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 was developed to provide interactive access from a Macintosh to telnet hosts on TCP/IP networks. It is an implementation of DARPA standard telnet. NCSA Telnet allows you to have simultaneous connections to numerous computers across the network, and includes a standard file transfer server (FTP) to allow you to transfer files to and from other remote machines and users. Moreover, it includes VT102 emulation; Tektronix 4014 emulation; support for ICR; domain name lookup; user-defined macro keys; full color, font style, and font size support; and customized windows whose contents may be scrolled, cut, copied, pasted, and printed.

Special Features

Special features of NCSA Telnet for the Macintosh include:

- VT102 emulation
- Simultaneous logon to a number of computers
- File transfer server (standard FTP)
- Tektronix 4014 emulation
- Color raster graphics capabilities
- Domain name lookup
- Scrollback with ability to print and copy
- User-defined macro keys
- Customized window arrangement facility
- Support for window contents of less or greater than 24 lines
- Support for any font, font size, or color

System Requirements

In order to run NCSA Telnet Version 2.3, you need a Macintosh with System software version 5.0 or later. Your Macintosh should be configured with one of the following:

EtherTalk devices

- EtherLink/NB (3C543) or EtherLink/SE (3C563) from 3Com Corpora-

tion
- EtherSC, Etherport SE, or Etherport II from the Kinetics division of Excelan
- EtherTalk board from Apple Computer, Inc.
- Nodem products from Adaptec, Inc.
- MacConnect NIA310 from Interlan, Inc.
- FastNet SCSI or FastNet III from Dove Computer Corporation
- any other EtherTalk compatible system for the Macintosh

AppleTalk to Ethernet gateways
- any FastPath gateway model from the Kinetics division of Excelan and Kinetics gateway software or Stanford KIP (Croft) gateway software
- GatorBox from Cayman Systems, Inc.
- any other AppleTalk to Ethernet gateway compatible with Kinetics FastPath

Use of this Manual

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

Before using NCSA Telnet, you should know how to use the mouse, issue commands from menus, work with windows, and locate files using directory dialog boxes. If you are unfamiliar with the Macintosh user interface or need more detailed information regarding these procedures, please refer to your Macintosh user's guide.

Organization of This Manual

This manual is organized into eight chapters and two appendixes. Each page is given a unique number that consists of the chapter number, a period, and the number of that individual page (beginning with the first page of the chapter). For example, page 2.3 is the third page of the second chapter.

Manual Contents

This manual is organized into the following chapters and appendixes:

Chapter 1, "Getting Started," introduces the basic steps involved in using NCSA Telnet for the Macintosh: starting the program; opening and closing connections to a remote host; setting a terminal type; cutting, copying, pasting, and printing; and quitting the program.

Chapter 2, "Using the Keyboard," explains how to use the Macintosh keyboard with NCSA Telnet, for example, to enable command key equivalents of menu commands, emulate a VT102 terminal keyboard, and define macros.

Chapter 3, "Customizing the Environment," describes changing the configuration settings, setting the characteristics of session windows, and customizing other NCSA Telnet operations using the Preferences dialog box and Session menu.

Chapter 4, "Advanced Features," discusses using saved sets, working

with multiple connections, telnet options, and network-related commands.

Chapter 5, “File Transfer,” explains how to transfer files between a Macintosh and any FTP host on the network.

Chapter 6, “Tektronix 4014 Emulation,” describes how to use the graphics capabilities of NCSA Telnet.

Chapter 7, “Interactive Color Raster Graphics,” introduces the Interactive Color Raster (ICR) protocol and describes how you may use the protocol to display color graphics with NCSA Telnet.

Chapter 8, “System Administrator Information,” contains information for experienced users on installing and customizing a system.

Appendix A, “Error Conditions,” lists the causes and solutions for NCSA Telnet’s error conditions.

Appendix B, “Code to Convert /etc/hosts Files,” contains information for converting UNIX /etc/hosts files to NCSA Telnet’s configuration file format.

Form of Presentation

The material in this manual is presented in text, screen displays, or command line notation.

Text

In explaining various features and commands, this manual often presents a word within a paragraph in *italics* to indicate that the word is defined within the paragraph.

Portions of this manual refer to other portions of the manual where the other portions explain related topics. These cross references usually mention the title of sections or chapters enclosed in quotation marks, such as, See Chapter 1, “NCSA Telnet Tutorial.”

Command Line Format Notation

Throughout this manual, many explanations instruct you to make entries by typing on the keyboard. These entry instructions are printed in **courier bold type** and appear within a paragraph or on a separate line. The command lines in this manual are normally shown in lowercase.

Keys that are labeled with more than one character (such as the RETURN key) are identified with all uppercase letters. Keys are printed in bold type. Keys that are to be pressed simultaneously or in succession are linked with a hyphen. For example, press CONTROL-A.

The meaning of each special notation applied to format lines is listed in Table I.1.

Table I.1 Meaning of Entry Format Notations

Appearance	Example	Entry Method

On separate line; lowercase, courier bold type	**dothis**	Enter the keys for each character.
Within a text line; uppercase	RETURN	Press the single key indicated.
Within a text line; uppercase; hyphens between key names	CONTROL-A	While holding down the first one or two key(s) indicated, press the last key indicated.
On separate line or within a text line; italic, lowercase, courier bold type	***filename***	This notation is a variable, which represents a certain kind of entry, but may consist of different characters every time you make the entry.

Figure I.1 shows you how to read and enter a command line.

Figure I.1 Reading and Entering a Command Line

Installation Note

This manual assumes that NCSA Telnet has been installed on your system by a system or network administrator who has assigned an IP address to your Macintosh. Chapter 8 contains information to be used by system administrators and other experienced users to install and customize NCSA Telnet.