
NeoLinux Thin Clients User Manual

Release 3.0



Hotkey Quick Reference Guide

To...	Press....
Display the ezConnect Manager desktop	Ctrl + Alt + End
Display the next/previous connection	Ctrl + Alt + ↑ or ↓
Change window focus on current desktop	Ctrl + Alt + Tab



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Web: For the most recent version of this manual, please visit Neoware's Web site at
<http://www.neoware.com/manuals.html>

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Production note: This manual was entirely designed, written, edited, and illustrated on Neoware thin clients using embedded NeoLinux software, Windows 2000 Server with Terminal Services, Citrix MetaFrame, Adobe Illustrator, Adobe Photoshop, and Adobe FrameMaker.

6.9.2004

FCC regulatory and safety information

FCC regulatory and safety information can be found in the Quick-Start Guide that came with your appliance, and on the Support section of the Neoware website which can be found at:

<http://www.neoware.com/support.html>

CANADA ICES/NMB-003 Class/Classe (B)

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Neoware Hardware Warranty

Neoware hardware warranties can be found in the Quick-Start Guide that came with your appliance, and on the Support section of the Neoware website which can be found at:

<http://www.neoware.com/support.html>

Safety Instructions

Please read these safety instruction carefully and keep this user's manual for later reference.

- 1** Before removing the outer case from the appliance always disconnect the AC power cord to prevent the possibility of dangerous electrical shock.
- 2** Before cleaning, disconnect the appliance from AC power. Do not use liquid or sprayed cleaning products to clean the unit. Instead, use a moistened sheet or cloth for cleaning.
- 3** Be sure not to expose the appliance to excessive humidity.
- 4** Be sure to install the appliance on a secure surface. A falling appliance could cause injury.
- 5** Place the power cord in such a way to avoid people stepping on it. Do not place anything over the power cord.
- 6** Be sure to note all cautions and warnings on the appliance.
- 7** If the appliance is not used for a long period of time, disconnect the AC power to avoid damage caused by voltage transients.
- 8** Never pour any liquid into any appliance openings: This could cause fire or electrical shock.
- 9** If one of the following situation occurs, be sure to get the appliance checked by a qualified service technician:
 - a. The power cord or plug is damaged.
 - b. Liquid penetrates the appliance case.
 - c. The appliance is exposed to moisture.
 - d. The appliance does not work well or you cannot get it to work according to the user's manual.
 - e. The appliance has been dropped or damaged.
 - f. If the appliance has obvious signs of breakage.
- 10** The appliance should be stored and used only in temperature and humidity controlled environments. Storing appliances below -20°C (-4°F) or above 60°C (140°F) may cause damage.
- 11** The sound pressure level at the operators position according to IEC 704-1:1982 is equal or less to 70dB(A).
- 12** The input power cord shall be minimum H05VV-F, 3G, 0.75mm^2 , rate minimum 6A.
- 13** The appliance should be used only where ambient air temperatures are maintained below 40°C .

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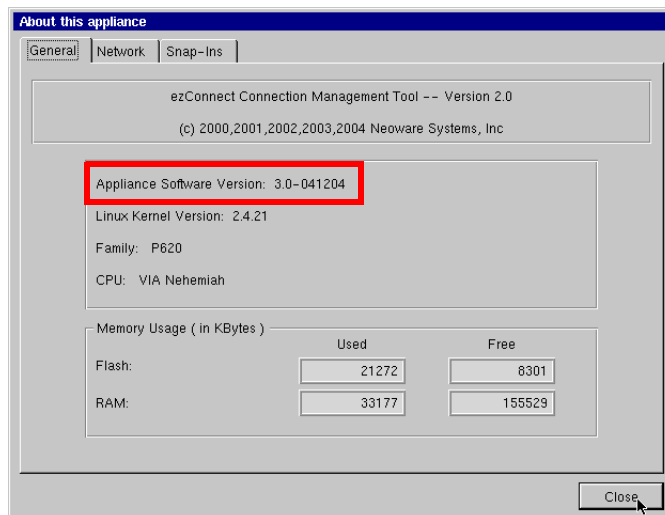
Introduction

This chapter describes the purpose and main topics of this manual, as well as the basic features of the Neoware thin clients.

Overview

Purpose and intended readers

This manual explains how to use thin client devices that are running Neoware NeoLinux Software Release 3.0. The intended audience is primarily system administrators and users of NeoLinux on thin clients. (To find out which release version of software is running on your thin client, see “Determining the release version of your software” on page 19.)



Topics covered

Neoware recommends that you read the chapters in this manual in order. The main topics covered are:

- Unpacking and setting up your thin client.
- Configuring your thin client for your network.
- Changing settings on your thin client.
- Creating and using connections to servers, mainframes, and intranets.

The appendix, *Advanced Neolinux Configurations*, provides additional topics that you may need to know.

What is a Thin Client Appliance?

A new way to use Windows

Thin clients (also called “thin client appliances”) are smart devices that provide access to programs running on network servers. Once a connection is made to a server, depending on the version of software installed, you can use your favorite Windows programs such as Microsoft® Office® or Adobe Photoshop® in the familiar Windows® desktop, connect to LINUX/UNIX servers, mainframes and minicomputers via telnet, terminal emulations, and X Window connections, and connect to intranet / Internet applications through a Web browser.

Generally as you work, your thin client sends keystrokes and mouse clicks to the server, which responds with screen updates for your monitor. Most of the processing occurs on the server. Due to the speed of modern computer networks, this exchange happens as fast as, and frequently faster than, processing on a personal computer.

Thin clients aren’t difficult to use. If you know how to use a personal computer, or even if you don’t, you can use a thin client.

ezConnect

Neoware ezConnect, the NeoLinux connection manager, consists of a simple, easy, and highly customizable user interface for Linux that

shields users from the complexity of the Linux operating system. It has been designed specifically for thin client computing applications. ezConnect allows users or administrators to create a variety of connections to run Microsoft Windows applications on servers, UNIX applications via the X Window protocol, terminal connections to servers, mainframes and minicomputers, Netscape Navigator Internet sessions for applications such as kiosks, and custom connections to launch virtually any Linux application. ezConnect also allows users to customize the operation of the device.

Neoware thin clients

Neoware thin clients are sleek computing devices that contain no hard drive, fan, or other moving parts, making them extremely reliable, and completely silent. They can be used with standard VGA, SVGA, and XVGA-type monitors, PS/2 or USB mouse and keyboard, and other pointing devices.

Configurations vary with respect to the specific number of parallel port, serial port(s), and USB ports that are provided. When available, these ports may be used for peripheral devices that may include printers, modems, floppy drives, zip drives, cd-roms, and bar code scanners. The version of software installed in your thin client will determine which types of peripherals may be used.

Your thin client can automatically connect to either 10BaseT or 100BaseT (twisted-pair) Ethernet networks, as well as make serial port connections with or without a modem.

Neolinux software builds

Your thin client arrives with Neoware's NeoLinux software internally pre-installed in the local Flash disk memory of your thin client.

Note: This manual is intended to cover a number of different Neoware thin client models. Since the primary difference between models is the client software included with each model, this manual may contain references to client software packages that are not

included in your particular model. Shown below are the client software packages currently provided in Neoware thin client models:

Part Number	Model Name	ICA	RDP	TeemTalk	Basic VT Terminal	Netscape Browser	XDM / X.11 R6
BE-02-BA	Capio One – Single Session	X					
BE-A2-BB	Capio One – Multiple Sessions	X	X	X			
CP4A-AA	Capio 500 16/32	X	X		X		
CP4S-CB	Capio 500 32/64	X	X	X	X	X	X
CP4S-EC	Capio 500 64/128	X	X	X	X	X	X
BA-EON2000E-6	Eon 2000 16/32	X	X		X		
BA-EON2000X-6	Eon 2000 16/64	X	X	X	X		
BA-EON4000S-6	Eon 4000 32/64	X	X	X	X	X	X
BA-EON4000T-6	Eon 4000 64/64	X	X	X	X	X	X
BA-EON4000N-6	Eon 4000 16/64 (Network Boot)	X	X		X	X	X
BH-02-CB	Eon e100 32/64	X	X	X	X	X	X
BH-02-EC	Eon e100 64/128	X	X	X	X	X	X
BD-02-EB	Eon e300 64/64	X	X	X	X	X	X

Using NeoLinux, your thin client can initiate simultaneous, multiple connections (some models are restricted to one session, only) to Windows Server 2003, Windows 2000 Server, Windows NT Terminal Server, UNIX-based servers, mainframes, midrange computers, intranets, and the Internet, depending on the software version installed in the thin client.

FYI

To make Windows connections using ICA, the server must be running Citrix MetaFrame, or WinFrame.

Connections to Windows Server 2003, Windows 2000 Server, and NT-based servers are made via Citrix's Independent Computing Architecture (ICA[®]) protocol, as well as Remote Desktop Protocol (RDP). Access to UNIX-based servers can be made by telnet connections and by X Window protocols. In addition, the optional TeemTalk suite provides more than 30 terminal emulations.

NeoLinux supports DHCP and BOOTP remote configuration services, and NFS file transfer protocol. In some models, a local Netscape[®] Navigator browser is also included.

Getting more information

The Internet

Current and archival information about Neoware products, including the latest software updates, can be found at:

<http://www.neoware.com>

Also, this user manual and other Neoware documentation are available on the Neoware Web site for reading or downloading.

Technical support

For the quickest response to technical support needs, register your support need at

http://www.neoware.com/support/support_request.html

You can also call Neoware at +1.610.277.8300.

Setting Up Your Thin Client

This chapter describes how to unpack and set up your Neoware thin client thin client.

Unpacking your Neoware thin client

Packaging contents

Neoware thin client devices are typically is shipped in cartons. Depending on the shipping configuration, one or more of the following items may be contained in separate shipping cartons (such as a monitor, keyboard, and mouse):

Neoware Thin Client

- A keyboard with cable attached.
- A mouse with cable attached.
- A power cord.
- A stand for stabilizing your thin client in a vertical orientation.
- Neoware thin client *Quick-Start Guide*.

Monitor

- A monitor power cord (attached to some monitors).
- A monitor video cable (attached to most monitors).
- A tilt/swivel base, attached or unattached.

When unpacking your thin client, open the cartons carefully, remove the components, and save the packing materials in the event you need to repack the device.











Connecting the components

Back panel connectors

FYI

The serial and parallel ports can be used with ICA and terminal emulation connections.

The following bulleted list provides explanations about the different connections that can be found on the back panels of Neoware thin clients.

- **MOUSE** is a PS/2-type mouse port (green-colored connector marked with the word “MOUSE” or with the icon displayed here). NeoLinux also supports USB mice, plugged into one of the USB ports. 
- **KEYBOARD** is a PS/2-type keyboard port (purple-colored connector marked with the word “KEYBOARD” or with the icon displayed here). 
- **LAN** is an RJ-45 jack. The thin client automatically detects and connects to either 10BaseT or 100BaseT (twisted-pair) Ethernet. 
- **PARALLEL** is a standard DB-25 parallel port for local printers. 
- **COM 1** and **COM 2** are DB-9, RS-232 serial ports. Depending upon which software version is loaded in the thin client, serial ports may be used for peripheral devices such as modems, personal digital assistants (PDAs), and bar code scanners. 
- **USB ports** (two Type A USB ports). NeoLinux supports USB mice, including scroll mice. NeoLinux automatically recognizes which type of mouse is attached at bootup. If a mouse is changed, a reboot is necessary. 
- **MIC** is a 3.5 mm microphone jack. 
- **LINE IN** is a 3.5 mm line audio input jack. 
- **LINE OUT** is a 3.5 mm audio output jack. 
- **MONITOR** is a standard DB-15, high-density, VGA-type monitor connector. 

- The internal or external power supply connects through the supplied power cord. It automatically detects and accepts from 100 to 240 VAC line voltage.

Connecting the cables

- 1 Arrange your thin client and monitor in your work area.
- 2 Connect the monitor power cord into a power receptacle.
- 3 Connect the thin client power cord into the socket. Ensure the thin client is powered off.
- 4 Connect the keyboard cable into the KEYBOARD (purple) port.
- 5 Connect the mouse cable into the MOUSE (green) port.
- 6 Connect the monitor video cable to the MONITOR port.
Don't overtighten the screws. The video cable connection to the monitor varies. Some monitors have attached video cables.
- 7 Connect a twisted-pair, 10BaseT or 100BaseT Ethernet cable into the LAN jack.

Connecting parallel and serial peripheral devices

You can connect a modem, printer, bar code scanner, and other peripheral devices to your thin client.

- 1 If your thin client is powered on, log off all its open connections, and then power off the device.
- 2 For a local printer, connect its cable to the PARALLEL port. You can also attach local serial printers to either serial port: COM 1 or COM 2.
- 3 For an external modem, bar code scanner, or other serial device, connect its cable to a serial port (COM 1 or COM 2). Which serial port devices will work with your thin client, depends entirely upon the software version loaded in the device. Not all software versions support all serial devices.
- 4 Power on your thin client, and then the peripheral device.

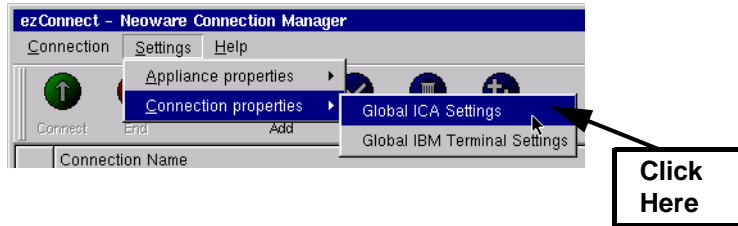
Connecting USB peripheral devices for use with Citrix ICA

Note

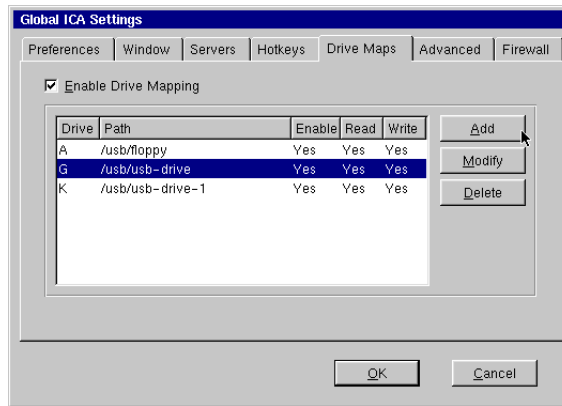
To install and use USB peripheral devices, it is necessary that the USB Controller settings in your thin client's BIOS be enabled. If upgrading from an earlier version of NeoLinux, you will need to enable this setting. For information on changing this setting in the BIOS see "Enabling the USB Controller in the thin client BIOS" on page 119.

You can connect USB external drives to your NeoLinux thin client, including floppy drives, zip drives, and CD-ROM drives. (USB devices are not supported in Capió 504.)

- 1 In the ezConnect (Neoware Connection Manager) menu bar, select **Settings | Connection Properties | Global ICA Settings**.

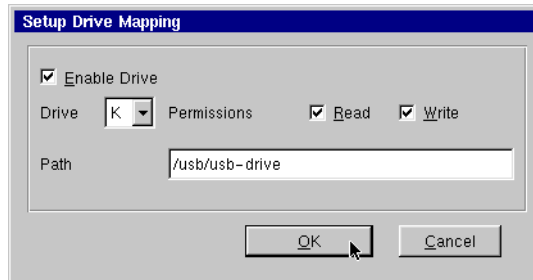


- 2 When the Global ICA Connection Properties tabbed dialog appears, select the **Drive Maps** tab.



- 3 Click the **Enable Drive Mapping** checkbox.
- 4 Click the **Add** button.
- 5 When the Setup Drive Mapping dialog appears, select the drive letter to represent the USB peripheral device you are setting up, and type the path of the drive in the path field. When finished

Click **OK**.



Note: Depending upon the device you are connecting, the path will be one of the following:

- Zip drive - **/usb/zip**
- Floppy Drive - **/usb/floppy**
- CD-ROM drive - **/usb/cdrom**
- Other (USB Flash drives, etc.) - **/usb/usb-drive**

6 Click **OK** in the Global ICA Connection Properties tabbed dialog.

The external USB drive will now work a) when using the NeoLinux operating system, and b) when connecting to ICA sessions with MetaFrame servers.

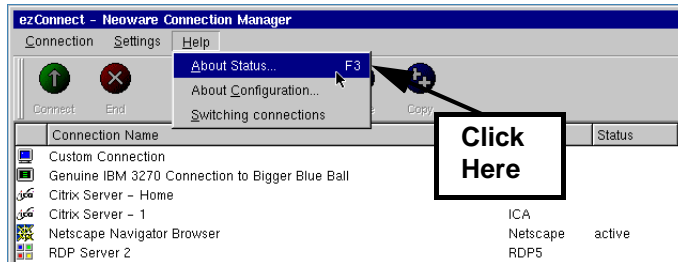
Determining the release version of your software

Accessing the Help | About Status dialog

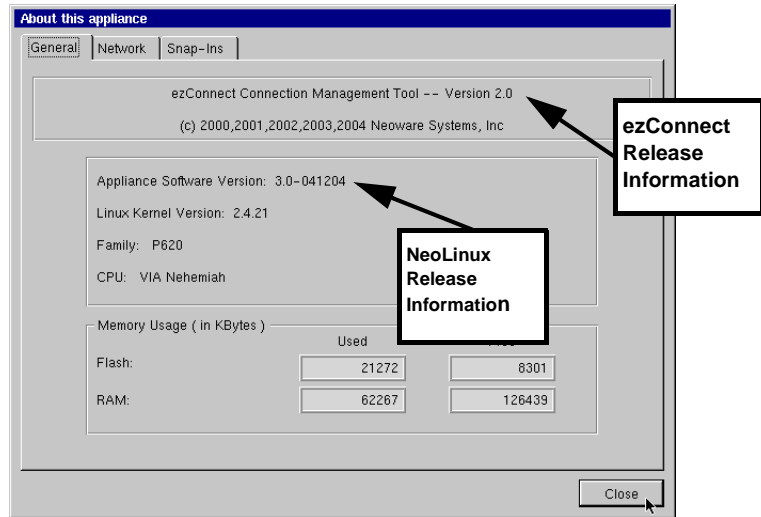
By accessing the **Help | About Status** dialog using ezConnect Connection Manager you can determine which release version of NeoLinux your thin client is running.

1 In the ezConnect (Neoware Connection Manager) menu bar, select **Help | About Status**, or press **F3** any time the ezConnect

Connection Manager screen is visible on-screen.



- 2 The About information box appears. This box shows which release version of NeoLinux is installed in your thin client, and which release version of ezConnect Connection Manager is installed.



Arranging Your Work Area

Getting comfortable These tips will help reduce eye strain and body fatigue when using your thin client:

- Adjust your chair seat level so that your feet are flat on the floor, your legs form a right angle with the floor, your knees are free of the chair seat, and your lower back is fully supported.
- Adjust the chair height so the keyboard and mouse are at elbow height so your wrists are straight and supported.
- Maintain a neutral neck posture with the top of the monitor no higher than your eye level.
- Adjust the monitor and lighting to reduce glare on the screen and to place the monitor at a correct distance for your vision.
- Take periodic breaks to stretch your arms and wrists and rest your eyes.

CHAPTER 2

Configuring Your Network Settings

This chapter describes how to initially configure your thin client for your network.

Selecting the network settings

Do you need to configure?

FYI

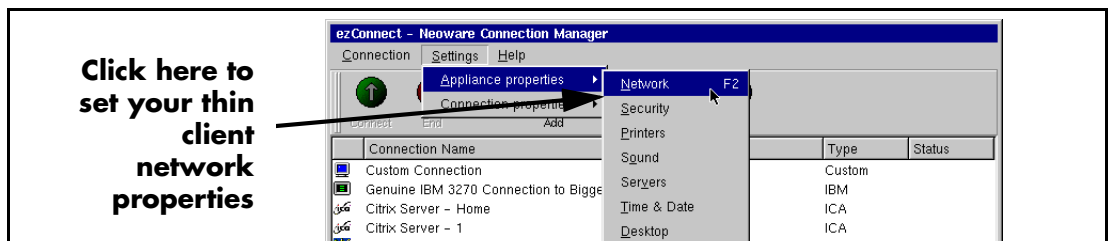
DHCP and BOOTP automatically supply the IP address and other setting for your appliance when it starts up.

Your thin client must be assigned a unique Internet Protocol (IP) address in order to communicate on your network. Your network may also require other settings.

If your network uses a remote configuration service such as the Dynamic Host Configuration Protocol (DHCP) or the Bootstrap Protocol (BOOTP), the thin client will configure itself. In that case, all you do is turn on the thin client. Your network or system administrator will tell you if your network uses DHCP or BOOTP (in which case you may not need to configure network settings) or if you need to manually enter network settings.

Accessing network settings

To configure your thin client's network settings, select **Settings | Appliance Properties | Network** from the ezConnect (Neoware Connection Manager) menu bar or press the **F2** key.



Network Settings dialog

The Network Settings dialog includes four tabbed pages allowing an administrator to configure the thin client network settings, including defining an ezUpdate server. When a thin client security password has been set, the password must be supplied before changes in this dialog are effected.

Network Devices tab

The following values may be set on the Network Devices tab. If more than one network interface is installed in your thin client appliance, you may choose between the settings for each device on this tab.

Network Device: If more than one network interface is detected by the thin client, each may be controlled separately by selecting from the drop-down list (click on the down arrow to see the list). All Neoware thin clients will have at least one network interface showing in this field: “Built-in Ethernet (default).”

F3 Hotkey Tip

To see the network settings currently in use by your thin client, press the F3 key when the ezConnect screen is displayed.

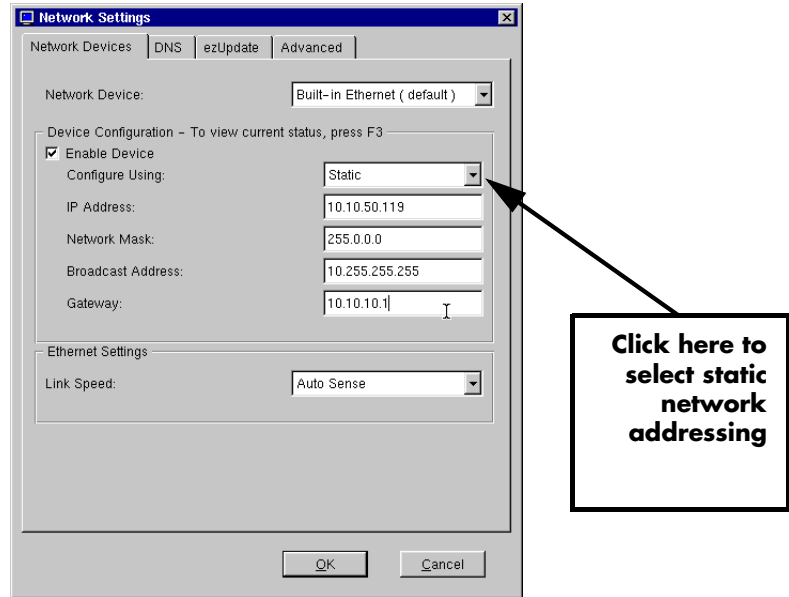
Enable Device: [Default: *Selected*] This checkbox allows an administrator to disable one or more installed network interfaces. When selected, Enable Device checkbox allows the network interface showing in the Network Device field to operate.

For example: When using a Wireless Ethernet device (Wi-Fi), the built-in Ethernet adapter must be disabled to avoid conflicts during software update operations.

Configure Using: [Default: *DHCP/BOOTP*] Choose from the drop-down selection list whether to use a dynamic network addressing scheme (DHCP or BOOTP) or a static IP address. If your network uses DHCP or BOOTP for configuration, you may not need to make any adjustments to network settings on the thin client appliance.

However, if you wish to manually assign the network address, select **Static** from the drop-down list (click on the down arrow in the field).

You will need to obtain the entries for the fields on this tab from your network administrator if you choose static addressing.



Note on DHCP/BOOTP operation:

When a thin client connects to the network with dynamically-provided (DHCP/BOOTP) information, the information is saved in the thin client. At the next thin client bootup, if the client cannot reach the DHCP server, the client will connect to the network using the saved network information provided that the initial lease time has not expired.

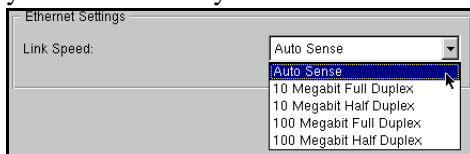
IP Address: Uneditable (grayed-out) if dynamic network addressing (DHCP/BOOTP) is selected. The IP (Internet Protocol) address assigned to the appliance. Entered in a dotted-decimal format (for example, 10.10.10.10). Ask your network or system administrator.

Network Mask: Uneditable (grayed-out) if dynamic network addressing (DHCP/BOOTP) is selected. If required, type a dotted-decimal subnet mask number. The network mask distinguishes your

local network from a larger network. For example, **255.0.0.0**. Ask your network or system administrator.

Broadcast Address: Uneditable (grayed-out) if dynamic network addressing (DHCP/BOOTP) is selected. If needed, type a dotted-decimal network mask number. Specify how broadcast requests are sent from your appliance to the network. Typically, the setting is **255.255.255.255** or **0.0.0.0**. Ask your network or system administrator.

Gateway: Uneditable (grayed-out) if dynamic network addressing (DHCP/BOOTP) is selected. If your thin client accesses servers on different networks from the one on which it is installed, type the IP address of the router or gateway computer that connects them. Ask your network or system administrator.



Link Speed: [Default: *Auto Sense*] Select from the drop-down list the speed to be used with the network adapter listed in the Network Device field. The default *Auto Sense* setting should be selected, unless your network environment requires manually selecting speed and duplex mode.

DNS tab

FYI

Domain Name Service (DNS) is a server-based program that translates text-based server names into IP addresses.

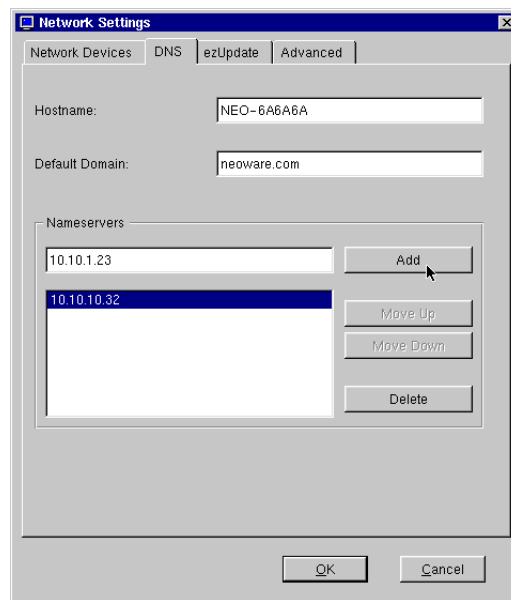
The Network Settings DNS tab provides the mechanism by which you can change the thin client's network name ("hostname"), set the default domain string, and add additional domain nameservers for the device to use:

Hostname: [Default: *NEO- \langle Last six digits of MAC address \rangle*] This name is used by network devices (UNIX/Linux systems use this as the hostname, ICA and RDP servers use this as the "client name" or "computer name"). The default Hostname utilizes the last six digits of the device's MAC address as the last six digits of the Hostname. Since the serial number of each thin client appliance also ends in the last six digits of the MAC address, the default Hostname enables

easy asset management when used in conjunction with ezRemote Manager.

Default Domain: [Default: <Empty>] If your network uses dynamic addressing (DHCP or BOOTP), the default domain string is typically provided by the DHCP/BOOTP server, if required. When the default domain string is provided by DHCP or BOOTP, this field will normally be empty.

In static addressing, you may be required to type the domain name, for example: **neoware.com**. Ask your network or system administrator.



Nameservers: In networks that use dynamic addressing, name server information is provided from the DHCP or BOOTP server. To add domain nameserver entries in manual or static environments, or to add additional nameserver addresses to those provided by DHCP/BOOTP servers, enter the IP address of the nameserver(s) you wish to add to the list, and then click **Add**. When nameserver addresses are added manually in the Nameservers field and nameserver addresses are provided by a DHCP/BOOTP server, the manually-entered

addresses are appended to the nameserver list used by the thin client at networking startup.

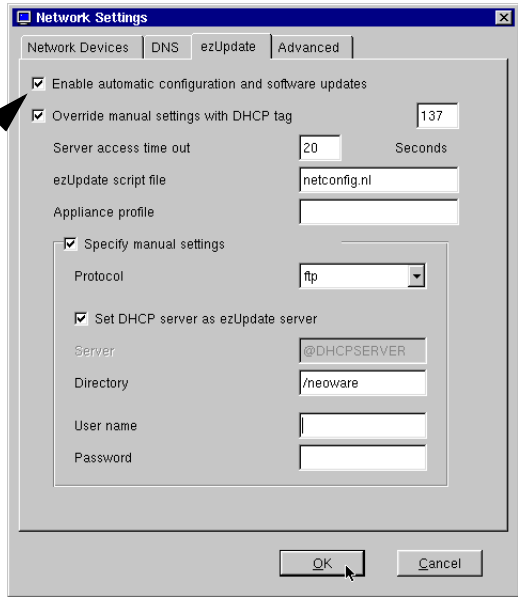
When networking starts, the thin client goes through the list and performs a port check to verify that each DNS server is operating, deleting from the list any that does not respond. After the check, the thin client will copy into the client resolver file and use only the first three listed addresses that responded to the port check.

Highlight a nameserver address in the list and click **Move Up** or **Move Down** to adjust that address's placement in the list. Click **Delete** in order to remove the address from the list.

ezUpdate tab

Click on the **ezUpdate tab** on the Network Settings dialog to change or view ezUpdate settings.

The default ezUpdate settings allow an unconfigured thin client to automatically receive configuration and software updates from an ezUpdate server.



What is ezUpdate?

ezUpdate is the mechanism that allows Neoware thin client appliance configurations and software to be automatically updated from

servers. Instructions for using ezUpdate and setting up ezUpdate servers are available in the *ezRemote Manager User Manual*.

ezUpdate servers can provide the following types of automatic configuration updates:

- Full image software updates
- Modular software updates (Snap-ins)
- Thin client appliance connection definitions
- Thin client appliance device configurations

ezUpdate settings

Enable automatic configuration and software updates: [Default: Selected] When checked, this setting allows the appliance to automatically receive and apply configuration and software updates. Since this is the default configuration, once an ezUpdate server is configured and a DHCP server is providing ezUpdate-specific tags, newly installed thin client appliances will automatically be configured at first bootup.

Override manual settings with DHCP tag: [Default: Selected] When checked, this setting forces a booting-up thin client to use DHCP information received in DHCP tag 137 (or other tag number entered here) instead of any configuration information manually entered on the ezUpdate tab. In a configured ezUpdate environment, DHCP tag 137 is used to define the location of the ezUpdate server. By deselecting this checkbox, administrators can test new configurations being installed on the ezUpdate server without exposing those configurations to production use.

DHCP tag: [Default: 137] If a DHCP tag other than 137 is used to distribute ezUpdate server location information, enter the number in this field.

Server access time out: [Default: 20] This setting sets the maximum time (in seconds) for the thin client to wait for a response from the ezUpdate server. If the ezUpdate server does not respond within 20 seconds (or whatever value is set here), the thin client will boot as

if it did not receive information in DHCP tag 137 (or tag number as redefined), by-passing the ezUpdate startup sequence.

ezUpdate script file: [Default: *netconfig.nl*] By default, the script file name that is initially obtained from the ezUpdate server is *net-config.nl*.

Appliance profile: [Default: <Empty>] By default, the profile name field is empty. To maintain multiple device configurations using ezUpdate, the appliance profile name can be used. Creating separate profiles on the ezUpdate server allows you to point one or more appliances to a specific profile using this field.

Specify manual settings: [Default: unchecked] This allows administrators who are configuring an ezUpdate server with a new profile, to override the existing ezUpdate settings for one or more appliances. This provides the ability to test a new configuration without exposing all installed appliances to the untested profile. By checking this checkbox, and using the manual settings fields below (which are not grayed out when the checkbox is checked), an individual appliance can test a configuration on any server.

Protocol: By default, this setting is not available. If the Specify manual settings checkbox is checked, you can choose between *ftp* and *nfs* protocols for communication with the ezUpdate server.

Set DHCP server as ezUpdate server: By default, this setting is not available. If Specify manual settings is checked, and this is unchecked, then you can define a server other than the DHCP server to provide the ezUpdate software or configurations by replacing the *@DHCPSEVER* entry to the IP address or DNS name of the ezUpdate server.

Directory: By default, this setting is not available. If Specify manual settings is checked, you can define a directory or path within the ezUpdate directory structure other than the default */neoware*.

Username: By default, this setting is not available. If Specify manual settings is checked, you can define a username for accessing the ezUpdate server.

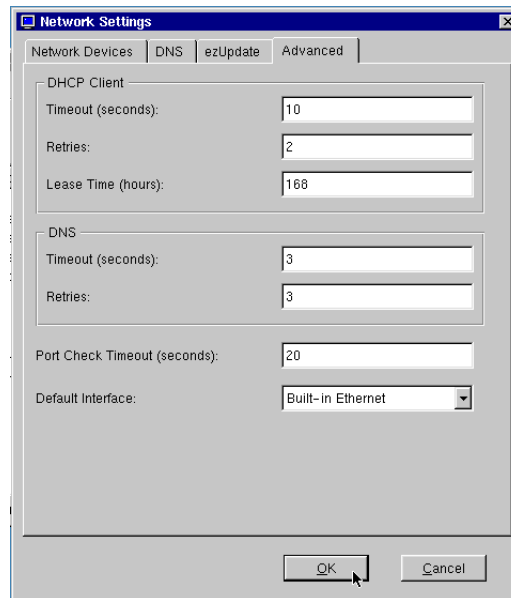
Password: By default, this setting is not available. If Specify manual settings is checked, you can define a password to be used with the username for accessing the ezUpdate server.

Advanced tab

The Advanced tab of the Network Settings dialog allows the system administrator to adjust default settings for network communications:

DHCP Client:

Timeout (seconds): [Default: 10] The number of seconds the device will wait when attempting to communicate with a DHCP server before retrying communication, or if all allowed retries have been attempted, before ceasing to attempt to establish communication.



Retries: [Default: 2] The number of times the device will attempt to make contact with a DHCP server before ceasing the attempt.

Lease Time (hours): [Default: 168 = 7 days] The IP address lease period that is requested by the thin client upon communication with the DHCP server.

DNS:

Timeout (seconds): [Default: 3] The number of seconds the device will wait when attempting to communicate with a DNS server before retrying communication, or if all allowed retries have been attempted, before ceasing to attempt to establish communication.

Retries: [Default: 3] The number of times the thin client will attempt to make contact with a DNS server before ceasing the attempt.

Port Check Timeout (seconds): [Default: 20]

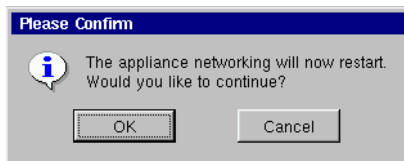
During bootup, NeoLinux checks networking functionality by calling a port check function. This setting allows the administrator to change or eliminate the length of time the software awaits a response.

Default Interface: [Default: *Built-in Ethernet*]

If more than one network interface adapters are recognized by NeoLinux, then the administrator may select which one is use by default as the primary network connection. In that case, all network traffic that doesn't get routed through any other interface will automatically be routed through the defined default interface.

Saving network settings changes

Once you make changes to your network settings, click **OK** and a confirmation dialog will appear. Click **OK** to restart the appliance networking and apply the changes or **Cancel** to return to the Network Settings dialog.



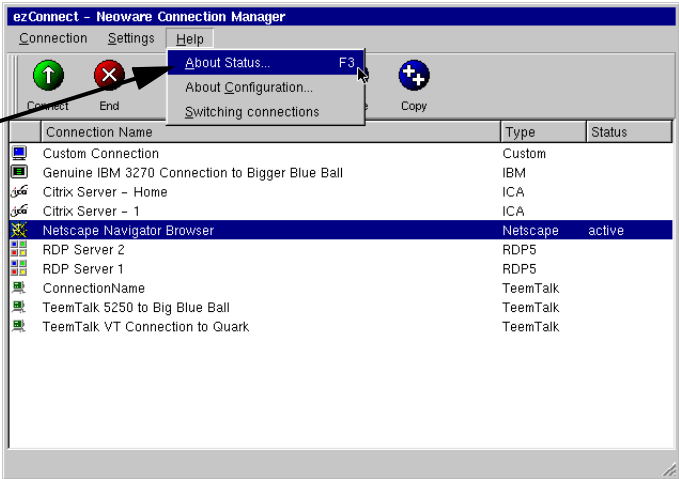
Viewing current network settings

In order to view current network settings, particularly useful when dynamic network addressing (DHCP/BOOTP) is in use, use the About This Appliance dialog.

Accessing information about status and configuration

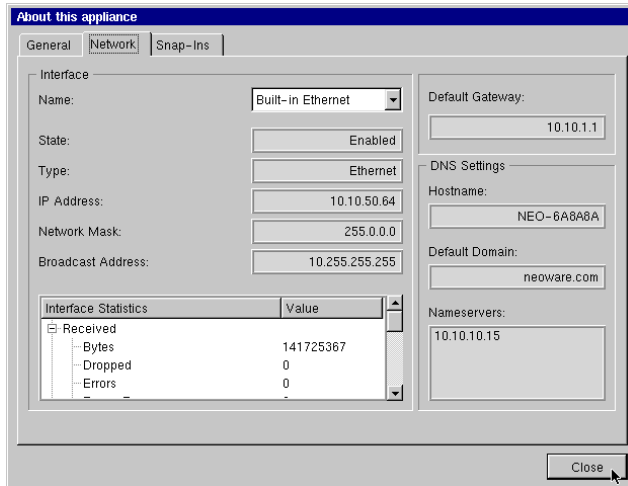
To view configuration information about your thin client, including the current network settings, select **Help | About Status** from the ezConnect (Neoware Connection Manager) menu bar or press the **F3** key.

Click here to view current status information about your thin client



The Network tab

Click the Network tab of the About This Appliance dialog to view current network settings:



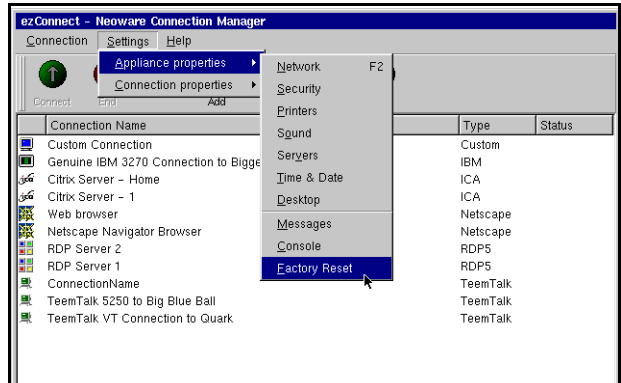
If more than one network adapter is in use by the thin client appliance, select among the available interfaces through the drop-down list in the Interface Name field.

Configuring the Neoware 802.11b USB Wireless Ethernet Adapter

Any Neoware NeoLinux thin client with USB ports can be configured to use the Neoware 802.11b USB Wireless Ethernet Adapter. For easiest configuration, use the following procedure:

Factory reset the thin client

If the thin client to which the USB Wireless Ethernet Adapter is being attached has previously been used with a wired Ethernet LAN (10 BaseT or 100



BaseT), first factory reset the thin client before attaching the thin client. From the ezConnect screen, select **Factory Reset** from the **Settings | Appliance properties** menu. If a configuration password has been set, it will be required before the factory reset can be accomplished.

Power off the thin client

After the thin client beeps during the factory reset reboot, use the power switch to turn the power off.

Insert the USB Wireless Ethernet Adapter's USB connector

While the power is turned off, insert the USB connector from the Wireless Ethernet Adapter into one of the thin client's available USB ports.

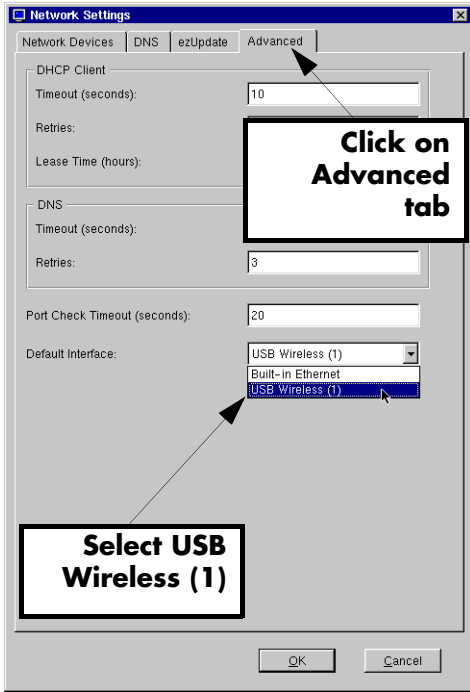
Power on the thin client

Use the power switch to turn the thin client on with the Wireless Ethernet Adapter plugged in to one of the USB ports.

TIP

Configure the display to 1024x768 or higher resolution for easiest interaction with the Network Settings dialog.

Open Network Settings



When the ezConnect Connection Manager screen appears and is highlighted, press **F2** to quickly access the Network Settings dialog, or select **Network** from the **Settings | Appliance properties** menu.

Select the Advanced tab

Click on the drop-down arrow in the Default Interface field and select: *USB Wireless (1)*.

Select the Network Devices tab

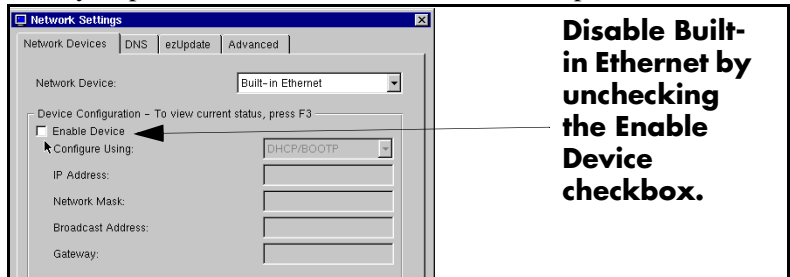
Select the Network Devices tab to configure the Wireless Ethernet adapter.

Disable the on-board Ethernet interface

Critical Step!

Disable the on-board Ethernet interface when you install a Wireless Ethernet Adapter.

It is very important that the on-board Ethernet adapter be disabled



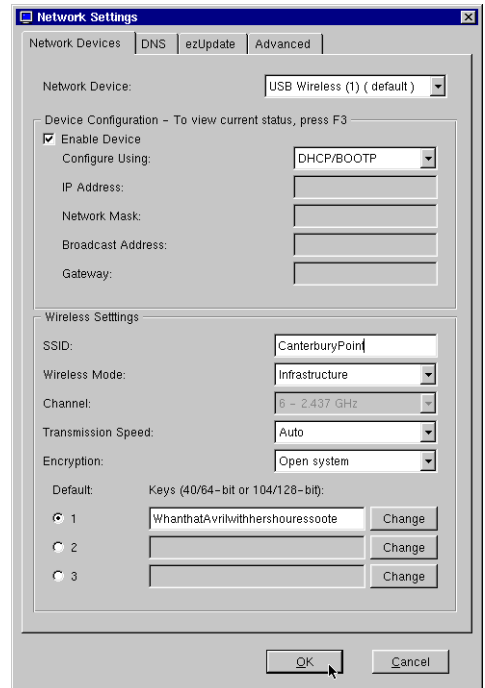
when using a Wireless Ethernet adapter. Failure to disable the Built-in Ethernet adapter will cause software updates to fail.

Disable the **Built-in Ethernet** by unchecking the **Enable Device** checkbox.

Configure Wireless Settings

On the Network Devices tab, first select the *USB Wireless (1)* from the **Network Interface** selection choices. Because you selected this interface as the default, it now shows as *(default)* in the field.

The following fields that are specific to wireless Ethernet configuration will now appear on the Network Devices tab under Wireless Settings.



Wireless Settings

SSID: [Default: *any*] The SSID (service set identifier) is also called the *network name*. This is the identifier for the wireless LAN

(WLAN) to which you wish to connect. The SSID must be provided to you by your system administrator.

Wireless Mode: [Default: *Infrastructure*] **Infrastructure** sets NeoLinux to connect to wireless Ethernet access points. **Ad-Hoc** sets NeoLinux to connect to other desktop devices with wireless Ethernet adapters.

Channel: [Default: (Grayed-out 6 - 2.437 GHz)] Only applicable for Ad-Hoc networks, the user can choose between 13 wireless Ethernet channels.

Transmission Speed: [Default: *Auto*] The default value Auto allows the software and the wireless Ethernet device automatically adjust the transmission speed according to the environment. The user may also select between 1, 2, 5.5, and 11 Megabits/second transmission speeds.

Encryption: [Default: *Disabled*] This setting determines whether the wireless Ethernet adapter uses WEP (Wired Equivalent Privacy) keys to encode the communication between the thin client and the access point. If a wireless access point is set to use WEP encryption, then all wireless adapters communicating with that access point must also be set to use WEP encryption, and use identical WEP keys to the one in use by the access point.

The choices for encryption types are:

- **Disabled** (the default value). With this setting, the wireless Ethernet adapter does not use encryption.
- **Open system.** The wireless adapter is allowed to receive non-encrypted packets from the access point.
- **Restricted system.** The wireless adapter is only allowed to receive encrypted packets from the access point.

WEP Keys

The user may define up to three WEP keys that may be used for communication with wireless access points that are configured to use WEP encryption.

To add or change a WEP key, click on a **Change** button adjacent to the WEP key field. Enter the WEP key, and click **OK** to restart wireless networking using the new key.

Note on WEP keys: NeoLinux supports 64-bit and 128-bit encryption. For 64-bit encryption (actually 40-bit encryption plus a 24-bit initialization vector), the WEP key must be 10 characters long. For 128-bit encryption (actually 104 bits plus the 24-bit initialization vector), the WEP key must be 26 characters long. These keys are provided by your system administrator and must be in hexadecimal format (“HEX” numbers and characters instead of ASCII characters).

If you define more than one WEP key, all of the keys must be the same length.

Default WEP key use

If more than one WEP key is defined for use on your network, you can select which one is used initially to establish communication with the wireless network. Click **1**, **2**, or **3** to select the default key.

Click OK to save settings

Click **OK** to save the settings. In order for the changes to take effect, the thin client networking must be restarted.

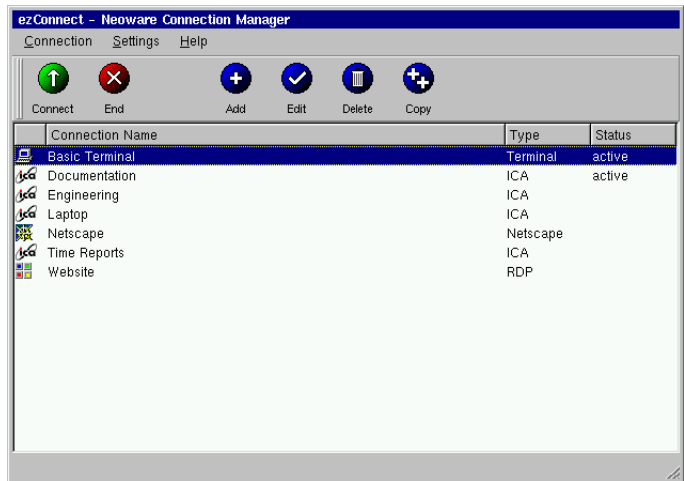
CHAPTER 3

ezConnect - The NeoLinux Connection Manager

This chapter describes how to use ezConnect to create and use connections on your Neoware thin client to connect to servers.

Managing connections

ezConnect Connection Manager



ezConnect Connection Manager

ezConnect is the connection manager user interface that appears when your NeoLinux thin client starts. ezConnect lets you configure and manage connections to servers.

Creating connections



- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Click the **Add** button or select **Connection | Add**.
- 3 In the Add Connection dialog select the type of connection you would like to create from the drop-down menu and then click **OK**.

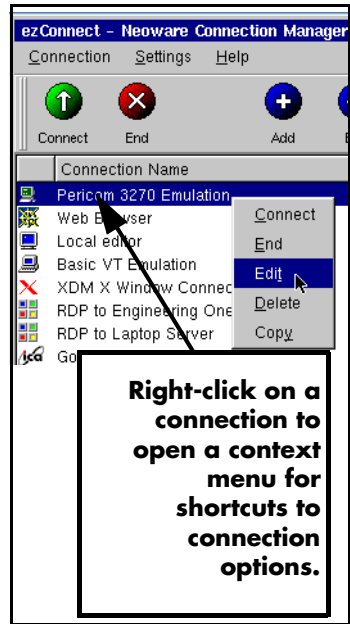
The Add New Connection wizard will start, prompting you to enter the configuration settings for the type of connection you chose to create, with a series of dialogs. For more information concerning setting up and managing the different types of connections, please see the chapters describing them.

Editing connections



- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select the connection from the connection list that you would like to edit.
- 3 Click the **Edit** button or select **Connection | Edit**.
- 4 In the Edit Connection dialog, select the tab that contains the configuration settings to edit and make the appropriate changes. When finished, click **OK**.

When editing a connection, the user is presented with a tabbed dialog that corresponds to the series of dialogs from the Add New Connection wizard. (For a description of these dialogs, see the chapter that corresponds to the type of connection you would like to edit.)



Deleting connections



- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select the connection from the connection list that you would like to delete.
- 3 Click the **Delete** button or select **Connection | Delete**.
- 4 When the delete confirmation message appears, click **OK** to delete the connection or click **Cancel**.

Copying connections



- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select the connection from the connection list that you would like to copy.
- 3 Click the **Copy** button or select **Connection | Copy**.

When the user copies a connection a new connection appears with the title of "Copy of [connection copied]."

Using connections

Establishing a connection



- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select the connection from the connection list that you would like to run.
- 3 Click the **Connect** button, or select **Connection | Connect**.
Note: Other ways of starting a connection include double-clicking on the connection name, right-clicking on a connection name and clicking **Connect** in the window that appears, as well as selecting a connection and pressing the **Enter** key.

Your connection will start.

Ending a connection 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.



2 Select the connection from the connection list that you would like to end.

3 Click the **End** button or select **Connection | End**.

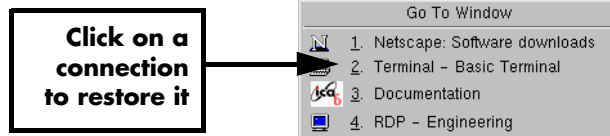
Note: If you disconnect or logout from within a session, then you automatically will return to the ezConnect screen. To learn how this is done, consult the documentation concerning that connection.

Your connection will end.

Switching between connections

Once you have multiple connections started you can switch between them by:

- Typing the key sequence **CTRL + ALT + ↑** or **↓** arrow key
- Starting a new connection from within the ezConnect connection manager
- Accessing the Go To Window by clicking on the NeoLinux desktop background. Once the Go To Window appears click the active connection that you would like to use.



Session management

Users can simultaneously disconnect from (or close) all of the sessions that are active on their thin client with a single selection from the ezConnect connection manager.

1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.

2 Select **Connection | Session**. Choose from the following options:

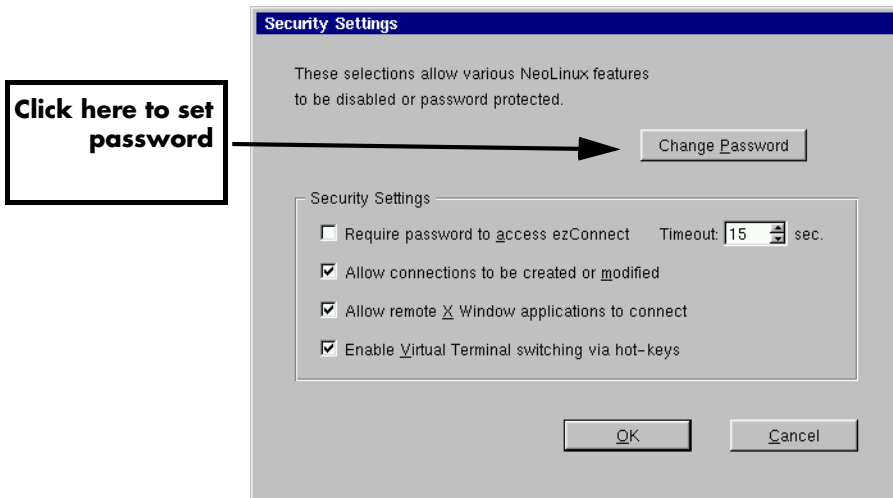
- **Close All Connections** - Disconnects from or logs off of all active connections running on the thin client thin client

- **Restart** - Disconnects from all active connections (leaving them running on the server), and then restarts the thin client (a warm boot).
- 3 Select either **Close All Connections** or **Restart**.

Appliance properties

Security

- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select **Settings | Appliance properties | Security**.
The Security Settings dialog will open.



Note: Neoware strongly recommends setting the appliance configuration password on every thin client when it is initially configured. Setting the same password on all thin clients in a group or enterprise makes managing those devices easier. Once set, only authorized administrators with access to the password can change appliance properties and connection settings either at the device or remotely.

This dialog allows the System Administrator to selectively set specific security options to limit a user's ability to make thin client setting changes. These security options include:

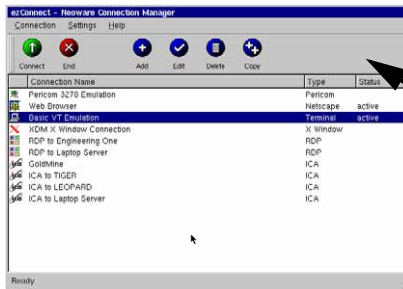
- **Set/Change Password (button)**

Click here to set or change the configuration password for the thin client.

- **Require password to access ezConnect** - Select this checkbox if requiring that the user type in the password to access the ezConnect connection manager is critical. This option is useful for thin client configurations where the end user is only to have access to a specific autostarted connection. One example of such a configuration would be an thin client running a Netscape connection in Kiosk mode, set to autostart on appliance startup.

Timeout - Set the amount of time to allow the user to enter the password to access ezConnect. After the timeout is reached, the display automatically returns to the autostarted connection.

- **Allow connections to be created or modified** - Select this checkbox to allow the user to create and configure connections in ezConnect on the thin client. Compare this secured version of the ezConnect Connection Manager interface to the unsecured version on page 41.



The Add, Edit, Delete, and Copy buttons are removed when ezConnect is secured

- **Allow remote X Window application to connect** - Select this checkbox to allow X window applications running on a remote server to access your thin client. This does not affect X win-

dow connections defined in ezConnect connection manager.

Note: Selecting this feature can create a security risk by allowing people to access your thin client remotely.

- **Enable Virtual Terminal switching via hotkeys** - Select this checkbox to allow the user to switch between Virtual Terminal connections using hotkeys. This can be accomplished by typing the key combination **Alt + SysRq** and then typing a Function key. For example, type **Alt + SysRq** and then type **F3** in order to access a diagnostic console. To return from a Virtual Terminal type **Alt + F4**. Disabling Virtual Terminal switching is frequently desirable for public-access kiosk type installations.

Note: You should not access the diagnostic console unless you are familiar with Linux at a command line level. Accessing this mode should only be attempted with the direction of Neoware Technical Support personnel.

To use this mode, you must first set the configuration password on the thin client (see page 45). At the login prompt, type "root" and press the **Enter** key. Then enter the password (not echoed) that you have set as the security password and press the **Enter** key. At this point, you are at the NeoLinux command line. To exit this mode type either **Control + D, exit** or **logout** immediately after the prompt ([root@<machine-name> /root]#), then **Alt + F4**.

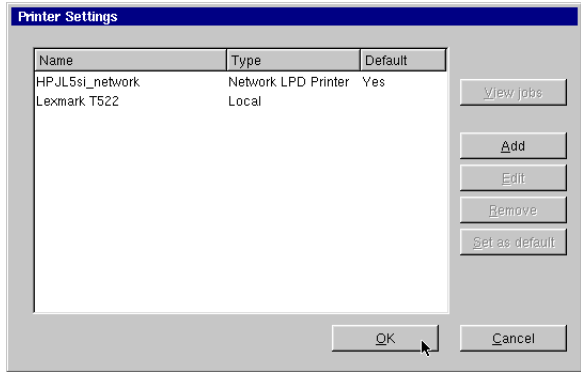
Printers

- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select **Settings | Appliance properties | Printers**.

The Printer Settings dialog will open.

This dialog is a graphical print spool manager that allows you to manage your local print jobs. It allows you to choose a default printer, and remove print jobs that are waiting in the queue. The user can also determine the status of the printer they are using.

Note: The Printer Settings dialog only handles print jobs that originate on your local thin client (for example: printing from a terminal

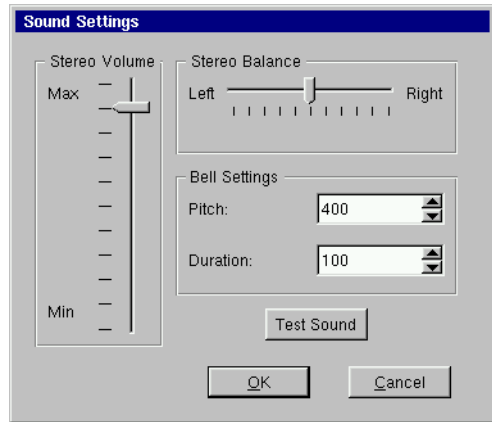


emulation connection or from a Netscape connection). It will not handle print jobs that come from external connections such as the ICA client. However, printers defined within the Printer Settings dialog can be accessed automatically by both Citrix MetaFrame (through ICA connections), Windows 2000 Server and Windows Server 2003 Terminal Services servers (through RDP connections).

For more information on the Print Manager utility, see “Using the NeoLinux Print Manager utility” on page 121.

Sound

- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select **Settings | Appliance properties | Sound**.
The Sound Settings dialog will appear on your screen.



- 3 The Stereo Volume slider adjusts the line out and thin client speaker (if applicable) volume.

4 The Stereo Balance slider adjust the left/right mix of your line out sound.

Note: This will not affect the sound output of an thin client's internal speaker (if applicable).

5 The two Bell Settings adjust the pitch and duration of the system bell. Click the **Test Sound** button to preview your settings.

6 Click **OK** to accept the changes.

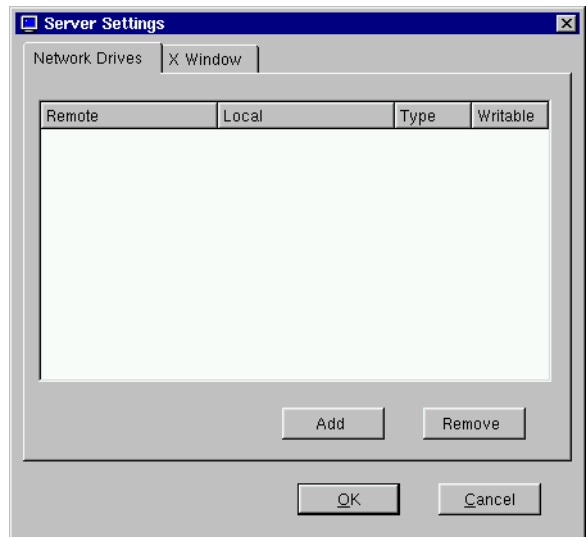
Servers

Note: The Servers menu selection may not be available on your thin client, depending upon the software version installed.

1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.

2 Select **Settings | Appliance properties | Servers**.

The Server Settings dialog will appear on your screen. The Network Drives tab is used to map one or more network drive(s) for NeoLinux applications to use. The X Window tab allows you to specify XDM and X Font servers that do not respond to XDMCP

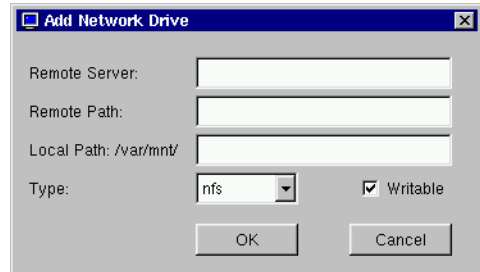


broadcasts (so that they are available when creating an X Window connection). The usual reason for no response being obtained to XDMCP broadcasts is that there is a router between the thin client and the XDMCP machine(s).

To map a network drive, continue with step 3. To specify XDM and X font servers, continue with step 9.

Network Drives Tab

3 Select the Network Drives tab and click the **Add** button to map a network drive for NeoLinux applications to use. The Add Network Drive Dialog will appear.

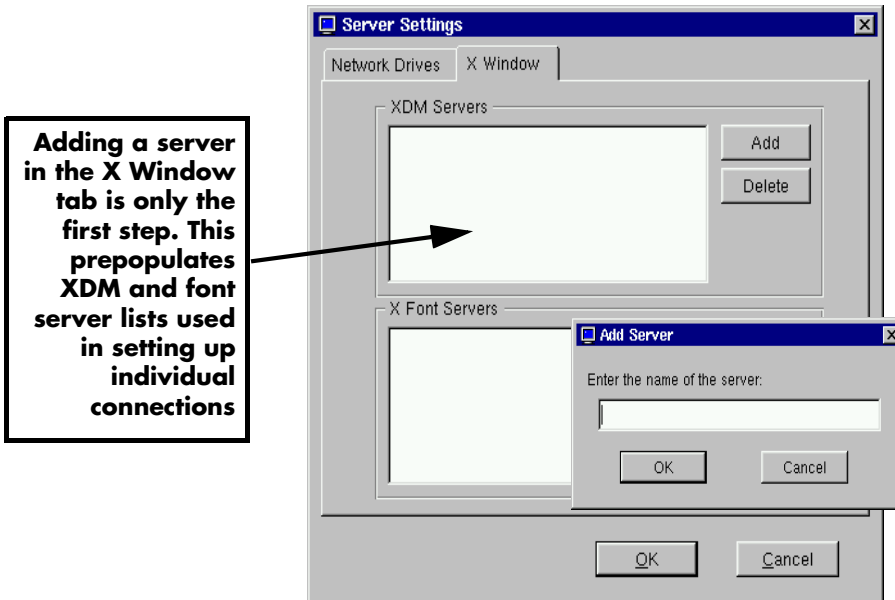


- 4** In the Remote Server field specify the host name or IP address of the server that contains the drive to be mapped.
- 5** In the Remote Path field, specify the full path of the directory to be mapped.
- 6** In the Local Path field, specify the name of the local directory to be mapped to the network drive.
Note: The directory you specify here will be mounted and appear in the path **/var/mnt/**.
- 7** The Type field defaults to *nfs*.
- 8** Click the Writable checkbox for NeoLinux Applications to be able to write to the mapped network drive.
- 9** Click **OK** to map the specified network drive.

X Window tab

10 Select the X Window tab and click the **Add** button to specify XDM and X Font servers that do not respond to XDMCP broadcasts. The Add Server dialog will appear.

The X Window tab of the Server Settings dialog allows an administrator to prepopulate XDM and font server lists used when configuring individual connections. (For more information about configuring individual X Window connections, see “Creating an X Window connection” on page 86.)



11 In the Add server Enter the host name or IP address of the server that you would like to add.

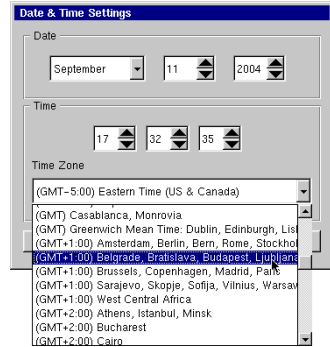
12 Click **OK** to add the server.

Setting the date, time, and time zone

- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select **Settings | Appliance properties | Time & Date**.

The Date & Time Settings dialog will appear on your screen.

- 3 Adjust the month, day, and year if incorrect.
- 4 Adjust the time (using the 24-hour clock) for your location.
- 5 Adjust the time zone for your location. Click **OK** to accept the changes.



Note: The names of the time zones match those used in Windows. Also, the Time Zone affects local applications as well as Citrix connections. Additionally, the Time Zone affects the local clock, according to Daylight Savings Time rules for that zone.

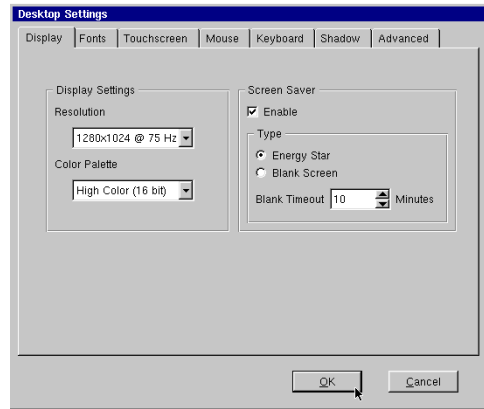
Desktop settings

- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select **Settings | Appliance properties | Desktop**.

The Desktop Settings tabbed dialog will appear on your screen.

- 3 Select the tab on the Desktop settings dialog to make changes to and adjust the appropriate parameters.

- **Display** - Adjusts display resolution and color palette. Additionally, you can enable a screen saver and determine the type and timeout.



- **Fonts** - Control font servers and path settings for the fonts on your thin client.

Note: The Fonts tab may not be available on your thin client, depending on the software version installed.

- **Touchscreen** - If using the thin client with a touchscreen device, configure and calibrate the touchscreen device from this tab.

- **Mouse** - Specify and test your input device settings.

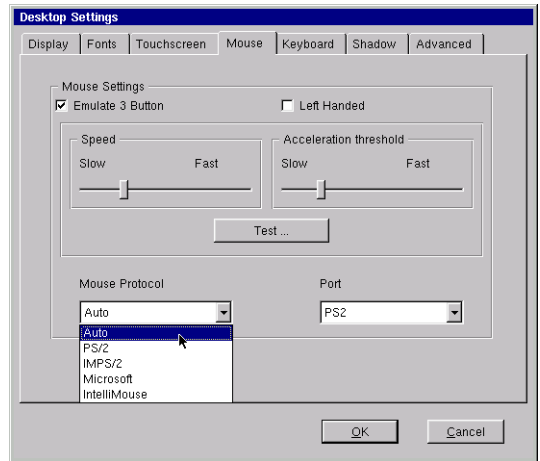
NeoLinux supports and automatically detects both PS/2 and USB mouse types at bootup.

Changing or adding a

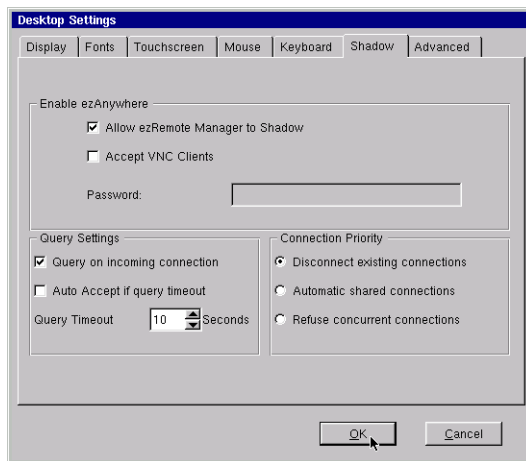
mouse should be done only when the device is powered off so that NeoLinux can automatically detect and enable mice plugged in to PS/2 and USB ports. The default Mouse Protocol setting of Auto allows NeoLinux to find and use mice attached on both the PS/2 and USB ports (even simultaneously).

Mouse speed and acceleration can be set on this tab as well as left-handed mouse use.

- **Keyboard** - Specify and test the Repeat Rate and Delay for keyboard. You can also specify the Keyboard Locale and decide whether to enable NumLock at startup.



- **Shadow** - Specifies the settings that allow an administrator to shadow (remotely view and interact with) the thin client. The settings include checkboxes that control whether ezRe-



remote Manager or other VNC clients can be used to shadow the thin client. If using a VNC client (not ezRemote Manager) to shadow, you can specify a required password when a shadow session is attempted. Additionally, you can specify Query Settings, which prompt the user to approve the shadowing of their thin client. The thin client can also be set to allow shadowing if a user does not respond to the query via the Query Timeout. Finally, you can set the shadow Connection Priority to disconnect a shadowing connection if a) a second shadowing connection is established, b) to automatically share connections allowing multiple shadowing connections, or c) to refuse concurrent connections, which will disallow any further shadowing connections if one is already established.

- **Advanced** - Choose whether the Taskbar of the NeoLinux desktop is to Auto hide and/or appear on the ezConnect - Neoware Connection Manager screen. You can also specify whether the desktop is to appear on X display :1 instead of X display :0. (Some X Window applications require the ability to write to display :0 which otherwise is being used by NeoLinux for ezConnect and client applications.)

Note: The Advanced tab may not be available on your thin client, depending on the software version installed.

Messages and console

The System Messages is a diagnostic log of system error messages and other information. The Console Window is used by administrators to view system directories and files. To open them, click **Settings | Appliance properties | Messages** or **Console** from the ezConnect menu bar.

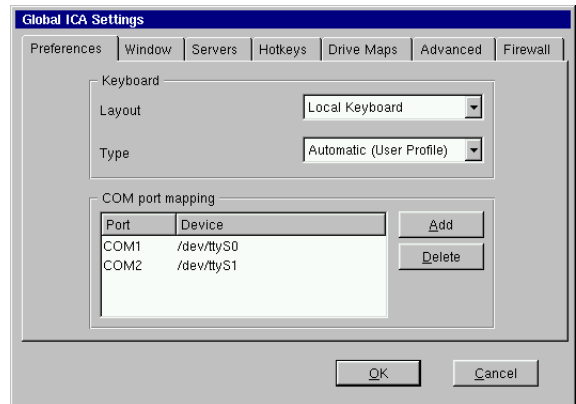
Factory reset

Selecting this option from the appliance properties menu will restore your thin client to its factory default state.

Connection properties menu

Global ICA settings

Click **Settings | Connection properties | Global ICA Settings** to access a tabbed dialog used to customize settings that apply to all ICA connections defined on your thin client. Any setting made in



the Global ICA Settings dialog, will become the default setting for new ICA connections created using ezConnect.

These tabbed settings include:

- **Preferences** - Includes fields for setting the Keyboard layout and type, as well as port and device settings.

Note: For your keyboard to work properly during an ICA session, the Keyboard Layout setting must either be set to “Local Keyboard” or it must match the Keyboard Locale setting in the Neolinux Desktop Settings dialog (see page 53).

- **Window** - Permits you to set the default number of colors and screen size of all ICA connections.
- **Server** - Allows you to define a list of primary Citrix browser servers that can be accessed to determine the list of available ICA connections (desktops and/or published applications). The default network protocol (*TCP/IP + HTTP server location*) works only with Citrix MetaFrame XP servers or later. Change the default network protocol to *TCP/IP* for connecting to earlier versions of MetaFrame and WinFrame.

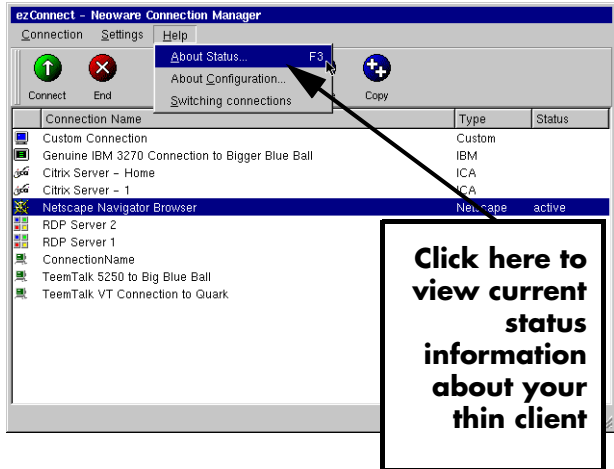
Some models also include a selection called *SSL + HTTPS server location* which provides Secure Sockets Layer (SSL) support. This provides SSL-level server authentication, data stream encryption, and message integrity checks.

- **Hotkeys** - Lets you set standard hotkey combinations.
- **Drive Mapping** - Allows you to specify thin client mounted directories or drives to access within ICA sessions.
- **Advanced** - Permits you to set specific ICA WFCClient and Thin-wire key item value registry entries.
Note: Modifications to these registry entries can cause the ICA client to not run.
- **Firewall** - Lets you configure the ICA client to connect to a Citrix server through a firewall.

Obtaining information about the desktop device

Accessing device status information

To view configuration information about your thin client, including the current network settings, select **Help | About Status** from the ezConnect (Neoware Connection Manager) menu bar or press the **F3** key.

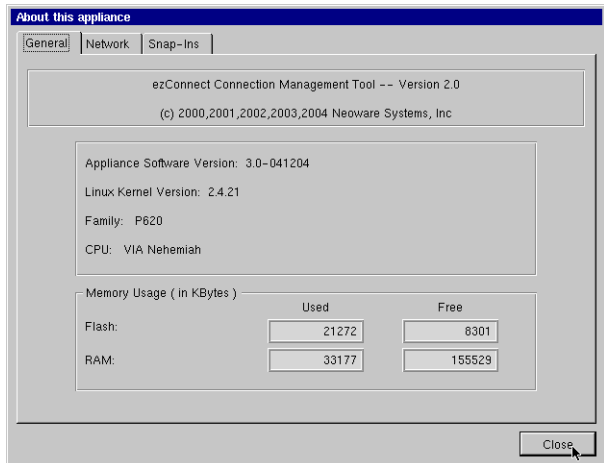


General tab

The default tab when the About This Appliance dialog opens is the General information tab.

Information that is available on the General tab:

- ezConnect Connection Manager software version

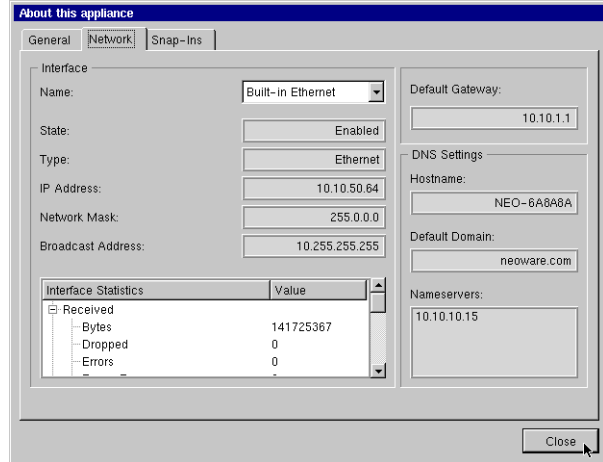


- NeoLinux software release version
- Linux kernel version
- Thin client appliance hardware family
- Thin client appliance CPU identification
- Thin client appliance current memory usage (Flash disk and RAM, used memory and free space)

The Network tab

Click the Network tab of the About This Appliance dialog to view current network settings:

If more than one network adapter is in use by the thin client appliance, select among the available interfaces through the drop-down list in the Interface Name field.



Information that is available on the Network tab:

By interface device:

- Name of device
- Device status
- Device type
- IP address
- Network mask
- Broadcast address
- Interface statistics (received and sent)

Other

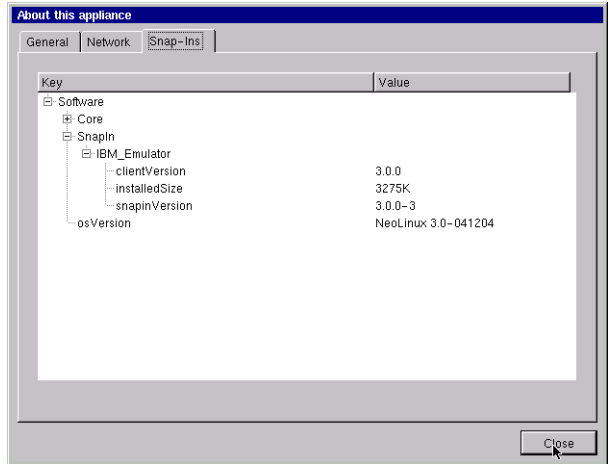
- Default gateway
- DNS hostname
- DNS default domain
- DNS nameservers

Snap-Ins tab

Click the Snap-Ins tab of the About This Appliance dialog to view currently installed software snap-ins.

The Snap-Ins tab allows the administrator to view version and size information about software snap-ins installed in the NeoLinux thin client.

Click **Close** to exit.



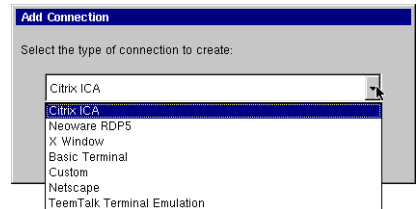
This chapter describes how to create and edit the configuration of ICA connections.

Configuring ICA connections

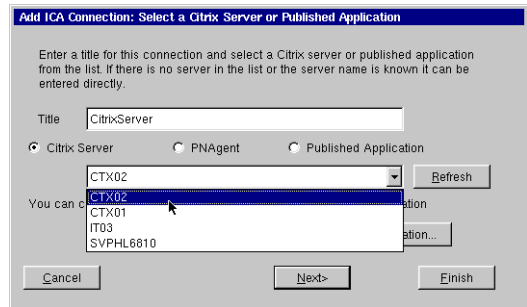
ICA (“Independent Computing Architecture”) is a network protocol created by Citrix Systems, Inc. and used by Windows-based servers running Citrix MetaFrame or WinFrame. After clicking the **Add** button in ezConnect, follow these steps to properly set up your new ICA connection.

Creating an ICA connection

- 1 In the Add Connection dialog, select Citrix ICA Connection from the drop-down menu. When finished, click **OK**.
- 2 In the Select a Citrix Server or Published Application dialog, type a title for your connection and select one of the following ICA connection types:
 - **Citrix Server**
 - **PNAgent**
 - **Published Application**



3 For **Citrix Server** and **Published Application** connections, select the server or application to which you want to connect from the drop-down menu.



4 If you need to set another primary Citrix server (for example, one located on a different subnet from the thin client), click the **Server Location** button. For more information concerning the dialog that opens, see the explanation of the Server tab in the Global ICA Settings section of the ezConnect chapter, page 56.

TIP
You can short-cut the ICA connection setup process by clicking *Finish* on any dialog screen.

When finished, click **Next** or **Finish**.

Note: When no server or application is listed in the drop-down menu, or you know the name of the server or application, you can directly enter the name or the IP address in the field.

If neither **Citrix Server** nor **Published Application** radio button produces a listing, and you are using MetaFrame with browsing enabled, click on **Server Location** and set the Network Protocol to “TCP/IP” instead of “TCP/IP + HTTP server location.” If your servers can respond to only TCP/IP browser requests, you should consider using the Global ICA Defaults dialog to make TCP/IP the default network protocol. (For more information, see “Global ICA settings” on page 55.)

When ICA browsing is required across a router, you will need to set server location addresses using the **Server Location** dialog.

- 5 For **PNAgent** connections, type the Citrix server IP address or name to which users will connect for authentication. When finished, click **Next** or **Finish**.

Add ICA Connection: Select a Citrix Server or Published Application

Enter a title for this connection and select a Citrix server or published application from the list. If there is no server in the list or the server name is known it can be entered directly.

Title:

Citrix Server PNAgent Published Application

You can change your server location settings by clicking Server Location

Primary Citrix server:

For more information about using and configuring PNAgent sessions, see “Using the PNAgent interface” on page 66.

- 6 In the Startup Options dialog, you can select whether this connection should automatically start at startup, and/or automatically restart the connection after it has become disconnected.

Add ICA Connection: Specify Startup Options

Startup Options

Automatically start connection at startup

Automatically restart disconnected sessions

When finished, click **Next** or **Finish**.

- 7 In the Specify Application Information dialog, you can optionally enter the command line and Working Directory of the application to be run.

Add ICA Connection: Specify Application Options

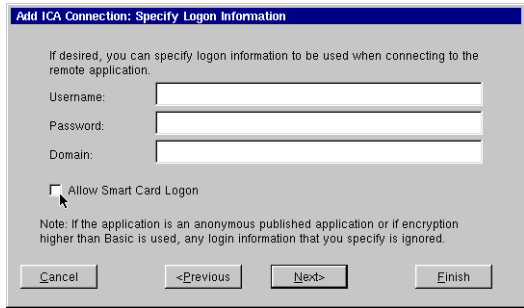
If desired, specify the command line and working directory of the application to run. Leave these fields blank to run a Windows NT desktop.

Command Line:

Working Directory:

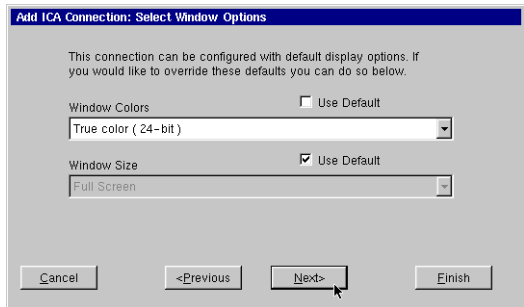
When finished, click **Next** or **Finish**.

- 8 If you choose, specify logon information, and then click **Next**. The Smart Card Logon checkbox allows smart cards to be used when logging on to Citrix ICA connections.



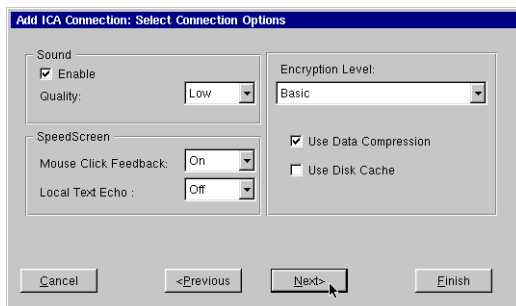
Note: Logon information not entered in this dialog (username, password, or domain) will be requested when the connection starts.

- 9 In the Select Window Options dialog, you can override the default settings for Window Colors and Window Size for the connection being defined. Deselect the Use Default checkbox to change the settings from the default. See "Global ICA settings" on page 55 for information about setting the defaults.

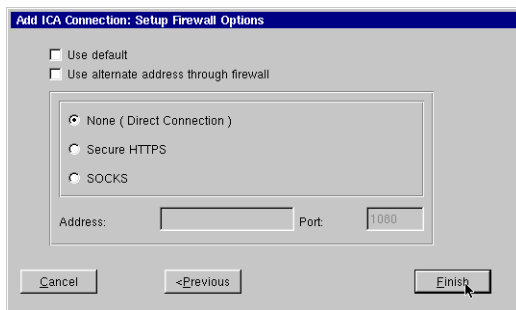


When finished, click **Next** or **Finish**.

10 The Select Connection Options dialog allows you to set Sound Quality, SpeedScreen options, and Encryption Level. When finished, click **Next** or **Finish**.



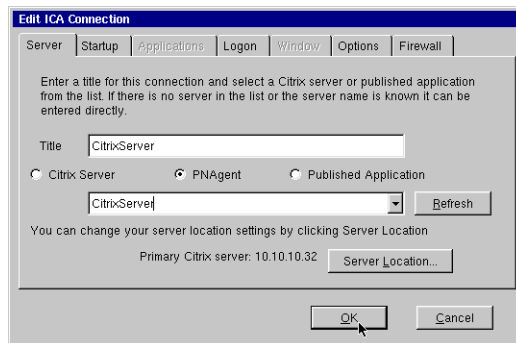
11 The Setup Firewall Options dialog allows you to override (for the connection being defined) the Global ICA Settings. Deselect the **Use default** checkbox to change the settings. See “Global ICA settings” on page 55 for information about setting the defaults.



When finished, click **Next** or **Finish**.

Editing an ICA connection

When editing an ICA connection, you are presented with a tabbed dialog with each tab corresponding to the series of dialogs contained in the Add ICA Connection wizard. (For specific information concerning the

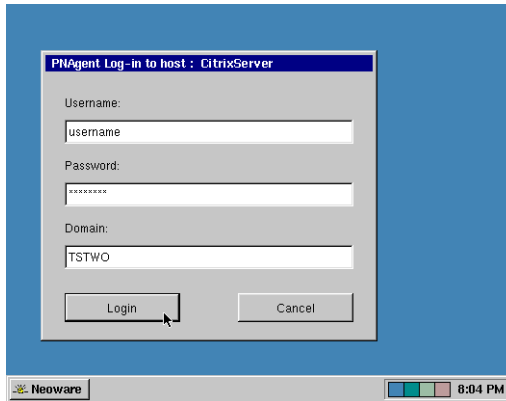


detailed settings contained in these tabs, refer to the Creating an ICA connection instructions above.)

Using the PNAgent interface

For Citrix environments where applications are published and access assigned to user groups or individuals through Program Neighborhood, configuring the NeoLinux device to use the PNAgent interface will allow:

- User authentication before being able to access any application or desktop through the thin client device
- Dynamic assignment of application or desktop availability based on user authentication
- Better security and control with respect to exposing server names or published application names to unauthorized users
- Easy access to seamless window ICA sessions on the NeoLinux desktop



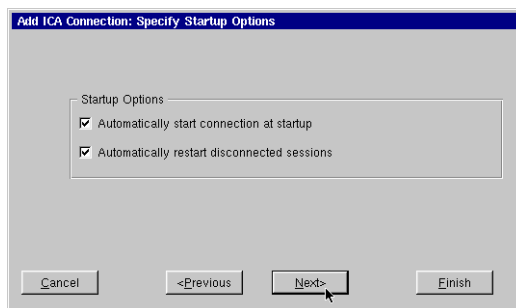
PNAgent connections may be used in conjunction with more direct ICA desktop or published application connections in the ezConnect Connection Manager, or may be set up in a kiosk-type mode so that every thin client user must authenticate with username, password

and domain before accessing their individualized list of published applications and desktops. The description below assumes setting the NeoLinux to use a single PNAgent connection to create a Citrix-access NeoLinux kiosk.

Automatically starting and restarting a PNAgent connection

The first step for making a PNAgent kiosk is to create the ICA PNAgent connection selecting the following Startup Options:

- Select checkbox **Automatically start connection at startup** so that whenever the NeoLinux thin client is powered up, the PNAgent session will automatically launch.
- Select checkbox **Automatically restart disconnected sessions** so that when an individual user logs out of a session, a fresh PNAgent session will automatically launch.



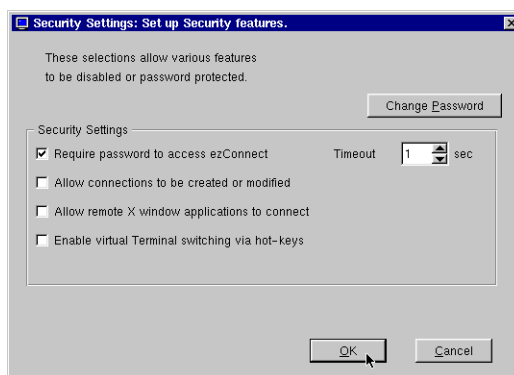
An already-defined PNAgent connection also may be modified to automatically start and restart by editing the connection, and changing the Startup Options on the Startup tab.

Securing the ezConnect Connection Manager

The second step for making a PNAgent kiosk is to lock down the ezConnect Connection Manager user interface. For kiosk-mode operations, individual non-administrator users should not be able access or change the kiosk-mode connection settings.

From the ezConnect screen, open the **Settings** menu, **Appliance Properties | Security Settings** dialog.

If you have not already assigned a configuration security password, do so by



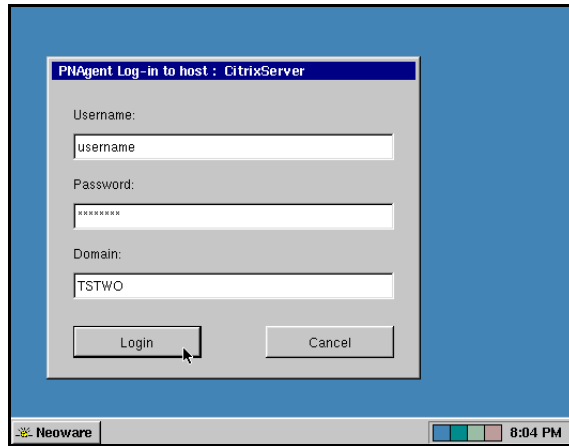
clicking **Change Password**. Click **OK** to apply the password.

Deselect all checkboxes except for **Require password to access ezConnect**. Set the **Timeout** to *1 second*.

Click **OK** to save the settings and restart the thin client.

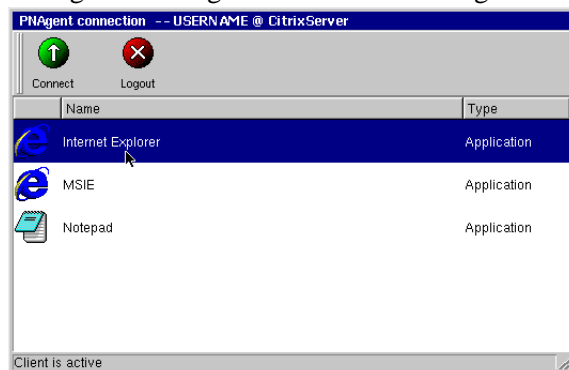
Power the thin client on and off (or select **Session | Restart** from the ezConnect **Connection** menu).

Log on to the Citrix Server



When the thin client restarts, the PNAgent log in dialog appears on the NeoLinux desktop.

Enter the appropriate Username, Password, and Domain in order to authenticate on the Citrix server and view the published applications and desktops available to the specific user through the PNAgent Connection Manager.



This chapter describes how to create and edit the configuration of Neoware RDP 5 connections.

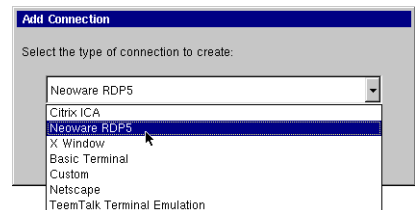
Configuring RDP 5 Connections

Note: This manual is intended to cover a number of Neoware thin client models. Depending upon the software version included with your thin client, it may not have the RDP 5 client installed. For a listing of clients included with each model, see “NeoLinux software builds” on page 11.

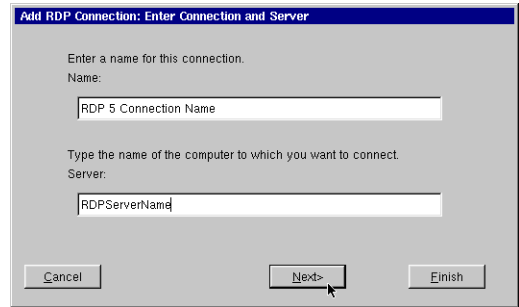
RDP connections utilize the open source RDP client to connect to Windows NT Terminal Server and Windows 2000 Servers using the RDP protocol. After clicking the add button in ezConnect, follow these steps to properly setup a new RDP connection.

Creating an RDP 5 connection

- 1 In the Add Connection dialog, select Neoware RDP 5 connection from the drop-down menu. When finished, click **OK**.

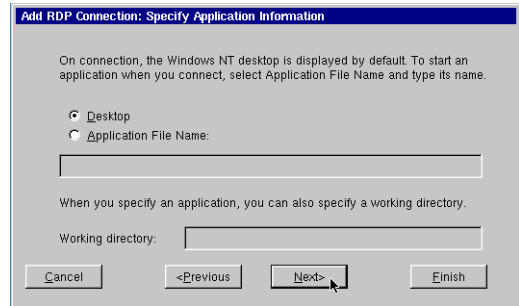


- 2 In the Enter Connection and Server dialog, type a title for your connection in the name field, and then type the name or IP address of the server to which the connection will be made. When finished click **Next** or **Finish**.

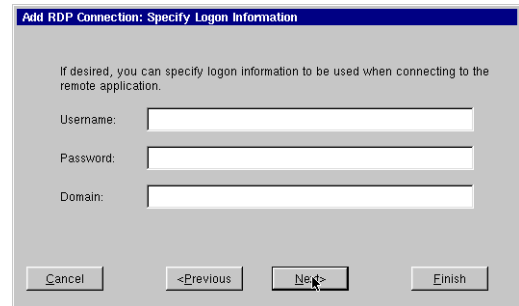


Note: By clicking the **Finish** button at the end of this step, or any subsequent step, a connection will be created using the default settings for the remaining configuration options.

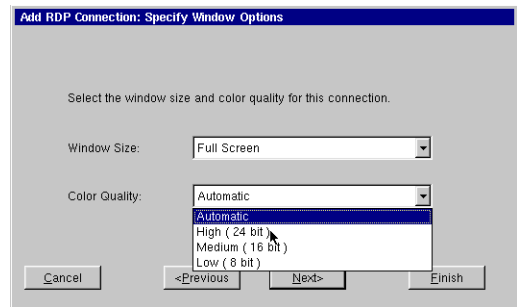
- 3 In the Specify Application Information dialog, choose either to display the desktop or start an application when the connection is established. Be sure to specify both the Application File Name (command line) and a Working Directory for the application to start when the connection is established. When finished, click **Next** or **Finish**.



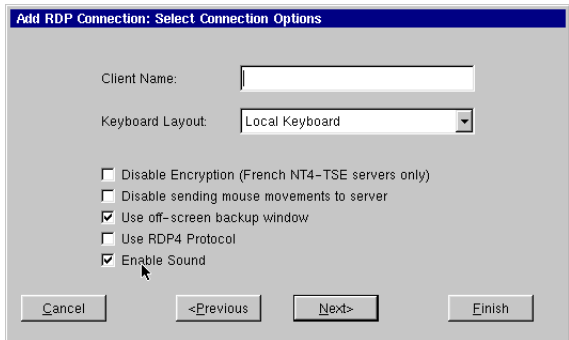
- 4 Optional: Specify logon information. When finished, click **Next** or **Finish**.
Note: If you don't type logon information now, it will be requested when the connection starts.



- 5 In the Specify Window Options dialog, choose the connection window size and color depth. A Windows Size choice of Full Screen causes the connection to be displayed without a border using the current screen size defined for the thin client. When finished, click **Next** or **Finish**.



- 6 In the Select Connection Options dialog, specify the options to be applied to the RDP connection.

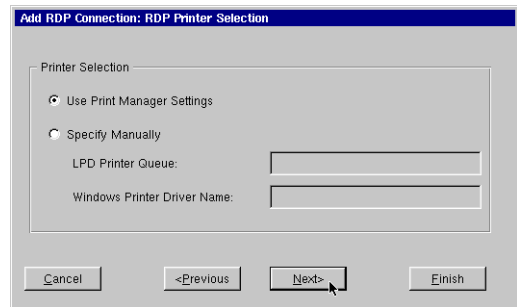


The following options can be applied to RDP connections

- **Client Name** - specifies the RDP client name.
Note: If the Client Name is left blank, the RDP connection will use the Hostname in the Network Settings DNS tab (see Hostname on page 26).
- **Keyboard Layout** - Select the type of keyboard you are using.
Note: If the Keyboard Layout is set to “Local Keyboard,” it will use the Keyboard Locale that is set in the ezConnect Desktop Settings Keyboard tab (see “Desktop settings” on page 52). Keyboard Layout can be used to specify keyboards not listed in the Desktop Settings Keyboard.

- **Disable Encryption** - Selecting this checkbox disables encryption, allowing your thin client to connect to French versions of Windows NT 4 servers running Terminal Server Edition.
- **Disable sending mouse movements to server** - This option reduces the amount of network traffic and should be used for low bandwidth RDP connections.
- **Use off-screen backup window** - This improves the screen refresh. [Enabled by default.]
Note: This option uses system memory and can result in a slight performance decrease or a decrease in the maximum number of simultaneous sessions that can be sustained.
- **Use RDP4 Protocol** - This forces the Neoware RDP client software to use only RDP 4 protocol communications with the server.
- **Enable Sound** - [Enabled by default.] When connecting to a Windows Server 2003 server, or to a Windows XP Professional PC, this setting allows audio events to be transported and heard from the thin client's internal speaker and/or external speakers.

7 Printers that are defined locally in the NeoLinux thin client using the Print Manager utility are automatically made available to Windows 2000 Server, Windows Server 2003, and Windows XP Professional connections.

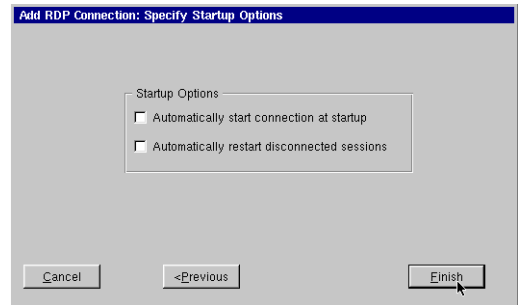


- The default selection of Use Print Manager Settings will automatically make available to the Windows server all printers that have been defined with a Windows printer driver name in the Print Manager Advance Information dialog.

- The alternate selection of Specify Manually allows you to specify a single printer for the connection, not necessarily one defined in the NeoLinux Print Manager.

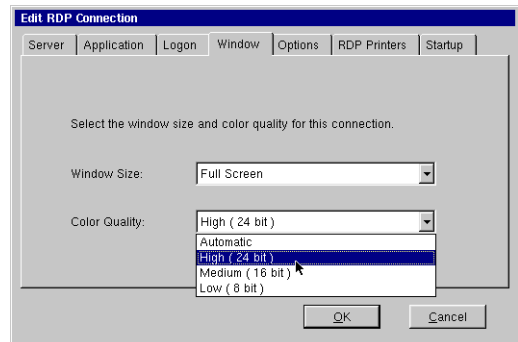
Note: For more information on using the NeoLinux Print Manager utility, see “Using the NeoLinux Print Manager utility” on page 121.

- 8** In the Startup Options dialog, you can select whether this connection should automatically start at startup, and/or automatically restart the connection after it has become disconnected. When finished, click **Finish**.



Editing an RDP connection

When editing an RDP connection, a tabbed dialog is displayed, with each tab corresponding to the series of dialogs contained in the Add RDP Connection wizard. (For specific information concerning the detailed settings contained in these tabs, refer to the Creating a RDP connection instructions above.)



CHAPTER 6

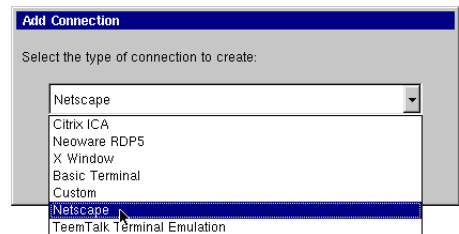
Netscape Connections

If your thin client has the optional Netscape software installed, then this chapter describes how to create and edit Netscape connections.

Configuring Netscape connections

Note: This manual is intended to cover a number of different thin client models. Depending upon the software version included with your thin client, you may not have the Netscape Navigator client available. (For a listing of clients included with each model, see “NeoLinux software builds” on page 11.)

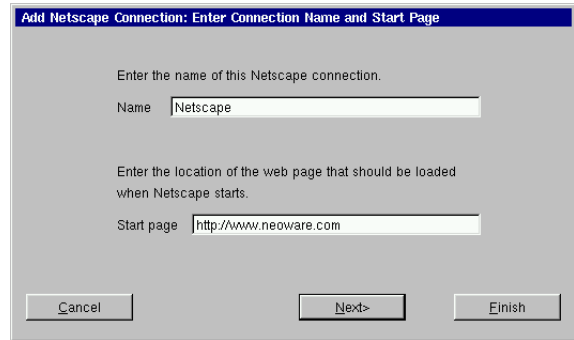
A Netscape connection allows you to establish a connection to the Internet, or a local intranet site using the embedded Netscape browser. After clicking the add button in ezConnect, follow these steps to properly set up a new Netscape connection.



Creating a Netscape connection

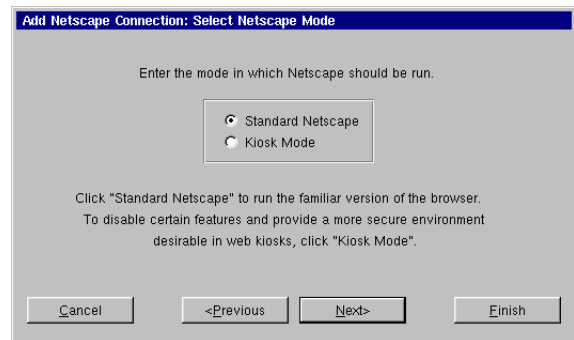
- 1 In the Add Connection dialog, select Netscape from the drop-down menu. When finished, click **OK**.

- 2 In the Enter Connection Name and Start Page dialog, enter a title for your connection in the Name field, and then specify the URL (Uniform Resource Locator) of the Web page you choose to appear when starting the connection. When finished, click **Next** or **Finish**.



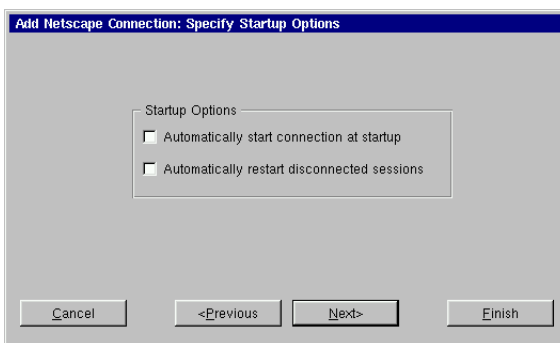
Note: By clicking the Finish button at the end of this step, or any subsequent step, a connection will be created using default settings for the remaining options.

- 3 In the Select Netscape Mode dialog, choose whether Netscape is to run in either the “Standard Netscape” or “Kiosk Mode.” When finished, click **Next** or **Finish**.



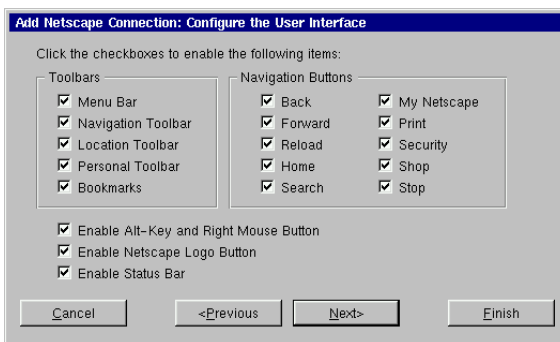
Note: The Netscape kiosk mode runs the browser full screen. This allows the administrator to disable certain features of the browser to provide the users of this connection with a more secure connection. This is accomplished in step 5 of the Add Netscape Connection Wizard.

- 4 In the Startup Options dialog, you can select whether this connection is to automatically start at startup, and/or automatically restart the



connection after it has become disconnected. To create a Netscape Kiosk connection, click **Next**. To create a Standard Netscape connection, click **Finish**.

- 5 If you chose the Kiosk Mode in step 3, the Configure the User Interface dialog will appear. In this dialog, you choose which fea-

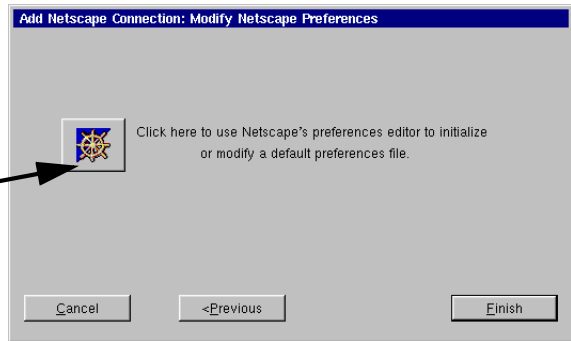


tures are to be enabled or disabled in the Netscape browser user interface for this defined connection only. To enable a feature, it must have a check in its corresponding checkbox. To disable a feature, the corresponding checkbox must be empty. Set the features to either enabled or disabled. When finished, click **Next**.

- 6 You can click on the Netscape icon in the Modify Netscape Preferences dialog to start the Netscape Preferences Editor. This allows you to easily access configuration options that are blocked

when you have disabled the menu bar in step 5.

If you have disabled the menu bar in step 5, clicking here opens the Netscape Preferences Editor which can only be accessed from the menu bar.



FYI

The Netscape Preferences Editor allows changes to be made to the software appearance, font, color, home page, history, programming language support, cookies, cache, and proxy settings.

Once you have finished modifying the Netscape Preferences, click **OK** and then select **Exit** from the File menu in the Netscape browser. Then select **Finish** in the Modify Netscape Preferences dialog to complete the Netscape connection.

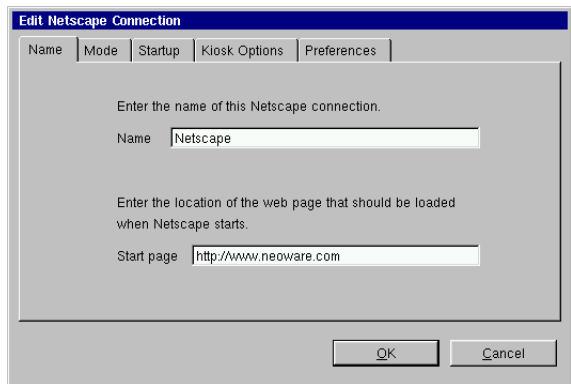
Note: (For more information on editing the Netscape browser preferences, refer to Netscape's documentation.)

The Netscape connection will appear in the ezConnect connection list.

Editing a Netscape connection

When editing a Netscape connection, you are presented with a tabbed dialog with each tab corresponding to the series of dialogs contained in the Add Netscape Connection wizard.

(For specific information concerning the detailed settings contained

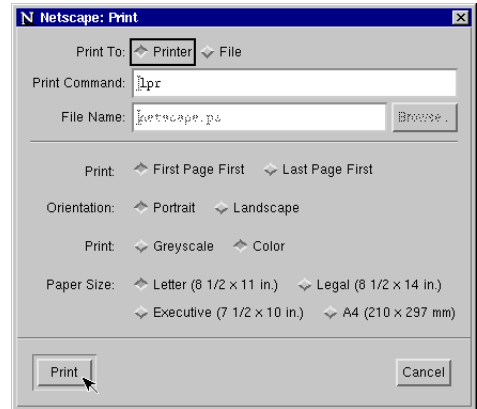


in these tabs, refer to the Creating a Netscape connection instructions above.)

Printing Netscape pages

The local Netscape Navigator browser prints to PostScript printers, only.

- To print Netscape pages, select **File | Print** from the Netscape menus (or simultaneously depress **Alt + P** keys), and then click **Print**.
- The *lpr* print command will send the print job to the NeoLinux Print Manager utility. At least



one printer must be defined using the Print Manager utility in order for the *lpr* print command to work properly. If more than one printer has been defined in Print Manager, then a selection window will appear to allow the user to select among the already-defined printers for the current print job.

For more information on configuring printers in NeoLinux, see “Using the NeoLinux Print Manager utility” on page 121.

CHAPTER 7

Basic Terminal Connections

This chapter describes how to create and edit Basic Terminal connections.

Configuring Basic Terminal Connections

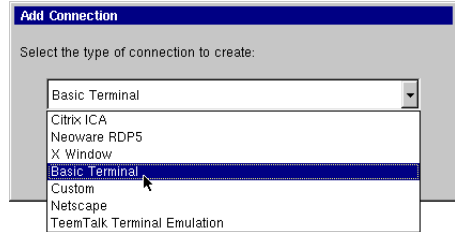
Note: This manual is intended to cover a number of thin client models. Depending upon the software version included with your thin client, you may not have the Basic Terminal Connection client available. (For a listing of clients included with each model, see “NeoLinux software builds” on page 11.)

A Basic Terminal connection allows the user to connect to a UNIX, or Linux server, using a Telnet session. This differs from the more full-featured TeemTalk terminal emulation suite; that allows the user to select from a variety of different terminal emulations, print from terminal sessions, create macros, and run scripts in sessions. It is also different from the IBM 3270/5250 Emulation available for certain NeoLinux models. (For more information on using these more advanced emulations, see “TeemTalk Terminal Emulation Connections” on page 111, or see “IBM 3270/5250 Emulator for NeoLinux” on page 91.)

After you have clicked the **Add** button in ezConnect, follow these steps to properly setup a new Basic Terminal connection.

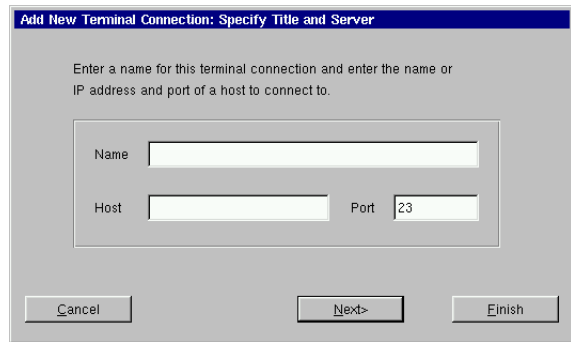
Creating a Basic Terminal connection

1 In the Add Connection dialog, select Basic Terminal from the drop-down menu. When finished, click **OK**.



2 In the Specify Title and Server dialog, enter a title for your connection. Then enter the name or IP address and the port of a host to connect to. When finished, click **Next** or **Finish**.

Note: By clicking the **Finish** button at the end of this step, or any subsequent step, a connection will be created using the default settings for the remaining configuration options.

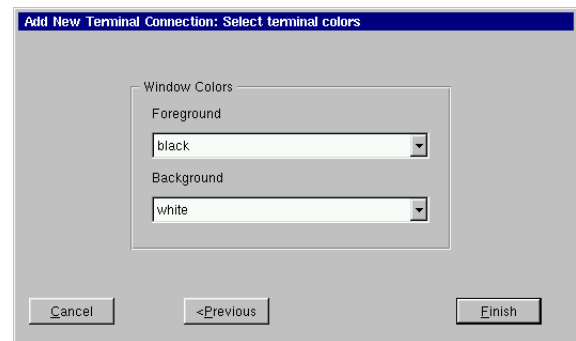
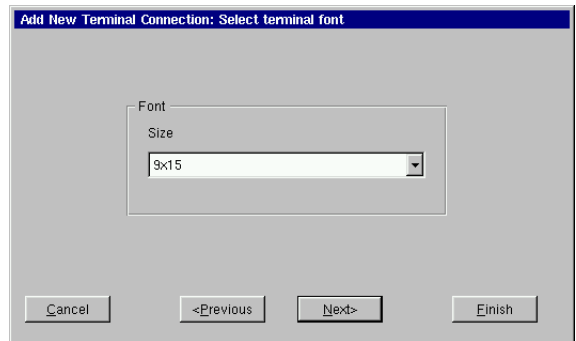
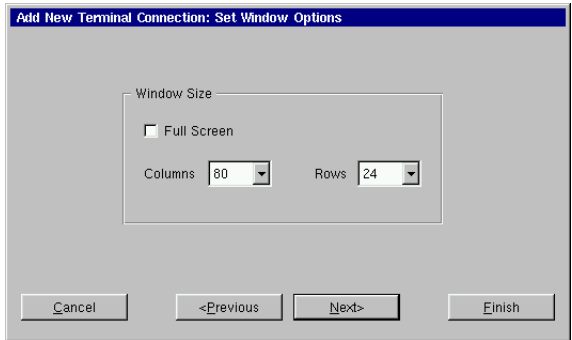


3 In the Startup Options dialog, you can select whether this connection is to automatically start at startup, and/or automatically restart if it becomes disconnected.



When finished, or, to not enable these options, click **Next** or **Finish**.

- 4 If you want, select a window size for your connection, and then click **Next**.
- 5 To specify which font size to use, select the font size to use from the drop-down list. When finished, click **Next**.
- 6 To specify the foreground and background colors for your connection, select them from the drop-down lists. When finished, click **Finish**.

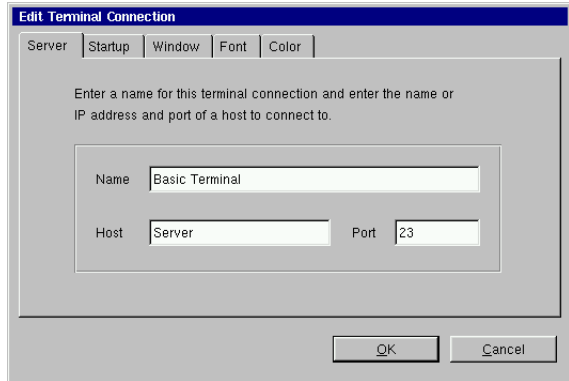


The Basic Terminal connection will appear in the ezConnect connection list.

Editing a Basic Terminal connection

When editing a Basic Terminal connection, you are presented with a tabbed dialog, with each tab corresponding to the series of dialogs contained in the Add Terminal Connection wizard.

(For specific information concerning the detailed settings contained in these tabs, refer to the Creating a Basic Terminal connection instructions above).



CHAPTER 8

X Window Connections

If your thin client contains this software option, then this chapter describes how to create and edit X Window connections.

Configuring X Window connections

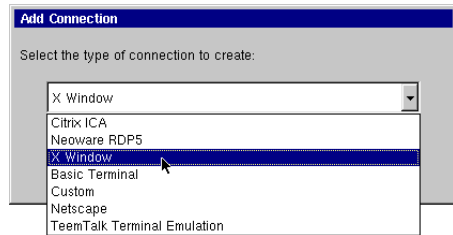
Note: This manual is intended to cover a number of different thin client models. Depending upon the software version included with your thin client, you may not have the X Window Connections client available. (For a listing of clients included with each model, see “NeoLinux software builds” on page 11.)

An X Window connection allows you to connect to XDM servers for remote X desktops. After clicking the add button in ezConnect, follow these steps to properly setup a new X Window connection.

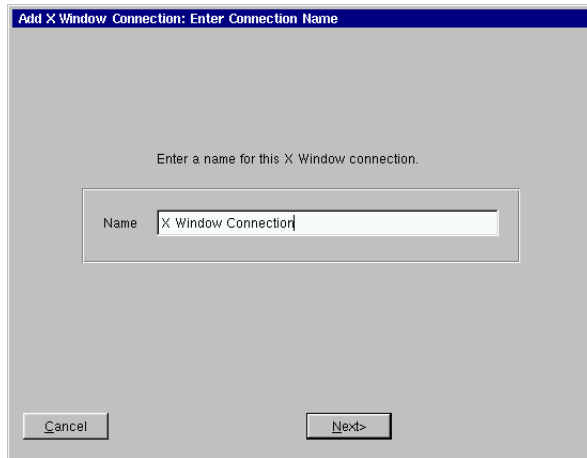
Note: Certain dialogs in the Add X Window Connection wizard contain “Use Main Desktop Settings” checkboxes. By enabling this option, Main Desktop Settings checkboxes will equate to the corresponding Appliance properties Desktop setting (see “Desktop settings” on page 52).

Creating an X Window connection

- 1 In the Add Connection dialog, select X Window from the drop-down menu. When finished, click **OK**.



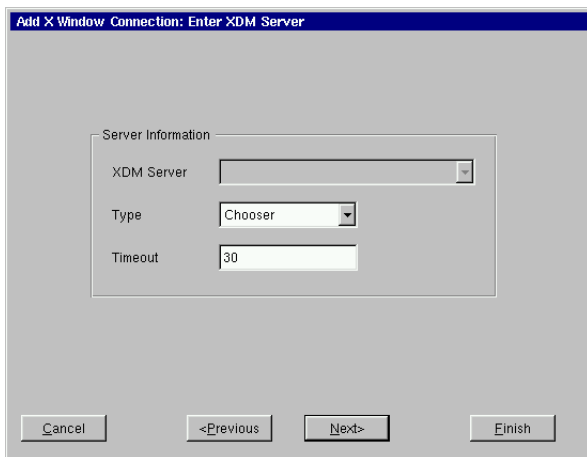
- 2 Enter a name for your X Window connection. When finished, click **Next**.



- 3 In the Enter XDM Server dialog, enter the name of the XDM server to connect to, and then specify the type of X connection you are creating. When finished, click **Next**.

Note: There are four types of XDM sessions: direct, chooser, indirect, and broadcast.

- **Direct** requires specifying the

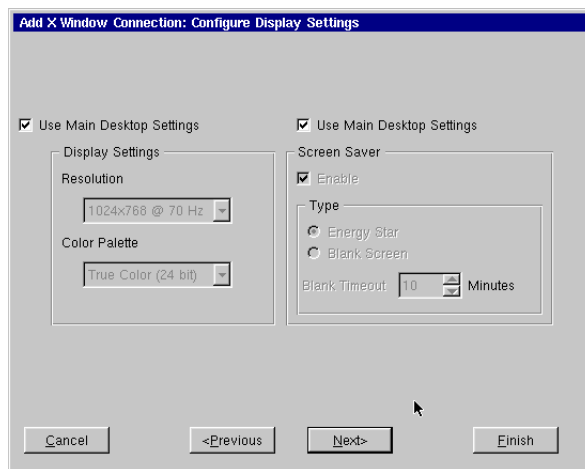


server you will connect to using this connection.

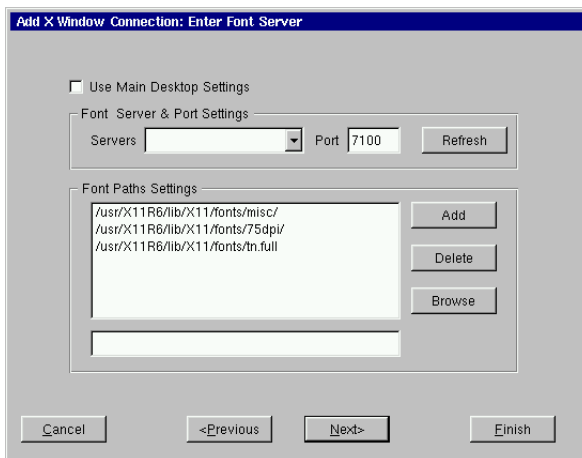
- **Chooser** presents you a list of possible servers at connection time. This list consists of a combination of servers located by a broadcast and servers specified by an administrator in the Server Settings dialog (for more information about preconfiguring XDM server lists, see “X Window tab” on page 50.)
 - **Indirect** works similarly to direct, but allows the specified server to redirect you to another server.
 - **Broadcast** will connect to the first server that responds to a location broadcast.
- 4 In the Configure Display Settings dialog, adjust the display resolution and color palette. Additionally, you can enable a screen saver and determine the type and timeout.

The display settings for X Window connections can be any desired resolution and color depth supported by the thin client, even if they are different from the ones set in ezConnect for the standard thin client desktop. However, setting different resolutions can increase the time required to switch between connections / sessions.

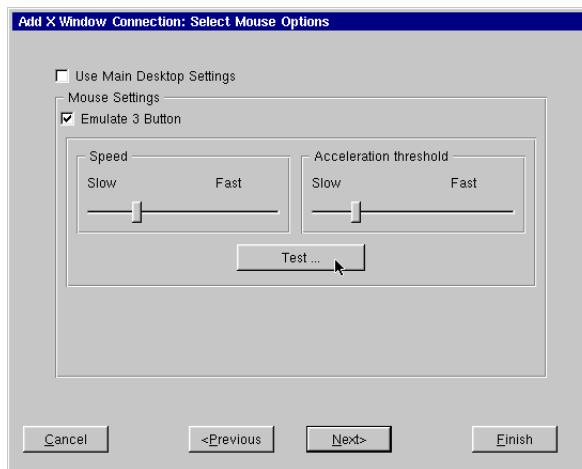
When finished, click **Next**.



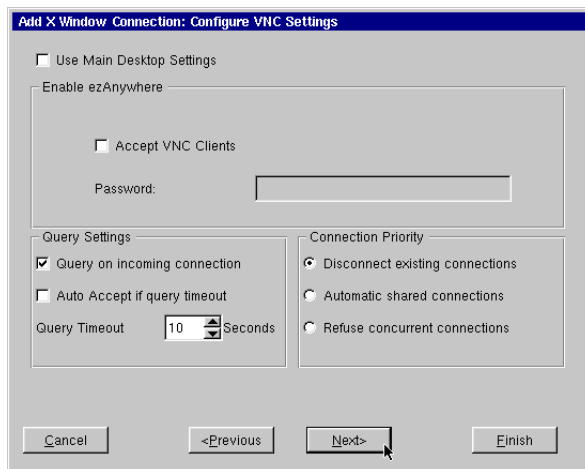
- 5 Enter the font server and the font server port to be used. When finished, click **Next**.



- 6 In the Select Mouse Options dialog specify and test your input device settings. When finished, click **Next**.

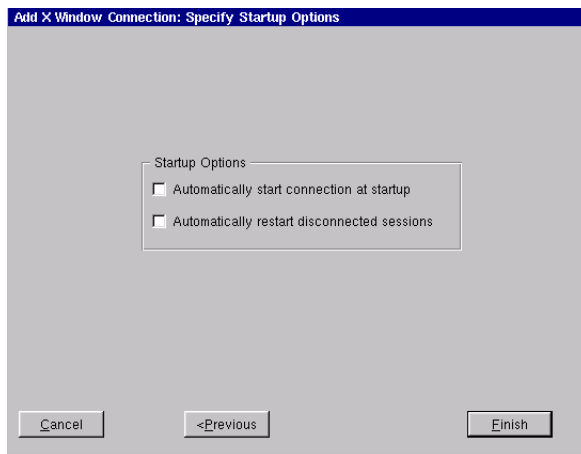


- 7 In the Configure VNC Settings dialog, you can opt to allow or disallow shadowing of the thin client by specifying the Query Settings, and specify one of three different Connection Priority choices.



When finished, or, to not enable these options, click **Next**. (For a complete explanation of this dialog, view the VNC Shadow description on Page 37 of this document.)

- 8 In the Startup Options dialog, you can select whether this connection is to automatically start at startup, and/or automatically restart if it becomes disconnected.

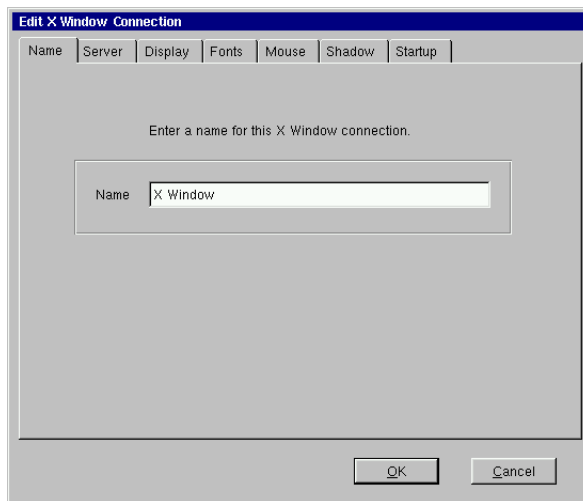


When finished, or, to not enable these options, click **Finish**.

The X Window connection will appear in the ezConnect connection list.

Editing an X Window connection

When editing an X Window connection, you are presented with a tabbed dialog, with each tab corresponding to the series of dialogs contained in the Add X Window connection wizard. For specific information concerning the detailed settings contained in these tabs, refer to the Creating an X Window connection instructions above.



CHAPTER 9

IBM 3270/5250***Emulator for NeoLinux***

Use this chapter to find out how to create and edit IBM 3270/5250 terminal emulator connections if your software installation includes the optional IBM software.

Overview

This manual is intended to cover a number of different thin client models. Depending upon the software version installed on your thin client, you may not have the IBM 3270/5250 Terminal Emulator client available. (For a listing of standard clients included with different model packages, see “NeoLinux software builds” on page 11.) However, your System Administrator may also have added the IBM 3270/5250 terminal emulator software to your thin client using a snap-in.

How to determine if the IBM 3270/5250 terminal emulator client is installed in your software

- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Click the **Add** button or select **Connection | Add**.
- 3 In the Add Connection dialog open the drop-down menu.
- 4 If you see “IBM Emulator Terminal Connection” in the list of available connection types, then the IBM 3270/5250 emulator client is installed.

What are IBM 3270 and 5250 emulations?

Instead of using dedicated text terminals to access applications running on IBM AS/400® computers and IBM S/390® computers, customers can use terminal emulation software to communicate to those host computers. The terminal emulation software communicates to the host computers by mimicking the display of the original text terminals, (on the client device) and mimicking the behavior of the text terminal with respect to data exchanged with the host computer.

IBM® developed this IBM 3270/5250 emulator software package originally for IBM Network Station thin clients, and later ported it for IBM NetVista N2200 and N2800 thin clients. Unique among the various 3270/5250 emulator software packages available today, only this one was developed at IBM by IBM 3270/5250 programmers.

How do I know which emulation I need?

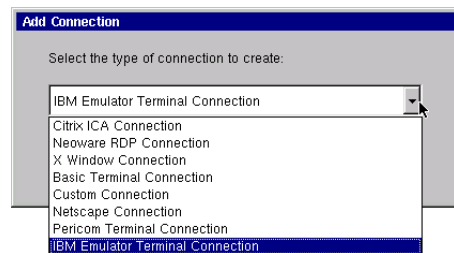
IBM 5250 emulation mode is used to access IBM AS/400® applications.

IBM 3270 emulation mode is used to access IBM S/390® applications.

IBM 3270/5250 Emulator Setup Wizard

Creating an IBM 3270/5250 Emulator connection

- 1 In the Add Connection dialog, select IBM Emulator Terminal Connection from the drop-down menu. When finished, click **OK**.
- 2 In the Specify Name, Server, and Emulation dialog, enter a name for your connection, the name or IP address of a server where you will connect, and the emulation you plan to use. When finished, click **Next** or **Finish**.



Note: By clicking the **Finish** button at the end of this step or any subsequent step, a connection will be created using default settings for the remaining options.

Add IBM Terminal Connection: Specify Name, Server and Emulation

Enter a name for this connection and enter the name or IP address of a server to connect to. Finally, select either the IBM 3270 or IBM 5250 emulation type.

Name:

Server:

Emulation:

Select either IBM 3270 or IBM 5250

- 3** In the Startup Options dialog, you can select whether this connection is to automatically start whenever the thin client starts

Add IBM Terminal Connection: Specify Startup Options

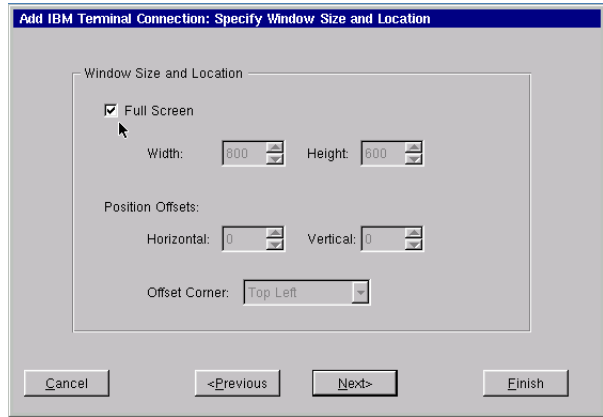
Startup Options

Automatically start connection at startup

Automatically restart disconnected sessions

(or restarts), and/or automatically restart the connection if it becomes disconnected. When finished, or, to not enable these options, click **Next** or **Finish**.

- 4 In the Specify Windows Size and Location dialog, enable **Full Screen** for the emulator session to completely fill the thin client monitor, or deselect the **Full Screen** box to set initial window size and placement.



Full Screen operations

When Full Screen is enabled, the emulator session is displayed on the thin client desktop, identical to the corresponding text terminal. No window borders or controls are visible on screen, although the mouse can be used to interact with menus, pop-up configuration dialogs, and help screens. (For more about full screen operations, see “Full screen operations with IBM 3270/5250 Emulator” on page 96.)

When you have finished defining the window size and location, click **Next** or **Finish**.

- 5 In the Optional Advanced Settings dialog, type any information required for the connection being defined. When finished, click **Finish**.

Session Title. You can enter the name of the session being defined, if you choose it to be different from the name that appears in ezConnect connection manager. For windowed sessions, the session title will appear in the title bar of the session's window. If nothing is entered in this field, the name defined in step 2 above will appear in the title bar of a windowed session.

Emulator User ID. You can enter a user ID that will be passed to the host server when the connection starts.

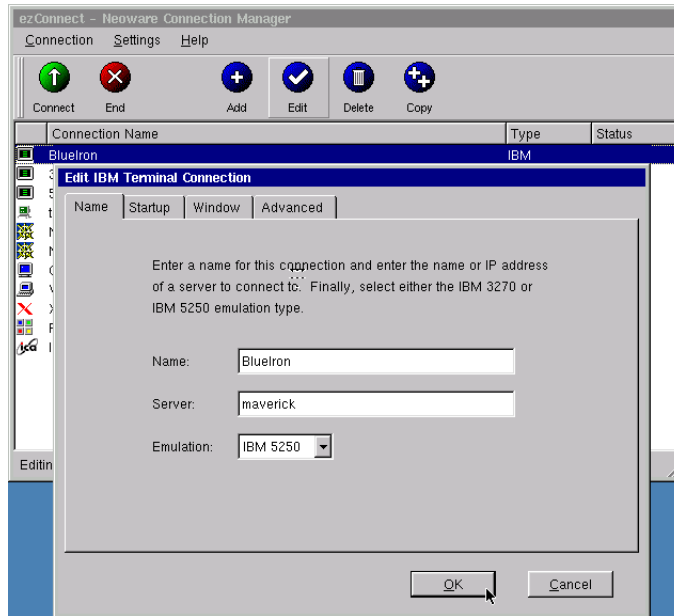
Emulator Password. You can enter a password that matches the user ID entered in the field above. In combination, the user ID and password can allow a thin client to automatically log on to a server using 3270 or 5250 emulation when the connection has been set to automatically start or to automatically reconnect if disconnected. See step 3, above.

Other Parameters. Optional startup parameters entered in this field will be passed to the host server when the connection starts.

The IBM Emulator connection will appear in the ezConnect connection list, with the name entered in step 2, above.

Editing an IBM 3270/5250 Emulator connection

When editing an IBM 3270/5250 Emulator connection, you are presented with a tabbed dialog with each tab corresponding to the series of dialogs contained in the Add IBM Terminal Connection wizard. (For specific information concerning the detailed settings contained in these tabs, refer to the Creating an IBM Terminal Connection wizard instructions above.)



Full screen operations with IBM 3270/5250 Emulator

What is full screen mode?

You can set any IBM 3270/5250 Emulator connection to appear as a full screen desktop. Instead of having the connection session appear inside a window on the NeoLinux desktop, the full screen connection fills the entire screen. For many users who are accustomed to working with standard text terminals, full-screen mode is less con-

fusing; it looks identical to the text terminal screen they have used in the past.



IBM 5250 Emulator in Full Screen Mode

How do you set full screen mode?

You specify whether a specific connection is to appear in full screen mode when you create the connection. (See Step 2 in “Creating an IBM 3270/5250 Emulator connection” on page 92.) You can change a connection from windowed to full screen mode by editing the connection in ezConnect, and clicking on the Window tab.

Moving between simultaneous full screen connections

Moving between multiple, simultaneously active IBM Emulator full screen sessions is accomplished by using the NeoLinux desktop hot-keys:

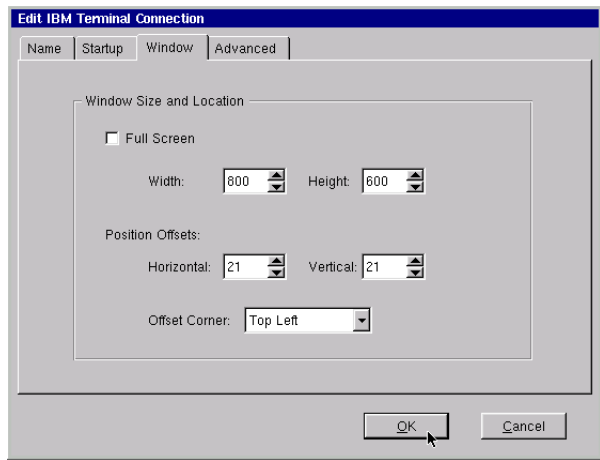
To...	Press...
Display the ezConnect Manager desktop	Ctrl + Alt + End
Display the next/previous active session	Ctrl + Alt + ↑ or ↓

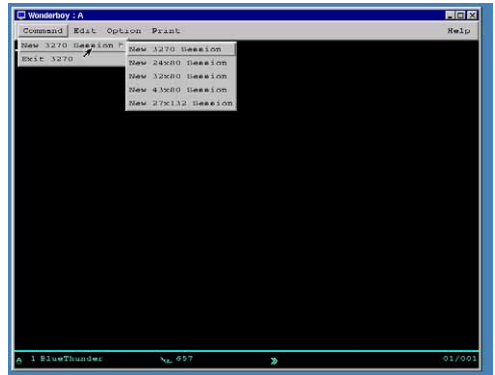
Starting new sessions in full screen mode

To prevent new sessions from being lost behind other full-screen sessions, new sessions cannot be created from within a full-screen connection session. (Note that the **New 5250** Command menu item is not available in the screen shot, above.) To create multiple full screen sessions, use ezConnect connection manager to create multiple sessions, each one with a unique name.

Windowed operations with IBM 3270/5250 Emulator

You can also define IBM 3270/5250 Emulator connections to appear as a windowed application on the NeoLinux desktop. Deselect the Full Screen checkbox in the setup wizard and select your desired window size and offset parameters.





IBM 3270 Emulator in Windowed Mode

Moving between windowed connections

Moving between windowed IBM Emulator sessions (and other NeoLinux active connections) is accomplished by using the NeoLinux desktop hotkeys:

To...

- Display the ezConnect Manager desktop
- Display the next/previous active session
- Change window focus on current desktop

Press...

- Ctrl + Alt + End**
- Ctrl + Alt + ↑ or ↓**
- Ctrl + Alt + Tab**

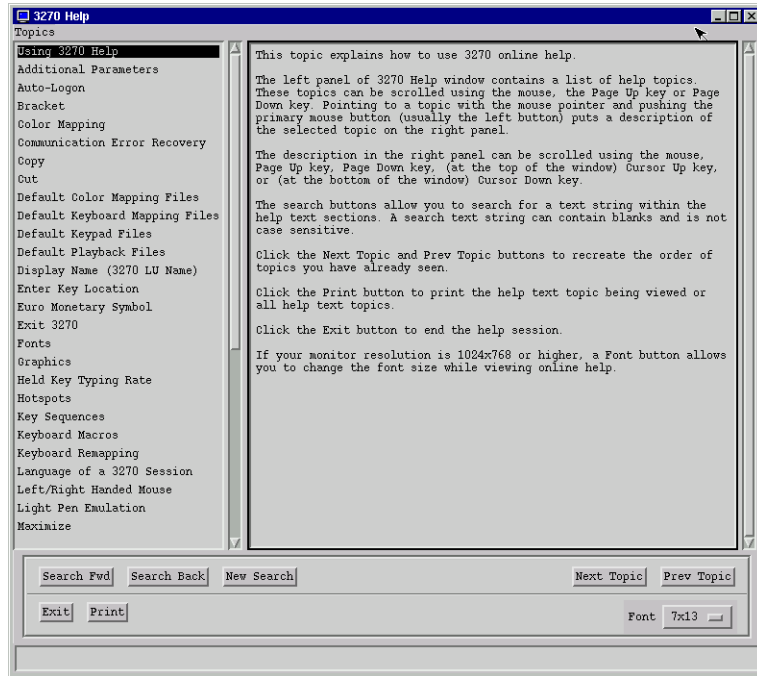
Starting new sessions in windowed mode

You can create new sessions from within an active windowed IBM 3270/5250 Emulator connection by clicking on the Command menu and selecting **New 3270 (or 5250) Session** (as shown in the screen shot, above).

Detailed help on IBM 3270/5250 Emulator software

The IBM 3270/5250 Emulator software contains extensive, context-sensitive help files. To access help for the emulator software, click

the **Help** menu on the menu bar. The Help dialog can also be accessed from within preferences dialogs.



Global IBM Emulator settings

Click **Settings | Connection properties | Global IBM Settings** to access a tabbed dialog used to customize settings that apply to all IBM 3270/5250 Emulator connections defined on your thin client. Different global settings can be applied to 3270 emulations and 5250 emulations separately.

Many of the settings can be used to lock down the emulator to prevent the unauthorized user from accessing sensitive menus and features.

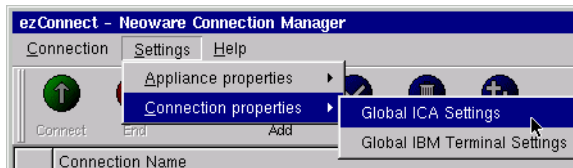
Precedence of settings

Settings made in the Global IBM Terminal Settings dialogs affect all connections made using the IBM 3270/5250 Emulator software. However, connection-specific settings take precedence over conflicting global settings.

For example, if you define an Emulation User ID in the Global IBM Terminal Settings dialog for 3270 emulations, you can override that ID for a specific connection by entering a different ID in the connection setup wizard (see “Creating an IBM 3270/5250 Emulator connection” on page 92).

Accessing Global IBM Emulator settings

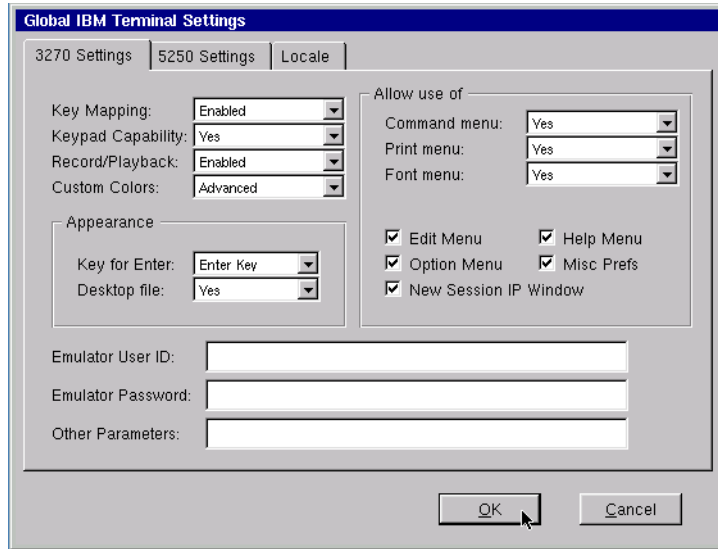
- 1 If ezConnect isn't on screen, simultaneously press **CTRL + ALT + END**.



- 2 Select **Settings | Connection properties | Global IBM Terminal Settings**.

3270 Emulation global settings

Click on the 3270 Settings tab. The available settings include:

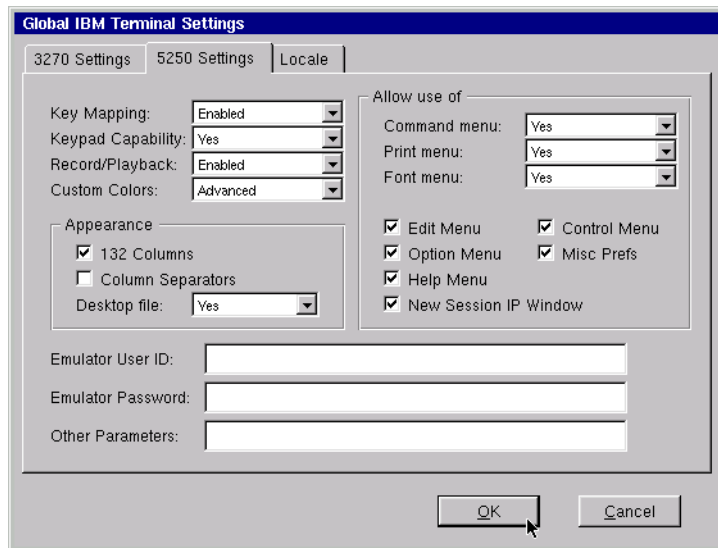


- **Key Mapping** - Enabled (default), Disabled, or Hidden
- **Keypad Capability** - Yes (default), Keypad use only, or Hidden
- **Record/Playback** - Enabled (default), Playback only, or Hidden
- **Custom Colors** - Basic, Advanced (default), Disabled, or Hidden
- **Appearance - Key for Enter** - Enter Key (default), or Control Key
- **Appearance - Desktop file** - Yes (default), Yes - read only, or No
- **Allow use of - Command menu** - Yes (default), No - allow close, or Hidden
- **Allow use of - Print menu** - Yes (default), No menu - keyboard only, or Hidden
- **Allow use of - Font menu** - Yes (default), No, or No - no resize/move
- **Allow use of - Edit Menu** - Checkbox (enabled by default)
- **Allow use of - Option Menu** - Checkbox (enabled by default)

- **Allow use of - New Session IP Window** - Checkbox (enabled by default)
- **Allow use of - Help Menu** - Checkbox (enabled by default)
- **Allow use of - Misc Prefs** - Checkbox (enabled by default)
- **Emulator User ID** - Text field
- **Emulator Password** - Text field (password disguised)
- **Other Parameters** - Text field

5250 Emulation global settings

Click on the 5250 Settings tab. The available settings include:

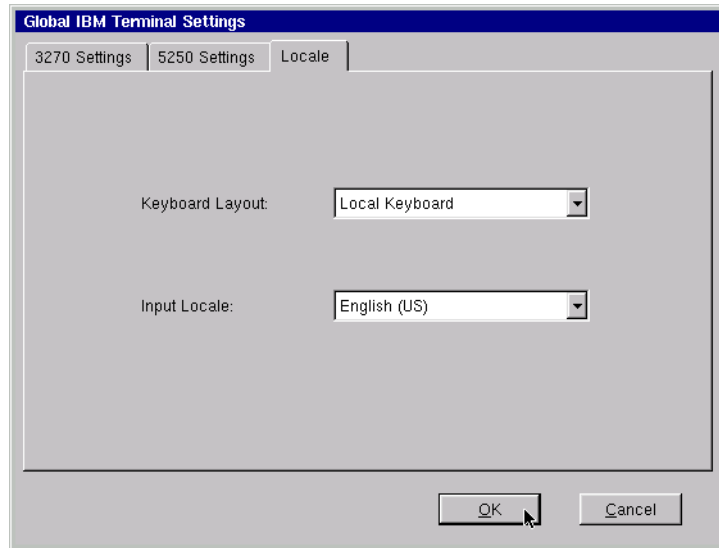


- **Key Mapping** - Enabled (default), Disabled, or Hidden
- **Keypad Capability** - Yes (default), Keypad use only, or Hidden
- **Record/Playback** - Enabled (default), Playback only, or Hidden
- **Custom Colors** - Basic, Advanced (default), Disabled, or Hidden
- **Appearance - 132 Columns** - Checkbox (enabled by default)
- **Appearance - Column Separators** - Checkbox (disabled by default)

- **Appearance - Desktop file** - Yes (default), Yes - read only, or No
- **Allow use of - Command menu** - Yes (default), No - allow close, or Hidden
- **Allow use of - Print menu** - Yes (default), No menu - keyboard only, or Hidden
- **Allow use of - Font menu** - Yes (default), No, or No - no resize/move
- **Allow use of - Edit Menu** - Checkbox (enabled by default)
- **Allow use of - Option Menu** - Checkbox (enabled by default)
- **Allow use of - Help Menu** - Checkbox (enabled by default)
- **Allow use of - New Session IP Window** - Checkbox (enabled by default)
- **Allow use of - Control Menu** - Checkbox (enabled by default)
- **Allow use of - Misc Prefs** - Checkbox (enabled by default)
- **Emulator User ID** - Text field
- **Emulator Password** - Text field (password disguised)
- **Other Parameters** - Text field

Locale tab

The Locale tab allows the user to select the keyboard layout and input locale.



Keyboard Layout

- **Local Keyboard** – Emulator will use the keyboard layout specified in the **Settings | Desktop | Keyboard** menu dialog. (See “Desktop Settings - Keyboard” on page 53.)
- **Other layouts** – Other language keyboard layouts are available in the drop-down menu: Belgian, Brazilian, Canadian, Canadian French, Danish, Finnish, French, German, Italian, Latin American, Norwegian, Portuguese, Spanish, Swedish, Swiss French, Swiss German, United Kingdom, and US English.

Input Locale

This setting controls the language used in the IBM 3270/5250 Emulator user interface (menu bar, dialogs, etc.). It also controls the character set code page used to encode and decode the character traffic to and from the server.

The available options are: English (US - default), English (United Kingdom), Danish, Dutch (Belgium), Dutch (Netherlands), Finnish,

French (Belgium), French (Canada), French (France), French (Switzerland), German (Germany), German (Switzerland), Italian (Italy), Italian (Switzerland), Norwegian, Portuguese (Brazil), Portuguese (Portugal), Spanish (Latin America), Spanish (Spain), and Swedish.

CHAPTER 10

Custom Connections

If your thin client has this software option, then this chapter describes how to create a Custom connection.

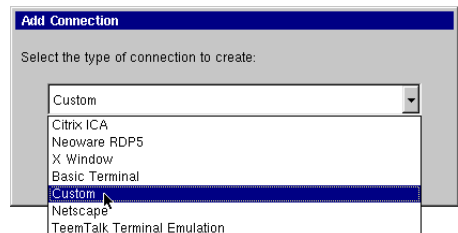
Configuring custom connections

Note: This manual is intended to cover a number of different thin client models. Depending upon the software version included with your thin client, you may not have the option of configuring a custom connection.

A Custom connection allows the user to define an executable command that is run as if from a **command** line to start a connection. After clicking the Add button in ezConnect, follow these steps to properly setup a Custom connection.

Creating a Custom connection

- 1 In the Add Connection dialog, select Custom Connection from the drop-down menu. When finished, click **OK**.



- 2 In the Specify Name and Command, enter the name for your connection, and the executable command to use to start your custom connection. When finished, click **Next** or **Finish**.

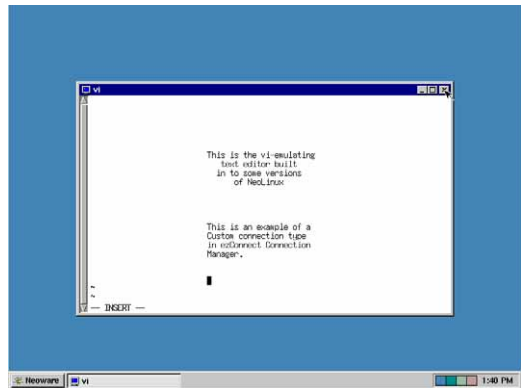
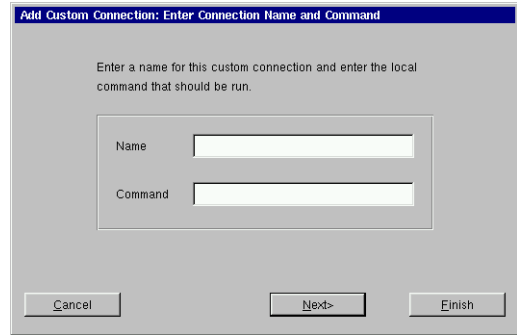
Note: By clicking the **Finish** button at the end of this step, or any subsequent step, a connection will be created using default settings for the remaining options.

Example of a custom connection

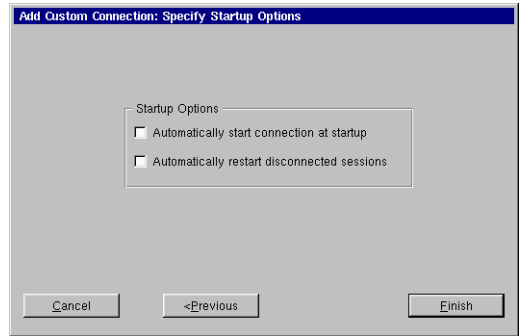
To create a custom connection that spawns a window with a *vi*-like text editor, enter the following in the Command field:

```
rxvt -e vi
```

This will produce a windowed connection that looks like this:



- 3 In the Startup Options dialog, you can select whether this connection is to automatically start at startup, and/or automatically restart if it becomes disconnected. When finished, or, to not enable these options, click Finish.



The Custom connection will appear in the ezConnect connection list.

Editing a Custom connection

When editing a Custom connection, you are presented with a tabbed dialog, with each tab corresponding to the series of dialogs contained in the Add Custom Connection wizard. (For specific information concerning the detailed settings contained in these tabs, refer to the Creating a Custom connection instructions above.)

CHAPTER 11

*TeemTalk Terminal
Emulation Connections*

If your thin client includes the optional TeemTalk software, then this chapter describes how to create and edit TeemTalk Terminal Emulation connections.

Configuring TeemTalk terminal emulation connections

Alphanumeric Emulations

- ADDS A2
- AIXTerm
- ANSI BBS
- AT 386
- AT&T 4410
- Bull BQ 3107/7107
- Data General DG410
- DEC VT52, VT100, VT101, VT102, VT125, VT131, VT132, VT220, VT240, VT320, VT340, VT400-7, VT400-8, VT420
- DOC 18
- Hazeltine HZ 1500
- Hewlett Packard 2392A, 2622A, 700/92
- IBM 3151, 3270 2, 3, 4, 5 NVT Mode, 3270E, and 5250

- ICL 7561
- McDonnell Douglas Prism -8, -9, -12
- Microcolor 2200
- Prime PT250
- SCO Console
- Siemens 97801
- Stratus V102
- Tandem 6526, 6530
- Televideo 910+, 920, 925, 950, 955
- Viewdata 40, 80, Split
- WYSE 50, 50+, 60

Graphic Emulations

- DEC VT340 (ReGIS)
- IBM 3270
- Retrographics VT640
- Tektronix 4010, 4014
- Westward 2119

Note: This manual is intended to cover a number of different thin client models. Depending upon the software version included with

your thin client, you may not have the TeemTalk Terminal Emulation client available. (For a listing of clients included with each model, see “NeoLinux software builds” on page 11.)

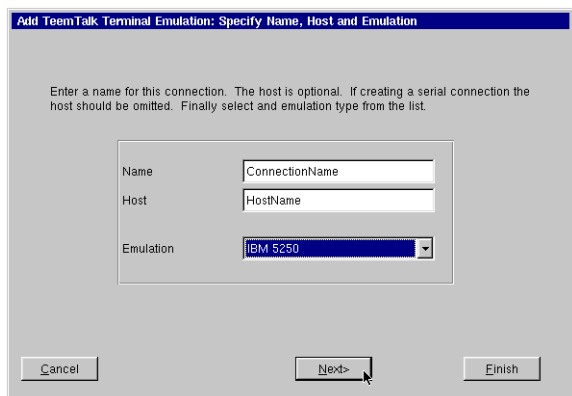
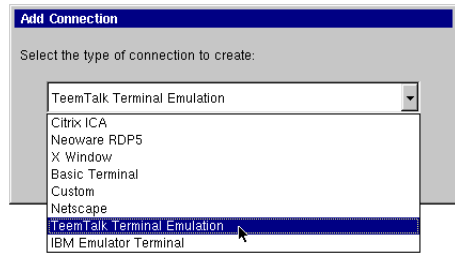
TeemTalk allows you to access mainframes or minicomputers. The TeemTalk Terminal Emulation connection differs from the Basic terminal connection by offering advanced functionality, such as printing, macros, and scripting. TeemTalk includes more than 30 alphanumeric and graphic terminal emulations.

After you have clicked the **Add** button in ezConnect, follow these steps to properly setup a TeemTalk Terminal Emulation connection.

Creating a TeemTalk Terminal Emulation connection

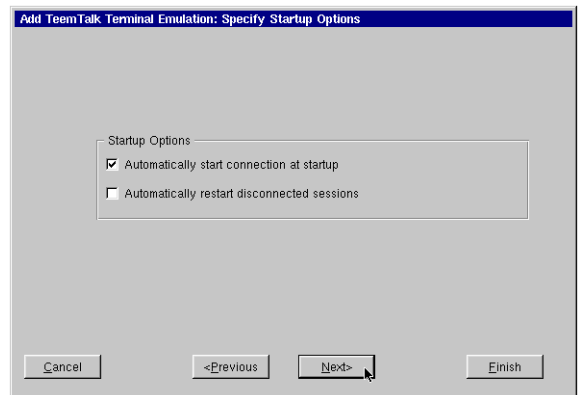
- 1 In the Add Connection dialog, select TeemTalk Terminal Emulation from the drop-down menu. When finished, click **OK**.
- 2 In the Specify Name, Host, and Emulation dialog, enter a name for your connection, a name or IP address of a host to connect to (optional), and the emulation you would like to use. When finished, click **Next** or **Finish**.

Note: By clicking the Finish button at the end of this step, or any subsequent step, a connection will be cre-



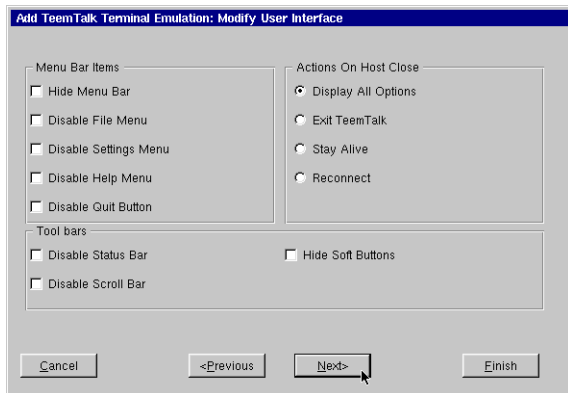
ated using default settings for the remaining options.

- 3 In the Start-up Options dialog, you can select whether this connection is to automatically start at system boot, and/or automatically restart the connection after it has become disconnected. When finished, click **Next** or **Finish**.



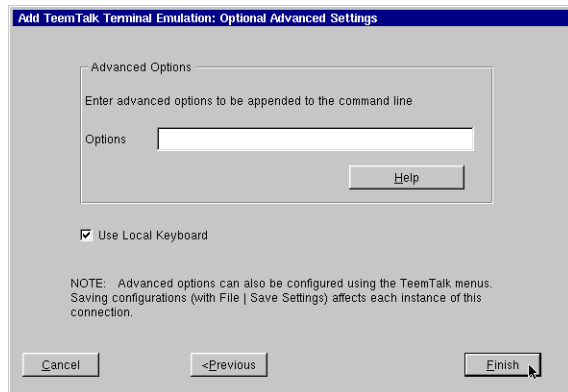
- 4 At the Modify User Interface dialog, choose the settings to be applied to the TeemTalk user interface. Check the box of the corresponding option to set the feature.
 - **Menu Bar Items** - Allows you to customize the menu bar displayed at the top of the TeemTalk Terminal window. You can hide the entire Menu Bar, or disable one or more of the individual menus (File, Settings, and Help) or the Quit button on the Menu Bar.
 - **Actions On Host Close** - Lets you customize what occurs when a terminal emulation session is closed. You can Exit TeemTalk, Stay Alive (keep TeemTalk running without a session), Reconnect, or have a choice dialog that allows the user to choose what will occur.

- **Toolbars** - Permits you to hide the tool-bars in the TeemTalk Terminal window. You can disable the Status Bar, Scroll Bar, and the Soft Buttons.



When finished customizing the user interface, if necessary, click **Next** or **Finish**.

- 5 In the Optional Advanced Settings dialog, type any command line options you choose to append to the TeemTalk executable command. When finished, click **Finish**.



(For a list of the advanced command-line options that might be entered in the Options field, click on the **Help** button.)

Note: The Use Local Keyboard option (selected by default) causes your keyboard to be automatically configured using the Keyboard Locale setting in the General Settings dialog (see

Desktop Settings dialog on page 53). Unchecking this option will require users to configure their keyboard for the TeemTalk connection manually.

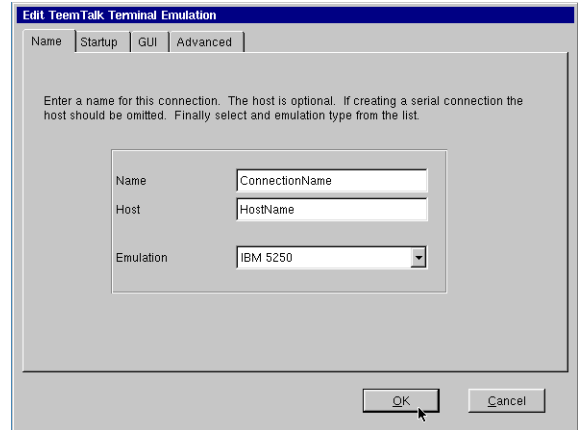
The TeemTalk Terminal Emulation connection will appear in the ezConnect connection list.

Editing a TeemTalk Terminal Emulation connection

When editing a TeemTalk Terminal Emulation connection, you are presented with a tabbed dialog, with each tab corresponding to the series of dialogs contained in the Add Terminal Connection wizard.

(For specific

information concerning the detailed settings contained in these tabs, refer to the Creating a TeemTalk Terminal connection instructions above).



Printing text screens

You can print TeemTalk text screens to a printer directly attached to your thin client. (Your System Administrator can configure your thin client to print to a network printer.) The local printer must be powered on and not currently printing other files.

Setting up a text printer

Before printing to a locally attached printer, configure TeemTalk to use a locally-defined printer.

- While running TeemTalk, select **File | Printer Setup**.

- Select the appropriate printer from the available printers selection.

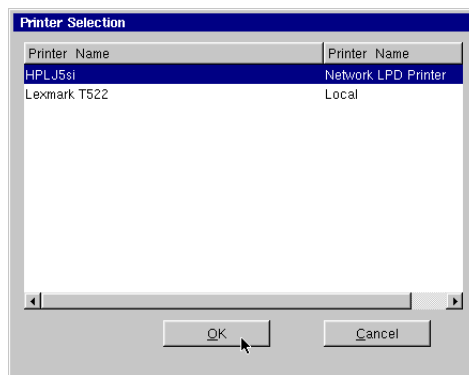
Note: The printer names that appear in the Text Printer Settings dialog are created using the NeoLinux Printer Setup utility.



- If the status bar is turned on (**Settings | VT/ANSI/SCO** dialog, Status Line = Indicator), Printer Ready appears when the settings have been made.
- Select **File | Save Settings** in order to save the printer configuration for use in future sessions.

Printer: Ready

- When printing a screen after setting up the TeemTalk Printer configuration with multiple printers, NeoLinux will pop up a printer selection confirmation screen. Click **OK** to continue printing. If a single printer is defined, the print job will be sent to the defined printer without opening the Printer Selection pop-up.



For more information about setting up local printers in NeoLinux, see “Using the NeoLinux Print Manager utility” on page 121.

CHAPTER 12 *Using the NeoLinux Desktop*

Desktop

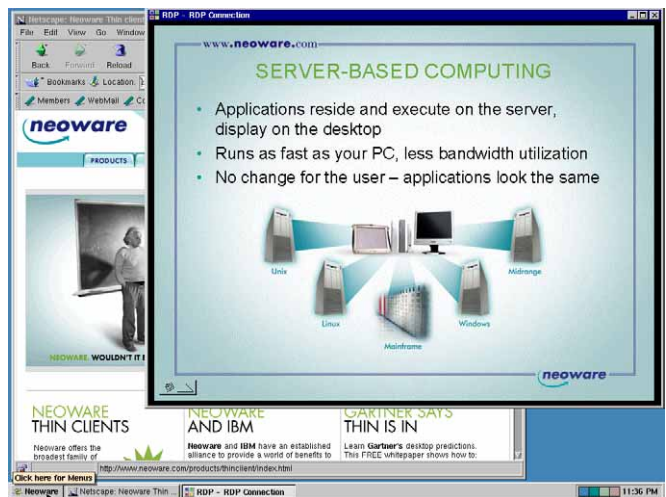
This chapter explains how to use the NeoLinux desktop to manage your program windows.

Getting Started

Overview

Many other competing thin clients only use full screen connections, requiring you to know keyboard short-cuts to switch between multiple connections. NeoLinux thin clients, in addition to offering full screen connections, also allow you to create windowed connections, so you can toggle between screens at the click of a mouse.

After you start a windowed connection, that connection will appear on the NeoLinux

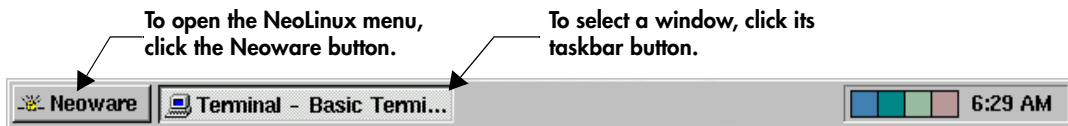


desktop. The NeoLinux desktop is a graphical user interface that lets you manage multiple windows.

Using the Taskbar

The NeoLinux taskbar is a movable control bar. Every open Windows connection and NeoLinux window has a taskbar button.

- **To open the Neoware menu**, click the Neoware button on the taskbar. Then click a menu item to select it.



Note

Your system administrator can hide the NeoLinux taskbar so that it appears as a thin line. When you point to this line, the taskbar appears. When you point away from taskbar, the taskbar hides again.

- **To select a window or connection**, (even when it isn't on the current NeoLinux desktop) left-click its taskbar button. To learn how to use NeoLinux windows, see page 119.
- **To move the taskbar**, middle-click and drag the edge of the taskbar beyond the middle of the desktop. Then release the mouse button, and the taskbar moves to the top or bottom.
- **To resize the taskbar**, left-click and drag an edge of the taskbar. As you open more windows, you may want to enlarge the taskbar to make its buttons more readable.
- **To display the window properties**, right-click its taskbar button. To close a Properties box, click it.

Using the Desktop Divider



The Desktop Divider, residing on the right hand side of the taskbar, is a miniature representation of four desktops, in which you can open and move NeoLinux windows. In effect, the Desktop Divider quadruples the work space available on the NeoLinux desktop.

- **To display a NeoLinux desktop**, left-click one of the colored squares in the Desktop Divider to access the desktop it represents.

- **To move windows between NeoLinux desktops**, Left-click on the computer icon in the upper left-hand corner of the window you would like to move. Highlight the Move to desk option in the drop-down menu, and then from the drill down menu select a Desk to place the window.

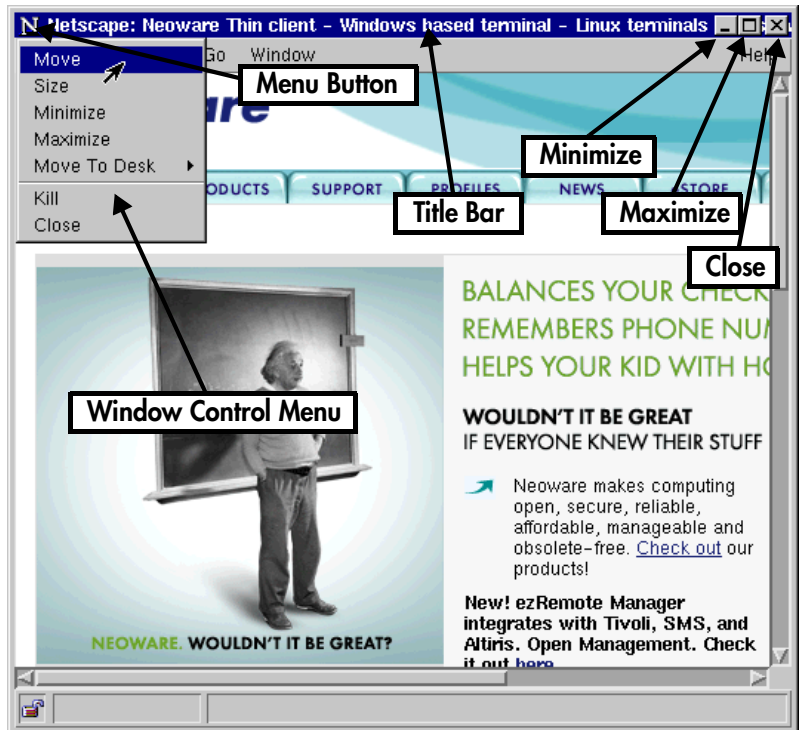
Using NeoLinux Windows

Using the window controls

FYI

The title bar displays the name of the program in the window. When it's highlighted, the window is active, meaning the keyboard and mouse interact with that program.

Each program on the NeoLinux desktop operates in a separate window that you can maximize, minimize, and move.



- **To display the Window Control menu**, click the Menu button. Then click a menu command. For example, click Move, drag the window, and then click the pointer at the desired position.

- **To reduce a window to a taskbar button**, click its Minimize button (-), or select minimize from the drop-down menu. To reopen the window, click its taskbar button.
- **To fill the desktop with a window**, click its Maximize button (□), or select maximize from the drop-down menu.
- **To close a window and its program(s)**, left-click its Close button (X), or select close from the drop-down menu.
- **To move a window**, left-click and drag its title bar. Or click and drag a window edge or corner with the middle or right mouse buttons.
- **To resize a window**, left-click and drag an edge or corner.

CHAPTER 13 *Using the NeoLinux Print Manager utility*

This chapter explains how to use the NeoLinux Print Manager utility to create printers and manage local print jobs.

Getting Started

Overview

The NeoLinux Print Manager utility allows the administrator to define printers in the local thin client device. Once defined, local printers can be used by software running in the thin client (such as TeamTalk and Netscape Navigator), can be used by network resources (servers or other devices printing using *lpd* for remote printing), and can be used by Windows servers through ICA and RDP connections.

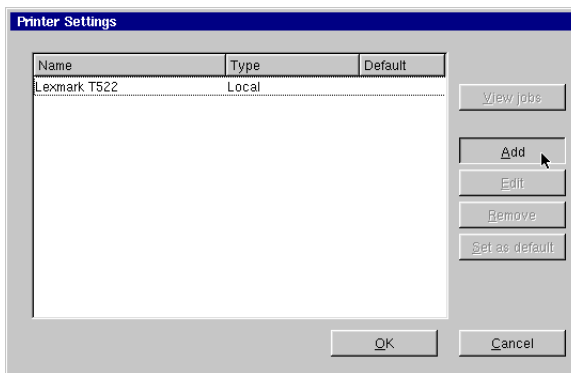
Since the Print Manager utility saves the configuration settings in the NeoLinux registry, printers can be defined on one thin client and those settings can be copied and cloned to other thin clients running NeoLinux (Rel. 3.0 or later). Using ezRemote Manager or ezUpdate, configurations are easily duplicated from one device to hundreds or thousands of others.

When used in a secured, production environment, unauthorized end users cannot change printer configurations, but can access the Print Queue Manager in order to trouble-shoot any printing problems.

Accessing NeoLinux Print Manager utility

- 1 If the ezConnect Connection Manager isn't on screen, simultaneously press **CTRL + ALT + END**.
- 2 Select **Settings | Appliance properties | Printers**.

The Printer Settings dialog will open.



Locally defined printers (and in some cases, locally defined printer ports) appear listed in the Printer Settings dialog. The information that is displayed for each printer:

- **Printer Name** – The name of the printer as defined when created in the Print Manager utility.
- **Type** – The type of printer, whether it is defined as *Local* (a printer attached to the thin client) or *Network LPD Printer* (a printer available through LPD via an IP address).
- **Default** – If a printer has been defined as the default printer, *Yes* will appear in this column.

For more information about using Print Manager printers from within NeoLinux local client applications, see:

- For RDP 5 connections, see page 72.
- For Netscape Navigator connections, see “Printing Netscape pages” on page 79.
- For TeemTalk host access terminal emulation connections, see “Printing text screens” on page 115.

Adding printers using Print Manager

Open Print Manager utility

See “Accessing NeoLinux Print Manager utility” on page 121 for directions on opening Print Manager.

Adding a local printer

FYI

The Print Manager utility generates NeoLinux's *printcap* file dynamically. Use the Advanced Information dialog to enter custom entries you would normally make in the *printcap* file.

A *local printer* is one attached to one of the ports on the thin client device.

NeoLinux supports printers connected to the parallel port, to the serial ports, to the USB ports, and also

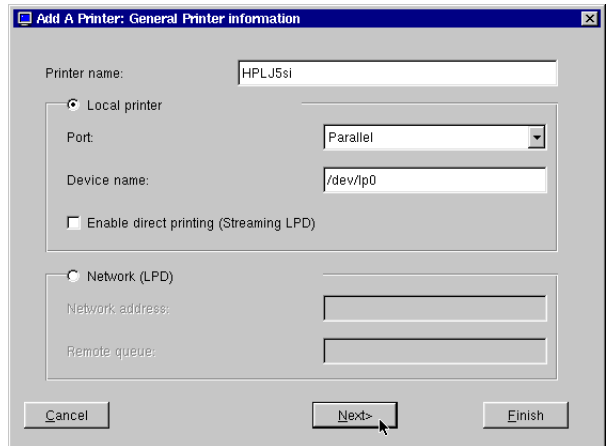
allows you to define a port by selecting *Other*.

Note: Do not make edits to a local *printcap* file in this version of NeoLinux. The *printcap* file is generated dynamically from registry entries when the Print Manager starts at device startup, and after changes in the Print Manager utility. Special entries can be made using the *Additional printcap entries* section on the Advanced Information dialog.

To add a new printer, click **Add**.

General Printer Information

In the Add A Printer: General Printer Information dialog, set the following configuration settings:



- **Printer name** [required] – This is the name of the printer that will be displayed in the Select Printer dialog. Each printer that you define must have a unique name. Spaces may be used in printer names, but the following characters may not be used:

`/ \ : $ & ? " < > | # [] ' ,`

This entry creates the following lines for this printer in the dynamically-generated *printcap* file:

```
<Printer name>:\
        :sd=/var/spool/lpd/<Printer name>:\
```

If this printer is set as the default printer, then the first line of the entry will be:

```
lp|<Printer name>:\
```

- **Local printer** [required] – This button must be selected to add a local printer to the thin client.
- **Port** [required] – Select the port to which the printer is attached. Choices are: *Parallel*, *Serial 1*, *Serial 2*, *USB*, and *Other*.
- **Device Name** [required] – The device name is automatically populated based on the choice made in the Port field, except for *Other*.

Parallel – /dev/lp0

Serial 1 – /dev/ttyS0

Serial 2 – /dev/ttyS1

USB – /dev/usb

Other – [empty]

The administrator may change the default device names if desired, as long as they are valid device names to NeoLinux. When *Other* is chosen in the Port field, then the administrator must enter a device name in this field.

This entry creates the following line for this printer in the dynamically-generated *printcap* file:

```
:lp=/dev/<Device Name>:\
```

- **Enable direct printing (Streaming LPD)** [optional] – When selected, this checkbox sets the Print Manager utility to send an incoming print job (coming from a remote LPD service) directly to the defined printer port instead of saving it as a file in the print spool directory. This setting is most often used when large print files are typically associated with a specific printer and those files typically exceed the available space on the thin client's Flash disk for writing spool files.

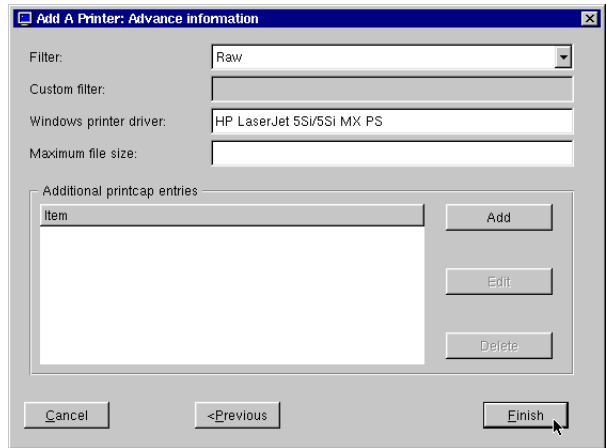
When selected, this entry creates the following line for this printer in the dynamically-generated *printcap* file:

```
:dp:\
```

Click **Next**.

Advanced Information

The Advanced Information dialog provides settings that are important if you intend to use the locally-defined printer with ICA or RDP connections, or if you need to customize the *printcap* file entries for the printer.



Note: Do not make edits to a local *printcap* file in this version of NeoLinux. The *printcap* file is generated dynamically from registry entries when the Print Manager starts at device startup, and after changes in the Print Manager utility. Special entries can be made using the *Additional printcap entries* section on the Advanced Information dialog.

- **Filter** [default: *Raw*]– For most printers, the default *Raw* setting will be satisfactory.

Raw – The printer spool file/stream is fed to the printer port without filtering or other modification. Printers other than text-only or PostScript printers will require a printer driver to be executed on the print-job-generating computer in order create the raw print data that is fed to the printer.

Text – The setting to choose for text-only printers, the *Text* filter (`/usr/sbin/crlf-filter`) inserts a CR characters before a trailing LF characters before sending the data to the printer port.

When selected, this entry creates the following line for this printer in the dynamically-generated *printcap* file:

```
:if=/usr/sbin/crlf-filter:\
```

Custom – Allows free-form definition of a print filter that should be used for this printer. For an example, see *Custom filter*, immediately following this.

- **Custom filter** – This entry is used only when *Custom* is selected in the *Filter* field. The filter may be a script, in which case the path to the script should be entered in the *Custom filter* field. If you have installed the *ghostscript* snap-in, and are setting up a non-PostScript printer (Epson C40US), then you might enter the following in the *Custom Filter* field:

```
/usr/local/bin/gs -q -dSAFER -dNOPAUSE  
-sDEVICE\=stp -sModel\escp2-c40us  
-dDensity\=0.8 -r1440x720 -dImageType\2  
-sOutputFile\=- -
```

In this case, the print file would be sent to *ghostscript* for processing, along with the command-line settings detailed in the text string.

When not blank, this entry creates the following line for this printer in the dynamically-generated *printcap* file:

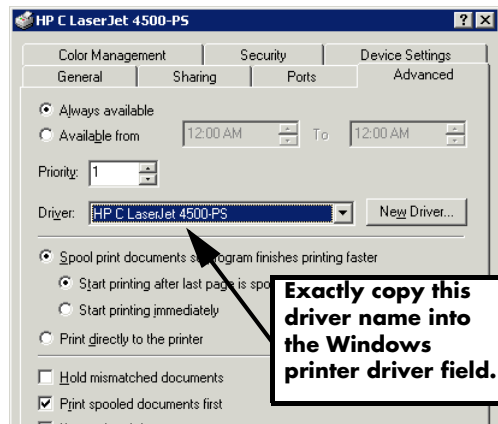
```
:if=/tmp/config/<Printer name>:\
```

And a corresponding script file (`/tmp/config/<Printer name>`) is generated that contains the contents of the Custom filter field. For example, the example above for the Epson C40US generates a file:

```
#!/bin/sh
/usr/local/bin/gs -q -dSAFER -dNOPAUSE -sDEVICE=\stp
-sModel\escp2-c40us -dDensity=0.8 -r1440x720 -dimageType\2
-sOutputFile=- -
```

- **Windows printer driver** [default: `<blank>`] – This entry must be completed when a locally-defined printer is intended for use by Windows server applications through either ICA or RDP connections. The value entered here is passed by the thin client software back to the Windows application server in order to identify which Windows printer driver should be used to prepare the print job. Depending upon how the server software is configured, a printer properly configured using the Windows printer driver can be made automatically available to end-users when connecting from the thin client.

The text value entered in the Windows printer driver field must match exactly (including spaces and capitalization of characters) the name of the printer driver on the Windows application server. In Windows 2000 Server, this name appears as Driver on the printer properties Advanced tab.



When not blank, this entry creates the following line for this printer in the dynamically-generated printcap file:

```
:wd=<Windows printer driver>:
```

- **Maximum file size** [default: <blank>] – This entry allows the administrator to specify a size limit for the print file when spooled. The default blank value, or zero (“0”), results in an unlimited pool file size.

When blank, this entry creates the following line for this printer in the dynamically-generated printcap file:

```
:mx#0:\
```

- **Additional printcap entries** [default: empty] – This field allows administrators to add other entries into the dynamically-generated printcap file.



Instead of directly editing a printcap file, click **Add** to open the Add Printcap Items dialog. Be sure to include the colon (“:”) at each end of an expression. However, the escaped newline (“\”) is *not* required at the end of the entry.

Click **OK** to enter the printcap item.

When not blank, this entry creates a line for this printer in the dynamically-generated printcap file exactly as entered. For example, an entry of “:sf:” produces:

```
:sf:
```

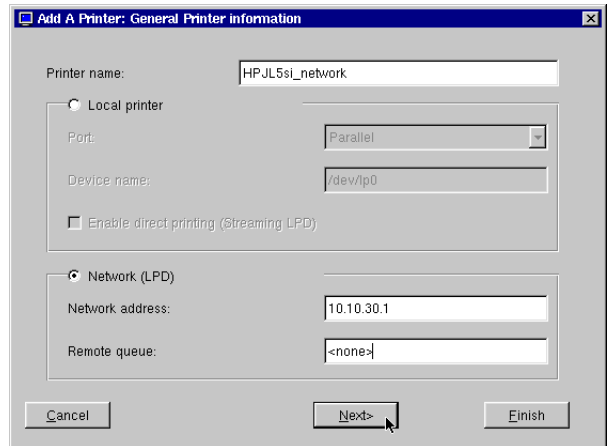
Click **Finish** to return to the Print Manager utility dialog.

Saving changes

Click on **OK** to save the newly created printer(s). The Print Manager must restart print services in order to make the changes.

Adding a network printer

You can also define a printer in Print Manager that is connected to your network and addressable by IP address, and which is accessible through an LPD service.



Many network printers include an LPD capability built-in to the device. The example shown above is for that type of network printer.

- **Network address** – Enter the IP address of the network printer or LPD server.

This entry creates the following line for this printer in the dynamically-generated printcap file (using the IP address of 10.10.30.1):

```
:rm=10.10.30.1:\
```

- **Remote queue** – For an LPD server, enter the queue name. For a network printer that is not using a queue, enter “<none>.”

This entry creates the following line for this printer in the dynamically-generated printcap file (using the queue name “<none>”):

```
:rp=<none>:\
```

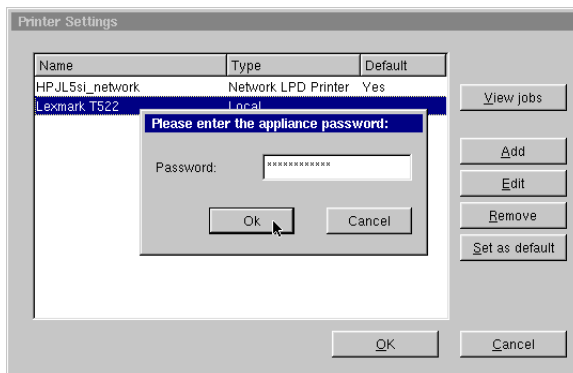
Click **Next** for the Advanced Information dialog.

For details on the settings on the Advanced Information dialog, see “Advanced Information” on page 125.

Security in Print Manager

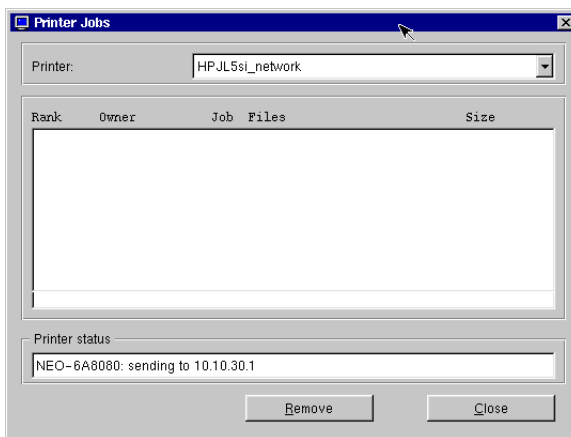
After the configuration password is set on a NeoLinux thin client, then only a user with that password can add, edit, or delete printers defined in Print Manager.

All users have access to the Print Manager utility dialog. But if the user clicks on Add, Edit, or Remove, then the configuration password must be provided in the resulting dialog before completing the action.



Printer Jobs dialog

Because all users may need to trouble-shoot print problems, access to the Printer Jobs dialog is not restricted. Highlight a printer. Click **View jobs**.



If a job has not started and must be cancelled, highlight the job name and click **Remove**.

The Printer status field shows responses from the printer.

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