APPC Networking Services for Windows

SC31-8124-00

Getting Started

Version 1.0

IBM

APPC Networking Services for Windows

SC31-8124-00

Getting Started

Version 1.0

Note!

Before using this information and the product it supports, be sure to read the general information under “Notices” on page v.

First Edition (November 1994)

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About This Book

IBM APPC Networking Services for Windows is a software product that supports Advanced Program-to-Program Communication (APPC) in the Microsoft** Windows** or Microsoft Windows for Workgroups 3.1 environments. With Networking Services, communications applications on your workstation can “talk to” partner applications on other systems that support APPC.

This book helps a user get started with Networking Services. This book explains how to install and configure Networking Services functions on a workstation, but does not discuss the functions in detail.

You may need to refer to other IBM books for more specific information about a particular topic. The “Bibliography” on page X-1 lists information about Networking Services and related products.

Who Should Use This Book

This book is intended for the user who has workstation experience and is responsible for installing Networking Services on his or her workstation. This book is also used by the Networking Services administrator for setting up users on the workstation.

You should be familiar with the following:

- The Windows graphical environment when using Windows applications
- SNA/APPC networks in general and your own network in particular.

In addition, if you plan to write applications for Networking Services, you should be familiar with Common Programming Interface for Communications (CPI-C).

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About This Book

Chapter 1. Welcome to IBM APPC Networking Services for Windows

This chapter provides an overview of the IBM APPC Networking Services for Windows product. Specifically, this chapter covers the following topics:

Topic	Page
What Networking Services does	1-1
What are the benefits of using Networking Services	1-4
Contents of the Networking Services package	1-7

What Networking Services Does

Networking Services is an Advanced Program-to-Program Communication (APPC) product for the Microsoft Windows environment.

Networking Services enables applications on workstations to communicate with partner applications on the wide range of IBM systems that support APPC, as well as many non-IBM systems. Networking Services supports both Common Programming Interface for Communications (CPI-C) and EHNAPPC application program interfaces (APIs).

IBM Platforms

AIX*	MVS	VM
CICS*	OS/2*	VSE
IMS	OS/400*	

Connectivity Options

Networking Services provides a variety of connectivity options, including the following:

Local Area Network (LAN)

- Token-ring
- Ethernet

Twinaxial

Synchronous data control link (SDLC)

Asynchronous

Multi-protocol transport networking (MPTN)

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What Networking Services Does

Networking Services Desktop

Networking Services provides a graphical interface for most of its programs. Figure 1-1 on page 1-3 is an example of how your desktop may display the IBM APPC Networking Services program group window. Descriptions of these programs follow.

Advanced Operations
A program that controls network connections and Networking Services operation and configuration.

Autostart Networking Services
A program that can automatically start Networking Services when Windows is started.

Change Installation
A maintenance program that allows you to selectively install, restore, update, and delete Networking Services programs.

Check Connection (APING)†
A sample CPI-C program that checks the connection between your workstation and the remote computer.

Configure
A program that allows you to provide information Networking Services uses to operate.

Display SNA Sense Data
A program that displays SNA sense data and associated explanations.

Send Message (ATELL)†
A sample CPI-C program that sends a message to another workstation.

Test CPIC
A program that uses CPI-C calls to test the communications between the CPI-C program at your workstation and a partner program at the remote computer.

Trace
A program that traces line flows and API communications between applications and Networking Services.

Transfer File (AFTP)†
A sample CPI-C program that transfers files between your workstation and a remote computer.

View Message Log
A program that allows you to view the message log file.

† This program is a member of the APPC Application Suite.

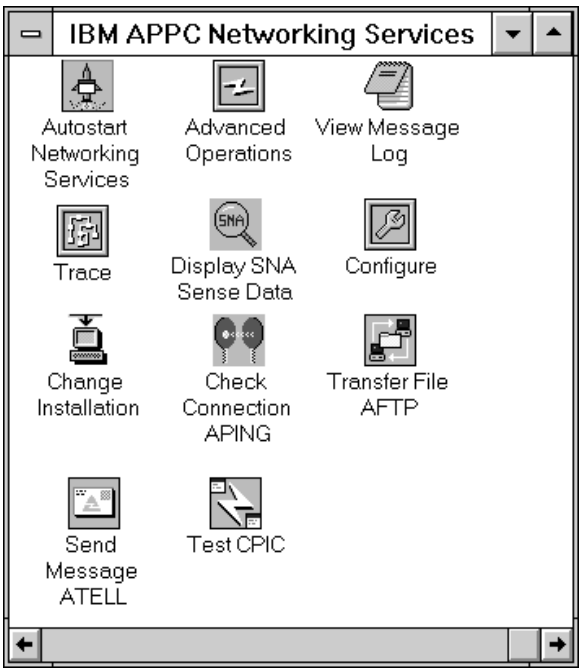

Figure 1-1. Example of a Networking Services Desktop

Benefits of Networking Services

What Are the Benefits of Using Networking Services

Networking Services provides many benefits to organizations that rely on workstations.

For End Users

Simple installation

Networking Services provides users with a straightforward installation program that guides them through each step of the installation process. As a result, users can get started with Networking Services quickly, without spending time on complex installation procedures.

Easy configuration

Networking Services provides an easy configuration program.

Ease of use

Operating Networking Services requires just a few clicks of the mouse. Client/server CPI-C applications are provided and can be used to automatically start and operate Networking Services transparently to the CPI-C users.

Online help

Networking Services provides online help for all configuration parameters and error messages.

Complete package

The Networking Services package includes product diskettes, documentation in softcopy format, as well as product diskettes and documentation for the IBM Local Area Network Support Program and the BookManager* Library Reader* for Windows.

Hardcopy of the *Networking Services: Getting Started* and the *Networking Services: Configuration Parameters Reference for Administrators and Application Programmers* publications are provided to quickly introduce users to the product and to explain configuration parameter information. Additionally, the *Networking Services: Administrator's Guide* and the *Networking Services: Application Programmer's Reference* are available as softcopy publications for quick and easy online access. Users can display the softcopy at their workstations with the BookManager Library Reader for Windows.

Access to data

With Networking Services, end users on Windows workstations can now use distributed applications to access data they need on other systems in the network.

Benefits of Networking Services

For System Administrators

Easy advanced configuration

Networking Services automatically creates a network configuration file for each user's workstation. For advanced configuration parameters, a system administrator may also use any ASCII text editor to tailor this short file to the users' network and application requirements.

Reduced system definition

By connecting to an Advanced Peer-to-Peer Networking* (APPN*) network node, you can connect to any other partner LU supported by the APPN network without specifically configuring connection parameters for each one.

Greater security

With Networking Services, system administrators can store vital data on secure server or mainframe computers and use communications applications on the Windows workstation to provide data access to those users who need it. Networking Services also provides outgoing conversation security that can be controlled by either the user or the communications application.

Effective use of resources

Because it supports a wide range of workstations, Windows operating environments, and communications adapters, Networking Services helps eliminate the need to purchase additional hardware and software. System administrators can reduce costs by balancing the computing workload among more of the existing computers in the network.

Support of existing programs

Applications using the CPI-C and EHNAPPC APIs are supported.

For Application Developers

Standard programming interface

Networking Services helps programmers develop applications easily and quickly, because CPI-C eliminates the need to learn the details of APPC for each operating system supported.

Benefits of Networking Services

Portable programs

By using the CPI-C interface, programmers can port both their applications and their programming skills from one system to another. Programmers do not need to rewrite an application for the new environment.

Sample programs

The Networking Services package includes sample programs and header files that further simplify application development.

Diagnostic tools

Networking Services provides the Trace program that can be used to trace line flows and CPI-C calls, and can be integrated with your application tracing. The following Networking Services programs also provide diagnosis information:

Advanced Operations
Display SNA Sense Data
Test CPIC

Application Integration

The Node Operator Facility (NOF) application program interface improves the integration of APPC client applications and Networking Services. Using this interface, an application program may request Networking Services functions that affect communication links, sessions, and node configuration.

Expanded Network Access

Networking Services permits Windows to Windows communications without requiring support of a network node. Distributed applications can now be developed and tested solely within a Windows PC environment.

Additionally, Networking Services supports the Multi-protocol Transport Networking (MPTN) architecture that communicates across both SNA and TCP/IP networks using the IBM AnyNet* for Windows product offering. This permits multiple protocol networks to add more applications and simplify their networks. Applications using CPI-C can be written or acquired without concern for the underlying network transport protocol and require no application rewrite for a new network environment.

Contents of the Networking Services Package

The Networking Services package contains:

Networking Services for Windows diskettes contains:

- Networking Services product files
- Softcopy versions of:
  - *IBM APPC Networking Services for Windows: Getting Started* (this book)
  - *IBM APPC Networking Services for Windows: Administrator's Guide*
  - *IBM APPC Networking Services for Windows: Application Programmer's Reference*
  - *IBM APPC Networking Services for Windows: Configuration Parameters Reference for Administrators and Application Programmers*
  - *IBM Multi-Platform APPC Configuration Guide*

Local Area Network Support Program, Version 1.35 diskettes

BookManager Library Reader for Windows diskettes.

These products are provided on 1.44MB 3.5-inch diskettes.

The package also includes hardcopy of:

IBM APPC Networking Services for Windows: Getting Started (this book)

IBM APPC Networking Services for Windows: Configuration Parameters Reference for Administrators and Application Programmers

Local Area Network Support Program User's Guide

Chapter 2. Getting Ready to Install Networking Services

This chapter provides information about getting ready to install and to configure the Networking Services for Windows product. Specifically, this chapter covers the following topics:

Topic	Page
Installation and configuration tasks	2-1
What you need to install and configure Networking Services	2-1
Considerations and restrictions	2-3
How to convert Networking Services/DOS to Networking Services for Windows.	2-4

Installation and Configuration Tasks

Administrator Tasks:

Read the README.TXT file that is located on the first installation diskette using Notepad.
Complete the configuration worksheet in Appendix A, “Networking Services Configuration Worksheet” for each connection type that the user needs.

See Appendix A, “Networking Services Configuration Worksheet,” for a sample of this worksheet.

User Tasks:

Read the README.TXT file, that is located on the first installation diskette using Notepad.
Install Networking Services for Windows.
Enter information from the configuration worksheet.

What You Need to Install and Configure Networking Services

You need the following to install Networking Services:

Hardware and software as described in “Workstation Requirements” on page 2-2
Completed configuration worksheet
Installation diskettes or instructions from your administrator for how to install from a LAN.

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Workstation Requirements

The workstation requirements are:

An 80386** or higher microprocessor.

A minimum of 4MB of memory.

A minimum of 2MB of available disk space for the base feature. The additional disk space you need to install a connection type ranges from 90KB to 560KB.

DOS Version 5.0 or later.

Microsoft Windows Version 3.1 or later or Microsoft Windows for Workgroups 3.1 or later.

Note: Networking Services for Windows will not work in the Windows environment in OS/2.

A communications adapter card for the connection type you are using.

A current version of the IBM Local Area Network Support program or its equivalent (needed only for LAN connections).

Note: The Local Area Network Support program diskettes and the *Local Area Network Support Program User's Guide* are included in the Networking Services package. This user's guide includes information on installing the LAN support program.

A current version of the BookManager Library Reader for Windows program or IBM Library Reader program (needed only if you plan to use Networking Services softcopy documentation).

Note: The BookManager Library Reader for Windows program diskettes are included in the Networking Services package. Chapter 3, “Installing and Configuring Networking Services for Windows” on page 3-1 includes information on installing the BookManager Library Reader for Windows program.

Configuration Worksheet

The configuration worksheet contains the following information:

Your workstation name (fully-qualified local LU name)

Information for the connection type (required and optional configuration parameters).

See Appendix A, “Networking Services Configuration Worksheet,” for a sample of this worksheet.

Installation Diskettes

The installation diskettes are used to install all of the programs and files that are required on your workstation for operation of IBM APPC Networking Services for Windows.

If you use a LAN, your administrator may give you instructions to install from the LAN.

Considerations and Restrictions

Security: Networking Services provides outgoing conversation security, but it does not provide BIND security or incoming conversation security. Networking Services does not verify incoming user IDs or passwords. It is the responsibility of the incoming conversation applications to provide security. It is the responsibility of the user to ensure that adequate security measures have been taken in installing and operating Networking Services in the network.

Communications protocols: Networking Services supports the APPC (LU 6.2) protocol only. If you run communications applications that use other logical unit (LU) types, these applications can either share the LAN adapter with Networking Services or use another communications adapter. In addition, Networking Services is an independent LU type 6.2, physical unit (PU) type 2.1; Networking Services cannot be configured as a dependent LU.

If you plan to run IBM Personal Communications/3270, see your Networking Services system administrator.

Network management: Networking Services does not provide an API to network management facilities. You must use the adjacent link station to report link failures to network management systems. Applications can send workstation alerts to network management systems using APPC.

Communications adapters: Networking Services uses only one network adapter at a time.

Starting communications applications: Networking Services can start communications applications automatically, based on incoming communications from a partner program on a remote computer.

CPI-C functions: Networking Services does not support the sync point function. In addition, although Networking Services supports the Set_Log_Data (CMSLD) call and places log data in its trace log, Networking Services does not transmit error description data.

DOS APPC applications: Networking Services supports the EHNAPPC API for DOS APPC applications.

How to Convert Networking Services/DOS to Networking Services for Windows

IBM APPC Networking Services for Windows builds upon the Networking Services/DOS technology and provides the same functions and more in a Windows environment. If you are converting from Networking Services/DOS to Networking Services for Windows:

Install Networking Services for Windows in a separate directory.
Run the Configure program and use the following Networking Services/DOS configuration files for configuration information:

- CONFIG.NSD
- MODE.NSD
- SIDEINFO.NSD
- DEFINETP.NSD
- AUTOEXEC.BAT (NSDL and NSDM environment variables).

See the Networking Services administrator for details for setting up the configuration parameters.

Note: Installing Networking Services for Windows will remove Networking Services/DOS from your workstation's path.

Chapter 3. Installing and Configuring Networking Services for Windows

This chapter provides an overview of the basic steps for installing and configuring Networking Services product. Specifically, this chapter covers the following topics:

Topic	Page
Networking Services installation procedure	3-1
Networking Services configuration procedure	3-3

You can select to install the following features based upon your needs:

Base (required)

- Autostart Networking Services
- Advanced Operations
- Change Installation
- View Message Log
- Display SNA Sense Data
- Trace

One or more connection types

Tools

- Check Connection (APING)
- Send Message (ATELL)
- Transfer File (AFTP)

Documentation

Application developer's Toolkit

- Test CPIC

Installation Procedure

Use this procedure to install Networking Services on a workstation.

Note: Windows should be running on your workstation. If it is not, enter win at the DOS prompt.

1. Insert the first installation diskette in the diskette drive.
2. Select Run from the File pull-down menu on the Windows Program Manager.
3. Type A:INSTALL in the Command Line box. Change A: if you are installing from a different diskette drive.
4. Follow the install program instructions.

   If you decide to configure Networking Services, follow the configuration program instructions on page 3-3.

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5. When the completion message appears, exit Windows and reboot your workstation.

If you want to view the softcopy version of the Networking Services books, install the BookManager Library Reader for Windows program. For installation information for BookManager Library Reader for Windows, see "Installing BookManager Library Reader for Windows."

If you want to install Networking Services from the LAN server, see "Setting Up for Installation from a LAN Server."

Installing BookManager Library Reader for Windows

Use this procedure to install BookManager Library Reader for Windows on a workstation.

1. Insert the first installation diskette in the diskette drive.
2. Select Run from the File pull-down menu on the Windows Program Manager.
3. Type A:INSTALL in the Command Line box. Change A: if you are installing from a different diskette drive.
4. Select Install from the File pull-down menu on the Installation window.
5. Follow the install program instructions.

Setting Up for Installation from a LAN Server

If you have purchased additional licenses of Networking Services, consider placing the product files on a LAN server for easier access. To install Networking Services from a LAN, follow these steps:

1. Create a directory on the LAN server to store the Networking Services files.

   For example: > MKDIR J:\INSTNSW
2. Copy each Networking Services diskette into this directory.

   For example: > Copy A:*.* J:\INSTNSW
3. Give all licensed users access to the LAN drive that you copied the diskettes into

   In this example, the LAN drive is the J drive.
4. Users may access the LAN drive and directory and install Networking Services.

   For example: > J:\INSTNSW\INSTALL

Configuration Procedure

To start the configuration program, double-click on the **Configure** icon in the IBM APPC Networking Services program group. The Networking Services Configuration window is displayed.

1. Click on Step 1.

   When the General Configuration window is displayed, type in the value shown on your configuration worksheet for your local LU name and select your connection type.

2. Click on Step 2.

   The Configuration window appropriate to the connection type you selected in Step 1 is displayed.

   For SDLC and asynchronous connection types, this step is required to specify modem type, line type, port name, and answer mode. This step is optional for other connection types.

   If you use this step to specify a link name and any other parameters required to activate a link, the link is activated when Networking Services is started.

3. Click on Step 3 (optional).

   When the Definitions window is displayed, click on the option button for the definition category you want to work with. The panel for that category displays the names of any definitions that have already been defined.

   You can define, delete, or display definitions.

   Note: If you want to change a definition,

   a. Delete the definition
   b. Define it.

   You can repeat Step 3 to work with another definition category.

4. Click on Done.

   This step saves your configuration information and exits the Configure program.

Chapter 4. Using Networking Services Programs

This chapter discusses the Networking Services programs. It tells you what each program does and what options you can customize to meet your particular needs. Each program has online help information to assist you with the program.

The following programs are discussed:

Topic	Page
Advanced Operations	4-3
Autostart Networking Services	4-3
Change Installation	4-4
Check Connection (APING)	4-4
Configure	4-4
Display SNA Sense Data	4-5
Send Message (ATELL)	4-5
Test CPIC	4-5
Trace	4-6
Transfer File (AFTP)	4-6
View Message Log	4-7

To use these programs, double-click on the icons in the IBM APPC Networking Services program group.

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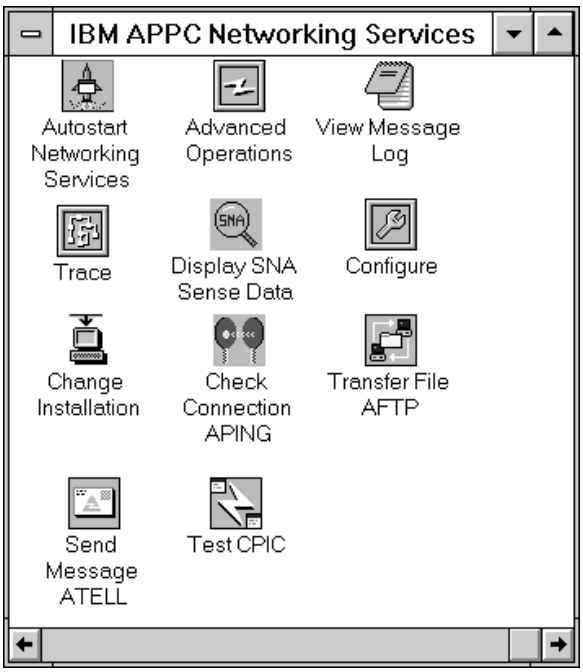

Figure 4-1. Example of a Networking Services Desktop

Advanced Operations

Advanced Operations

Intended user: Administrator and Application Programmer

Advanced Operations can be used to control Networking Services operation and configuration, and to display information. Advanced Operations allows the user to:

Start, stop, and display information about:

- Networking Services
- Links
- Sessions
- Program Launcher

Control which incoming Attaches will be queued.

Define, delete, and display modes, CPI-C side information, and TPs

Display and delete queued Attaches.

Autostart Networking Services

Autostart Networking Services

Intended user: End User

Autostart Networking Services is a program that starts Networking Services so that it can be used by other applications without further user action. To automatically start Networking Services when Windows is started, drag this icon into the Startup program group.

Change Installation

Intended user: All

Change Installation is a maintenance program that allows you to selectively install, restore, update, or delete Networking Services programs. When Networking Services is active, do not run the Change Installation program.

Check Connection (APING)

Intended user: All

Check Connection (APING) is a sample CPI-C program that verifies network connections. APING can be used for establishment of network connectivity, problem determination, and simple performance measurements. APING exchanges data packets with a partner computer and times how long the data transfer takes.

Configure

Intended user: All

Configure is a program that is used to provide required and optional information. This information is required by Networking Services to operate. It allows you to enter:

General configuration information

Information specific to a connection type, such as link connections

Mode, side information, and transaction program definitions.

Display SNA Sense Data

Display SNA Sense Data

Intended user: Application Programmer

Display SNA Sense Data is a program that displays SNA sense data descriptions. The sense data and associated explanations are displayed. Sense data is an SNA-defined encoding of error information. In Networking Services, sense data may be included with some Networking Services error messages.

Send Message

Send Message ATELL

Intended user: All

Send Message (ATELL) is a sample CPI-C program that sends a message to another workstation.

Test CPIC

Test CPIC

Intended user: Application Programmer

Test CPIC is a program that uses CPI-C calls to test the application program communications logic between the CPI-C program at your workstation and the partner program at the remote computer.

Trace

Intended user: Administrator and Application Programmer

Trace is a program that traces line flows and API communications between your workstation and remote computer. This information is useful for reporting and identifying problems. This facility allows you to:

1. Set up trace parameters
2. Configure trace options
3. Activate the trace
4. Suspend the trace
5. Format the trace output.

Transfer File (AFTP)

Intended user: All

Transfer File (AFTP) is a sample CPI-C program that runs over the APPC protocol. AFTP distributes files that can be used among multiple platforms and archives files that are not usable on a particular platform. Networking Services provides the AFTP client. Server programs are available on OS/2, MVS, VM, and AIX.

AFTP supports two different types of file transfer:

Text transfer Normal text is transferred with ASCII characters, preserving the format of the text files, such as carriage returns and end-of-file markers.

Binary transfer Programs and other binary files are transferred as a stream of bytes exactly as they appear in the file; no attempt is made to interpret the characters.

View Message Log

Intended user: Administrator and Application Programmer

View Message Log uses the Microsoft Windows Notepad to examine the message log file (MSGLOG.NSD). Networking Services displays errors that occur during initialization and operations of Networking Services. (The file is in ASCII format and may be viewed with other text editors as well.)

Chapter 5. Where to Get More Information

This chapter discusses getting help when you are installing, configuring, or using Networking Services. Specifically, this chapter covers the following topics:

Topic	Page
Online Help Information	5-1
General Technical Assistance	5-1
Networking Services Service	5-1

Online Help Information

Program Helps

Each Networking Services program has online help information to assist you with using the program.

Error Helps

You can use the the Help function in the **Advanced Operations** program to view probable cause and suggested recovery for any error.

To view the error message log, double-click on the **View Message Log** icon in the Networking Services program group.

General Technical Assistance

For general services that are not platform specific, the IBM APPC Market Enablement (AME) organization provides marketing, development, and technical services for APPC, APPN, and CPI-C. AME maintains several bulletin board systems to support APPC including:

CompuServe**
OS2 Bulletin Board System (OS2BBS on IBMLINK)
the Networking Internet server

These bulletin board systems enable you to get up-to-date information on APPC, access sample programs and tools, ask questions, and provide feedback on APPC and related products.

Networking Services Service

If you have a Networking Services problem that requires service, call your IBM Service Representative at 1-800-992-4777.

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Appendix A. Networking Services Configuration Worksheet

This configuration worksheet must be completed by the person performing the Networking Services administrator tasks before users can configure Networking Services on their workstation.

Users need the information on this worksheet when configuring Networking Services on their workstations. Information is entered on corresponding displays on the workstation.

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Configuration Worksheet for the User

Complete only the portion of the worksheet that pertains to the connection type for the user.

User's name: _____

Connection type: **Twinaxial connection (TWINAX)**	
Configuration Parameter	***Data***
Required	
Local LU Name (fully-qualified)	
Optional	
Link Name	
Local Station Address	

Complete only the portion of the worksheet that pertains to the connection type for the user.

User's name: _____

Connection type: **Local area network (LAN)**	
Configuration Parameter	***Data***
Required	
Local LU Name (fully-qualified)	
Optional	
Link Name 1	
Remote LAN Address 1	
Link Name 2	
Remote LAN Address 2	
Link Name 3	
Remote LAN Address 3	
Link Name 4	
Remote LAN Address 4	
Link Name 5	
Remote LAN Address 5	
Link Name 6	
Remote LAN Address 6	

Complete only the portion of the worksheet that pertains to the connection type for the user.

User's name: _____

Connection type: **Synchronous Data Link Control (SDLC)**	
Configuration Parameter	***Data***
Required	
Local LU Name (fully-qualified)	
Modem Type	
Port Name	
Line Type	___ DIALED (Dialed point-to-point) ___ LEASED (Leased point-to-point)
Optional	
Link Name	
Local Station Address	
Telephone Number	
Receive Call	___ Check box ___ Do not check box

Complete only the portion of the worksheet that pertains to the connection type for the user.

User's name: _____

Connection type: **Asynchronous (ASYNC)**	
Configuration Parameter	***Data***
Required	
Local LU Name (fully-qualified)	
Modem Type	
Port Name	
Line Type	___ DIALED (Dialed point-to-point) ___ LEASED (Leased point-to-point)
Optional	
Link Name	
Local Station Address	
Telephone Number	
Receive Call	___ Check box ___ Do not check box

Complete only the portion of the worksheet that pertains to the connection type for the user.

User's name: _____

Connection type: **Multi-protocol transport networking (MPTN)**	
Configuration Parameter	***Data***
Required	
Local LU Name (fully-qualified)	
Optional	
Link Name	

Bibliography

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Publications

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Where to Find Networking Services Information

For information on Networking Services for Windows, refer to the following publications:

IBM APPC Networking Services for Windows: Getting Started, SC31-8124

IBM APPC Networking Services for Windows: Administrator's Guide, SC31-8125

IBM APPC Networking Services for Windows: Application Programmer's Reference, SC31-8126

IBM APPC Networking Services for Windows: Configuration Parameters Reference for Administrators and Application Programmers, SC31-8138.

Where to Find Related Information

Networking Services supports the Common Programming Interface for Communications (CPI-C). For more information on CPI-C, refer to either of the following:

CPI Communications Reference, SC26-4399 This book contains the CPI-C specifications as well as appendices on various IBM operating environments that support CPI-C, and an extensive bibliography of related publications for each of these environments.

CPI Communications Specification, SC31-6180 This book also contains the CPI-C specifications. It is the result of the CPI-C Implementers' Workshop, a group of both IBM and non-IBM product implementers.

For information on APPC publications, classes, platforms, and applications offered by IBM and other companies, refer to *The APPC Resource Book*, G325-0055.

For information on Systems Network Architecture (SNA) and APPC, refer to the following publications:

Program-to-Program Communication in System Application Architecture (SAA) Environments, GG24-3482

Systems Network Architecture Technical Overview, GC30-3073

SAA/LU 6.2: Distributed Networks and Applications by John J. Edmunds (McGraw-Hill, 1992, ISBN 0-07-019022-4).

For information on registering network identifiers (NETIDs), refer to *Registration Process for SNA Netids: User's Guide for SNA Network Registry*, ZZ27-7425.

For information on APPC and APPN implementations, refer to the following publications:

APPC and CPI-C Product Implementations GG24-3520. This book shows how different products implemented LU 6.2 and compares the different product implementations with the LU 6.2 architecture.

APPN Architecture and Product Implementations, GG24-3669. This book contains a tutorial on APPN, as well as an overview of the various product implementations.

For information on APPC programming, refer to the following publication:

PC Support/400: Application Program Interface Reference, SC41-8254

For information on Client Access/400 for Windows 3.1, refer to the following publications:

Client Access/400 for Windows 3.1: Getting Started, SC41-3530

Client Access/400 for Windows 3.1: API and Technical Reference, SC41-3531

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For information on APPC Application Suite, refer to the following publications:

APPC Application Suite Administration, SC31-6533

APPC Application Suite Programming Reference, SC31-6534

APPC Application Suite User's Guide, SC31-6532

For information on BookManager Library Reader for Windows, refer to the following publications:

BookManager Library Reader for Windows: User's Guide (softcopy only)

BookManager Library Reader for Windows: Online Reference (softcopy only)

BookManager Library Reader for Windows: Quick Reference, SC34-3067.

For information on factors that affect Networking Services performance on a LAN, refer to *AS/400 Communications: Local Area Network Guide*, SC41-0004.

For information on synchronous data link control (SDLC), refer to *Synchronous Data Link Control Concepts*, GA27-3093.

For information on International Standards Organization (ISO) standards, contact:

American National Standards Institute
1430 Broadway
New York, NY 10018

Configuration Information for Other Platforms: For detailed information about configuring platforms other than Networking Services, refer to the following publications:

AIX SNA Services/6000

- *AIX SNA Services/6000 Reference*, SC31-7014
- *Using AIX SNA Services/6000*, SC31-7002

APPC/MVS

- *MVS/ESA Planning: APPC Management*, GC28-1110

APPC/VM

- *VM/ESA Connectivity Planning, Administration, and Operation*, SC24-5448

AS/400*

- *AS/400 Communications APPC Guide*, SC41-8189
- *AS/400 Communications APPN Guide*, SC41-8188
- *AS/400 Programming: Control Language Reference*, SC41-0030
- *AS/400 Programming Reference Summary*, SC21-8076

CICS/ESA*

- *CICS/ESA: Resource Definition (Online)*, SC33-0666
- *CICS/ESA: System Definition Guide*, SC33-0664

OS/2

- *Communications Manager/2 APPC Programming Guide and Reference*, SC31-6160
- *Communications Manager/2 Configuration Guide*, SC31-6171
- *Communications Manager/2 Installation, Configuration and Administration*, SBOF-4386

The paper, *IBM Multi-Platform APPC Configuration Guide*, shows how to configure APPC and APPN on various platforms, and shows which values in one computer's configuration must match values in a partner computer's configuration. This paper is available through CompuServe (described below) as the following files:

MPCONP.ZIP PostScript** version

MPCONT.ZIP ASCII text version

MPCONF.ZIP Sample files

If you do not have access to CompuServe, ask your IBM representative to get the MPCONFIG PACKAGE from the MKTTOOLS disk.

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