes, one for each TP keyword

The CONVERSATION_TYPE parameter specifies the types of conversation supported by this transaction program (TP). Valid values are:

BASIC Basic conversation for system TPs.

EITHER Either basic or mapped conversation is allowed to start the TPs.

MAPPED Mapped conversation for application TPs.

This parameter is required. The default is EITHER.

DUPLEX_SUPPORT

Required?	Yes
Keyword Type:	Enumerated
Default	EITHER_DUPLEX
Multiples Allowed?	Yes, one for each TP keyword

The DUPLEX_SUPPORT parameter specifies whether the transaction program supports full or half duplex conversations. Valid values are:

EITHER_DUPLEX The transaction program supports either half or full duplex conversations.

FULL_DUPLEX Full duplex conversations refer to the ability of the transaction program to read data from and write data to other transaction programs simultaneously.

HALF_DUPLEX Half duplex conversations require a change of direction before a transaction program may begin writing data after reading data, or vice versa.

This parameter is required. The default is EITHER_DUPLEX.

DYNAMIC_LOAD

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each TP keyword

The DYNAMIC_LOAD parameter specifies whether the transaction program (TP) can be dynamically started by an allocation request received on a conversation. Valid values are:

0 The TP can not be dynamically started.

1 The TP can be dynamically started.

This parameter is required. The default is 1.

INCOMING_ALLOCATE_TIMEOUT

Required?	Yes
Keyword Type:	Unsigned number
Default	30
Range	0—65 535
Multiples Allowed?	Yes, one for each TP keyword

The INCOMING_ALLOCATE_TIMEOUT parameter specifies the number of seconds that an incoming attach is queued waiting for a RECEIVE_ALLOCATE. Zero implies no timeout, and so it is held indefinitely.

The value is an integer in the range of 0—65 535 seconds.

This parameter is required. The default is 30.

LOAD_TYPE

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each TP keyword

The LOAD_TYPE specifies how the transaction program is loaded. Valid values are:

0 CONSOLE — The transaction program runs in the Communications Server process environment.

1 DETACHED — The transaction program runs in its own process environment.

This parameter is required. The default is 0.

PARAMETERS

Required?	No
Keyword Type:	String
Field Length	1—63
Multiples Allowed?	Yes, one for each TP keyword

The PARAMETERS parameter specifies the parameters for the transaction program.

The value is an 1- to 63-byte character string.

This parameter is optional.

The program parameters are the names of the variables in which the logical unit (LU) places verbs and other program statements that make up the transaction-processing portion of the program.

PATHNAME

Required?	No
Keyword Type:	String
Field Length	1—255
Multiples Allowed?	Yes, one for each TP keyword

The PATHNAME parameter specifies the path and transaction program name.

The value is an 1- to 255-byte character string.

This parameter is optional.

The complete pathname describes the location of the program to be executed. The location may include the drive, the directory, the subdirectory, and the file name. The special character (″) can not be used.

PIP_ALLOWED

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each TP keyword

The PIP_ALLOWED parameter specifies whether the transaction program can receive program initialization (PIP) parameters. Valid values are:

0 The transaction program can not receive program initialization (PIP) parameters.

1 The transaction program can receive program initialization (PIP) parameters.

This parameter is required. The default is 1.

Program initialization parameters (PIPs) are the names of variables for the remote transaction programs (TPs). The PIPs are supplied by the allocating program. The contents of the PIPs have meaning only to the TPs and are not examined or used by the logical unit (LU).

QUEUED

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each TP keyword

The QUEUED parameter specifies whether the transaction program is queued while waiting for an Attach. Valid values are:

0 The transaction program is not be queued.

1 The transaction program is queued.

This parameter is required. The default is 0.

RECEIVE_ALLOCATE_TIMEOUT

Required?	Yes
Keyword Type:	Unsigned number
Default	3 600
Range	0—65 535
Multiples Allowed?	Yes, one for each TP keyword

The RECEIVE_ALLOCATE_TIMEOUT parameter specifies the number of seconds that a RECEIVE_ALLOCATE verb is queued while waiting for an Attach. Zero implies no timeout, and so it is held indefinitely.

The value is an integer in the range of 0—65 535 seconds.

This parameter is required. The default is 3 600 seconds.

SECURITY_RQD

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each TP keyword

The SECURITY_RQD parameter specifies whether conversation security information is required to start the transaction program. Valid values are:

0 Conversation security information is not required.

1 Conversation security information is required.

This parameter is required. The default is 1.

Conversation security allows controlled access to system resources through security parameters associated with a request for access to those resources.

SYNC_LEVEL

Required?	Yes
Keyword Type:	Enumerated
Default	EITHER
Multiples Allowed?	Yes, one for each TP keyword

The SYNC_LEVEL parameter specifies the synchronization levels supported by the transaction program. The synchronization level is the level allowed on allocation requests that start the local and remote transaction programs (TPs). Valid values are:

CONFIRM_SYNC_LEVEL	The transaction program supports a synchronization level of Confirm.
EITHER	The transaction program supports a synchronization level of None or Confirm.
NONE	The transaction program supports a synchronization level of None.
SYNCPT_NEGOTIABLE	The transaction program supports a synchronization level of None, Confirm, or Sync-point.
SYNCPT_REQUIRED	The transaction program supports a synchronization level of Sync-point.

This parameter is required. The default is EITHER.

TP_INSTANCE_LIMIT

Required?	Yes
Keyword Type:	Unsigned number
Default	0
Range	0—65 535
Multiples Allowed?	Yes, one for each TP keyword

The TP_INSTANCE_LIMIT parameter specifies the maximum number of concurrently active TP instances. A value of zero means no limit.

The value is an integer in the range of 0—65 535 instances.

This parameter is required. The default is 0.

TP_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—64
Multiples Allowed?	Yes, one for each TP keyword

The TP_NAME parameter specifies the 1-64 character name of the transaction program that provides information about how to accept incoming Attaches and optionally start programs on the workstation. Valid characters are any locally displayable characters using the native encoding of the local system. The TP name may also refer to a service transaction program.

This parameter is required.

A transaction program (TP) is a program that uses the advanced program-to-program communications (APPC) system to communicate with a partner application program at the partner node.

TP_NAME_FORMAT

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each TP keyword

The TP_NAME_FORMAT parameter specifies whether the TP_NAME value is a service TP or normal TP. Valid values are:

0 The TP_NAME value is a normal TP.

1 The TP_NAME value is a service TP.

This parameter is required. The default is 0.

Service TPs use a restricted character set for their names. A service TP name must begin with a two-digit hex value between X'00' and X'3D'. The remainder of the name must be three ASCII characters. For example, `07abc` is a valid service TP name. `7abc` is not a valid service TP name.

Chapter 31. USERID_PASSWORD

This chapter describes the parameter keywords and values you can specify for the USERID_PASSWORD keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Key Name:	USER_ID
Multiples Allowed?	Yes, but each USERID_PASSWORD keyword must have a unique USER_ID parameter

USERID_PASSWORD Sample

The following is a sample of the USERID_PASSWORD keyword:

```
USERID_PASSWORD=(
     USER_ID=MYUSER
     PASSWORD=A098C824DC22B856748B
)
```

USERID_PASSWORD Parameter Keywords

PASSWORD

Required?	Yes
Keyword Type:	Hexadecimal string
Field Length	1—20
Multiples Allowed?	Yes, one for each USERID_PASSWORD keyword

The PASSWORD parameter specifies the user password. The password is converted to a 20-character hexadecimal string by the encryption process.

Note: Since this value is encrypted, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the **Node Configuration** application.

This parameter is required.

USER_ID

Required?	Yes
Keyword Type:	String
Field Length	1—10
Multiples Allowed?	Yes, one for each USERID_PASSWORD keyword

USERID_PASSWORD

The USER_ID parameter specifies the user identifier.

USER_ID is a 1- to 10-byte SNA Type A character string.

This parameter is required.

Chapter 32. VERIFY

This chapter describes the parameter keywords and values you can specify for the VERIFY keyword.

The VERIFY keyword is required for product configuration.

This keyword should not be modified or deleted by the user.

Keyword Definition

Required?	Yes
Keyword Type:	Complex
Multiples Allowed?	No

VERIFY Sample

The following is a sample of the VERIFY keyword:

```
VERIFY=(
   CFG_MODIFICATION_LEVEL = 12
   CFG_VERSION_LEVEL = 1
)
```

VERIFY Parameter Keywords

CFG_LAST_SCENARIO

The CFG_LAST_SCENARIO parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Unsigned number
Range	0—20
Multiples Allowed?	No

The CFG_LAST_SCENARIO parameter specifies the last configuration scenario used in the **Node Configuration** application. When this configuration file is opened by the application, the initial configuration scenario will be set according to this value.

The value corresponds to the zero-based index of the scenario name in the **Scenario** pull-down on the menu bar of the **Node Configuration** application.

Note: You should not attempt to enter this value directly into the ACG file. The value should only be entered by the **Node Configuration** application.

CFG_LAST_SCENARIO is an integer in the range 0-20.

This parameter is optional.

CFG_MODIFICATION_LEVEL

Required?	No
Keyword Type:	Unsigned number
Range	0—100
Multiples Allowed?	No

The CFG_MODIFICATION_LEVEL parameter value is set when a configuration is stored and read when a configuration is loaded. If a new version of Communications Server or Personal Communications reads an older configuration file (indicated by the combination of this value and the CFG_VERSION_LEVEL value being less than the current value), the product migrates the configuration to the new level, if necessary.

Note: You should not attempt to enter this value directly into the ACG file. The value should only be entered by the **Node Configuration** application.

CFG_MODIFICATION_LEVEL is an integer in the range 0-100.

This parameter is optional.

CFG_VERSION_LEVEL

Required?	No
Keyword Type:	Unsigned number
Range	0—10
Multiples Allowed?	No

The CFG_VERSION_LEVEL parameter value is set when a configuration is stored and read when a configuration is loaded. If a new version of Communications Server or Personal Communications reads an older configuration file (indicated by the combination of this value and the CFG_MODIFICATION_LEVEL value being less than the current value), the product migrates the configuration to the new level, if necessary.

Note: You should not attempt to enter this value directly into the ACG file. The value should only be entered by the **Node Configuration** application.

CFG_VERSION_LEVEL is an integer in the range 0-10.

This parameter is optional.

Appendix A. AnyNet Specific Data

If you are using the AnyNet DLC, use this appendix to define the keyword parameters for the LINK_STATION and PORT keywords.

In addition to the keyword parameters for the LINK_STATION and PORT keywords, you must also define the ANYNET_COMMON_PARAMETERS keyword described in “Appendix G. ANYNET_COMMON_PARAMETERS” on page 229.

If you are using AnyNet Sockets Over SNA, you must define the ANYNET_SOCKETS_OVER_SNA keyword described in “Appendix H. ANYNET_SOCKETS_OVER_SNA” on page 235. AnyNet Sockets Over SNA does not use the AnyNet DLC.

LINK_STATION Keywords for the AnyNet DLC

The following section describes the parameter keywords you can specify in the LINK_STATION keyword to use the AnyNet DLC.

DEST_ADDRESS

Required?	No
Keyword Type:	Hexadecimal string
Field Length	0—34
Multiples Allowed?	No

The DEST_ADDRESS parameter specifes the hexadecimal equivalent of either the adjacent CP name (in EBCDIC) or the node ID. The value of this parameter should match the type specified by the PARTNER_ADDRESS_TYPE parameter.

This parameter is optional.

LINK_STATION_ANYNET_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The LINK_STATION_ANYNET_SPECIFIC_DATA parameter is a complex keyword comprised of the PARTNER_ADDRESS_TYPE parameter keyword.

See the description of the PARTNER_ADDRESS_TYPE parameter keyword to define the LINK_STATION_ANYNET_SPECIFIC_DATA parameter.

PARTNER_ADDRESS_TYPE

Required?	No
Keyword Type:	Enumerated
Default	USE_CP_NAME
Multiples Allowed?	No

The PARTNER_ADDRESS_TYPE parameter specifies how the partner address is identified.

USE_BLOCK_ID_AND_PU_ID
The partner address is identified by the block id and PU id.

USE_CP_NAME
The partner address is identified by the CP name.

This parameter is optional. The default is to use the CP name to identify the partner address.

PORT Keywords for the AnyNet DLC

The following section describes the parameter keywords you can specify in the PORT keyword to use the AnyNet DLC.

DLC_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DLC_NAME parameter specifies the 1- to 8-byte name of the communication adapter or protocol you are using. For the AnyNet DLC, DLC_NAME should be specified as ***ANYNET***.

This parameter is required.

Appendix B. LAN Specific Data

If you are using the LAN DLC, use this appendix to define the keyword parameters for the LINK_STATION and PORT keywords.

LINK_STATION Keywords for the LAN DLC

The following section describes the parameter keywords you can specify in the LINK_STATION keyword to use the LAN DLC.

DEST_ADDRESS

Required?	No
Keyword Type:	Hexadecimal string
Multiples Allowed?	No

The DEST_ADDRESS parameter specifes a 14 byte hexadecimal string comprised of the 12 byte medium access control (MAC) address concatenated with the two byte service access point (SAP) address.

This parameter is optional.

PORT Keywords for the LAN DLC

The following section describes the parameter keywords you can specify in the PORT keyword to use the LAN DLC.

DLC_DATA

Required?	No
Keyword Type:	Hexadecimal string
Multiples Allowed?	No

The DLC_DATA parameter specifies a 14 byte hexadecimal string comprised of 12 zeros concatenated with the two byte local service access point (SAP) address specified on the LOCAL_SAP parameter.

This parameter is optional.

DLC_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DLC_NAME parameter specifies 1- to 8-byte name of the communication adapter or protocol you are using. For the LAN DLC, DLC_NAME should be specified as ***LAN***.

This parameter is required.

PORT_LAN_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes, one for each PORT keyword

The PORT_LAN_SPECIFIC_DATA parameter is a complex keyword comprised of the following parameter keywords:

- ACK_DELAY
- ACK_TIMEOUT
- ADAPTER_NUMBER
- BUSY_STATE_TIMEOUT
- IDLE_STATE_TIMEOUT
- LOCAL_SAP
- OUTSTANDING_TRANSMITS
- POLL_TIMEOUT
- POOL_SIZE
- REJECT_RESPONSE_TIMEOUT
- TEST_RETRY_INTERVAL
- TEST_RETRY_LIMIT
- XID_RETRY_INTERVAL
- XID_RETRY_LIMIT

See the descriptions of the parameter keywords to define the PORT_LAN_SPECIFIC_DATA parameter.

ACK_DELAY

Required?	No
Keyword Type:	Unsigned number
Default	100
Range	30—1 000
Multiples Allowed?	No

The ACK_DELAY parameter specifies the time that the LAN device withholds a response to a received frame in order to allow more frames to be received and acknowledged with the same Request Ready (RR).

ACK_DELAY is an integer in the range 30—1 000 milliseconds.

This parameter is required. The default value is 100 milliseconds.

ACK_TIMEOUT

Required?	No
Keyword Type:	Unsigned number
Default	10 000
Default	3 000
Range	500—10 000
Multiples Allowed?	No

The ACK_TIMEOUT parameter specifies the time that a station should wait for an acknowledgment from a remote station after sending data.

ACK_TIMEOUT is an integer in the range 500—10 000 milliseconds. The default is 10 000 milliseconds.

ACK_TIMEOUT is an integer in the range 500—10 000 milliseconds. The default is 3 000 milliseconds.

This parameter is required.

ADAPTER_NUMBER

Required?	Yes
Keyword Type:	Unsigned number
Range	0—7
Range	0—7 or 9 999
Multiples Allowed?	No

The ADAPTER_NUMBER parameter uniquely identifies this adapter.

ADAPTER_NUMBER is an integer in the range 0-7.

ADAPTER_NUMBER is an integer in the range 0-7 or 9 999.

This parameter is required.

If you are creating a configuration to be exported to another Communications Server system, you can select any adapter number for this definition.

BUSY_STATE_TIMEOUT

Required?	Yes
Keyword Type:	Unsigned number
Default	15
Range	10—60
Multiples Allowed?	No

The BUSY_STATE_TIMEOUT parameter specifies the time that the local node waits for the remote node to exit a busy state. A busy state is entered when there is not enough memory to receive the incoming frames; the incoming frames are rejected. When resources are freed, the node exits the busy state.

BUSY_STATE_TIMEOUT is an integer in the range 10-60 seconds.

This parameter is required. The default value is 15.

IDLE_STATE_TIMEOUT

Required?	Yes
Keyword Type:	Unsigned number
Default	30
Range	10—120
Multiples Allowed?	No

The IDLE_STATE_TIMEOUT parameter specifies the time that the LAN device driver waits for a frame to be received before declaring the link to be inoperative.

IDLE_STATE_TIMEOUT is an integer in the range 10-120 seconds.

This parameter is required. The default value is 30 seconds.

LOCAL_SAP

Required?	Yes
Keyword Type:	Hexadecimal number
Default	X'04'
Range	X'04'—X'FC'
Multiples Allowed?	No

The LOCAL_SAP parameter specifies the local service access point (SAP) number of the local port. The value must be a multiple of 4.

LOCAL_SAP is a hexadecimal value in the range X'04'—X'FC'.

This parameter is required. The default value is X'04'.

MAX_RETRY

The MAX_RETRY parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Unsigned number
Default	10
Multiples Allowed?	No

The MAX_RETRY parameter specifies the number of times a frame is resent while waiting for the remote device to respond. When a frame is sent to the remote device with the POLL bit set, the local device waits the amount of time specified for the POLL_TIMEOUT parameter for the remote device to respond. If the timeout expires, the frame is resent and the timeout is reset. This occurs the number of times specified by MAX_RETRY.

This parameter is required. The default value is 10 retries.

OUTSTANDING_TRANSMITS

Required?	Yes
Keyword Type:	Unsigned number
Default	16
Range	2—64
Multiples Allowed?	No

The OUTSTANDING_TRANSMITS parameter specifies the maximum number of frames the LAN device queues to a link station before sending a Receive Not Ready (RNR) to the adjacent link station.

OUTSTANDING_TRANSMITS is an integer in the range 2-64 frames.

This parameter is required. The default value is 16 frames.

POLL_TIMEOUT

Required?	Yes	
Keyword Type:	Unsigned number	
Default	8 000	
Default	3 000	
Range	500—10 000	
Multiples Allowed?	No	

The POLL_TIMEOUT parameter specifies the time that the LAN device waits for a response to a frame sent with the POLL bit set.

POLL_TIMEOUT is an integer in the range 500—10 000 milliseconds.

The default is 8 000 milliseconds.

The default is 3 000 milliseconds.

This parameter is required.

POOL_SIZE

Required?	Yes
Keyword Type:	Unsigned number
Default	32
Range	2—64
Multiples Allowed?	No

The POOL_SIZE parameter specifies the number of buffers that are reserved in memory to hold data received from the host until it can be processed. Each buffer is the size of the PIU.

POOL_SIZE is an integer in the range 2-64 buffers.

This parameter is required. The default value is 32 buffers.

REJECT_RESPONSE_TIMEOUT

Required?	Yes
Keyword Type:	Unsigned number
Default	10
Range	5—30
Multiples Allowed?	No

The REJECT_RESPONSE_TIMEOUT parameter specifies the time that the LAN device waits to receive a response to an REJ frame.

REJECT_RESPONSE_TIMEOUT is an integer in the range 5-30 seconds.

This parameter is required. The default value is 10 seconds.

TEST_RETRY_INTERVAL

Required?	Yes
Keyword Type:	Unsigned number
Default	8
Range	5—30
Multiples Allowed?	No

The TEST_RETRY_INTERVAL parameter specifies the time between attempts to find the adjacent link station on the local area network (LAN). The number of attempts made are based on the value specified for the TEST_RETRY_LIMIT parameter.

TEST_RETRY_INTERVAL is an integer in the range 5-30 seconds.

This parameter is required. The default value is 8 seconds.

TEST_RETRY_LIMIT

Required?	Yes
Keyword Type:	Unsigned number
Default	5
Range	3—30
Multiples Allowed?	No

The TEST_RETRY_LIMIT parameter specifies the maximum number of attempts to find the adjacent link station on the local area network (LAN) without receiving an acknowledgment in the time set by the value for the TEST_RETRY_INTERVAL parameter.

TEST_RETRY_LIMIT is an integer in the range 3-30 attempts.

This parameter is required. The default value is 5 attempts.

XID_RETRY_INTERVAL

Required?	Yes
Keyword Type:	Unsigned number
Default	8
Range	5—60
Multiples Allowed?	No

The XID_RETRY_INTERVAL parameter specifies the time the link station waits for a reply to an XID command before sending another XID to the remote station. The number of times an XID is sent is based on the value specified on the XID_RETRY_LIMIT parameter.

XID_RETRY_INTERVAL is an integer in the range 5-60 seconds.

This parameter is required. The default value is 8 seconds.

XID_RETRY_LIMIT

Required?	Yes
Keyword Type:	Unsigned number
Default	5
Range	3—30
Multiples Allowed?	No

The XID_RETRY_LIMIT parameter specifies the maximum number of times Communications Server or Personal Communications sends XID commands to the remote station to establish a link, without receiving an acknowledgment from the remote station in the time specified for the XID_RETRY_INTERVAL parameter.

XID_RETRY_LIMIT is an integer in the range 3-30 times.

This parameter is required. The default value is 5 times.

Appendix C. OEM Specific Data

If you are using the Enterprise Extender (EE) DLC, the Multi-Path Channel (MPC) DLC, or an OEM DLC, use this appendix to define the keyword parameters for the LINK_STATION and PORT keywords.

If you are using an OEM DLC, use this appendix to define the keyword parameters for the LINK_STATION and PORT keywords.

LINK_STATION Keywords for an OEM DLC

The following section describes the parameter keywords you can specify in the LINK_STATION keyword to use the Enterprise Extender (EE) DLC , the Multi-Path Channel (MPC) DLC, or an OEM DLC.

The following section describes the parameter keywords you can specify in the LINK_STATION keyword to use an OEM DLC.

DEST_ADDRESS

Required?	No
Keyword Type:	Hexadecimal string
Field Length	0—34
Multiples Allowed?	No

The DEST_ADDRESS parameter specifes the necessary addressing information to contact a remote node over this DLC. The value is a 0- to 34-byte hexadecimal character string. This addressing information is manufacturer-specific.

For the Enterprise Extender (EE) DLC and Multi-Path Channel (MPC) DLC, this parameter is not used.

This parameter is optional.

LINK_STATION_OEM_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

The LINK_STATION_OEM_SPECIFIC_DATA parameter is a complex keyword comprised of the OEM_LINK_DATA parameter keyword.

See the description of the OEM_LINK_DATA parameter keyword to define the LINK_STATION_OEM_SPECIFIC_DATA parameter.

AUTO_REACTIVATE_SUPPORT

The AUTO_REACTIVATE_SUPPORT parameter keyword applies to Personal Communications only.

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	No

The AUTO_REACTIVATE_SUPPORT parameter specifies whether this link is reactivated automatically if it gets deactivated. Reactivation of a link is attempted only once after the link initially becomes inactive. If the reactivation fails, it is not tried again. Valid values are:

0 The link is not reactivated automatically.

1 The link is reactivated automatically.

This parameter is optional. The default is 0.

OEM_DATA

Required?	No
Keyword Type:	Hexadecimal string
Multiples Allowed?	Yes

For the Enterprise Extender (EE) DLC, OEM_DATA specifies four bytes of data in byte-swapped hexadecimal format for each of the following values:

Link type
This value is always 1 (X'01').

Remote Service Access Point (SAP) or DSAP
Valid values are X'04'—X'FC'. The value must be a multiple of 4.

Local Service Access Point (SAP) or SSAP
Valid values are X'04'—X'FC'. The value must be a multiple of 4.

XID retry count (limit)
The exchange identification (XID) retry limit is the maximum number of times Communications Server will send XID commands to the remote station to establish a link without receiving an acknowledgment from the remote station in the time set by the XID retry interval. Valid values are 3 to 29 times.

XID retry timer (interval)
The exchange identification (XID) retry interval is the time the link station waits for a reply to an XID command before sending another XID to the remote station. The number of times an XID is sent is based on the XID retry count. Valid values are 1 to 59 seconds.

Liveness mode
This value is always 0 (X'00').

Liveness timer (retry interval)
Liveness timer is the time the link station waits before testing whether the link is still active. After the specified amount of time elapses, a TEST command is sent to the remote station to check if the link is still active. Valid values are 1 to 59 seconds.

IP address
An IP address in dotted decimal notation. For example, an IP address could be 9.68.43.100.

Data in byte-swapped hexadecimal format is in reverse order of bytes. For example, the IP address 9.68.43.100 in hexadecimal format is X'09442B64', but in byte-swapped hexadecimal format is X'642B4409'.
Note: Since the format of this data is byte-swapped, it is recommended that the values only be entered using the **Node Configuration** application.

For the Multi-Path Channel (MPC) DLC, OEM_DATA specifies the hexadecimal format of the 1- to 8-byte ASCII name of the MPC DLC group for this connection.
Note: Since the format of this data is specific to the MPC DLC, it is recommended that the value only be entered using the **Node Configuration** application.

For OEM communications devices, the OEM_DATA parameter specifies binary information specific for the OEM card manufacturer's use only. Communications Server or Personal Communications supports the use of OEM communications devices where the OEM manufacturer provides its own configuration panels. More than one OEM_DATA parameter might appear in the ASCII configuration file.

OEM Specific Data — LINK_STATION

Note: Since the format of this binary data is very specific to the OEM device, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the configuration application provided by the OEM manufacturer.

This parameter is optional.

OEM_LINK_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The OEM_LINK_DATA parameter is a complex keyword comprised of the OEM_DATA parameter keyword.

See the description of the OEM_DATA parameter keyword to define the OEM_LINK_DATA parameter.

PORT Keywords for an OEM DLC

The following section describes the parameter keywords you can specify in the PORT keyword to use the Enterprise Extender (EE) DLC , the Multi-Path Channel (MPC) DLC, or an OEM DLC.

The following section describes the parameter keywords you can specify in the PORT keyword to use an OEM DLC.

DLC_DATA

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—32
Multiples Allowed?	No

The DLC_DATA parameter specifies information that is manufacturer-specific. The value is a 1- to 32-byte hexadecimal character string.

For the Enterprise Extender (EE) DLC and Multi-Path Channel (MPC) DLC, this parameter is not used.

This parameter is optional.

DLC_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DLC_NAME parameter specifies the 1- to 8-byte character name of the communication adapter or protocol you are using.

For the Enterprise Extender (EE) DLC, DLC_NAME should be specified as ***IBMLDLC***.

For the Multi-Path Channel (MPC) DLC, DLC_NAME should be specified as ***IBMMPCDL***.

For OEM devices, DLC_NAME is manufacturer-specific.

This parameter is required.

PORT_OEM_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

The PORT_OEM_SPECIFIC_DATA parameter is a complex keyword comprised of the following parameter keywords:

- OEM_LINK_DATA
- OEM_PORT_DATA
- OEM_PORT_DEFAULTS

See the descriptions of the parameter keywords to define the LINK_STATION_OEM_SPECIFIC_DATA parameter.

COST_PER_CONNECT_TIME

Required?	No
Keyword Type:	Unsigned number
Range	0—255
Multiples Allowed?	No

The COST_PER_CONNECT_TIME parameter specifies the cost per connect time.

The value is an integer in the range 0-255.

This parameter is optional.

EFFECTIVE_CAPACITY

Required?	No
Keyword Type:	Unsigned number
Multiples Allowed?	No

The EFFECTIVE_CAPACITY parameter specifies the actual units of effective capacity. The value is encoded as a 1-byte floating-point number, represented by the following formula:

```
0.1 mmm * 2 eeeee
```

where the bit representation of the byte is ***eeeeemmm***. Each unit of effective capacity is equal to 300 bits per second.

This parameter is optional.

INB_LINK_ACT_LIM

Required?	No
Keyword Type:	Unsigned number
Multiples Allowed?	No

The INB_LINK_ACT_LIM parameter specifies the number of link stations reserved for inbound activation on this port. The maximum number of outbound link stations that can be active concurrently is the value of the TOT_LINK_ACT_LIM parameter minus the value of the INB_LINK_ACT_LIM parameter.

Notes:

1. If the PORT_TYPE on the PORT keyword is specified as NONSWITCHED and the LINK_STATION_ROLE on the PORT keyword is specified as NEGOTIABLE or PRIMARY, the INB_LINK_ACT_LIM parameter must be specified as 0.
2. If the PORT_TYPE on the PORT keyword is specified as NONSWITCHED and the LINK_STATION_ROLE on the PORT keyword is specified as SECONDARY, the INB_LINK_ACT_LIM parameter must be specified as 0 or 1.
3. If this port is for the AnyNet DLC, the INB_LINK_ACT_LIM parameter must be specified as 0.

This parameter is optional.

OEM_DATA

Required?	No
Keyword Type:	Hexadecimal string
Multiples Allowed?	Yes

For the Enterprise Extender (EE) DLC, OEM_DATA specifies four bytes of data in byte-swapped hexadecimal format for each of the following values:

Link type
This value is always 1 (X'01').

Remote Service Access Point (SAP) or DSAP
This value is always 0 (X'00').

Local Service Access Point (SAP) or SSAP
This value is always 0 (X'00').

XID retry limit (count)
The exchange identification (XID) retry limit is the maximum number of times Communications Server will send XID commands to the remote station to establish a link without receiving an acknowledgment from the remote station in the time set by the XID retry interval. Valid values are 3 to 29 times.

XID retry interval (timer)
The exchange identification (XID) retry interval is the time the link station waits for a reply to an XID command before sending another XID to the remote station. The number of times an XID is sent is based on the XID retry count. Valid values are 1 to 59 seconds.

Liveness mode
This value is always 0 (X'00').

Liveness retry interval (timer)
Liveness retry interval is the time the link station waits before testing whether the link is still active. After the specified amount of time elapses, a TEST command is sent to the remote station to check if the link is still active. Valid values are 1 to 59 seconds.

IP address
An IP address in dotted decimal notation. For example, an IP address could be 9.68.43.100.

Data in byte-swapped hexadecimal format is in reverse order of bytes. For example, the IP address 9.68.43.100 in hexadecimal format is X'09442B64', but in byte-swapped hexadecimal format is X'642B4409'.
Note: Since the format of this data is byte-swapped, it is recommended that the values only be entered using the **Node Configuration** application.

For the Multi-Path Channel (MPC) DLC, this parameter is not used.

For OEM communications devices, the OEM_DATA parameter specifies binary information specific for the OEM card manufacturer's use only. Communications Server or Personal Communications supports the use of OEM communications devices where the OEM manufacturer provides its own configuration panels. More than one OEM_DATA parameter might appear in the ASCII configuration file.

Note: Since the format of this binary data is very specific to the OEM device, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the configuration application provided by the OEM manufacturer.

This parameter is optional.

OEM_LINK_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The OEM_LINK_DATA parameter is a complex keyword comprised of the OEM_DATA parameter keyword.

See the description of the OEM_DATA parameter keyword to define the OEM_LINK_DATA parameter.

For the Multi-Path Channel (MPC) DLC, this parameter is not used.

OEM_PORT_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The OEM_PORT_DATA parameter is a complex keyword comprised of the OEM_DATA parameter keyword.

See the description of the OEM_DATA parameter keyword to define the OEM_PORT_DATA parameter.

For the Enterprise Extender (EE) DLC and Multi-Path Channel (MPC) DLC, this parameter is not used.

OEM_PORT_DEFAULTS

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

The OEM_PORT_DEFAULTS parameter is a complex keyword comprised of the following parameter keywords:

- COST_PER_CONNECT_TIME
- EFFECTIVE_CAPACITY
- INB_LINK_ACT_LIM
- OUT_LINK_ACT_LIM
- PROPOGATION_DELAY
- SECURITY
- TOT_LINK_ACT_LIM

See the descriptions of the parameter keywords to define the OEM_PORT_DEFAULTS parameter.

OUT_LINK_ACT_LIM

Required?	No
Keyword Type:	Unsigned number
Multiples Allowed?	No

The OUT_LINK_ACT_LIM parameter specifies the number of link stations reserved for outbound activation on this port. The maximum number of inbound link stations that can be active concurrently is the value of the TOT_LINK_ACT_LIM parameter minus the value of the OUT_LINK_ACT_LIM parameter.

Notes:

1. If the PORT_TYPE on the PORT keyword is specified as NONSWITCHED and the LINK_STATION_ROLE on the PORT keyword is specified as NEGOTIABLE, the OUT_LINK_ACT_LIM parameter must be specified as 0.
2. If the LINK_STATION_ROLE on the PORT keyword is specified as PRIMARY, the value of the OUT_LINK_ACT_LIM parameter must be specified as equal to the value of the TOT_LINK_ACT_LIM parameter.
3. If the PORT_TYPE on the PORT keyword is specified as NONSWITCHED and the LINK_STATION_ROLE on the PORT keyword is specified as SECONDARY, the OUT_LINK_ACT_LIM parameter must be specified as 0 or 1.
4. If this port is for the AnyNet DLC, the OUT_LINK_ACT_LIM parameter must be specified as 0.

This parameter is optional.

PROPOGATION_DELAY

Required?	No
Keyword Type:	Enumerated
Multiples Allowed?	No

The PROPAGATION_DELAY parameter specifies the time it takes for a signal to travel the length of the link, in microseconds. The value is encoded as a 1-byte floating-point number, represented by the following formula:

```
0.1 mmm * 2 eeeee
```

where the bit representation of the byte is ***eeeeemmm***.

Valid values are:

LAN	Less than 480 microseconds delay.
MAXIMUM	Maximum propagation delay.
MINIMUM	No propagation delay.
PKT_SWITCHED_NET	Between 49 512 and 245 760 microseconds delay.
SATELLITE	Longer than 245 760 microseconds delay.
TELEPHONE	Between 480 and 49 512 microseconds delay.

This parameter is optional.

SECURITY

Required?	No
Keyword Type:	Enumerated
Multiples Allowed?	No

The SECURITY parameter specifies the type of security used for transmission of data over the connection. Valid values are:

ENCRYPTED
There is encryption over the line.

GUARDED_CONDUIT
The conduit is protected against physical tapping.

GUARDED_RADIATION
The line is protected against physical and radiation tapping.

NONSECURE
No security exists.

PUBLIC_SWITCHED_NETWORK
Data is transmitted over a public switched network.

SECURE_CONDUIT
The line is a secure conduit that is not guarded.

UNDERGROUND_CABLE
Data is transmitted over a secure underground cable.

ENCRYPTED
There is encryption over the line.

GUARDED_RADIATION
The line is protected against physical and radiation tapping.

NONSECURE
No security exists.

PUBLIC_SWITCHED_NETWORK
Data is transmitted over a public switched network.

SECURE_CONDUIT
The line is a secure conduit that is not guarded.

UNDERGROUND_CABLE
Data is transmitted over a secure underground cable.

This parameter is optional.

TOT_LINK_ACT_LIM

Required?	No
Keyword Type:	Unsigned number
Multiples Allowed?	No

The TOT_LINK_ACT_LIM parameter specifies the maximum number of link stations that can be active concurrently. This must be greater than or equal to the sum of the INB_LINK_ACT_LIM and OUT_LINK_ACT_LIM parameter values.

Notes:

1. If the PORT_TYPE on the PORT keyword is specified as NONSWITCHED and the LINK_STATION_ROLE on the PORT keyword is specified as NEGOTIABLE or SECONDARY, the TOT_LINK_ACT_LIM parameter must be specified as 1.
2. If the LINK_STATION_ROLE on the PORT keyword is specified as PRIMARY, the TOT_LINK_ACT_LIM parameter must be specified in the range greater than or equal to 1-256.
3. If this port is for the AnyNet DLC, the TOT_LINK_ACT_LIM parameter must be specified as 65 535.

This parameter is optional.

Appendix D. SDLC Specific Data

If you are using the SDLC DLC, use this appendix to define the keyword parameters for the LINK_STATION and PORT keywords.

LINK_STATION Keywords for the SDLC DLC

The following section describes the parameter keywords you can specify in the LINK_STATION keyword to use the SDLC DLC.

DEST_ADDRESS

Required?	No
Keyword Type:	Hexadecimal string
Multiples Allowed?	No

The DEST_ADDRESS parameter specifies the link station address.

The value is a 2 byte hexadecimal character string.

This parameter is optional.

LINK_STATION_SDLC_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes, one for each LINK_STATION keyword

The LINK_STATION_SDLC_SPECIFIC_DATA parameter is a complex keyword comprised of the following parameter keywords:

- BACKUP_PHONE_NUMBER
- CONNECT_RETRY_COUNT
- CONNECT_TIMER
- FRAMING_STANDARD
- INACTIVITY_TIMER
- PORT_SPEED
- PRIMARY_PHONE_NUMBER
- RESPONSE_RETRY_COUNT
- RESPONSE_TIMER
- USE_NRZI_ENCODING

See the descriptions of the parameter keywords to define the LINK_STATION_SDLC_SPECIFIC_DATA parameter.

AUTO_REACTIVATE_SUPPORT

The AUTO_REACTIVATE_SUPPORT parameter keyword applies to Personal Communications only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The AUTO_REACTIVATE_SUPPORT parameter specifies whether this link is reactivated automatically if it gets deactivated. Reactivation of a link is attempted only once after the link initially becomes inactive. If the reactivation fails, it is not tried again. Valid values are:

0 The link is not reactivated automatically.

1 The link is reactivated automatically.

This parameter is optional. The default is 0.

BACKUP_PHONE_NUMBER

Required?	No
Keyword Type:	String
Field Length	1—62
Multiples Allowed?	No

The BACKUP_PHONE_NUMBER parameter specifies the 1- to 62-character phone number used as the backup phone number.

This parameter is optional.

CONNECT_RETRY_COUNT

Required?	No
Keyword Type:	Unsigned number
Default	10
Range	0—127
Multiples Allowed?	No

The CONNECT_RETRY_COUNT parameter is used with CONNECT_TIMER parameter to allow enough time for the receipt of an exchange identifier (XID) response from the secondary link station. This is needed if the local link station is specified or negotiated as primary. The link activation fails if no XID response is received from the secondary station for the interval (CONNECT_TIMER value times CONNECT_RETRY_COUNT value).

The value is an integer in the range 0-127 retries.

This parameter is optional. The default is 10.

CONNECT_TIMER

Required?	No
Keyword Type:	Unsigned number
Default	2
Range	1—30
Multiples Allowed?	No

The CONNECT_TIMER parameter is used with the CONNECT_RETRY_COUNT parameter to allow enough time for the receipt of an exchange identifier (XID) response from the secondary link station. This is needed if the local link station is specified or negotiated as primary. The link activation fails if no XID response is received from the secondary station for the interval (CONNECT_TIMER value times CONNECT_RETRY_COUNT value).

The value is an integer in the range 1-30 seconds.

This parameter is optional. The default is 2 seconds.

FRAMING_STANDARD

Required?	No
Keyword Type:	Enumerated
Default	SNA_OVER_ASYNC
Multiples Allowed?	No

The FRAMING_STANDARD parameter specifies the framing options that support the medium access control (MAC) function for COM port devices. The type of standards that can be specified are:

ADVANTIS	SDLC over asynchronous communications when connecting with Advantis (IIN).
HAYES AUTOSYNC	SDLC over asynchronous communications via a Hayes AutoSync modem
SNA_OVER_ASYNC	Synchronous data link control (SDLC) over asynchronous communications, as in the International Organization for Standardization (ISO) Standard 3309.

This parameter is optional. The default is SNA_OVER_ASYNC

INACTIVITY_TIMER

Required?	No
Keyword Type:	Unsigned number
Default	80
Range	40—160
Multiples Allowed?	No

The INACTIVITY_TIMER parameter specifies the amount of time before the link is disconnected when the secondary link station has not received a poll. The inactivity timer is only used when the link station role is specified or negotiated as primary.

The value is an integer in the range 40-160 seconds.

This parameter is optional. The default is 80 seconds.

PORT_SPEED

Required?	No
Keyword Type:	Unsigned number
Default	57 600
Range	2 400—115 200
Multiples Allowed?	No

The PORT_SPEED parameter specifies the serial port speed supported by the device used for the connection.

The value is an integer in the range 2 400—115 200 bits per second (bps).

This parameter is optional. The default is 57 600.

If the highest carrier speed of your modem is 14 400 bps, specify a port speed of 57 600 bps or lower. If the highest carrier speed is 28 800 bps or higher, specify a port speed of 115 200 to use the maximum compression capabilities for the modem. A port speed of 115 200 bps is recommended for systems with Pentium processors.

PRIMARY_PHONE_NUMBER

Required?	No
Keyword Type:	String
Field Length	1—62
Multiples Allowed?	No

The PRIMARY_PHONE_NUMBER parameter specifies the 1- to 62-character phone number used as the primary phone number.

This parameter is optional.

RESPONSE_RETRY_COUNT

Required?	No
Keyword Type:	Unsigned number
Default	10
Range	1—127
Multiples Allowed?	No

The RESPONSE_RETRY_COUNT parameter is used with the RESPONSE_TIMER parameter to help maintain the link connection to the secondary link station. The retry count is only used when the link station role is specified or negotiated as

primary. The link is disconnected when no response is received from the secondary station for the interval (RESPONSE_TIMER parameter value times RESPONSE_RETRY_COUNT value).

The value is an integer in the range 1-127 retries.

This parameter is optional. The default is 10.

RESPONSE_TIMER

Required?	No
Keyword Type:	Unsigned number
Default	4
Range	2—20
Multiples Allowed?	No

The RESPONSE_TIMER parameter is used with the RESPONSE_RETRY_COUNT parameter to help maintain the link connection to the secondary link station. The response timer is only used when the link station role is specified or negotiated as primary. The link is disconnected if no response is received from the secondary station for the interval (RESPONSE_TIMER value times RESPONSE_RETRY_COUNT value).

The value is an integer in the range 2-20 seconds.

This parameter is optional. The default is 4 seconds.

USE_NRZI_ENCODING

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The USE_NRZI_ENCODING specifies how synchronous data sent to the modem is encoded. Valid values are:

0 Use non-return-to-zero (NRZ) encoding.

1 Use non-return-to-zero inverted (NRZI) encoding.

This parameter is optional. The default is 0.

PORT Keywords for the SDLC DLC

The following section describes the parameter keywords you can specify in the PORT keyword to use the SDLC DLC.

DLC_DATA

Required?	No
Keyword Type:	Hexadecimal string
Multiples Allowed?	No

The DLC_DATA parameter specifies the link station address.

The value is a 2 byte hexadecimal character string in the range of X'00'—X'FF'.

This parameter is optional. The default address is X'C1'.

If the LINK_STATION_ROLE parameter on the PORT or LINK_STATION keyword is specified as PRIMARY, this value is forced to X'FF'.

If the LINK_STATION_ROLE parameter on the PORT or LINK_STATION keyword is specified as SECONDARY, this value is forced to X'00'.

DLC_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DLC_NAME parameter specifies the 1- to 8-byte name of the communication adapter or protocol you are using. For the SDLC DLC, DLC_NAME should be specified as ***SDLC***.

This parameter is required.

PORT_SDLC_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

The PORT_SDLC_SPECIFIC_DATA parameter is a complex keyword comprised of the following parameter keywords:

- ACCEPT_INCOMING_CALLS
- CONNECT_RETRY_COUNT
- CONNECT_TIMER
- DUMB_CARD_INTERFACE
- FRAMING_STANDARD
- FULL_DUPLEX_SUPPORT
- INACTIVITY_TIMER
- IRQ_LEVEL
- MODEM_NAME
- MULTIDROP_PRIMARY_SERVER
- OEM_PORT_DATA
- PORT_SPEED
- RESPONSE_RETRY_COUNT
- RESPONSE_TIMER
- SHARED_RAM_ADDRESS
- STATION_POLL_COUNT

- OUTSTANDING_TRANSMITS
- POLL_TIMEOUT
- POOL_SIZE
- REJECT_RESPONSE_TIMEOUT
- TEST_RETRY_INTERVAL
- TEST_RETRY_LIMIT
- XID_RETRY_INTERVAL
- XID_RETRY_LIMIT

See the descriptions of the parameter keywords to define the PORT_SDLC_SPECIFIC_DATA parameter.

ACCEPT_INCOMING_CALLS

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The ACCEPT_INCOMING_CALLS parameter specifies whether Communications Server or Personal Communications is able to accept calls from other computers. Valid values are:

0 The product is not able to accept calls from other computers.

1 The product is able to accept calls from other computers.

This parameter is required. The default is 0.

If you allow the product to accept incoming calls through a COM port, it has exclusive use of the port when you start the configuration. If you want another program to use this port, you must stop Communications Server to stop the COM port device. (Merely closing the session using the port is not enough, because that does not stop the COM port devices.)

CONNECT_RETRY_COUNT

Required?	Yes
Keyword Type:	Unsigned number
Default	10
Range	0—127
Multiples Allowed?	No

The CONNECT_RETRY_COUNT parameter is used with CONNECT_TIMER parameter to allow enough time for the receipt of an exchange identifier (XID) response from the secondary link station. This is needed if the local link station is specified or negotiated as primary. The link activation fails if no XID response is received from the secondary station for the interval (CONNECT_TIMER value times CONNECT_RETRY_COUNT value).

The value is an integer in the range 0-127 retries.

This parameter is optional. The default is 10.

CONNECT_TIMER

Required?	Yes
Keyword Type:	Unsigned number
Default	2
Range	1—30
Multiples Allowed?	No

The CONNECT_TIMER parameter is used with the CONNECT_RETRY_COUNT parameter to allow enough time for the receipt of an exchange identifier (XID) response from the secondary link station. This is needed if the local link station is specified or negotiated as primary. The link activation fails if no XID response is received from the secondary station for the interval (CONNECT_TIMER value times CONNECT_RETRY_COUNT value).

The value is an integer in the range 1-30 seconds.

This parameter is optional. The default is 2 seconds.

DUMB_CARD_INTERFACE

The DUMB_CARD_INTERFACE parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The DUMB_CARD_INTERFACE parameter specifies whether the OEM communications device uses the Microsoft SNA Server synchronous dumb card interface. Communications Server supports the use of OEM communications devices where the OEM manufacturer provides its own configuration panels. Valid values are:

0 The OEM communications device does not use the Microsoft SNA Server synchronous dumb card interface. The device uses the shallow interface provided by Communications Server.

1 The OEM communications device uses the Microsoft SNA Server synchronous dumb card interface.

Note: This value should only be entered using the configuration application provided by the OEM manufacturer.

This parameter is required. The default is 0.

FRAMING_STANDARD

Required?	Yes
Keyword Type:	Enumerated
Default	SNA_OVER_ASYNC
Multiples Allowed?	No

The FRAMING_STANDARD parameter specifies the framing options that support the medium access control (MAC) function for COM port devices. The type of standards that can be specified are:

ADVANTIS	SDLC over asynchronous communications when connecting with Advantis (IIN).
HAYES AUTOSYNC	SDLC over asynchronous communications via a Hayes AutoSync modem
SNA_OVER_ASYNC	Synchronous data link control (SDLC) over asynchronous communications, as in the International Organization for Standardization (ISO) Standard 3309.

This parameter is optional. The default is SNA_OVER_ASYNC

FULL_DUPLEX_SUPPORT

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The FULL_DUPLEX_SUPPORT parameter specifies whether this transaction program supports full duplex conversations. Valid values are:

0 The transaction program does not support full duplex conversations.

1 The transaction program supports full duplex conversations.

This parameter is optional. The default is 0.

Full duplex conversations refer to the ability of the transaction program to read data from and write data to other transaction programs simultaneously. Half duplex conversations require a change of direction before a transaction program may begin writing data after reading data, or vice versa. If you specify a 1, the transaction program supports either full duplex or half duplex conversations. If you specify a 0, the transaction program may only support half duplex conversations.

INACTIVITY_TIMER

Required?	Yes
Keyword Type:	Unsigned number
Default	80
Range	40—160
Multiples Allowed?	No

The INACTIVITY_TIMER parameter specifies the amount of time before the link is disconnected when the secondary link station has not received a poll. The inactivity timer is only used when the link station role is specified or negotiated as primary.

The value is an integer in the range 40-160 seconds.

This parameter is optional. The default is 80 seconds.

IRQ_LEVEL

Required?	Yes	
Keyword Type:	Unsigned number	
Default	3	
Range	2—15	
Range	0—15	
Multiples Allowed?	No	

The IRQ_LEVEL parameter (interrupt request level) specifies the IRQ level used to send or receive data frames to and from the device. Select a value that matches the installed adapter.

The value is an integer in the range 2-15.

The value is an integer in the range 0-15.

Select a value that matches the IRQ level value specified on the installed adapter card.

This parameter is required. The default is 3.

This option only applies to industry standard architecture (ISA) adapters. For the synchronous data link control (SDLC) ISA adapters, the value must be 3. For the Multiprotocol adapter (MPA) for ISA adapters, the value can be set to 3 or 4.

MODEM_NAME

Required?	No
Keyword Type:	String
Field Length	1—256
Multiples Allowed?	No

The MODEM_NAME parameter specifies the 1- to 256-character name of the modem as defined to the NT operating system. A PORT keyword passes this name to the communications port device driver, which can use this name to open the modem device and initialize it.

Note: Since the **Node Configuration** application produces a list of available modems from which to choose, you should not attempt to enter this value directly into the ACG file.

The value is a 1-256 character string.

This parameter is optional.

MULTIDROP_PRIMARY_SERVER

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The MULTIDROP_PRIMARY_SERVER parameter specifies whether this server is a multidrop primary server. Valid values are:

0 This server is not a multidrop primary server.

1 This server is a multidrop primary server.

This parameter is required. The default is 0.

A multidrop primary server allows an SNA node (Gateway, Network and HPR node) to support multiple SDLC secondary PUs with one physical leased line. This support helps to minimize operating costs by reducing the number of lines and hardware required to connect to downstream PUs. The support requires the use of multidrop modems with a configuration of one master and multiple slaves. The primary must be set to use constant RTS while the secondaries must use switched RTS. A modified round robin polling algorithm is used. The polling algorithm consists of an active list (stations which responded to a poll) and an inactive list. Stations from the active list are polled round robin a user-specified number of times before a station is polled from the inactive list. Stations are rotated on the inactive list after each unsuccessful poll.

OEM_DATA

The OEM_DATA parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Hexadecimal string
Multiples Allowed?	Yes

The OEM_DATA parameter specifies binary information specific for the OEM card manufacturer's use only. Communications Server supports the use of OEM communications devices where the OEM manufacturer provides its own configuration panels. More than one OEM_DATA parameter might appear in the ASCII configuration file.

Note: Since the format of this binary data is very specific to the OEM device, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the configuration application provided by the OEM manufacturer.

This parameter is optional.

OEM_PORT_DATA

The OEM_PORT_DATA parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The OEM_PORT_DATA parameter is a complex keyword comprised of the OEM_DATA parameter keyword.

See the description of the OEM_DATA parameter keyword to define the OEM_PORT_DATA parameter.

PORT_SPEED

Required?	Yes
Keyword Type:	Unsigned number
Default	57 600
Range	2 400—115 200
Multiples Allowed?	No

The PORT_SPEED parameter specifies the serial port speed supported by the device used for the connection.

The value is an integer in the range 2 400—115 200 bits per second (bps).

This parameter is optional. The default is 57 600.

If the highest carrier speed of your modem is 14 400 bps, specify a port speed of 57 600 bps or lower. If the highest carrier speed is 28 800 bps or higher, specify a port speed of 115 200 to use the maximum compression capabilities for the modem. A port speed of 115 200 bps is recommended for systems with Pentium processors.

RESPONSE_RETRY_COUNT

Required?	Yes
Keyword Type:	Unsigned number
Default	10
Range	1—127
Multiples Allowed?	No

The RESPONSE_RETRY_COUNT parameter is used with the RESPONSE_TIMER parameter to help maintain the link connection to the secondary link station. The retry count is only used when the link station role is specified or negotiated as primary. The link is disconnected when no response is received from the secondary station for the interval (RESPONSE_TIMER parameter value times RESPONSE_RETRY_COUNT value).

The value is an integer in the range 1-127 retries.

This parameter is optional. The default is 10.

RESPONSE_TIMER

Required?	Yes
Keyword Type:	Unsigned number
Default	4
Range	2—20
Multiples Allowed?	No

The RESPONSE_TIMER parameter is used with the RESPONSE_RETRY_COUNT parameter to help maintain the link connection to the secondary link station. The response timer is only used when the link station role is specified or negotiated as primary. The link is disconnected if no response is received from the secondary station for the interval (RESPONSE_TIMER value times RESPONSE_RETRY_COUNT value).

The value is an integer in the range 2-20 seconds.

This parameter is optional. The default is 4 seconds.

SHARED_RAM_ADDRESS

Required?	No
Keyword Type:	Hexadecimal number
Range	X'C0000'—X'FC000'
Multiples Allowed?	No

The SHARED_RAM_ADDRESS parameter specifies the address in memory at which the 16K buffer used by the adapter starts.

The value is a hexadecimal character string in the range X'C0000'—X'FC000'.

This parameter is optional.

If you are using an industry standard architecture (ISA) adapter, you must specify the shared RAM address. If you are using an IBM Micro Channel adapter, the shared RAM address is determined automatically.

STATION_POLL_COUNT

Required?	No
Keyword Type:	Unsigned number
Default	1
Range	1—10
Multiples Allowed?	No

The STATION_POLL_COUNT parameter specifies the number of times an active station is polled in the context of the polling list before a station from the inactive list is polled.

The value is an integer in the range 1-10 polls.

This parameter is optional. The default is 1 poll.

TRANSMISSION_FLAGS

Required?	Yes
Keyword Type:	Unsigned number
Default	1
Range	1—10
Multiples Allowed?	No

The TRANSMISSION_FLAGS parameter specifies the minimum number of flags inserted to produce idle time between transmitted frames.

A flag is the time it takes to send one byte, and represents a delay between frames. The values are 1, 3, 4, 6, and 10. Change this parameter to a value other than 1 if the device at the other end of the communication link can not receive frames with only one intervening flag.

This parameter is required. The default is 1 flag.

USE_CONSTANT_RTS

Required?	Yes
Keyword Type:	Boolean
Default	1
Multiples Allowed?	No

The USE_CONSTANT_RTS (request-to-send) parameter specifies whether flow control is used between an adapter and the modem. Valid values are:

0 The adapter waits for the CTS (clear-to-send) signal before sending data to the modem.

1 There is no flow control to the modem.

This parameter is required. The default is 1.

By default, for a synchronous data link control (SDLC) connection, constant RTS is specified. When this local station is a secondary link station on a multidrop connection, constant RTS should not be specified.

USE_NRZI_ENCODING

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	No

The USE_NRZI_ENCODING specifies how synchronous data sent to the modem is encoded. Valid values are:

0 Use non-return-to-zero (NRZ) encoding.

1 Use non-return-to-zero inverted (NRZI) encoding.

This parameter is required. The default is 0.

Appendix E. Twinaxial Specific Data

If you are using the twinaxial DLC, use this appendix to define the keyword parameters for the LINK_STATION and PORT keywords.

LINK_STATION Keywords for the Twinaxial DLC

The following section describes the parameter keywords you can specify in the LINK_STATION keyword to use the twinaxial DLC.

DEST_ADDRESS

Required?	No
Keyword Type:	Hexadecimal number
Range	X'00'—X'06'
Multiples Allowed?	No

The DEST_ADDRESS parameter specifes the TDLC station address.

The value is a 1-byte hexadecimal character string in the range of X'00'—X'06'.

This parameter is optional.

PORT Keywords for the Twinaxial DLC

The following section describes the parameter keywords you can specify in the PORT keyword to use the twinaxial DLC.

DLC_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DLC_NAME parameter specifies the 1- to 8-byte name of the communication adapter or protocol you are using. For the twinaxial DLC, DLC_NAME should be specified as ***TWINAX***.

This parameter is required.

PORT_TWINAX_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

Twinaxial Specific Data — PORT

The PORT_TWINAX_SPECIFIC_DATA parameter is a complex keyword comprised of the following parameter keywords:

- ADAPTER_TYPE
- IO_ADDRESS
- IRQ_LEVEL
- MEMORY_ADDRESS

See the descriptions of the parameter keywords to define the PORT_TWINAX_SPECIFIC_DATA parameter.

ADAPTER_TYPE

Required?	Yes
Keyword Type:	Enumerated
Default	NONE
Multiples Allowed?	No

The ADAPTER_TYPE parameter specifies the type of adapter to be used for twinaxial communication. Valid values are:

IBM_5250_EXPRESS_ISA_ADAPTER
IBM_5250_EXPRESS_PCI_ADAPTER
NONE
OTHER_TWINAX_ADAPTER
SYSTEM_36_WORKSTATION_EMULATION_ADAPTER_A
5250_AT_COMMUNICATION_ADAPTER
5250_EMULATION_ADAPTER_A
5250_EMULATION_PCMCIA_ADAPTER
5250E_DISPLAY_STATION_EMULATION_ADAPTER
IBM_5250_EXPRESS_PC_CARD

5250_EMULATION_PCMCIA_ADAPTER

5250_PCMCIA_ADAPTER_CARD

This parameter is required. The default is NONE.

If you choose OTHER_TWINAX_ADAPTER, the product assumes that the necessary software for the adapter is installed. If it is not, you receive an error message when you start the session.

IO_ADDRESS

Required?	No
Keyword Type:	Hexadecimal number
Default	X'271A'
Range	X'240A'—X'27FA'
Multiples Allowed?	No

The IO_ADDRESS parameter must be set for the following adapters:

- IBM Enhanced 5250 Display Station Emulation Adapter
- IBM 5250 AT-Bus Communication Adapter

The value is a hexadecimal address in the range X'240A'—X'27FA'.

This parameter is required. The default is X'271A'.

IRQ_LEVEL

Required?	No
Keyword Type:	Unsigned number
Default	5
Range	3—7
Multiples Allowed?	No

The IRQ_LEVEL parameter must be set for the following adapters:

- IBM Enhanced 5250 Display Station Emulation Adapter
- IBM 5250 AT-Bus Communication Adapter

The value is an integer in the range 3-7. Select a value that matches the IRQ level value specified on the installed adapter card.

This parameter is required. The default is 5.

MEMORY_ADDRESS

Required?	No
Keyword Type:	Hexadecimal number
Default	X'DC000'
Range	X'C0000'—X'DC000'
Multiples Allowed?	No

The MEMORY_ADDRESS parameter specifies the location of the shared workstation memory used by this adapter. The IRQ_LEVEL parameter must be set for the following adapters:

- IBM Enhanced 5250 Display Station Emulation Adapter
- IBM 5250 AT-Bus Communication Adapter

The value is a hexadecimal address in the range X'C0000'—X'DC000'. Check your adapter documentation for details on how to select the memory address.

This parameter is required. The default is X'DC000'.

Appendix F. X.25 Specific Data

If you are using the X.25 DLC, use this appendix to define the keyword parameters for the LINK_STATION and PORT keywords.

LINK_STATION Keywords for the X.25 DLC

The following section describes the parameter keywords you can specify in the LINK_STATION keyword to use the X.25 DLC.

LINK_STATION_X25_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The LINK_STATION_X25_SPECIFIC_DATA parameter is a complex keyword comprised of the following parameter keywords:

- ADDITIONAL_FACILITIES
- CALL_USER_GROUP_FORMAT
- CALL_USER_GROUP_INDEX
- CONNECTION_ID
- CONNECTION_TYPE
- LOGICAL_CHANNEL_NUMBER
- NETWORK_USER_ID
- PACKET_SIZE
- REMOTE_CONFORMANCE
- REQUEST_REVERSE_CHARGING
- WINDOW_SIZE
- X25_DESTINATION_ADDRESS

See the descriptions of the parameter keywords to define the LINK_STATION_X25_SPECIFIC_DATA parameter.

ADDITIONAL_FACILITIES

	Required?	No
	**Keyword Type:**	Hexadecimal string
	**Keyword Type:**	String
	Field Length	1—110
	Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The ADDITIONAL_FACILITIES parameter describes the other X.25 optional facilities that apply to this directory entry. To determine which facilities you can specify, refer to the information that you received from the network supplier when you subscribed to the network. The CCITT X.25 Recommendation also provides general information about the network facilities and their hexadecimal format (facility codes, etc.).

The value is a 1- to 110-byte hexadecimal character string.

The value is a 1- to 110-byte character string.

This parameter is optional.

Type 1- to 109-bytes of information for each X.25 optional facility in hexadecimal format (0-9, A-F). Do not enclose the information in single quotation marks. To specify more than one facility, keep typing without separating the information with a comma or blank.

If you are using a network user ID for this terminal and the ID contains non-standard ASCII characters, you need to enter the network user ID in this field in hex format. Type the following information:

- 06 for the facility code
- Number of characters in the network user ID
- Network user ID

AUTO_REACTIVATE_SUPPORT

The AUTO_REACTIVATE_SUPPORT parameter keyword applies to Personal Communications only.

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The AUTO_REACTIVATE_SUPPORT parameter specifies whether this link is reactivated automatically if it gets deactivated. Reactivation of a link is attempted only once after the link initially becomes inactive. If the reactivation fails, it is not tried again. Valid values are:

0 The link is not reactivated automatically.

1 The link is reactivated automatically.

This parameter is optional. The default is 0.

CALL_USER_GROUP_FORMAT

Required?	No
Keyword Type:	Enumerated
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The CALL_USER_GROUP_FORMAT parameter describes the type of closed user group subscription assigned to the terminal by the network supplier. This parameter is also referred to as the ***Closed User Group Format***. The value you select is the one provided by the network supplier when you subscribed to the network. Valid values are:

BASIC The terminal can only use index names in the range of 00-99.

EXTENDED The terminal can use index names in the range of 0 000—9 999.

NONE No closed user group (CUG) is requested.

This parameter is optional.

CALL_USER_GROUP_INDEX

Required?	No
Keyword Type:	String
Field Length	1—6
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The CALL_USER_GROUP_INDEX parameter is the index closed user group (CUG) supplied by the provider. The value of the CUG index depends on the closed group (CUG) format selected.

The value is a 1- to 6-byte character string.

This parameter is optional.

CONNECTION_ID

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—16
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The CONNECTION_ID parameter permits IBM SNA X.25 DTEs to accept or reject incoming calls based on its content.

The value is a 1- to 16-byte hexdecimal character string, specified in eight octets.

This parameter is optional.

The following rules apply to the use of the optional CID:

1. Some IBM SNA X.25 DTEs may not support the CID.
2. For IBM SNA X.25 DTEs that do support a CID, its use is optional on a per call basis at the discretion of the user.
3. IBM SNA X.25 DTEs that support CIDs may reject incoming calls by transferring a CLEAR_REQUEST with the appropriate diagnostic code when the CID does not compare with the one that is expected.

CONNECTION_TYPE

Required?	No
Keyword Type:	Enumerated
Default	PVC
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The CONNECTION_TYPE parameter specifies the connection type this directory entry uses. Valid values are:

PVC This directory entry uses permanent virtual circuit (PVC).

SVC This directory entry uses switched virtual circuit (SVC).

This parameter is optional. The default is PVC.

DTE_ADDRESS

Required?	No
Keyword Type:	String
Field Length	1—16
Multiples Allowed?	Yes, one for each X25_DESTINATION_ADDRESS parameter

The DTE_ADDRESS parameter specifies the address that was assigned to your data terminal equipment (DTE) when you subscribed to the network. The remote DTE address is the X.25 network address of the remote DTE your workstation communicates with. Each DTE link to an X.25 network is identified by its DTE address. The DTE address identifies an X.25 DTE uniquely throughout the world. It includes a 3-digit country code and a national terminal number (NTN). The first four digits of the DTE address contain the data network identification code (DNIC) that defines the country and the service within that country. The first three digits of the DNIC identify the country code, followed by a one-digit number for the service.

The value is a 1- to 16-byte character string.

This parameter is optional.

Note: The data identification code is not always required. For example, you can omit the data identification code for local calls or for a private network that uses its own addressing method. Some networks do not use the full 15 digits when assigning DTE addresses. In this case, you can use the

remaining digits as a suffix for your own purposes, such as routing calls to different applications, according to the suffix of the local DTE address of a caller.

DTE_ADDRESS_EXTENSION

Required?	No
Keyword Type:	String
Field Length	1—42
Multiples Allowed?	Yes, one for each X25_DESTINATION_ADDRESS parameter

The DTE_ADDRESS_EXTENSION parameter specifies the X.25 network address extension of the remote DTE your workstation communicates with. The address extension is an optional CCITT-specified DTE facility which may be used for a given call. It provides for the transparent conveyance in CALL REQUEST and INCOMING CALL packets of all or part of the Network Services Access Point (NSAP) address.

The value is a 1- to 42-byte character string.

This parameter is optional.

The X.25 local DTE address extension was assigned to your data terminal equipment (DTE) when you subscribed to the network.

LOGICAL_CHANNEL_NUMBER

Required?	No
Keyword Type:	Unsigned number
Range	0—60 000
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The LOGICAL_CHANNEL_NUMBER parameter specifies the number of the PVC to be used for this connection. The number you type must be in the range of logical channel numbers reserved for PVCs.

The value is an integer in the range 0—60 000.

This parameter is optional.

NETWORK_USER_ID

	Required?	No
	**Keyword Type:**	String
	**Keyword Type:**	Hexadecimal string
	**Field Length**	1—42
	**Field Length**	1—80
	Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The NETWORK_USER_ID parameter enables the transmitting data terminal equipment (DTE) to provide billing, security, or management information on a per-call basis to the data circuit terminating equipment. The value that you type in this field is the one provided by the network supplier when you subscribed to the network. If the terminal subscription from the network supplier includes a network user ID in standard ASCII characters, type the ID. If the network user ID contains non-standard ASCII characters, type the ID using the ADDITIONAL_FACILITIES parameter.

The value is a 1- to 42-byte character string.

The value is a 1- to 80-byte hexadecimal character string.

This parameter is optional.

PACKET_SIZE

Required?	No
Keyword Type:	Unsigned number
Default	128
Range	16—4 096
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The PACKET_SIZE parameter refers to the length of user data in a data packet. The value that you select should be the value that was agreed upon when you subscribed to the network.

If your network complies with the 1980 or 1984 CCITT recommendation, the agreed-upon size is one of the following: 16, 32, 64, 128, 256, 512, 1 024.

If your network complies with the 1988 CCITT recommendation, the agreed-upon size is one of the following: 16, 32, 64, 128, 256, 512, 1 024, 2 048, or 4 096.

The value is an integer in the range 16—4 096.

This parameter is optional. The default is 128.

REMOTE_CONFORMANCE

Required?	No
Keyword Type:	Enumerated
Default	1984_COMPLIANCE
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The REMOTE_CONFORMANCE parameter specifies the level of CCITT (International Telegraph and Telephone Consultative Committee) compliance. Valid values are:

- USE_ADAPTER_DEFAULTS
- 1980_COMPLIANCE
- 1984_COMPLIANCE
- 1988_COMPLIANCE

- 1980_COMPLIANCE
- 1984_COMPLIANCE
- 1988_COMPLIANCE

This parameter is optional. The default is 1984_COMPLIANCE.

The CCITT recommendations define the protocols to be used for information exchange at each interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) on a packet-switching data network.

Warning: If you change the year from 1984 or 1988 to 1980, you can encounter communications problems if you have used packet sizes larger than 1024. The 1984 and 1988 CCITT X.25 recommendations allow some enhancements that are not supported or defined in the 1980 recommendation.

REQUEST_REVERSE_CHARGING

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The REQUEST_REVERSE_CHARGING parameter specifies whether the cost of the call is assigned to the remote (calling) data terminal equipment (DTE). Valid values are:

0 The cost of the call is not assigned to the remote (calling) data terminal equipment (DTE).

1 The cost of the call is assigned to the remote (calling) data terminal equipment (DTE).

This parameter is optional. The default is 0.

WINDOW_SIZE

Required?	No
Keyword Type:	Unsigned number
Default	2
Range	1—127
Multiples Allowed?	Yes, one for each LINK_STATION_X25_SPECIFIC_DATA parameter

The WINDOW_SIZE parameter specifies the number of frames that can be sent or received on a virtual circuit without acknowledgment.

The value is an integer in the range 1-127.

This parameter is optional. The default is 2.

X25_DESTINATION_ADDRESS

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes, with a maximum of eight

The X25_DESTINATION_ADDRESS parameter is a complex keyword comprised of the following parameter keywords:

- DTE_ADDRESS
- DTE_ADDRESS_EXTENSION

See the descriptions of the parameter keywords to define the X25_DESTINATION_ADDRESS parameter.

PORT Keywords for the X.25 DLC

The following section describes the parameter keywords you can specify in the PORT keyword to use the X.25 DLC.

DLC_DATA

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—32
Multiples Allowed?	No

The DLC_DATA parameter specifies the 1- to 32-byte local data terminal equipment (DTE) address in hexadecimal format.

This parameter is optional.

DLC_NAME

Required?	Yes
Keyword Type:	String
Field Length	1—8
Multiples Allowed?	No

The DLC_NAME parameter specifies the 1- to 8-byte communication adapter or protocol you are using. For the X.25 DLC, DLC_NAME should be specified as ***X25***.

This parameter is required.

PORT_X25_SPECIFIC_DATA

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The PORT_X25_SPECIFIC_DATA parameter is a complex keyword comprised of the following parameter keywords:

- ACCEPT_INCOMING_CALLS
- ALTERNATE_REMOTE_PHONE_NUMBER
- COMPLIANCE
- DEFAULT_WINDOW_SIZE
- DIAL_TYPE
- DUMB_CARD_INTERFACE
- FRAME_INACTIVITY_TIMEOUT
- FRAME_RETRANSMISSION_TIMEOUT
- FRAME_SEQUENCE
- FRAME_TRANSMISSION_RETRY_COUNT
- FRAME_WINDOW_SIZE
- INSERT_CALLING_ADDRESS
- IN_ONLY_SVC_COUNT
- IN_ONLY_SVC_START
- LOCAL_DTE_ADDRESS
- MAX_PIU_SIZE
- MODEM_NAME
- NETWORK_CONNECTION_TYPE
- OEM_PORT_DATA
- OUT_ONLY_SVC_COUNT
- OUT_ONLY_SVC_START
- PACKET_SIZE
- PORT_SPEED

- PVC_COUNT
- PVC_START
- REMOTE_PHONE_NUMBER
- SEQUENCING
- SHARED_RAM_ADDRESS
- TRANSMISSION_FLAGS
- TWO_WAY_SVC_COUNT
- TWO_WAY_SVC_START
- USE_CONSTANT_RTS
- USE_NRZI_ENCODING
- USE_X32_PROTOCOL
- X32_IDENTITY
- X32_SIGNATURE
- INCOMING_CALL_FILTER

See the descriptions of the parameter keywords to define the PORT_X25_SPECIFIC_DATA parameter.

ACCEPT_CHARGES

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each INCOMING_CALL_FILTER parameter

The ACCEPT_CHARGES parameter specifies whether charges from a calling user are accepted. If the calling user requests Reverse Charges, the filter defined for that user must be set to accept reverse charges. Valid values are:

0 The cost of the call are assigned to the remote (calling) data terminal equipment (DTE).

1 The cost of the call are not assigned to the remote (calling) data terminal equipment (DTE).

This parameter is optional. The default is 0.

ACCEPT_INCOMING_CALLS

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The ACCEPT_INCOMING_CALLS parameter specifies whether Communications Server or Personal Communications is able to accept calls from other computers. Valid values are:

0 The product is not able to accept calls from other computers.

1 The product is able to accept calls from other computers.

This parameter is required. The default is 0.

If you allow the product to accept incoming calls through a COM port, it has exclusive use of the port when you start this configuration. If you want another program to use this port, you must stop the product; that is, you must use **SNA Node Operations** to stop the COM port device. (Merely closing the session that is using the port is not enough, because that does not stop the COM port devices.)

ALTERNATE_REMOTE_PHONE_NUMBER

Required?	No
Keyword Type:	String
Field Length	1—64
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The ALTERNATE_REMOTE_PHONE_NUMBER parameter specifies the phone number to dial if the primary remote phone number fails.

The phone number is a 1- to 64-digit string.

This parameter is optional.

COMPLIANCE

Required?	No
Keyword Type:	Enumerated
Default	1984_COMPLIANCE
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The COMPLIANCE parameter specifies the level of CCITT (International Telegraph and Telephone Consultative Committee) compliance. Valid values are:

- 1980_COMPLIANCE
- 1984_COMPLIANCE
- 1988_COMPLIANCE

This parameter is optional. The default is 1984_COMPLIANCE.

The CCITT recommendations define the protocols to be used for information exchange at each interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) on a packet-switching data network.

DEFAULT_WINDOW_SIZE

Required?	No
Keyword Type:	Unsigned number
Default	2
Range	1—127
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The DEFAULT_WINDOW_SIZE parameter specifies the number of frames that can be sent or received without acknowledgment.

The value is an integer in the range 1-127.

This parameter is optional. The default is 2.

The value that you type in this field is the one provided by the network supplier when you subscribed to the network, and is specific to this PVC. If the FRAME_SEQUENCE parameter is specified as MODULO_8, type a value from 1 to 7. If the FRAME_SEQUENCE parameter is specified as MODULO_128, type a value from 1 to 127.

DIAL_TYPE

Required?	No
Keyword Type:	Enumerated
Default	TONE
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The DIAL_TYPE parameter specifies the dial mode used. Valid values are:

PULSE For older telephone lines, such as those that have rotary-dial.

TONE For telephone lines that allow multifrequency dialing

This parameter is optional. The default is TONE.

DTE_ADDRESS

Required?	No
Keyword Type:	String
Field Length	0—16
Multiples Allowed?	Yes, one for each INCOMING_CALL_FILTER parameter

The DTE_ADDRESS parameter specifies the address that was assigned to your data terminal equipment (DTE) when you subscribed to the network. The remote DTE address is the X.25 network address of the remote DTE your workstation communicates with. Each DTE link to an X.25 network is identified by its DTE address. The DTE address identifies an X.25 DTE uniquely throughout the world. It includes a 3-digit country code and a national terminal number (NTN). The first four digits of the DTE address contain the data network identification code (DNIC) that defines the country and the service within that country. The first three digits of the DNIC identify the country code, followed by a one-digit number for the service.

The value is a 0- to 16-byte character string.

This parameter is optional.

Note: The data identification code is not always required. For example, you can omit the data identification code for local calls or for a private network that uses its own addressing method. Some networks do not use the full 15

digits when assigning DTE addresses. In this case, you can use the remaining digits as a suffix for your own purposes, such as routing calls to different applications, according to the suffix of the local DTE address of a caller.

DTE_ADDRESS_EXTENSION

Required?	No
Keyword Type:	String
Field Length	0—8
Multiples Allowed?	Yes, one for each INCOMING_CALL_FILTER parameter

The DTE_ADDRESS_EXTENSION parameter specifies the X.25 network address extension of the remote DTE your workstation communicates with. The address extension is an optional CCITT-Specified DTE facility which may be used for a given call. It provides for the transparent conveyance in CALL REQUEST and INCOMING CALL packets of all or part of the Network Services Access Point (NSAP) address.

The value is a 0- to 8-byte character string.

This parameter is optional.

The X.25 local DTE address extension was assigned to your data terminal equipment (DTE) when you subscribed to the network.

DUMB_CARD_INTERFACE

The DUMB_CARD_INTERFACE parameter keyword applies to Communications Server only.

Required?	Yes
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The DUMB_CARD_INTERFACE parameter specifies whether the OEM communications device uses the Microsoft SNA Server synchronous dumb card interface. Communications Server supports the use of OEM communications devices where the OEM manufacturer provides its own configuration panels. Valid values are:

0 The OEM communications device does not use the Microsoft SNA Server synchronous dumb card interface. The device uses the shallow interface provided by Communications Server.

1 The OEM communications device uses the Microsoft SNA Server synchronous dumb card interface.

Note: This value should only be entered using the configuration application provided by the OEM manufacturer.

This parameter is required. The default is 0.

FRAME_INACTIVITY_TIMEOUT

Required?	No
Keyword Type:	Unsigned number
Default	30
Range	0—255
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The FRAME_INACTIVITY_TIMEOUT parameter specifies how long, in seconds, the link can be idle before it is considered to be malfunctioning.

Valid values are 0 or 4–255. A value of 0 indicates no timeout.

This parameter is optional. The default is 30.

FRAME_RETRANSMISSION_TIMEOUT

Required?	No
Keyword Type:	Unsigned number
Default	3
Range	1—60
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The FRAME_RETRANSMISSION_TIMEOUT parameter specifies the milliseconds allowed for a response to a frame. If a response is not received within the specified number of milliseconds, the frame is transmitted again. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 1-60.

This parameter is optional. The default is 3.

If you want to determine your own retransmission timeout value, consider the maximum amount of time it takes for:

- A frame to travel to the data circuit terminating equipment (DCE) from the data terminal equipment (DTE)
- DCE processing
- A response frame to return to the DTE from the DCE

Frame retransmission speed depends on the link speed and the frame size. Maximum frame size is related to the maximum packet size. If you do not allow enough time, a response can not be received. If you allow more than enough time, line connection costs increase because excess time passes before a frame is transmitted.

FRAME_SEQUENCE

Required?	No
Keyword Type:	Enumerated
Default	MODULO_8
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The FRAME_SEQUENCE parameter applies to frames that have been either sent or received. The value that you select is the one provided by the network supplier when you subscribed to the network. Valid values are:

MODULO_8 The frame sequence number fields are modulo 8 (3 bits). For Modulo 8, the frame sequence numbers range from 1 to 7.

MODULO_128 The frame sequence number fields are modulo 128 (7 bits). For Modulo 128, the frame sequence numbers range from 1 to 127.

This parameter is optional. The default is MODULO_8.

FRAME_TRANSMISSION_RETRY_COUNT

Required?	No
Keyword Type:	Unsigned number
Default	20
Range	1—255
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The FRAME_TRANSMISSION_RETRY_COUNT parameter specifies the maximum number of times an X.25 frame can be transmitted before the link is considered to be malfunctioning. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 1-255.

This parameter is optional. The default is 20.

FRAME_WINDOW_SIZE

Required?	No
Keyword Type:	Unsigned number
Default	7
Range	1—127
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The FRAME_WINDOW_SIZE parameter specifies the number of frames that can be sent or received without acknowledgment. The value that you type is the one provided by the network supplier when you subscribed to the network. If the frame sequence is MODULO_8, type a value from 1 to 7. If the frame sequence is MODULO_128, type a value from 1 to 127.

The value is an integer in the range 1-127.

This parameter is optional. The default is 7.

INCOMING_CALL_FILTER

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The INCOMING_CALL_FILTER parameter is a complex keyword comprised of the following parameter keywords:

- ACCEPT_CHARGES
- DTE_ADDRESS
- DTE_ADDRESS_EXTENSION

See the descriptions of the parameter keywords to define the INCOMING_CALL_FILTER parameter.

INSERT_CALLING_ADDRESS

Required?	No
Keyword Type:	Boolean
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The INSERT_CALLING_ADDRESS parameter specifies whether to insert the address of the local data terminal equipment (DTE) into the calling address field of the call request packet. Valid values are:

0 Do not insert the address of the local data terminal equipment (DTE) into the calling address field of the call request packet.

1 Insert the address of the local data terminal equipment (DTE) into the calling address field of the call request packet.

This parameter is optional.

If you insert a calling address into the call request packet when it is not required, some networks clear the call request with a diagnostic code at run time. Other networks insert the address into the call packet and overwrite the address inserted by the X.25 DLC.

IN_ONLY_SVC_COUNT

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—60 000
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The IN_ONLY_SVC_COUNT parameter specifies how many SVCs are reserved for incoming calls on this link. The value that you specify is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 0—60 000.

This parameter is optional. The default is 0.

If you specify a value of 0 (the default), no logical channels are reserved for incoming calls, and no in-only SVCs are allowed on the link.

Note: The total number of virtual circuits for each link can not exceed 1 024, unless the CCITT compliance is specified as 1988. In this case, the total number can be 4 095. This number includes both permanent virtual circuits (PVCs) and SVCs.

IN_ONLY_SVC_START

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—60 000
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The IN_ONLY_SVC_START parameter specifies the lowest logical channel number that the data circuit-terminating equipment (DCE) can assign an incoming call. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 0—60 000.

This parameter is optional. The default is 0.

The value you type in this field must match both of the following conditions:

- The value can not be within the range defined for permanent virtual circuits (PVCs), two-way SVCs, or outgoing-only SVCs.
- The value must be greater than the highest PVC channel number configured for this link.

Note: You can not specify a value for this parameter unless the IN_ONLY_SVC_COUNT parameter has a value greater than 0.

LOCAL_DTE_ADDRESS

Required?	No
Keyword Type:	String
Field Length	1—15
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The LOCAL_DTE_ADDRESS parameter specifies the address that was assigned to your data terminal equipment (DTE) when you subscribed to the network. The remote DTE address is the X.25 network address of the remote DTE your

workstation communicates with. Each DTE link to an X.25 network is identified by its DTE address. The DTE address identifies an X.25 DTE uniquely throughout the world. It includes a 3-digit country code and a national terminal number (NTN). The first four digits of the DTE address contain the data network identification code (DNIC) that defines the country and the service within that country. The first three digits of the DNIC identify the country code, followed by a one-digit number for the service.

The value is a 1- to 15-byte character string.

This parameter is optional.

Note: The data identification code is not always required. For example, you can omit the data identification code for local calls or for a private network that uses its own addressing method. Some networks do not use the full 15 digits when assigning DTE addresses. In this case, you can use the remaining digits as a suffix for your own purposes, such as routing calls to different applications, according to the suffix of the local DTE address of a caller.

MAX_PIU_SIZE

Required?	No
Keyword Type:	Unsigned number
Default	2 048
Range	265—4 115
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The MAX_PIU_SIZE parameter specifies the maximum PIU size for all link stations using this port.

The value is an integer in the range 265—4 115.

This parameter is optional. The default is 2 048.

Note: This value is negotiated between the origin node and destination node when link activation occurs. Each node has a defined maximum. The smaller of the MAX_PIU_SIZE parameter values is used for the link.

MODEM_NAME

Required?	No
Keyword Type:	String
Field Length	1—256
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The MODEM_NAME parameter specifies the name of the modem as defined to the NT operating system. A PORT keyword passes this name to the communications port device driver, which uses this name to open the modem device and initialize it.

Note: Since the **Node Configuration** application produces a list of available modems from which to choose, you should not attempt to enter this value directly into the ACG file.

The value is a 1- to 256-byte character string.

This parameter is optional.

NETWORK_CONNECTION_TYPE

Required?	No
Keyword Type:	Enumerated
Default	SWITCHED
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The NETWORK_CONNECTION_TYPE parameter specifies whether the connection is a leased or a switched connection. Valid values are:

LEASED A leased line is a permanent connection into your telephone network.

SWITCHED A switched line uses a dialed connection. A switched line has a telephone number.

This parameter is optional. The default is SWITCHED.

OEM_DATA

The OEM_DATA parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Hexadecimal string
Multiples Allowed?	Yes

The OEM_DATA parameter specifies binary information specific for the OEM card manufacturer's use only. Communications Server supports the use of OEM communications devices where the OEM manufacturer provides its own configuration panels. More than one OEM_DATA parameter might appear in the ASCII configuration file.

Note: Since the format of this binary data is very specific to the OEM device, you should not attempt to enter this value directly into the ACG file. The value should only be entered using the configuration application provided by the OEM manufacturer.

This parameter is optional.

OEM_PORT_DATA

The OEM_PORT_DATA parameter keyword applies to Communications Server only.

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The OEM_PORT_DATA parameter is a complex keyword comprised of the OEM_DATA parameter keyword. See the descriptions of the parameter keyword to define the OEM_PORT_DATA parameter.

See the description of the OEM_DATA parameter keyword to define the OEM_PORT_DATA parameter.

OUT_ONLY_SVC_COUNT

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—60 000
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The OUT_ONLY_SVC_COUNT parameter specifies how many outgoing-only SVCs can be used on this link. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 0—60 000.

This parameter is optional. The default is 0.

If you type a value of 0 (the default), no out-only SVCs are allowed on the link.

Note: The total number of virtual circuits for each link can not exceed 1 024, unless the CCITT compliance is specified as 1988. In this case, the total number can be 4 095. This number includes both permanent virtual circuits (PVCs) and SVCs.

OUT_ONLY_SVC_START

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—60 000
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The OUT_ONLY_SVC_START parameter specifies the lowest logical channel number that the data terminal equipment (DTE) can assign to an outgoing call. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 0—60 000.

This parameter is optional. The default is 0.

The value you type in this field must match both of the following conditions:

- The value can not be within the range defined for the two other SVCs (in-only SVCs and two-way SVCs).
- The value must be greater than the highest two-way SVC channel number configured for this link.

Note: You can not specify a value for this parameter unless the OUT_ONLY_SVC_COUNT parameter has a value greater than 0.

PACKET_SIZE

Required?	No
Keyword Type:	Unsigned number
Default	128
Range	16—4 096
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The PACKET_SIZE parameter refers to the length of user data in a data packet. The value that you select should be the value that was agreed upon when you subscribed to the network.

If your network complies with the 1980 or 1984 CCITT recommendation, the agreed-upon size is one of the following: 16, 32, 64, 128, 256, 512, 1 024.

If your network complies with the 1988 CCITT recommendation, the agreed-upon size is one of the following: 16, 32, 64, 128, 256, 512, 1 024, 2 048, or 4 096.

The value is a 16—4 096 byte character string.

This parameter is optional. The default is 128.

PORT_SPEED

Required?	No
Keyword Type:	Unsigned number
Default	57 600
Range	2 400—115 200
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The PORT_SPEED parameter specifies the serial port speed supported by the device used for the connection.

The value is an integer in the range 2 400—115 200 bits per second (bps).

This parameter is optional. The default is 57 600.

If the highest carrier speed of your modem is 14 400 bps, specify a port speed of 57 600 bps or lower. If the highest carrier speed is 28 800 bps or higher, specify a port speed of 115 200 to use the maximum compression capabilities for the modem. A port speed of 115 200 bps is recommended for systems with Pentium processors.

PVC_COUNT

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—60 000
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The PVC_COUNT parameter specifies how many PVCs are reserved on this link. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 0—60 000.

This parameter is optional. The default is 0.

Note: The total number of virtual circuits for each link can not exceed 1 024, unless the CCITT compliance is specified as 1988. In this case, the total number can be 4 095. This number includes both permanent virtual circuits (PVCs) and SVCs.

PVC_START

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—60 000
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The PVC_START parameter specifies the lowest logical channel number assigned to PVCs. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 0—60 000.

This parameter is optional. The default is 0.

REMOTE_PHONE_NUMBER

Required?	No
Keyword Type:	String
Field Length	1—64
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The REMOTE_PHONE_NUMBER parameter specifies the phone number dialed to activate a connection to the destination.

The phone number is a 1- to 64-digit string.

This parameter is optional.

SEQUENCING

Required?	No
Keyword Type:	Enumerated
Default	MODULO_8
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The SEQUENCING parameter specifies how data frames are numbered to guarantee transmission. These numbers are used for acknowledgment and retransmission of frames. Valid values are:

- MODULO_8
- MODULO_128

This parameter is optional. The default is MODULO_8.

SHARED_RAM_ADDRESS

Required?	No
Keyword Type:	Hexadecimal number
Range	X'C0000'—X'FC000'
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The SHARED_RAM_ADDRESS parameter specifies the address in memory at which the 16K buffer, used by the adapter, starts.

The value is a hexadecimal character string in the range X'C0000'—X'FC000'.

This parameter is optional.

If you are using an industry standard architecture (ISA) adapter, you must select the shared RAM address. If you are using a Micro Channel adapter, the shared RAM address is set automatically. When you select the shared RAM address and your configuration contains another definition of an SDLC-WAC or X.25-WAC device that uses the same adapter number, that definition is automatically updated to use this shared RAM address.

TRANSMISSION_FLAGS

Required?	No
Keyword Type:	Unsigned number
Default	1
Range	1—10
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The TRANSMISSION_FLAGS parameter specifies the minimum number of flags that are inserted to produce idle time between transmitted frames.

The value is an integer in the range 1-10 flags.

This parameter is optional. The default is 1 flag.

A flag is the time it takes to send one byte, and represents a delay between frames. The values are 1, 3, 4, 6, and 10. Change this parameter to a value other than 1 when you know the device at the other end of the communication link can not receive frames with only one intervening flag.

TWO_WAY_SVC_COUNT

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—60 000
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The TWO_WAY_SVC_COUNT parameter specifies how many two-way SVCs can be used by this link for incoming calls or by the data terminal equipment (DTE) for outgoing calls. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 0—60 000.

This parameter is optional. The default is 0.

Note: The total number of virtual circuits for each link can not exceed 1 024, unless the CCITT compliance is specified as 1988. In this case, the total number can be 4 095. This number includes both permanent virtual circuits (PVCs) and SVCs.

TWO_WAY_SVC_START

Required?	No
Keyword Type:	Unsigned number
Default	0
Range	0—60 000
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The TWO_WAY_SVC_START parameter specifies the lowest logical channel number that the data circuit-terminating equipment (DCE) can assign an incoming call or by the data terminal equipment (DTE) for outgoing calls. The value that you type in this field is the one provided by the network supplier when you subscribed to the network.

The value is an integer in the range 0—60 000.

This parameter is optional. The default is 0.

The value you type in this field must match both of the following conditions:

- The value can not be within the range defined for the two other SVCs (in-only SVCs and outgoing-only SVCs).
- The value must be greater than the highest in-only SVC channel number configured for this link.

Note: You can not type a value in this field unless the TWO_WAY_SVC_COUNT parameter has a value greater than 0.

USE_CONSTANT_RTS

Required?	No
Keyword Type:	Boolean
Default	1
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The USE_CONSTANT_RTS (request-to-send) parameter specifies whether flow control is used between an adapter and the modem. Valid values are:

0 The adapter waits for the CTS (clear-to-send) signal before sending data to the modem.

1 There is no flow control to the modem.

This parameter is optional. The default is 1.

USE_NRZI_ENCODING

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The USE_NRZI_ENCODING specifies how synchronous data sent to the modem is encoded. Valid values are:

0 Use non-return-to-zero (NRZ) encoding.

1 Use non-return-to-zero inverted (NRZI) encoding.

This parameter is optional. The default is 0.

USE_X32_PROTOCOL

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The USE_X32_PROTOCOL parameter specifies whether you are using X.32 procedures for security signaling. Valid values are:

0 The X.32 protocol is not be used.

1 The X.32 protocol is used.

This parameter is optional. The default is 0.

X32_IDENTITY

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—32 
Field Length	0—64 
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The X32_IDENTITY parameter specifies the exchange station ID (XID) that identifies your workstation to your X.25 network supplier. The information that you type in this field is provided by the network supplier when you subscribed to the network.


The value is a 1- to 32-byte hexadecimal character string.


The value is a 0- to 64-byte hexadecimal character string.

This parameter is optional.

X32_SIGNATURE

Required?	No
Keyword Type:	Hexadecimal string
Field Length	1—32 
Field Length	0—64 
Multiples Allowed?	Yes, one for each PORT_X25_SPECIFIC_DATA parameter

The X32_SIGNATURE parameter specifies the signature identification that is used to enable the network operator to authenticate the claimed identity of the data terminal equipment (DTE). The information that you type in this field is provided by the network supplier when you subscribed to the network.


The value is a 1- to 32-byte hexadecimal character string.


The value is a 0- to 64-byte hexadecimal character string.

This parameter is optional.

Appendix G. ANYNET_COMMON_PARAMETERS

This appendix describes the parameter keywords and values you can specify for the ANYNET_COMMON_PARAMETERS keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

ANYNET_COMMON_PARAMETERS Sample

The following is a sample of the ANYNET_COMMON_PARAMETERS keyword:

```
ANYNET_COMMON_PARAMETERS=(
     CONNWAIT_SECS=30
     CONN_RETRY_SECS=300
     DG_IDLE_TIMEOUT=90
     INACTIVITY_TIMER_SECS=30
     SNASUFFIX=SNA.IBM.COM
     SNA_IP_NODE_TYPE=1
     UNACKED_DG_RETRY_SECS=10
     UNSENT_DG_RETRY_SECS=3
)
```

ANYNET_COMMON_PARAMETERS Parameter Keywords

CONN_RETRY_SECS

Required?	No
Keyword Type:	Unsigned number
Default	300
Range	1—65 535
Multiples Allowed?	No

The CONN_RETRY_SECS parameter specifies the maximum time, in seconds, for SNA over TCP/IP to set up a multiprotocol transport network (MPTN) connection over TCP/IP. When an MPTN connection setup fails, Communications Server or Personal Communications tries every IP address associated with a LU name in the domain name server or HOSTS file until all the addresses are exhausted, or until the specified time is reached.

The value is an integer in the range of 1—65 535 seconds.

This parameter is optional. The default is 300 seconds.

CONNWAIT_SECS

Required?	No
Keyword Type:	Unsigned number
Default	30
Range	1—65 535
Multiples Allowed?	No

The CONNWAIT_SECS parameter specifies the maximum time, in seconds, that SNA over TCP/IP waits to receive a multiprotocol transport network (MPTN) connection or connection response packet after the TCP connection is established. This limit prevents the connecting node from waiting too long for a session partner to send a packet.

The value is an integer in the range of 1—65 535 seconds.

This parameter is optional. The default is 30 seconds.

DG_IDLE_TIMEOUT

Required?	No	
Keyword Type:	Unsigned number	
Keyword Type:	String	
Field Length	1—257	
Range	1—65 535	
Multiples Allowed?	No	

The DG_IDLE_TIMEOUT parameter specifies the time that a datagram conversation remains idle before it is deallocated and closed. This timer enables you to balance using system resources to maintain an existing datagram conversation and taking longer to reestablish a new datagram conversation.

The value is an integer in the range of 1—65 535 seconds.

The value is an integer in the range of 1—257 seconds.

This parameter is optional. The default is 90 seconds.

INACTIVITY_TIMER_SECS

Required?	No
Keyword Type:	Unsigned number 
Keyword Type:	String 
Field Length	1—257 
Range	1—65 535 
Multiples Allowed?	No

The INACTIVITY_TIMER_SECS parameter specifies the seconds of inactivity allowed between two partner nodes before SNA over TCP/IP tries to determine whether the partner node is still active.


The value is an integer in the range of 1—65 535 seconds.


The value is an integer in the range of 1—257 seconds.

This parameter is optional. The default is 30 seconds.

Setting the interval below 10 seconds might seriously affect system performance. If you are unsure about what value to enter, use the default.

SNASUFFIX

Required?	No
Keyword Type:	String
Default	SNA.IBM.COM
Field Length	1—257
Multiples Allowed?	No

The SNASUFFIX parameter specifies a user-defined domain name suffix created using the hierarchical-naming format recognized by TCP/IP. The suffix consists of strings concatenated with periods. Each string must be less than or equal to 63 characters, with a total length of less than, or equal to, 257 characters.

The value is a 1- to 257-byte character string. Valid characters for each string are:

- The first character must be an alphabetic character (A-Z, a-z).
- The last character must be an alphanumeric character (A-Z, a-z, 0-9).
- The remaining characters can be alphanumeric characters (A-Z, a-z, 0-9) or the special character (-).

This parameter is optional. The default is SNA.IBM.COM.

SNA_IP_NODE_TYPE

Required?	No
Keyword Type:	Unsigned number
Default	1
Range	1—2
Multiples Allowed?	No

The SNA_IP_NODE_TYPE parameter specifies what type of node is being configured. Valid values are:

1 Access node

2 Gateway

This parameter is optional. The default is 1.

The value of the SNA_IP_NODE_TYPE parameter keyword is always 1.

UNACKED_DG_RETRY_SECS

Required?	No
Keyword Type:	Unsigned number
Default	10
Range	1—65 535
Multiples Allowed?	No

The UNACKED_DG_RETRY_SECS parameter specifies the maximum time, in seconds, that SNA over TCP/IP waits to resend an unacknowledged out-of-band (OOB) or MPTN keepalive datagram. When expedited data is sent over TCP/IP, this interval is used to help control the delivery of expedited data in congested situations. In SNA, some control messages are sent as expedited data (for example, messages requesting the right to send data or me ssages taking down a session). Expedited data is not subject to congestion control and can move ahead of normal, non-expedited data. To ensure delivery, AnyNet might send expedited data as normal data and as an OOB datagram.

The value is an integer in the range 1—65 535 seconds.

This parameter is optional. The default is 10 seconds.

UNSENT_DG_RETRY_SECS

Required?	No
Keyword Type:	Unsigned number
Default	3
Range	1—65 535
Multiples Allowed?	No

The UNSENT_DG_RETRY_SECS parameter specifies the maximum time, in seconds, that Communications Server or Personal Communications waits for an acknowledgment after sending expedited data on a TCP connection, before sending the data as an out-of-band (OOB) datagram. When expedited data is sent over TCP/IP, this interval is used to help improve the delivery of expedited data in congested situations. In SNA, some control messages are sent as expedited data (for example, messages requesting the right to send data or messages taking down a session). Expedited data is not subject to congestion control and can move ahead of normal, non-expedited data. To ensure delivery, AnyNet might send expedited data as normal data and as an OOB datagram.

The value is an integer in the range 1—65 535 seconds.

This parameter is optional. The default is 3 seconds.

Appendix H. ANYNET_SOCKETS_OVER_SNA

This appendix describes the parameter keywords and values you can specify for the ANYNET_SOCKETS_OVER_SNA keyword.

Keyword Definition

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

ANYNET_SOCKETS_OVER_SNA Sample

The following are samples of the ANYNET_SOCKETS_OVER_SNA keyword:

```
ANYNET_SOCKETS_OVER_SNA=(
     CLASSA_ADDRESS=125.0.0.0
     DEFAULT_MODE=BLANK
     GW_ADAPTER_CONFIG_REQUIRED=0
     INTERFACE=(
          INTERFACE_NAME=sna0
          IP_ADDRESS=9.37.54.3
          SUBNET_MASK=255.0.0.0
     )
     IP_TO_LU_MAPPING=(
          IP_ADDRESS=9.37.54.3
          LU_NAME=ANY
          MAPPING_TYPE=GENERATED
          NETID=USIBMNM
          SUBNET_MASK=255.0.0.0
     )
     PORT_TO_MODE_MAPPING=(
          MODE_NAME=#BATCH
          PORT_NUMBER=5
     )
     ROUTE_ENTRY=(
          DESTINATION_ADDRESS=0.0.0.0
          DESTINATION_MASK=0.0.0.0
          DIRECT_CONNECTION=0
          ROUTER_ADDRESS=9.67.10.3
          ROUTE_TYPE=DEFAULT
     )
)
```

ANYNET_SOCKETS_OVER_SNA Parameter Keywords

CLASSA_ADDRESS

Required?	No
Keyword Type:	String
Default	125.0.0.0
Default	No default
Multiples Allowed?	Yes, one for each ANYNET_SOCKETS_OVER_SNA keyword

The CLASSA_ADDRESS parameter specifies the address of the Class A network.

This parameter is optional.

The default is 125.0.0.0.

There is no default.

The Class A network must be defined for a server to act as a Sockets over SNA gateway. Addresses in this Class A network are used internally to help move data between SNA and TCP/IP. The gateway never sends these addresses over the network, but you need to make certain that no machines on your network use addresses in this Class A network. The Class A network address is specified in the format *a.b.c.d*, where *a* is a value from 1 through 126. Type the value of *a* for the Class A network address in dotted decimal notation.

DEFAULT_MODE

Required?	No
Keyword Type:	String
Default	BLANK
Default	No default
Multiples Allowed?	Yes, one for each ANYNET_SOCKETS_OVER_SNA keyword

The DEFAULT_MODE parameter specifies the mode name used to determine the session characteristics of the connection.

Sockets over SNA uses LU 6.2 conversations to enable communication between socket application programs. When an LU 6.2 conversation is established, Sockets over SNA defines the mode name and associated session characteristics of the connection. Communications Server or Personal Communications uses the mode to identify the characteristics of the connection between two Sockets over SNA nodes. If you specify an alternative mode that is not defined by the product, you must define the session characteristics associated with that mode to the product. You can use the default mode for Sockets over SNA or define a different default. You can use the default IP port/mode definitions or assign a different mode to a specific IP port.

This parameter is optional.

The default is BLANK.

There is no default.

DESTINATION_ADDRESS

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each ROUTE_ENTRY parameter

The DESTINATION_ADDRESS parameter specifies the address to activate a connection to the destination.

This parameter is optional.

DESTINATION_MASK

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each ROUTE_ENTRY parameter

The DESTINATION_MASK parameter specifies the mask used for class addresses. Type the network mask in dotted decimal notation. For Class A, B, and C addresses, the mask is optional. For Class D and E addresses, the mask is required.

For network routes, the mask is the network mask.

For default routes, the mask is 0.0.0.0. This value can not be changed.

For host routes, the mask is 255.255.255.255. This value can not be changed.

If you do not specify a mask for a network route, the first 8 bits of the destination IP address determines the default mask as follows:

1-126 Class A - Network mask default is 255.0.0.0

128-191 Class B - Network mask default is 255.255.0.0

192-223 Class C - Network mask default is 255.255.255.0

224-255 Classes D and E - User must specify a value.

DIRECT_CONNECTION

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each ROUTE_ENTRY parameter

The DIRECT_CONNECTION parameter specifies whether a direct connection is made. Valid values are:

0 The destination is not directly reachable. The address of an intermediate gateway or router is specified for the ROUTER_ADDRESS parameter.

1 The destination is directly reachable through a local interface and you entered the IP address of that local network interface for the ROUTER_ADDRESS parameter.

This parameter is optional. The default is 0.

DOMAIN_NAME

The DOMAIN_NAME parameter keyword applies to Personal Communications only.

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each ANYNET_SOCKETS_OVER_SNA keyword

The DOMAIN_NAME parameter specifies the fully qualified domain name of the local network.

This parameter is optional.

DOMAIN_NAME_SERVER_ADDRESS

The DOMAIN_NAME_SERVER_ADDRESS parameter keyword applies to Personal Communications only.

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes

The DOMAIN_NAME_SERVER_ADDRESS parameter specifies the IP address of the domain name server.

This parameter is optional.

Domain name servers maintain a table of IP addresses and their associated host names. The domain name server converts host names to IP addresses, enabling users to communicate with other hosts using host names rather than IP addresses.

GW_ADAPTER_CONFIG_REQUIRED

Required?	No
Keyword Type:	Boolean
Default	0
Multiples Allowed?	Yes, one for each ANYNET_SOCKETS_OVER_SNA keyword

The GW_ADAPTER_CONFIG_REQUIRED parameter specifies whether a gateway adapter configuration is required for this workstation. Valid values are:

0 A gateway adapter configuration is not required for this workstation.

1 A gateway adapter configuration is required for this workstation.

This parameter is optional. The default is 0.

HOST_NAME

The HOST_NAME parameter keyword applies to Personal Communications only.

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each ANYNET_SOCKETS_OVER_SNA keyword

The HOST_NAME parameter specifies the host name of the local node.

This parameter is optional.

INTERFACE

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The INTERFACE parameter is a complex keyword comprised of the following parameter keywords:

- INTERFACE_NAME
- IP_ADDRESS
- SUBNET_MASK

See the descriptions of the parameter keywords to define the INTERFACE parameter.

INTERFACE_NAME

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each INTERFACE parameter

The INTERFACE_NAME parameter specifies the name of the interface. The name of the interface is sna0, and it can not be changed or deleted.

This parameter is optional.

IP_ADDRESS

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each INTERFACE and IP_TO_LU_MAPPING parameter

The IP_ADDRESS parameter specifies the unique Internet Protocol (IP) address that is used by Sockets over SNA, when sending data over SNA. The IP address you enter in this field is assigned to the SNA network interface (sna0).

This parameter is optional.

IP_TO_LU_MAPPING

Required?	No
Keyword Type:	Complex
Multiples Allowed?	Yes

The IP_TO_LU_MAPPING parameter is a complex keyword comprised of the following parameter keywords:

- IP_ADDRESS
- LU_NAME
- MAPPING_TYPE
- NETID
- SUBNET_MASK

See the descriptions of the parameter keywords to define the IP_TO_LU_MAPPING parameter.

LU_NAME

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each IP_TO_LU_MAPPING parameter

The LU_NAME parameter specifies the name of the logical unit (LU) or template for generating LU names.

This parameter is optional.

MAPPING_TYPE

Required?	No
Keyword Type:	Enumerated
Default	GENERATED
Multiples Allowed?	Yes, one for each IP_TO_LU_MAPPING parameter

The MAPPING_TYPE parameter specifies how IP addresses are mapped to SNA LU names. Valid values are:

EXPLICITE Maps a single IP address to a single LU name

GENERATED Maps multiple IP addresses to multiple LU names

This parameter is optional. The default is GENERATED.

In generated mapping, LU names are automatically generated. During configuration, you specify a network IP address, address mask, network ID, and LU template value. Sockets over SNA uses the address mask to map the network portion of the IP address to the SNA network ID and the host portion to the SNA LU name. The LU template value is used to determine the characters and the positions of characters used in the LU name. Generated mapping is the recommended mapping method for networks with more than a few nodes. Using generated LU names eliminates the need for a local node to define each remote node with which it communicates.

In explicit mapping, all LU names are defined, and you assign each IP host address to a specific SNA LU name during configuration. Explicit mapping is most effective if a very small number of nodes are using Sockets over SNA, or if you are initially setting up the network and want to test communication among a few nodes. Be aware, however, that assigning LU names to individual nodes creates considerable administrative overhead. Each local node has to explicitly define each remote node with which it communicates. You must define at least one IP address to LU name mapping so that Sockets over SNA can map the address assigned to the sna0 interface to an LU name.

MODE_NAME

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each PORT_TO_MODE_MAPPING parameter

The MODE_NAME parameter specifies the name of the mode to be used for the session.

This parameter is optional.

MODE_NAME is a 1- to 8-byte SNA Type A character string. You can specify one of the following:

- BLANK
- #BATCH
- #BATCHSC

- #INTER
- #INTERSC
- QPCSUPP
- SNASVCMG
- A unique mode name for each mode you define. If you define your own mode name, valid characters are:
  - All blanks
  - The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
  - The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

If you do not specify this parameter, the default COS is set to the value specified for the COS_NAME parameter.

The mode name is used by the session initiator to designate the allocated session characteristics for the conversation. The mode defines a set of characteristics that can apply to one or more sessions. These characteristics include traffic-pacing values, message-length limits, synchronization point and cryptography options, and the class of service within the transport network.

NETID

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each IP_TO_LU_MAPPING parameter

The NETID parameter specifies the 1-8 character name of the SNA network where the LUs reside. Valid values are:

- The first character must be an uppercase alphabetic character (A-Z) or a special character (@,#,$).
- The remaining characters can be alphanumeric characters (A-Z, 0-9) or special characters (@,#,$).

This parameter is optional.

PORT_NUMBER

Required?	No
Keyword Type:	Unsigned number
Range	1—65 535
Multiples Allowed?	Yes, one for each PORT_TO_MODE_MAPPING parameter

The PORT_NUMBER parameter specifies a 16-bit number used to communicate between TCP and a higher-level protocol or application.

PORT_NUMBER is an integer in the range 1—65 535.

This parameter is optional.

Socket applications use port numbers to distinguish among multiple applications running at the same IP address. Applications use well known port numbers so that clients can find servers easily. For example, Telnet clients and servers usually use port 23 to communicate.

PORT_TO_MODE_MAPPING

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

The PORT_TO_MODE_MAPPING parameter is a complex keyword comprised of the following parameter keywords:

- MODE_NAME
- PORT_NUMBER

See the descriptions of the parameter keywords to define the PORT_TO_MODE_MAPPING parameter.

ROUTE_ENTRY

Required?	No
Keyword Type:	Complex
Multiples Allowed?	No

The ROUTE_ENTRY parameter is a complex keyword comprised of the following parameter keywords:

- DESTINATION_ADDRESS
- DESTINATION_MASK
- DIRECT_CONNECTION
- ROUTE TYPE
- ROUTER_ADDRESS

See the descriptions of the parameter keywords to define the ROUTE_ENTRY parameter.

ROUTE_TYPE

Required?	No
Keyword Type:	Enumerated
Multiples Allowed?	Yes, one for each ROUTE_ENTRY parameter

The ROUTE_TYPE parameter identifies the type of route that is being defined. Valid values are:

DEFAULT When no host or network route matches a given destination, the default route (if specified) is used. Data is routed through the gateway or router whose IP address is specified in the router address field.

HOST The destination address in the destination field is the IP address of

a particular remote host. Data is routed through the router whose IP address is specified in the router address field.

NETWORK The destination address specified in the destination field is the IP address of a particular remote network. Data is routed through the router whose IP address is specified in the router address field. If a conflict occurs between a host and a network route, the host route is used.

This parameter is optional.

ROUTER_ADDRESS

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each ROUTE_ENTRY parameter

The ROUTER_ADDRESS parameter specifies the IP address of the local network interface or the IP address of an intermediate gateway or router. If the Sockets over SNA node is routing data to a node that can be reached directly, but the destination IP address is not in the same subnet as the local interface, type the IP address of the local interface as the router address. Type the IP address in dotted decimal notation.

This parameter is optional.

SUBNET_MASK

Required?	No
Keyword Type:	String
Multiples Allowed?	Yes, one for each INTERFACE and IP_TO_LU_MAPPING parameter

The SUBNET_MASK parameter specifies how much of an IP address is used as a network address and how much as a host address.

This parameter is optional.

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Version 6.0 for Windows NT
and
eNetwork Personal Communications
Version 4.2
for Windows 95 and Windows NT
Configuration File Reference

Publication No. SC31-8655-00

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