

2 Booting Defaults

This chapter provides a summary of the default booting process of an NCD terminal:

- ❑ Address discovery
- ❑ Loading and executing the X server
- ❑ Loading configuration files
- ❑ Obtaining fonts
- ❑ Displaying a login prompt

For each default action, the alternatives (if any) are listed, followed by references that provide information about customizing each action.

Summary of Booting Alternatives

Table 2-1 lists the default booting actions of an NCD terminal and the alternatives to each action. When you add a terminal to the network using *ncdinstall*, the defaults are in effect.

Caution

Do not change the booting and network configuration of your terminal unless you understand the characteristics you are altering. Incorrect settings may make it impossible for your terminal to boot and may also impair network activity.

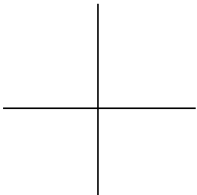


Table 2-1 Chronological Summary of Default Booting Actions and Alternatives

Default Booting Action	Alternate Action(s)	References
A user powers on the terminal or reboots it, and booting actions begin automatically.	You can configure the terminal to display a Boot Monitor prompt instead of booting automatically when powered on.	Chapter 4, Booting—X Server Loading
The Boot Monitor performs self tests, displays results, and reads NVRAM configuration content.	You can disable some of the self tests. NCD recommends that you do not disable any self tests.	Chapter 11, Boot Monitor and NVRAM
The Boot Monitor broadcasts the terminal's physical (Ethernet) address using alternating DHCP, BOOTP, and RARP requests for its IP address. If you use <i>ncdinstall</i> to add terminals, it configures the BOOTP/DCHP database on the boot host to include additional network information.	You can manually configure the BOOTP/DHCP database to provide more information.	Chapter 3, Booting—Address Discovery <i>System Administrator's Guide</i>
	Instead of using BOOTP/DHCP responses for determining the IP address and other booting information, you can configure the terminal to use information stored in NVRAM.	Chapter 6, Terminal Configuration Methods Chapter 11, Boot Monitor and NVRAM
	Instead of using BOOTP/DHCP responses for determining a subnet mask, you can configure the terminal to use ICMP for subnet mask discovery.	Chapter 3, Booting—Address Discovery
	Instead of using the default order of requests (DHCP, BOOTP, then RARP) for its IP address broadcasts, you can change the order through the Boot Monitor Setup menus.	Chapter 11, Boot Monitor and NVRAM

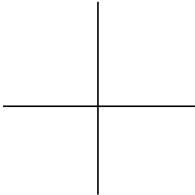


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Default Booting Action	Alternate Action(s)	References
The Boot Monitor sends a series of requests for an X server, first to the host that answered the request for the IP address, and then to the network. (For more information about the default series of X server requests, see Chapter 4.)	Direct the request for an X server to a specific host. You can also specify a second and third boot host in case the first host is not available.	<i>System Administrator's Guide</i> Chapter 4, Booting—X Server Loading
	Specify a non-standard X server filename.	Chapter 4, Booting—X Server Loading
	Change the default series of searches the Boot Monitor uses to find an X server.	
	Configure the terminal so it does not broadcast requests for an X server to the network.	
The Boot Monitor downloads an X server file using TFTP from the default TFTP directory (/tftpboot/ or /usr/tftpboot/) from the first host to answer a request. If the TFTP attempts fail, the Boot Monitor tries to download an X server using MOP and NFS.	Use a different default method for X server downloading, such as NFS or a local PCMCIA card.	Chapter 4, Booting—X Server Loading
	Specify the second and third choices for boot source.	<i>System Administrator's Guide</i> Chapter 4, Booting—X Server Loading
	Use a different directory from the default when using TFTP to download the X server.	Chapter 4, Booting—X Server Loading
	Use a different directory from the default when using NFS to download the X server.	
	Prevent the terminal from attempting to download an X server using MOP.	

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Default Booting Action	Alternate Action(s)	References
If the Boot Monitor does not find an X server, it displays its prompt and waits for the user to type a manual boot command.	Set the Boot Monitor to continue attempting to download an X server until the booting process is manually interrupted. When the booting process is interrupted, the terminal displays the Boot Monitor prompt.	Chapter 4, Booting—X Server Loading
The Boot Monitor executes the X server, and the X server takes control of the terminal, displaying the name of the X server file and the IP address and hostname of the terminal.	None	None
The X server loads a configuration file from the boot host's default configuration directory, /usr/lib/X11/ncd/configs . The X server searches for two default configuration filenames: a terminal-specific file named with the hexadecimal equivalent of the terminal's IP address and a generic file named ncd_std .	Set the X server to download the configuration file from a host other than the boot host by specifying an initial file server host and a secondary file server host. Specifying an initial file server host also allows terminals booted from a local PCMCIA card to download configuration files from a host.	Chapter 5, Configuring Network Services
	Use a configuration file with a non-standard or custom filename.	Chapter 6, Terminal Configuration Methods
If the terminal does not find a configuration file, it continues to boot without one.	Prevent the terminal from booting without a configuration file.	Chapter 6, Terminal Configuration Methods

2-4 Booting Defaults

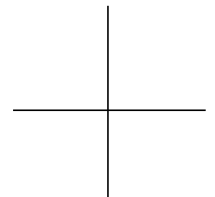


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Default Booting Action	Alternate Action(s)	References
The X server reads the font directories in its default font path on its boot host.	You can configure the terminal to use a custom font path.	Chapter 7, Bitmap Fonts and the Font Server
	Instead of, or in addition to reading font directories directly, you can configure the terminal to use a font server.	Chapter 7, Bitmap Fonts and the Font Server
	If a specified font cannot be found, the terminal uses its default font. You can specify a different default font.	Chapter 7, Bitmap Fonts and the Font Server
The X server reads the default keysym database file.	Specify an alternate keysym file (xserver-keysym-file parameter).	<i>Remote Configuration Parameter Quick Reference</i>
The X server reads the default color database file.	Specify an alternate color database file (xserver-rgb-file parameter).	<i>Remote Configuration Parameter Quick Reference</i>
The Console and a Login Chooser appear for the user to select a login host. The Login Chooser displays all the hosts that responded to XDMCP requests from the terminal.	You can specify a customized set of local clients that appear at startup.	<i>System Administrator's Guide</i>
	You can configure a customized Login Chooser or specify that only a login banner appears.	Chapter 8, Login and X Session Management <i>System Administrator's Guide</i>
	You can configure the terminal to display a Terminal Host Chooser for the user to log in through the NCD Terminal Emulator.	Chapter 12, Configuring the NCD Terminal Emulator <i>System Administrator's Guide</i>

