

Introduction

Overview

This introduction presents an overview of the capabilities and features of NCSA Telnet. The organization and use of this manual are described and notational conventions explained.

About NCSA Telnet

NCSA Telnet Version 2.3 for the PC provides interactive access from an IBM PC or compatible to telnet hosts on TCP/IP networks. NCSA Telnet is an implementation of DARPA standard telnet with added features that take advantage of the local processing power of the PC.

Special Features

Special features of NCSA Telnet for the PC include:

- VT100 emulation
- Local printer support for VT100 emulation
- Simultaneous logon to a number of computers
- Ability to capture text to the PC disk or printer
- File transfer server (standard FTP)
- Remote copy server (rcp) for use with UNIX hosts
- Ability to take full advantage of PC colors
- Topview/Windows compatibility
- Tektronix 4014 emulation
- Added applications such as: lpr, lpq, lprm, rexec, rsh, finger, setclock (all similar to UNIX utilities)
- Domain name lookup
- Optional use of RARP and Bootp for determining PC's IP address
- Support for Linemode protocol
- Scrollback with mouse support
- Cut and paste capabilities for text between sessions
- Keyboard mapping
- Text output mapping
- Better message routing of telnet options to console screen
- Ability to dump screens to a capture file

System Requirements

To use NCSA Telnet you must have the following hardware:

- IBM PC, PC/XT, PC/AT, IBM PS/2 model 30, or "true" compatible computer with one of the following Ethernet adapter boards:

- Appletalk Card
- DecNet Card
- 3COM 3C501 Etherlink
- 3COM 3C503
- 3COM 3C505
- AT&T Starlan 10
- Western Digital WD8003EB
- MICOM NI5210
- Ungermann-Bass PC-NIC (same as IBM Baseband Adapter)
- Western Digital WD8003E EtherCard PLUS

- or IBM PS/2 models 50,60 or 80, or "true" compatible computer with one of the following Ethernet adapter boards:

- Ungermann-Bass NICps/2
- 3COM 3C523 Etherlink/MC
- Western Digital WD8003A

- The following adapters have been tested successfully with packet drivers:

- 3Com's 3C501, 3C503, 3C505, 3C507, and 3C523
- Any SMC-mode ARCnet card
- Any AT&T Ethernet or StarLAN card
- D-Link Systems' DE-600 Pocket LAN Adapter
- Simulated driver over NetWare's IPX
- BICC Data Networks' ISOLAN
- Apple Computer's LocalTalk PC Card
- Sun/TOPS (Sitka) FlashCard
- Simulated driver over NetBIOS
- NCR's ET-105B
- Novell's NE1000, NE2000, and clones
- Racal-InterLan's NI5010, NI5210, NI6510, and NI9210
- Ungermann-Bass's NIC and NICps/2
- All Western Digital's models

- 384K minimum memory
- Ethernet or Thin Ethernet to connect the PC and other computers

To use NCSA Telnet you must have the following software:

- PC-DOS or MS-DOS Version 2.0 or later
- a standard text editor (helpful when editing the configuration file)

Use of This Manual

This section describes the organization of this manual, and the conventions and nomenclature used in developing it.

Manual Contents

This manual is organized into the following chapters:

Chapter 1, "Starting and Quitting NCSA Telnet," describes how to start NCSA Telnet and how to open and close a connection between your PC and one remote host.

Chapter 2, "Introduction to Managing Sessions," introduces NCSA Telnet's capability for multiple connections. It also discusses standard VT100 key emulation, keys used for common `EDT` operations, and usage of a capture file.

Chapter 3, "More about Managing Sessions," discusses multiple sessions in detail. The Parameters menu options, DOS shell feature, and several advanced functions are also described.

Chapter 4, "Utility Programs," outlines in detail some helpful command programs which you can implement along with NCSA Telnet.

Chapter 5, "File Transfer," outlines procedures for transferring files between a PC and a telnet host.

Chapter 6, "Tektronix 4014 Emulation," discusses NCSA Telnet's ability to emulate a Tektronix 4014 graphics terminal.

Chapter 7, "Installation and Configuration," contains information for system administrators (and other experienced users) to use when installing and customizing a system.

Appendix A, "Error Conditions," describes some of NCSA Telnet's error messages, as well as their causes and solutions.

Appendix B, "NCSA Telnet Command Reference," lists commands available from the PC keyboard.

Appendix C, "Configuration File Summary," lists the keywords for configuration file parameters.

Appendix D, "FTPBIN Command Reference," describes the FTPBIN commands that the program uses.

Appendix E, "Key-mapping," details the key-mapping elements NCSA Telnet for the PC incorporates from the MS-Kermit program.

Appendix F, "Obtaining NCSA Software," outlines the procedures for obtaining NCSA software via FTP, an archive server, or U.S. mail.

Form of Presentation

Figure I.1 shows some typical screen/user interactions using the conventions employed in this manual. Those conventions, and others, are explained here.

Figure I.1 Example of Notational Conventions

```
C:\> telnet machinename [machinename...]

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NCSA Telnet for the PC version 2.2
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ALT-H presents a summary of special keys

4.2 BSD UNIX (newton)

login:
```

dothis entries.	Information shown in courier boldface type	represents user
ALT-key Then release both	Press and hold the ALT key and then press the keys at the same time.	key designated by <i>key</i> .
variable shown in of different characters indicates a vary, depending	Do not enter the actual characters shown. Command line characters lowercase courier bold italic type represent an entry that may consist every time you make the entry. In other words, it is a variable entry. If it machine response, it means the actual wording of the response will on the filename, machinename, and so on.	
... more material	Do not enter an ellipsis. The ellipsis indicates that you may enter similar to the material preceding the ellipsis.	
[] square brackets is	Do not enter square brackets. Material or actions presented between optional and should be entered only in certain cases.	