Chapter 4 Advanced Features

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Chapter Overview

This chapter covers some more advanced aspects of the NCSA Telnet working environment. It describes how to change the configuration settings, use saved sets, open multiple sessions, and use, telnet options and network-related commands.

Saving Session Characteristics

NCSA Telnet makes it easy for you to begin a telnet session quickly and efficiently. So that you can login and get right to work without resetting the special characteristics and configuration of a connection each time you startup, NCSA Telnet Version 2.3 allows you to save and load sets.

A *set* is your current configuration. For example, a set consists of the current macro settings and each session's window location and size, connected host, window name, scrollback setting, color, font, font size, and backspace/delete setting.

Saving a Set

To save a set:

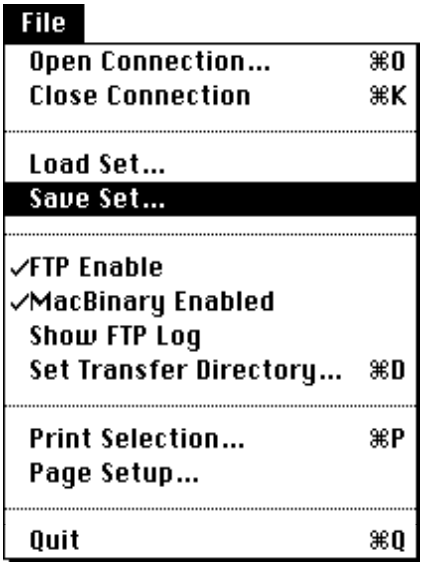
1. Log in to the desired host as instructed in Chapter 1, "Getting Started."

2. Customize the session by moving the session window to an ideal location on the screen, specifying a background or text color, choosing a font and font size, setting the desired number of scrollback lines, and choosing the backspace or delete function for the BACKSPACE (or DELETE) key.

3. Select Save Set from the File menu, shown in Figure 4.1. A directory dialog box appears and prompts you to name the set.

4. Name the set and click Save to implement the current settings.

Figure 4.1 File Menu



Using a Saved Set

By using sets, you can bypass the startup procedure introduced in Chapter 1, "Getting Started." Specifically, you do not need to select Open Connection from the File menu or press -O to open a connection, nor do

you need to specify the connection host or window name. These operations are performed automatically when you load a set.

When you load a set, the session window automatically appears for the specified host, at the specified location on the screen, with the specified window name, scrollback setting, color and other characteristics. The following characteristics are saved in a set:

- session name
- hostname
- window size and location
- scrollback setting
- backspace/delete setting
- macro definitions
- command key setting
- number of columns
- Tek clear screen setting
- font and font size
- color characteristics
- assigned keys for Interrupt, Suspend, and Resume

Figure 4.2 Set Icon

To load a set from the Finder, double-click on the set icon or file. This automatically invokes NCSA Telnet. Figure 4.2 depicts the set icon for the sample set named Setup One. To load a set from within the NCSA Telnet application, select Load Set from the File menu. In the directory dialog box that appears, select and open the set.

NOTE: You can edit a set datafile using any editor that can edit files even if they are not of operating system type TEXT.

Opening Multiple Connections

NCSA Telnet allows you to have multiple connections to a single host or to several different hosts. To open another connection, just repeat the procedure for opening a connection (presented in Chapter 1, “Getting Started”) or load a set as instructed in the section above.

The connection with which you are currently working is the active session. Generally, its session window appears frontmost on your desktop.

To switch between active sessions and make the active session window frontmost, click on the session window for the desired connection or select the associated session name from the Connections menu (see Figure 4.3).

Figure 4.3 Connections Menu

If you are using command key mode, you can activate the next session on your desktop by pressing -N (for next). This activates the session window directly beneath the current session window.

NOTE: If you want to make a session active without having its window frontmost on your desktop, hold down the OPTION key while selecting the session name from the Connections menu.

Rules for Session Names

When you have multiple connections to a single host, it is useful to specify session names for the connections other than the hostname. NCSA Telnet allows you to use any of the following for session names:

- the full Internet number of the host, such as 192.17.22.20.
- any session name that is in your configuration file. (See your system administrator for the complete list.)
- any name that can be resolved by the domain-based nameserver, such as sri-nic.arpa. (See your system administrator, who can configure NCSA Telnet to use the domain-based nameserver to look up hostnames.)
- the pound sign (#) followed by the host number the host uses on your Ethernet, when the destination machine is on the same Ethernet as the Macintosh (EtherTalk) or the gateway (LocalTalk). For example, if your Macintosh were machine 192.17.22.20 you could access host 192.17.22.30 by entering #30. (See your system administrator, who can determine the host number by the class of addressing and the subnet mask.)

For information about creating customized sessions or specifying multiple session names for a given host, refer to Chapter 8, “System Administrator Information.”

NOTE: Some systems do not use the standard telnet port number 23, MFENET for example. If you need access via the telnet protocol to a different port number, enter the port number after the session name when you enter it in the Connection dialog box. The session name and port number must be separated by one or more spaces. For example, to open a connection to port 23 of myhost.network.arpa, you would enter the following in the text box labeled Session Name.

```
myhost.network.arpa
```

The following example demonstrates what you would enter to open a connection to port number 911 of the same host.

```
myhost.network.arpa  911
```

The Connections Menu

You can specify titles other than session names for your session windows. This allows you to easily distinguish between multiple sessions and session windows.

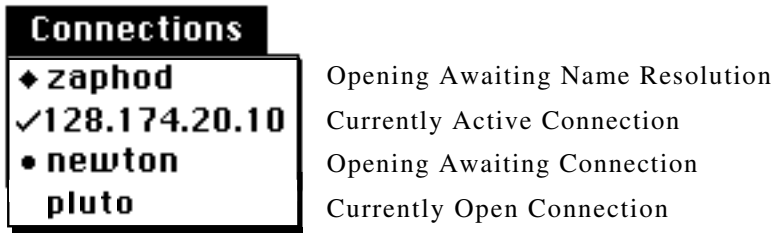
To specify a window title, type the name in the Window Name box that appears in the Connection dialog box when you open a connection, or enter the name in the Window Name box of the Configuration dialog box.

The Connections menu contains the window names for current connections and relays information about the status of each session. For example, a checkmark () appears next to the window name of the active session and a diamond (♦) or a circle (•) appears next to a session name for a connection that you attempted to make, but which has not yet been successfully opened.

The diamond indicates that NCSA Telnet is checking the nameserver, trying to find the session name or hostname. The circle means NCSA Telnet is trying to open the session. When the connection is established, the diamond or circle next to the session name goes away and the session window appears.

Figure 4.4 shows how window names may appear in the Connections menu and explains the notations used.

Figure 4.4 Connections Menu Symbols



NOTE: If you do not remember the meaning of the symbols used in the Connections menu, just select the connection in question from the Connections menu. The Connection Status dialog box appears and reports the name and status of the connection (see Figure 4.5). After reading the message, click OK or press RETURN to proceed opening the connection. Click Abort to cancel the attempt.

Figure 4.5 Connection Status Dialog Box

Aborting Connection Attempts

To abort a connection attempt:

1. Select the connection in question from the Connections menu. The Connection Status dialog box appears and reports the name and status of the connection (see Figure 4.5 above).

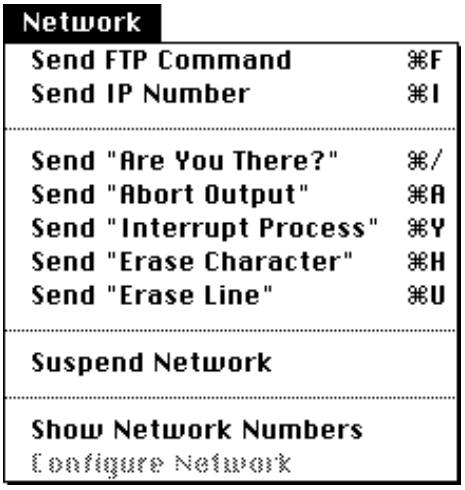
2. Click Abort.

Telnet Options

Five of the telnet options provided by NCSA Telnet are contained in the Network menu, shown in Figure 4.6, and are discussed in the following sections. The Internet standard telnet protocol defines several special commands which NCSA Telnet supports. Each host telnet implementation treats these commands differently, but the commands are supposed to have the functions described in the following sections.

The Interrupt process command and the other telnet options, Suspend and Resume, have been assigned special keys which may be changed using the Setup Keys command in the Session menu (see "Changing the Assigned Keys for Interrupt, Suspend, and Resume" in Chapter 2). Note that command key equivalents for these commands are only available if you have selected the Command Keys option in the Preferences dialog box (see "Using Keyboard Commands" in Chapter 2).

Figure 4.6 Network Menu



Send "Are You There?"

Every once in a while, perhaps because the host is bombarded with incoming information or tied up by a great number of users, it seems as if the host is not responding to your commands. When this happens and your terminal appears to have locked up, you can verify that you are still

connected to the host by selecting Send “Are You There?” from the Network menu or by pressing -/.

The host is supposed to respond, if able, with a readable message. Some machines answer [Yes]; others answer with more informative messages. Use this command whenever you are unsure whether the network is up.

Send “Abort Output”

The Send “Abort Output” command is supposed to throw away all output from the currently running process and resume when there is a pause. Very few hosts implement this correctly.

Send “Interrupt Process”

Available on nearly every telnet host, the Interrupt Process command stops the current process and throws away all pending data for the connection. The Interrupt Process command is equivalent to CONTROL-C on most UNIX systems. NCSA Telnet also maps CONTROL-C to Interrupt Process. You can change this mapping using the Setup Keys command in the Session menu (see “Changing the Assigned Keys for Interrupt, Suspend, and Resume” in Chapter 2).

Send “Erase Character” and Send “Erase Line”

While entering commands, you can erase the last character or the current line by issuing the Send “Erase Character” and Send “Erase Line” commands, respectively. Many hosts do not implement these commands, but use their own special characters instead.

Network-Related Commands

Three of NCSA Telnet’s network-related commands appear in the Network menu, shown in Figure 4.6—Suspend Network, Show Network Numbers, and Configure Network. The other, Reset Terminal, appears in the Session menu.

Suspend Network

To temporarily suspend all network communications, select Suspend Network from the Network menu. This disables all of the receive functions. All of your connections are kept alive, but you do not see any incoming text.

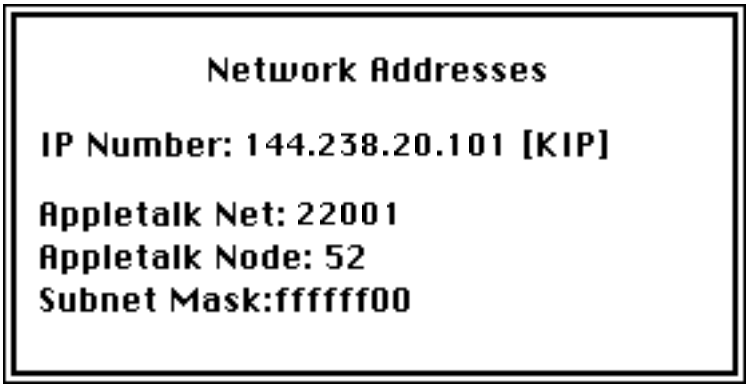
NOTE: Generally, you will use the Suspend and Resume commands discussed in the section entitled “Changing the Assigned Keys for Interrupt, Suspend, and Resume” in Chapter 2, rather than the Suspend Network command.

Show Network Numbers

If you need to see your AppleTalk address, IP number, Network Mask, or (for those using EtherTalk) your Ethernet address, select Show Network Numbers from the Network menu. This command displays the information in a dialog box, as shown in Figure 4.7; it does not transmit these

numbers. Click on the message box to remove it.

Figure 4.7 Network Numbers Dialog Box

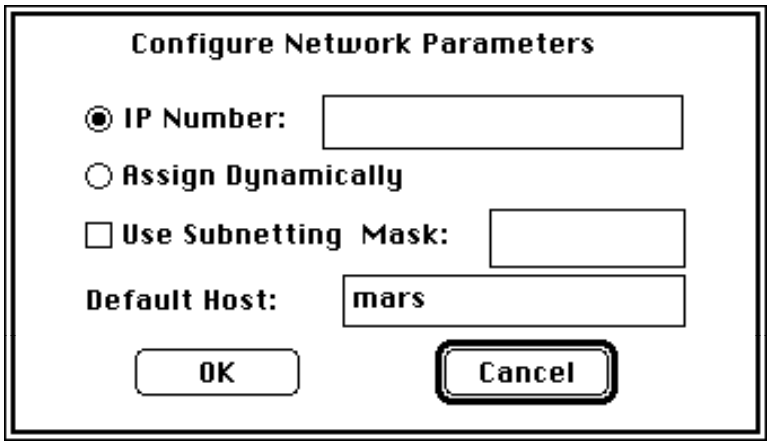


Configure Network

The Configure Network command is intended to be used by system administrators and knowledgeable users. It is only available when there are no active connections; that is, no connections are open, none are pending, and you are not using FTP. Otherwise, the command appears dimmed and cannot be selected.

Select Configure Network from the Network menu to see the Configure Network dialog box, which is used when you first configure the program (see Figure 4.8). For more information regarding configuring the network using the Configure Network dialog box, consult Chapter 8.

Figure 4.8 Configure Network Dialog Box



Reset Terminal

Some host programs can accidentally set graphics mode or fail to leave

graphics mode. If this occurs, select Reset Terminal from the Session menu. The reset terminal command resets all VT102 mode settings. These include disabling wrap mode, resetting graphics mode, setting the keypad mode back to the default, and resetting tabs to every eight spaces. To reset the VT102 screen, select Reset Terminal.