

Chapter 6**Tektronix 4014 and 4105 Emulation**

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Chapter Overview

This chapter describes the scope of NCSA Telnet's Tektronix 4014 and 4105 emulation capabilities, and explains how to conduct Tektronix graphics emulation sessions and operations in graphics windows.

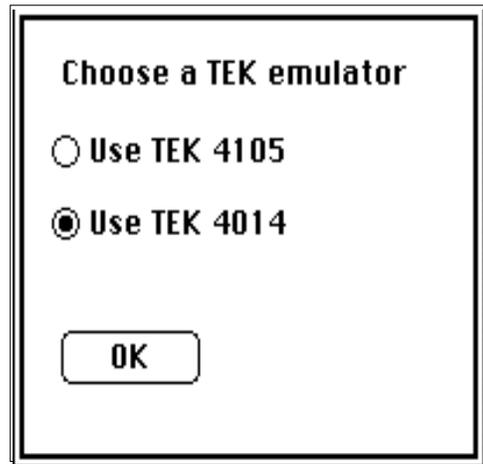
Tektronix Graphics Emulation

NCSA Telnet can emulate the Tektronix 4014 and 4105 terminals. This emulation includes text modes, Tektronix 4014 or 4105 text sizing, zoom, and pan. The use of Tektronix graphics with NCSA Telnet depends on host programs that can produce graphic images. When these programs run and produce Tektronix 4014 or 4105 graphics commands, NCSA Telnet automatically switches into graphics mode, opens a graphics window, and does the drawing.

Getting Started

The tektype field in the config file can be set to either 1 for 4105 or 0 for 4014. If this field does not exist in the config file, then you will be presented with a dialog box (figure 5.1) whenever you either select TEK page or begin to receive Tek codes from the network.

Figure 6.1 TEK Dialog Box



NOTE: If you wish to change the specified tektype, you must select the TEK mode from the Configuration dialog box when you first open a session.

A host program generates the Tektronix clear screen character sequence (ESC, FF) over a currently open connection. When NCSA Telnet receives this command, a graphics window opens. All graphics output from this session is redirected into that window until you close it or the TEK end command is sent.

Using TEK Page

The TEK Page command in the Session menu provides a quick way to create a Tektronix emulation window without requiring intervention from host software. Normally the emulation window appears automatically upon receiving the clear screen command sequence from the host. You can, however, select the TEK Page command to create the window immediately.

Moreover, just as you would use the Page key on a real Tektronix terminal to clear the window for the current session, you can select TEK Page to clear a graphics window.

Graphics Window Operations

NCSA Telnet allows you to detach, delete, zoom, print, and copy graphics windows as described in the following sections.

Detaching a Graphics Window

To detach a graphics window, click on the text window for that graphic's connection. To click on a window without detaching its corresponding graphics window, hold down the OPTION key while you click. When a window is detached its title no longer contains the (*) character that identifies it as the active output window.

The window may be detached under the control of host software, also. The CAN character (dec 24), when received, resets the terminal to the VT102 screen emulation.

Deleting a Graphics Window

To remove a graphics window, click on its close box.

Zooming/Unzooming a Graphics Window

To magnify a portion of the drawing in a graphics window, drag a selection rectangle around the area to be viewed more closely. When you release the mouse button, the selected section of the drawing expands to take up the entire window. The selections always maintain the aspect ratio of the TEK window. This requirement prevents the distortion or stretching of the TEK image.

To return the magnification to zero (and thus see the entire drawing), double-click anywhere in the window. Figures 6.2 and 6.3 show pictures of the same drawing in windows at normal and zoomed magnification, respectively.

You can copy and print the contents of zoomed or unzoomed windows. (When you copy or print a zoomed window, only the visible portion of the window is copied or printed.)

Figure 6.2 Normal Tektronix Image

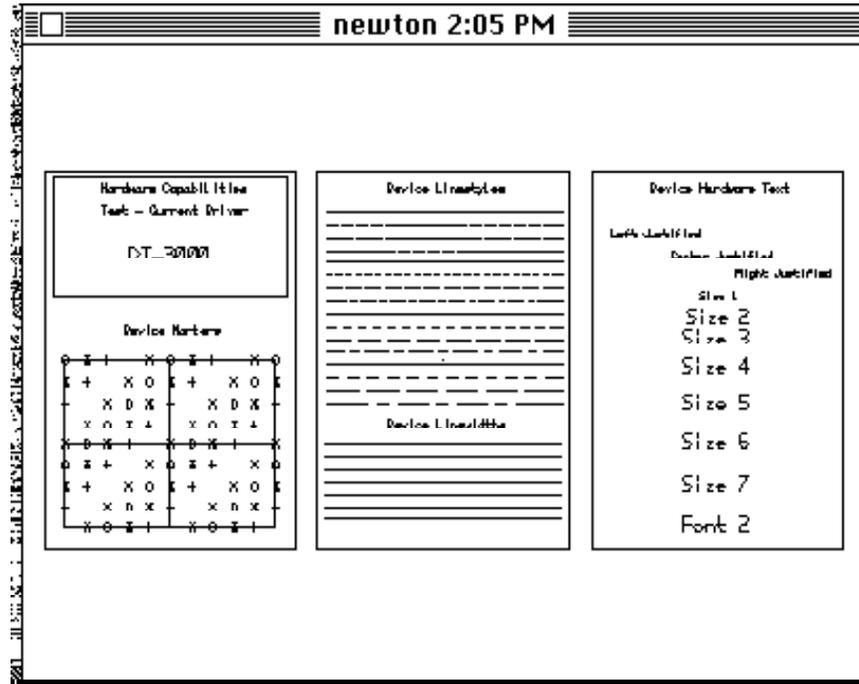
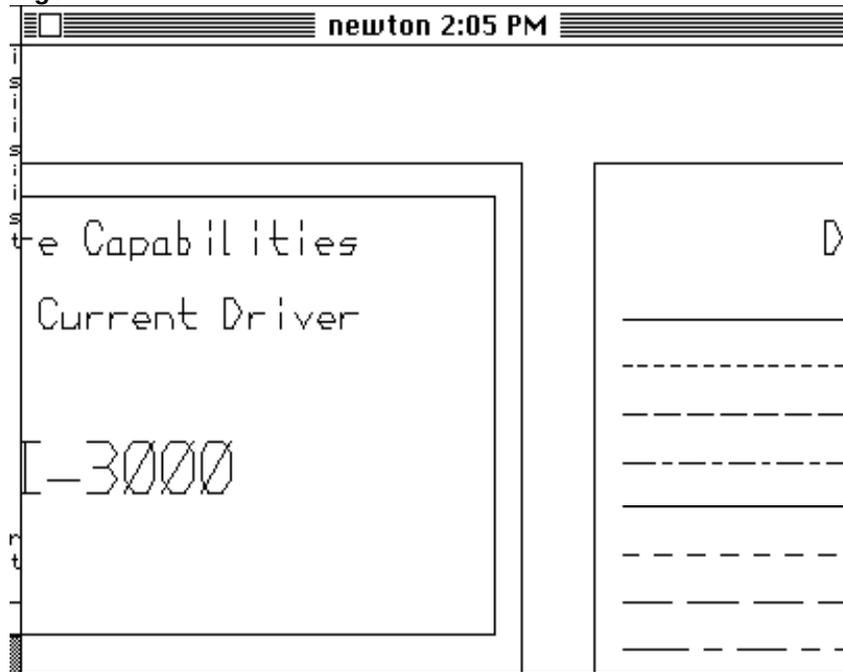


Figure 6.3 Zoomed Tektronix Image



Copying a Graphics Window

To copy the contents of a graphics window onto the Macintosh Clipboard, activate the window by clicking on it and choose Copy from the Edit menu. Now you can paste the graphic into another Macintosh application.

Printing a Graphics Window

To print the contents of a graphics window on a local printer or a printer on the AppleTalk network, activate the window by clicking on it and choose Print Selection from the File menu.

NCSA Telnet centers and scales all graphics to fit the page. To achieve the greatest resolution on a LaserWriter, set the Reduce or Enlarge option in the Page Setup dialog box to 25 percent (Figure 6.4). This setting does not change the size of the image, but makes the lines thinner. For more information about the Page Setup dialog box, refer to your Macintosh user's guide.

Figure 6.4 Page Setup Dialog Box

