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YES*tation* User's Guide for Linux-Based Terminals Models 2214, 2614, and 2814

2214

2614

2814

December 2003

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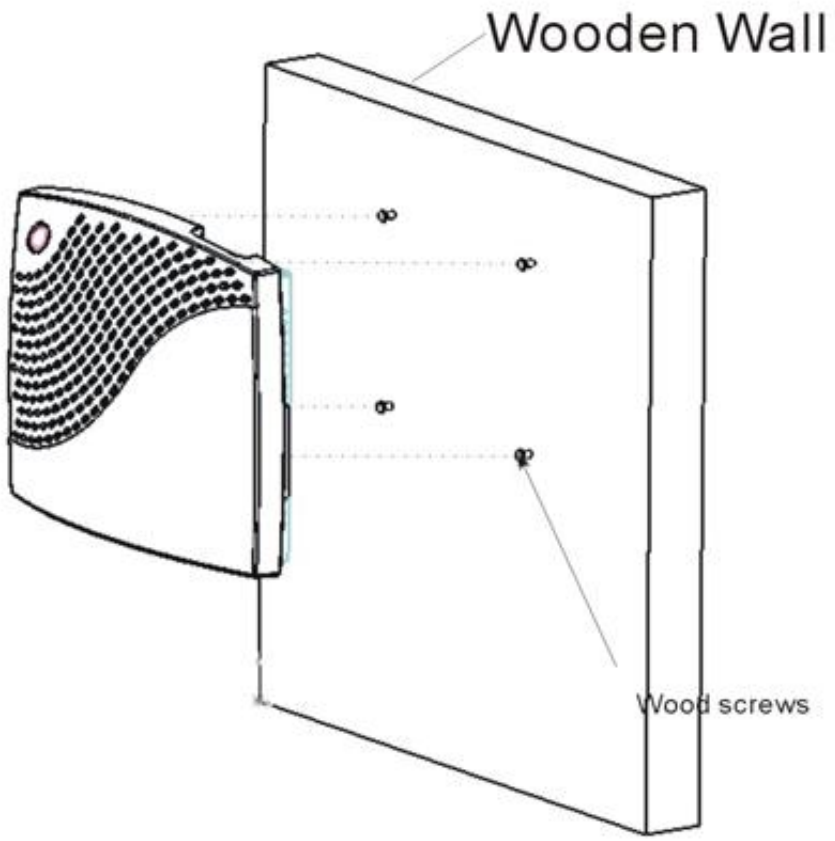
Installing Your Terminal

- Your terminal has no internal fan, and relies on natural airflow for cooling. When you mount it, *make sure to keep as many ventilation holes, as possible, unobstructed.*
- DO NOT use any AC-DC adapter other than the one provided with the terminal or acquired from Affirmative Computer Products or its distributors.

Mounting

2214 Terminal

The 2214 terminal can be placed horizontally on a flat surface, or it can be mounted vertically on a wall. A self-adhesive template and four #3, ½-inch wood screws are included with every terminal. The following figure shows one mounting possibility.



2214 Wall Mounting

Another possibility is shown here.

2214 Monitor Mounting

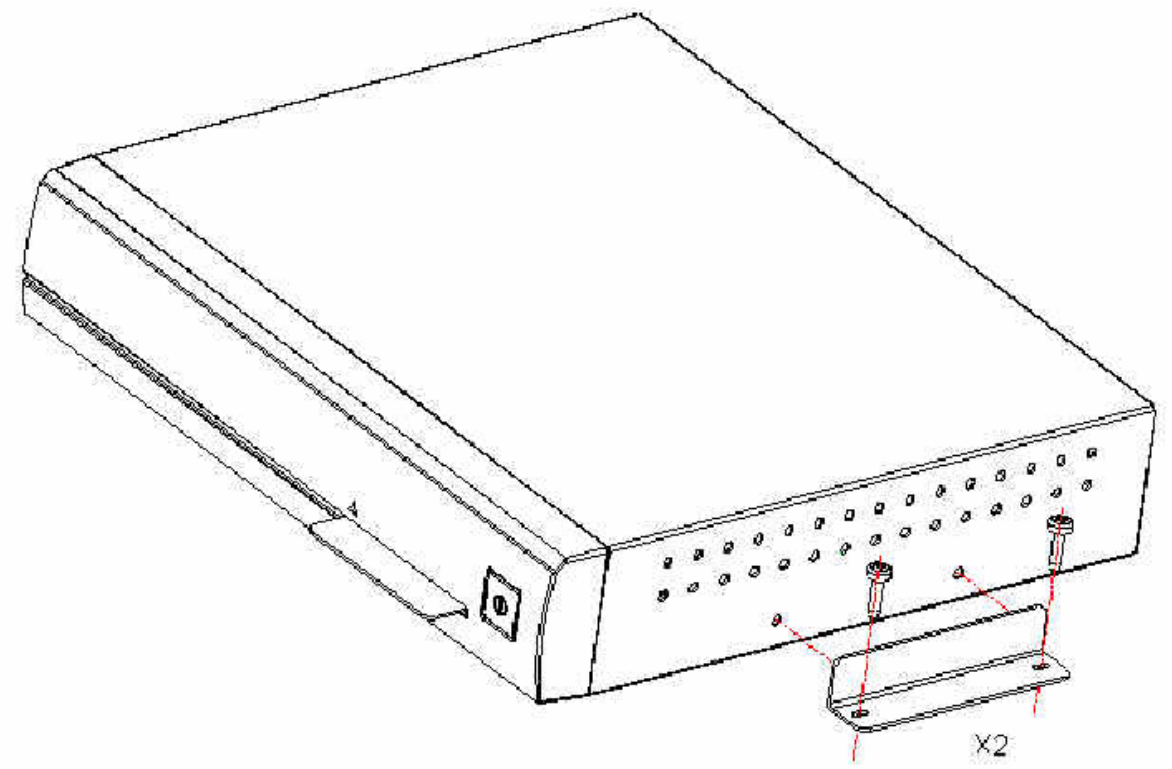
We have done some testing with the provided screws, and have the following suggestions:

- In soft wood, such as pine, no pilot holes are needed.
- In hard wood or plastic, such as the side of a monitor, create pilot holes by:
  - Drilling with a 3/64" drill bit.
  - Using a pushpin.
  - Using an ice pick.
- In dry wall, these screws do not hold well; if you must install on dry wall, we suggest that you:
  - Drill 3/64" pilot holes and put super glue in the holes before inserting the screws.
    Or
  - Use longer screws with coarser threads.

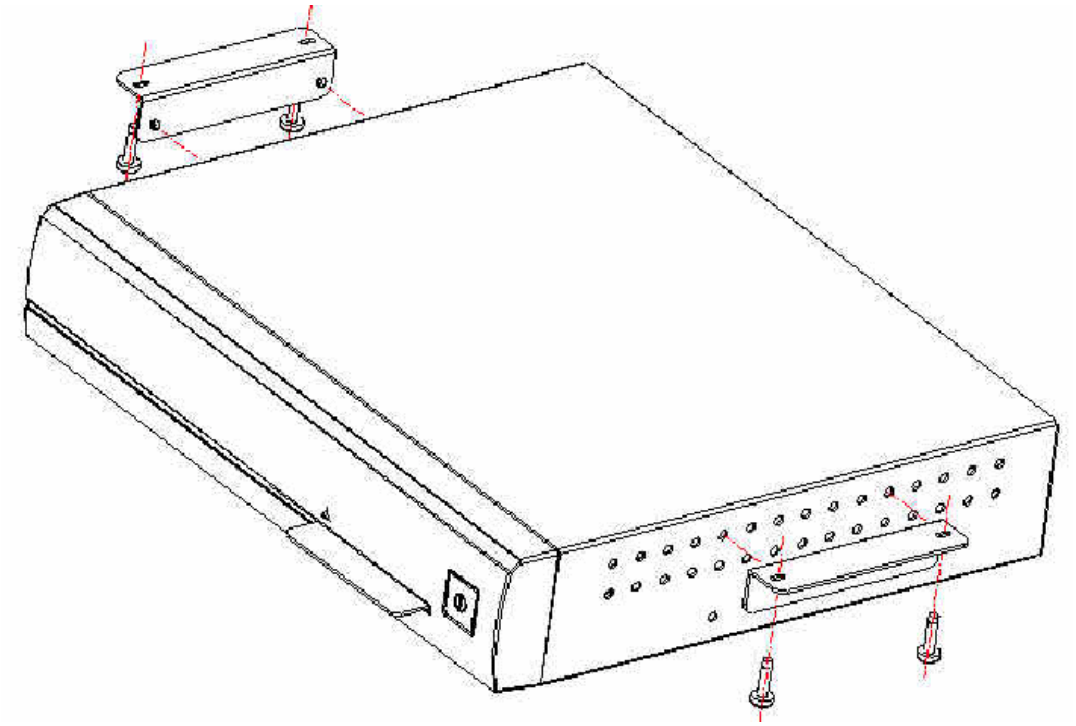
2614 Terminal

The 2614 terminal can be mounted in several ways:

- **Vertical Mounting**. Place the terminal in the provided stand as shown in the picture on the front cover of this manual.
- **Horizontal Mounting**. Adhere the provided rubber feet in the indentations on the bottom of the terminal, and place the terminal horizontally on a flat surface. Your monitor can be placed on top of the 2614, if you wish, to minimize desktop footprint.
- **Permanent Mounting**. The 2614 terminal can be mounted permanently on a desk or under a table or attached to a wall. The following figures show two possible mounting procedures



Mounting the 2614 on a desk or a wall



Mounting the 2614 under a table

2814 Terminal

The 2814 terminal can be mounted in two ways:

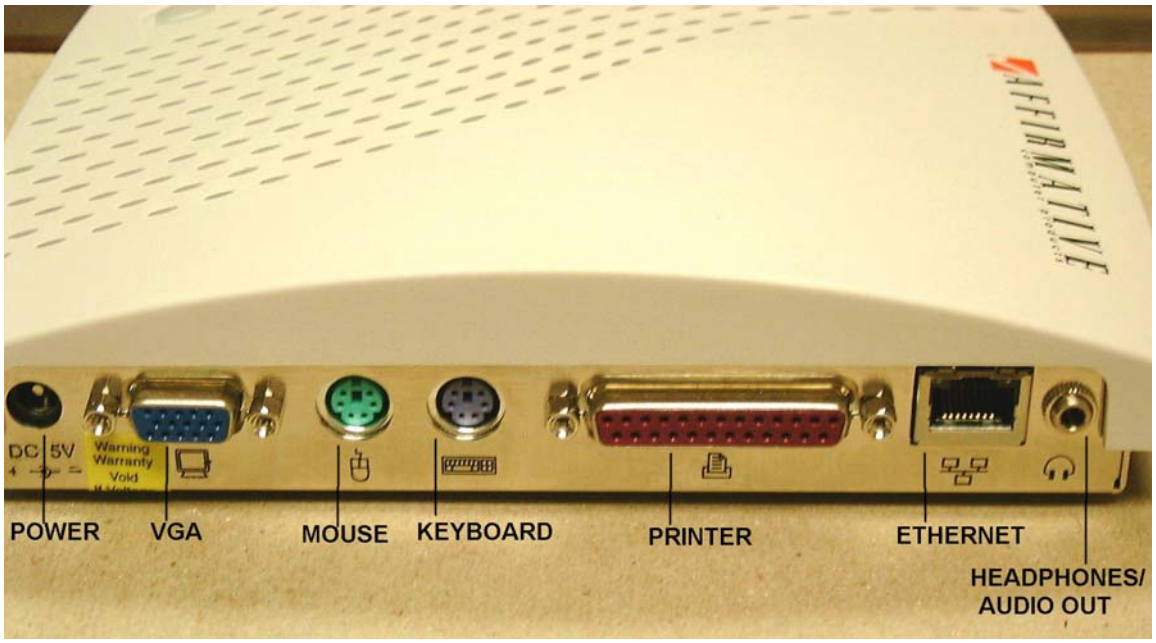
- **Vertical Mounting**. Place the terminal in the provided stand as shown in the picture on the front cover of this manual.
- **Horizontal Mounting**. Adhere the provided rubber feet to the four corners of the bottom of the terminal, and place the terminal horizontally on a flat surface. Be sure that it is oriented as shown here. Your monitor can be placed on top of the 2814, if you wish, to minimize desktop footprint.

2814 Orientation for Horizontal Mounting

Cabling

2214 Terminal

Please make all cable connections before turning on the power. The following figures show the 2214 rear and front connectors. **Note:** If you want to connect an external speaker to the Audio Out port, it must have auxiliary power.

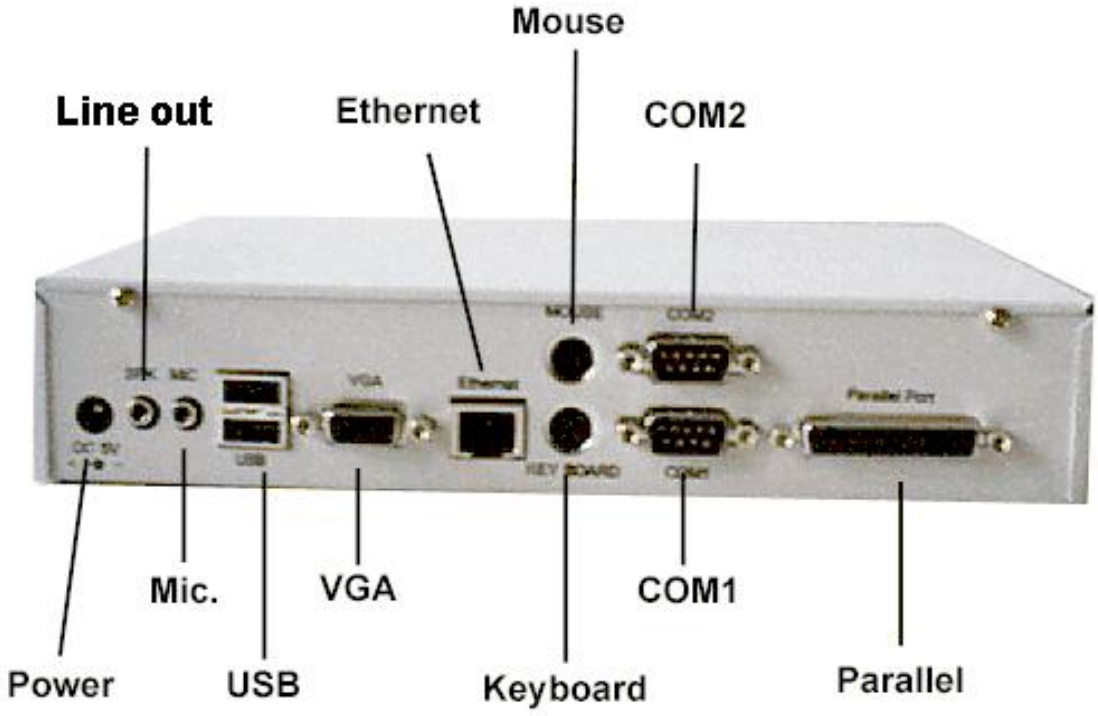


2214 Rear Connectors

2214 Front Connectors

2614 Terminal

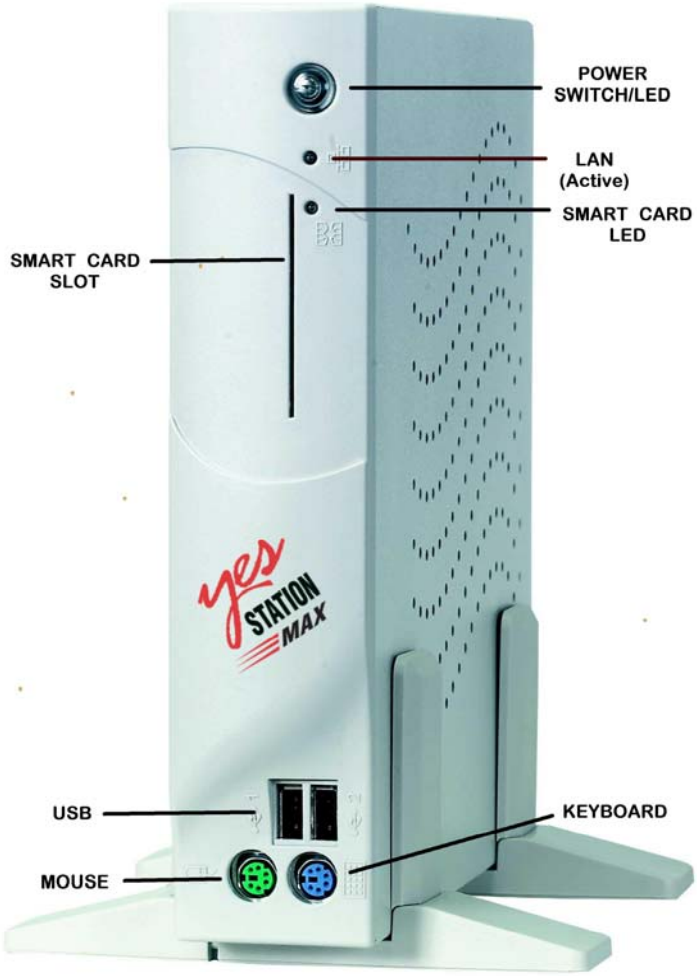
Please make all cable connections before turning on the power. The following figure shows the 2614 connectors on the rear panel. **Note:** If you want to connect an external speaker to the Line Out port, it must have auxiliary power.



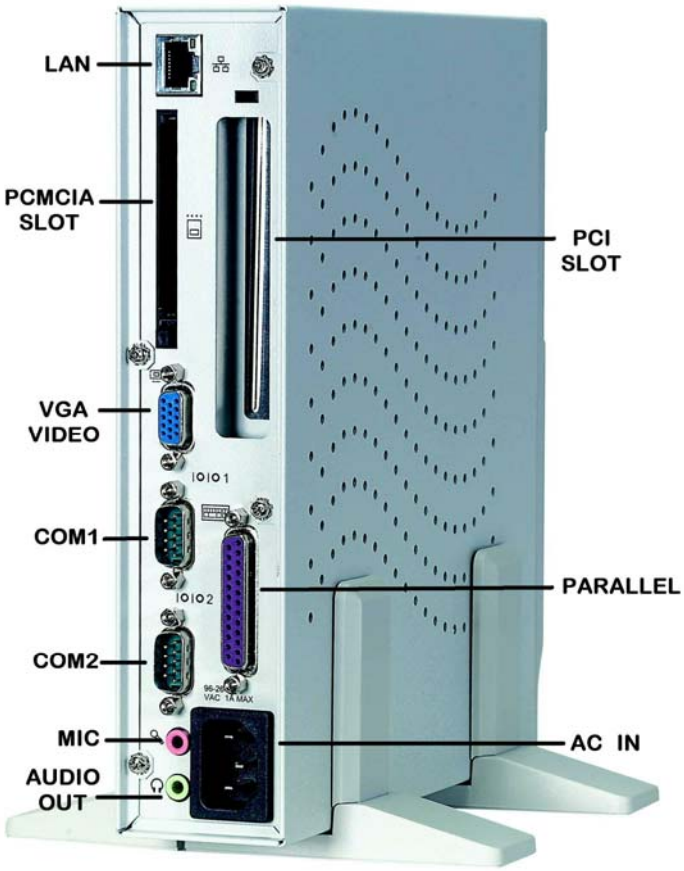
2614 Rear Panel

2814 Terminal

Please make all cable connections before turning on the power. The following figures show the 2814 rear and front connectors, indicators, and controls.
Note: If you want to connect an external speaker to the Audio Out port, it must have auxiliary power.
Note: The Smart Card and PCI options are not available.



2814 Front Panel



2814 Rear Panel

Power On

2214 Terminal

1. Power on the terminal after all cable connections have been made.
2. The Power LED, incorporated into the **Power** button will, change from faint orange to light green.
3. After several seconds, you will hear a beep and the bootup process will begin.

2614 Terminal

There are three LED indicator lights placed together on the front panel:

- **Power** (on the right or top). This indicator, incorporated into the **Power** switch, is green when the terminal is powered up.
- **Network Connection** (on the left or bottom). This indicator is on when there is a good physical connection to the Local Area Network.
- **Network Activity** (in the middle). This indicator flashes to indicate LAN activity.

1. Turn on the terminal after all cable connections have been made.
2. The Power and Network Connection lights should come on immediately.
3. After several seconds, you will hear a beep and the bootup process will begin. The Network Activity light should begin flashing

2814 Terminal

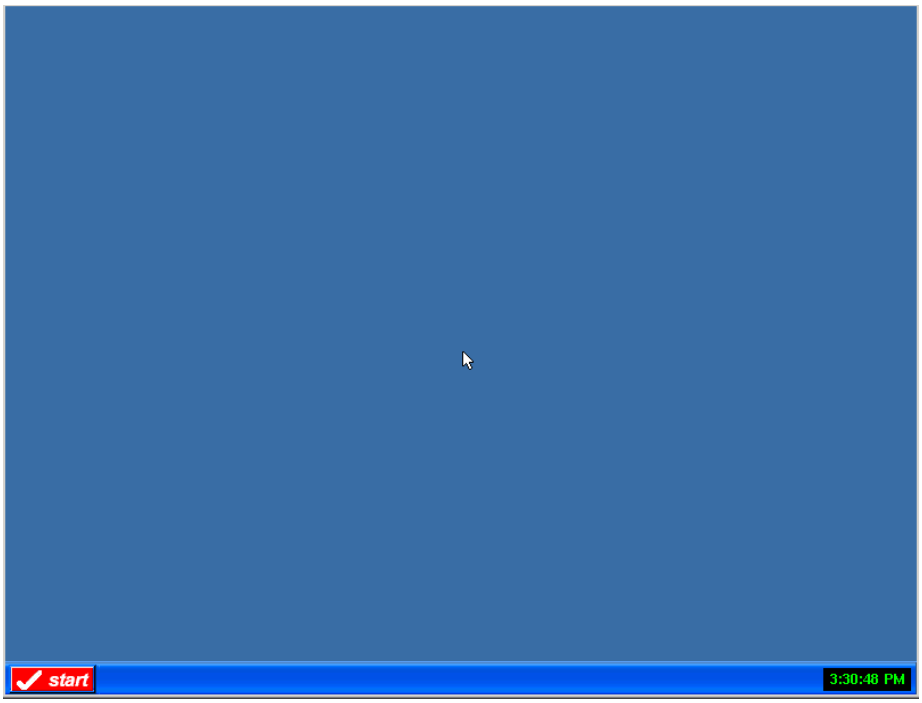
There are three LED indicator lights on the front panel:

- **Power** (on the right or top). This indicator is on when the terminal has been powered up.
- **Network Activity** (in the middle). This indicator flashes to indicate LAN activity.
- **Smart Card**. Since the Smart Card option is not yet available, this LED should never come on.

1. Turn on the terminal after all cable connections have been made.
2. The Power light should come on immediately.
3. The Network Activity light should come on in 1-2 seconds.
4. After several seconds, you will see screen activity, and the bootup process will begin. There is no beep.

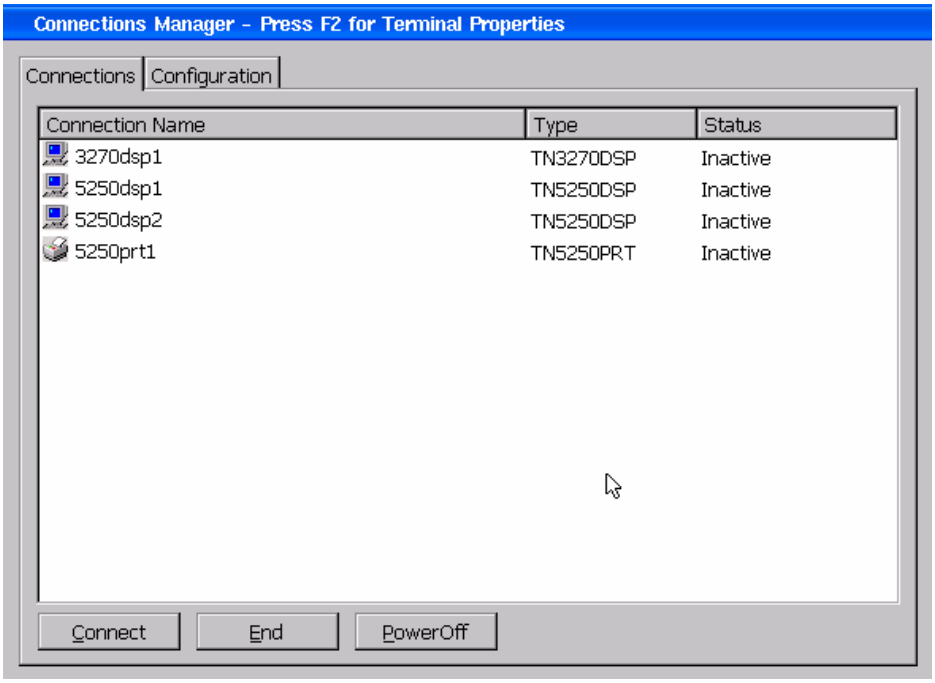
Bootup

1. You will see the message **Starting System. Please Wait…** on a black screen.
2. After several seconds, you will see the Affirmative logo screen with a progress bar at the top and a dialog box at the bottom announcing significant steps in the boot up process.
3. After the progress bar is complete, you will see a blank black screen, followed in several seconds by a blank grey screen, followed quickly by:
   - In the default Desktop viewing mode, the black screen will be quickly followed by a blue screen and then the Desktop screen.
     - If this is the initial bootup, you will see the first screen of the Setup Wizard.
     - If you have already configured an Autostart session (see Connections Management|Configuration|Startup), you will see a screen for that session.



Bootup Desktop Screen for Desktop Viewing Mode

- In the WBT viewing mode, the black screen will be quickly followed by a blue screen that is overlaid with the Connections tab of the Connections Management screen. If you have already configured an Autostart session (see Connections Management|Configuration|Startup), you will see a screen for that session.



Bootup Connections Manager Screen for WBT Viewing Mode

- In the TBT viewing mode, the grey screen will be quickly followed by a blank black screen and then by a "green screen" for one of the Autostart emulation sessions.

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Terminal Setup

The 2x14 can be operated in one of three viewing modes: TBT (Text Based Terminal), WBT (Windows Based Terminal), or Desktop. The default is Desktop, which presents a desktop screen with a Taskbar and a **Start** button very similar to a standard Windows desktop, and the mechanics of Desktop setup are covered here. However, the terminal properties and session properties are identical in the different viewing modes; only the look and feel are different.

Initial terminal setup is done from the Setup Wizard screens in Desktop viewing mode. Initial setup is done when:

- A terminal is first booted up after being received from the factory.
- A terminal is reset to factory defaults and then rebooted.

Setup can even be done remotely from a remote central management YES*manager* console using the Shadowing feature of YES*manager*.

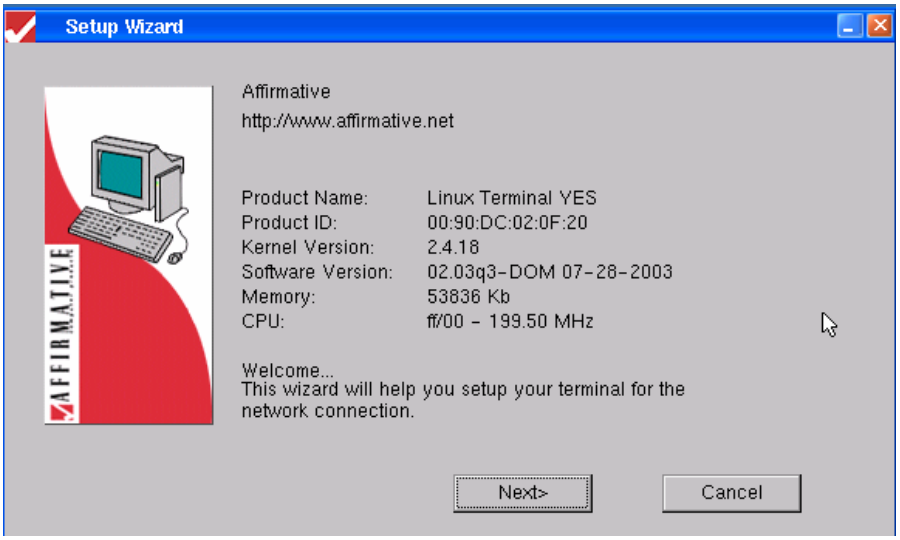
Setup Wizard

The Setup Wizard screens set the basic terminal network configuration and display parameters. Any parameters set here can be changed later. When proceeding through the Setup Wizard process:

- Activate the **Next** button to display the next dialog box in the sequence.
- Activate the **Back** button to return to the previous dialog box.
- Activate the **Cancel** or **X** button to return to the first Setup Wizard screen. You cannot use the terminal without completing the Setup Wizard.

There are four basic Wizard screens, and two supplemental screens if you choose static IP addressing.

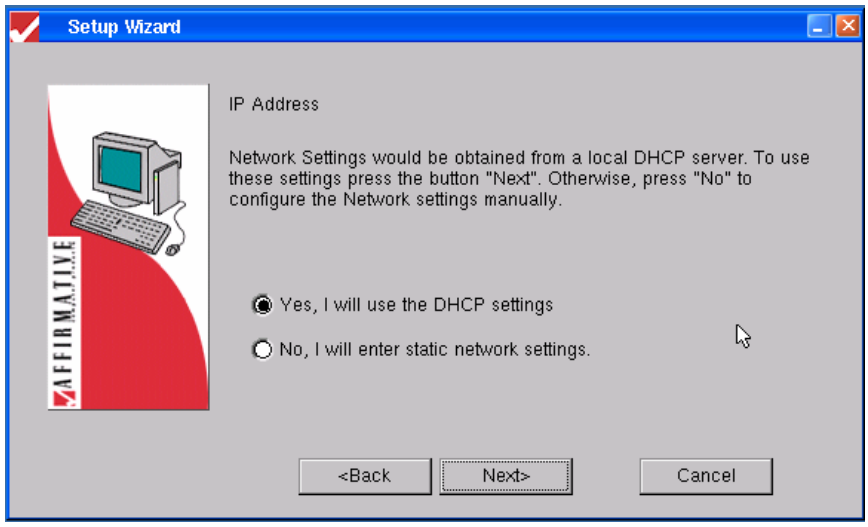
1. The first screen is informational only.



Setup Wizard Screen #1

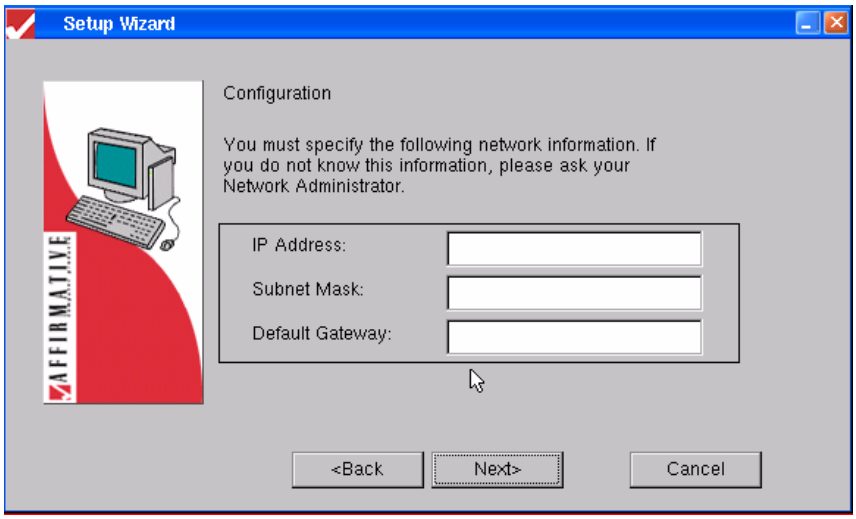
- **Product ID**. This is a unique product identification code that also happens to be the terminal MAC address. Every device on every LAN in the world is supposed to have a unique MAC address.
- **Kernel Version**. This is the version of the Linux kernel used on the terminal.
- **Software Version**. This is the version of the firmware installed in this terminal. If you contact Affirmative Computer Products Tech Support about a problem, please have this version information available.
- **Total RAM**. This is the amount of DRAM in the terminal after subtracting the memory used for some basic functions and the memory reserved for video.
- **CPU Info**. This shows some basic information about the CPU in the terminal.

2. The second screen is used for network information.



Setup Wizard Screen #2

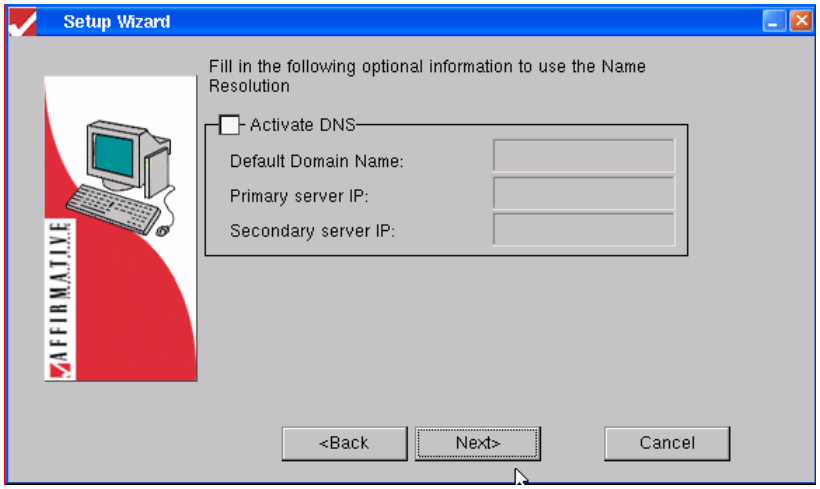
- **Yes, I will…**. Select this radio button to enable dynamic DHCP addressing from a DHCP server.
- **No, I will…**. Select this radio button to enable static network settings and invoke the two supplemental Wizard screens. The first supplemental screen is:



Setup Wizard Screen #2a

- **IP Address**. Enter a static IP address in this field.
- **Subnet Mask**. Enter the subnet mask of the local network
- **Default Gateway**. Enter the IP address of a gateway if any server is not on the local sub-net.

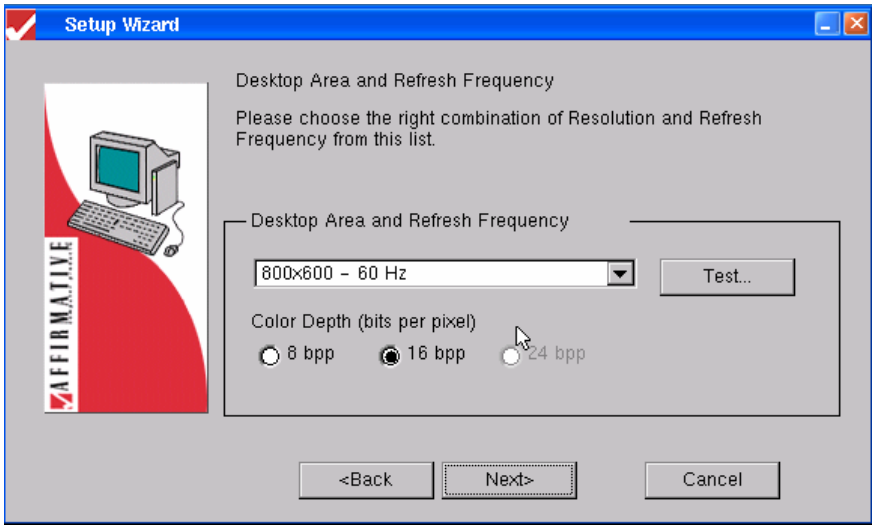
The second supplemental screen is:



Setup Wizard Screen #2b

Check **Activate DNS** and enter your Domain Name System server here. Get the entries from your network administrator.

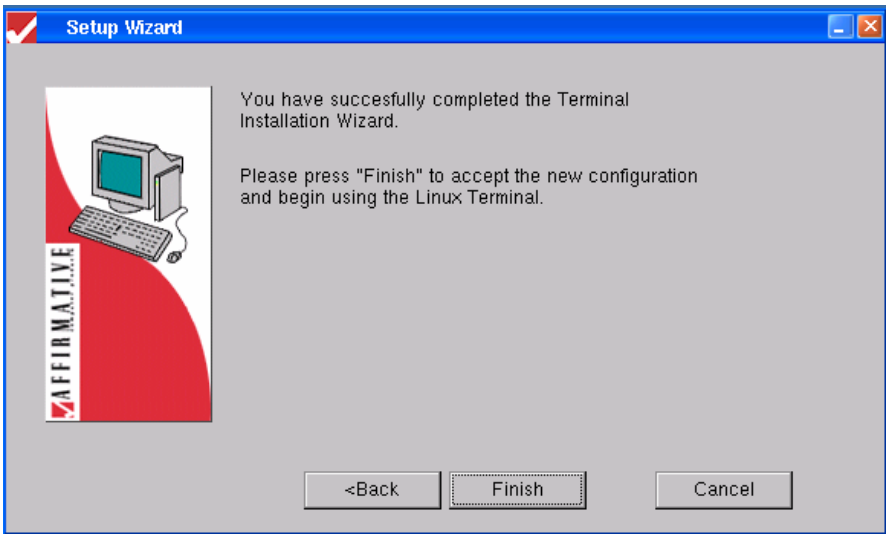
3. The third screen is used for basic display information.



Setup Wizard Screen #3

Select your resolution, refresh frequency, and color depth here. If you choose a new combination from the drop-down list, the **Next** button will be grayed out until you use the **Test** button to preview the selected resolution and frequency. Testing is required before locking in your settings since, if the monitor will not support your selection, you could be faced with an unreadable screen after boot-up.

4. The fourth screen commends you on your successful setup.



Setup Wizard Screen #4

Viewing Modes

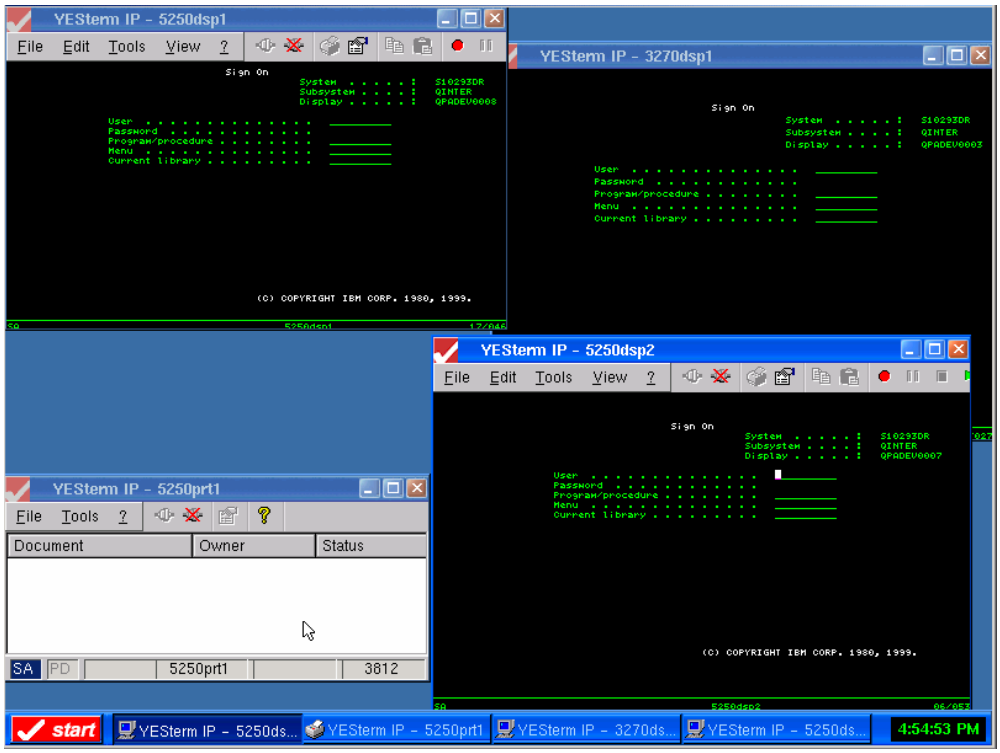
You can choose one of three viewing modes (see Editing Terminal Properties|Desktop) to be used during configuration and terminal operation.

NOTE: In the remainder of this document, a reference to the **Ctrl** key actually means the **LeftCtrl** key, a reference to the **Alt** key actually means the **LeftAlt** key, and a reference to a click actually means a mouse left click.

Desktop

The Desktop viewing mode is the default, presenting a desktop screen with a Taskbar and a **Start** button, very similar to a standard Windows desktop. A full set of configuration options is accessible from Terminal Properties. Sessions are launched from the Start menu or from Connections Manager, although they can be configured to Autostart at bootup**.** In Desktop mode, you can move, size, and show multiple emulator sessions on the screen in normal Windows fashion.

An example of a Desktop screen with four emulator sessions is shown below.



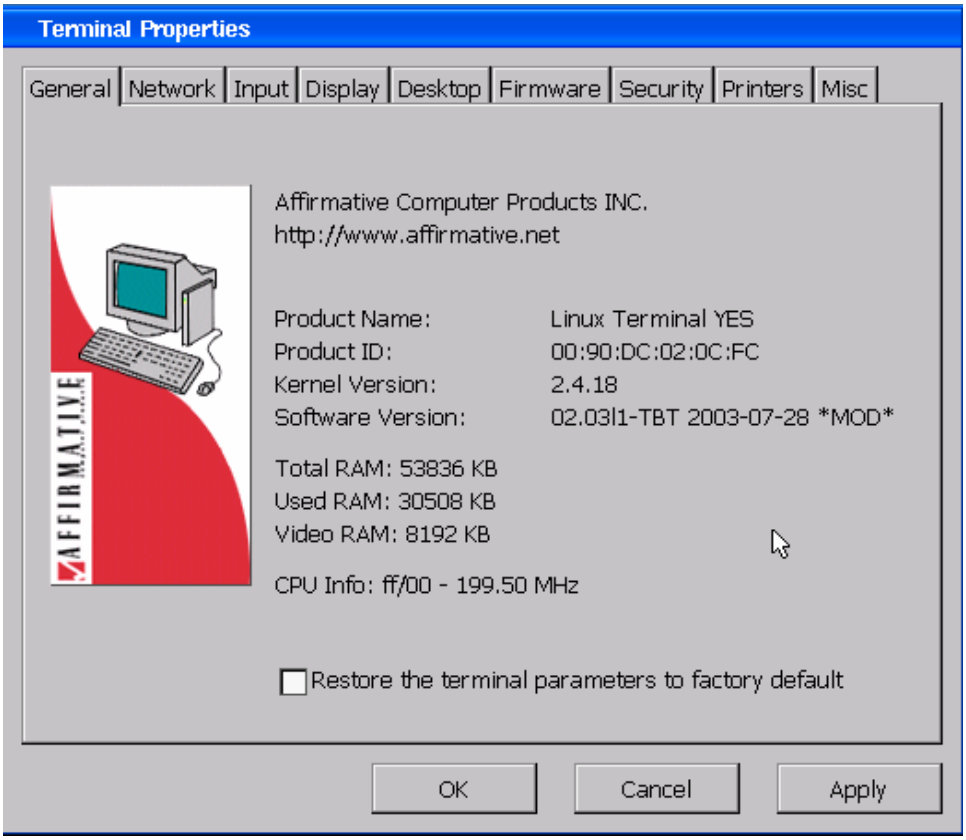
Four-Session Screen in Desktop Viewing Mode

Sessions can be minimized, maximized, or midsized just as on a Windows desktop, and placeholders appear in the Taskbar.

Terminal Properties

The Terminal Properties screen can be accessed with one of the following methods:

- Select from the Start menu.
- Press **F2** while in the Connection Manager screen.
- If you are using an Affirmative Computer Products 122-key keyboard and are in an active emulation session, press the **SetUp** key.



Terminal Properties Screen for WBT and Desktop Viewing Modes

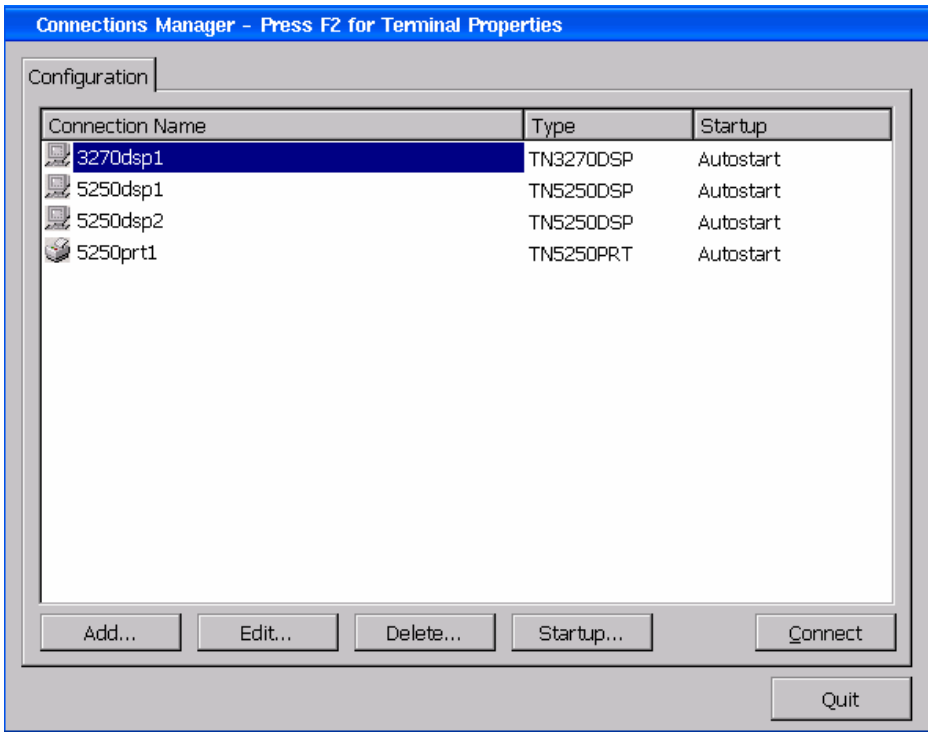
The Terminal Properties screen is exactly the same in the WBT and Desktop viewing modes. See Editing Terminal Properties for more information.

Connections Manager

The Connections Manager screen has only one tab, Configuration, in the Desktop viewing mode. However, the **Connect** button is added to allow launching sessions from this tab.

To open the Connections Manager screen, use either of the following methods:

- Select it from the Start menu.
- Press **Ctrl+Alt+End** at any time.



Connections Manager Screen in Desktop Viewing Mode

Navigation

- To open the Start menu, use either of the following methods:
  - Click on the **Start** button in the Taskbar.
  - Right-click on any unused portion of the Desktop.
- To access Terminal Properties, use one of the following methods:
  - Press **F2** while in the Connections Manager screen.
  - Select it from the Start menu.
  - If you are using an Affirmative Computer Products 122-key keyboard and are in an active session, press the **SetUp** key
- To open the Connections Manager screen, use either of the following methods:
  - Select it from the Start menu.
  - Press **Ctrl+Alt+End** at any time.
- To open non-Autostart sessions, use either of the following methods:
  - In the Connections Manager screen, highlight the session name and click on **Connect**.
  - Select it from the Start menu.
- If your display session is configured to hide the Menu and Tool bars, you can invoke the **File** menu by pressing **Alt**. Then you can get to other menus by using the **RightArrow** and **LeftArrow** keys.
- To close a display session, go to the Sign On screen, open the **File** menu, and activate **Close** or **Close All**. If all your display sessions are at the Sign On screen, you can just power down.
- To move among active emulator sessions, use one of the following methods:
  - Press **Alt+PgUp** for 101 keyboards or **Alt+PgDn** for 122 keyboards.
  - Press **Ctrl+Alt+UpArrow/DownArrow** for all keyboards.
  - Press **RightAlt+Up/DownArrow** for all keyboards, if enabled in Editing Terminal Properties|Desktop.

- Click on the appropriate button (**I, II, III**, or **IV**) in the tool bar.
- Return to Connections Manager and select another session.
- Move your mouse cursor to a new session if you are showing multiple sessions on the screen.
- Click on the placeholder in the Taskbar.

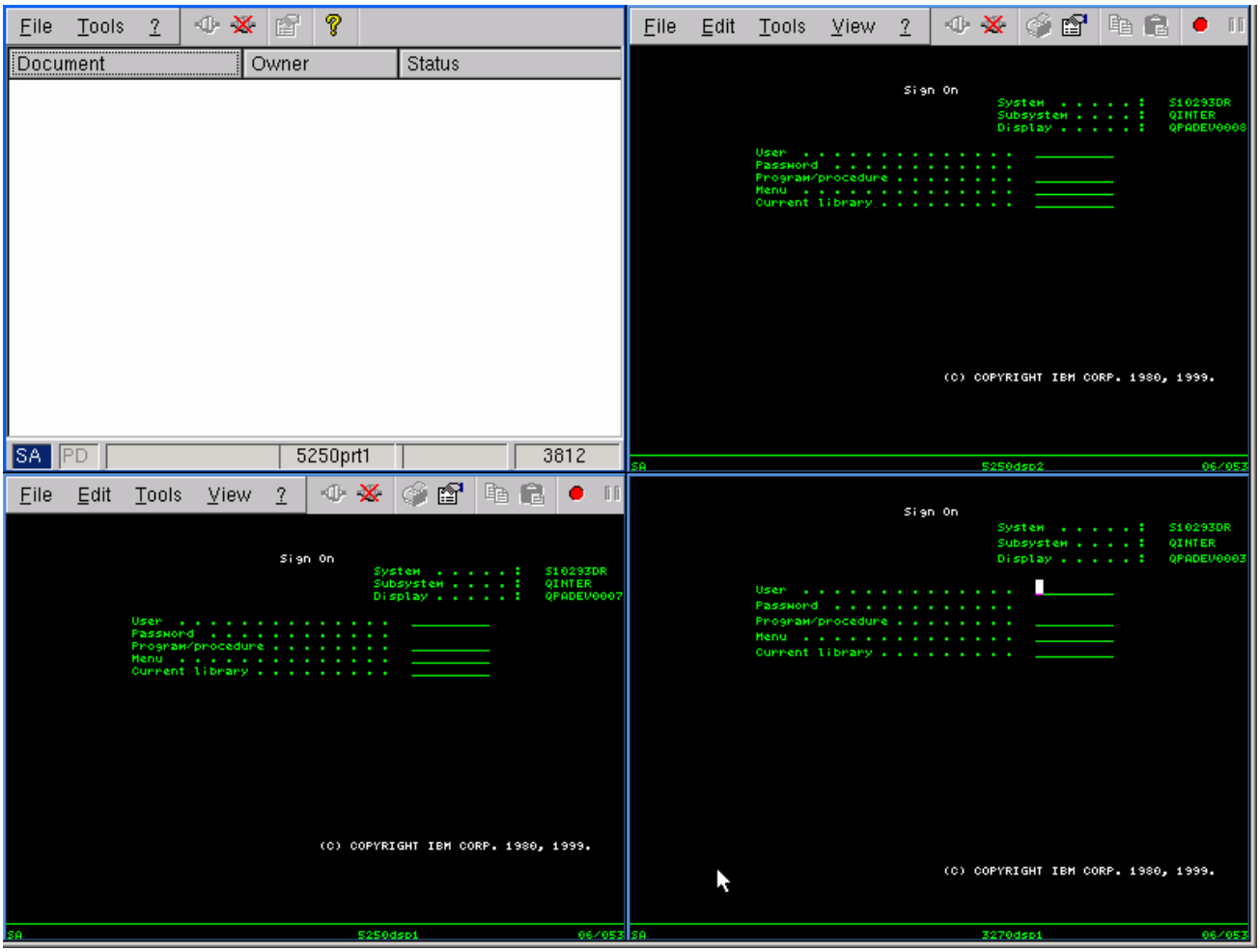
Note: The first two hot key methods listed above are only valid if the default **WBT** is selected in HotKeys in Editing Terminal Properties|Desktop.

- In Desktop mode, you can size and show multiple emulator sessions on the screen in normal Windows fashion.
- To power down or reboot, select **Shutdown** from the Start menu, and then select **Shutdown** or **Reboot**.

WBT (Windows Based Terminal)

The Windows Based Terminal mode presents the kind of screens that you normally see in an Affirmative Computer Products YES*tation* that uses the Windows CE operating system. Sessions are launched from the Connections Manager, although they can be configured to Autostart at bootup. All sessions can be viewed simultaneously in a split-screen mode, if desired; each session will get the same amount of space on the screen.

A split screen with four sessions is shown below.



Split Session Screen in WBT Viewing Mode

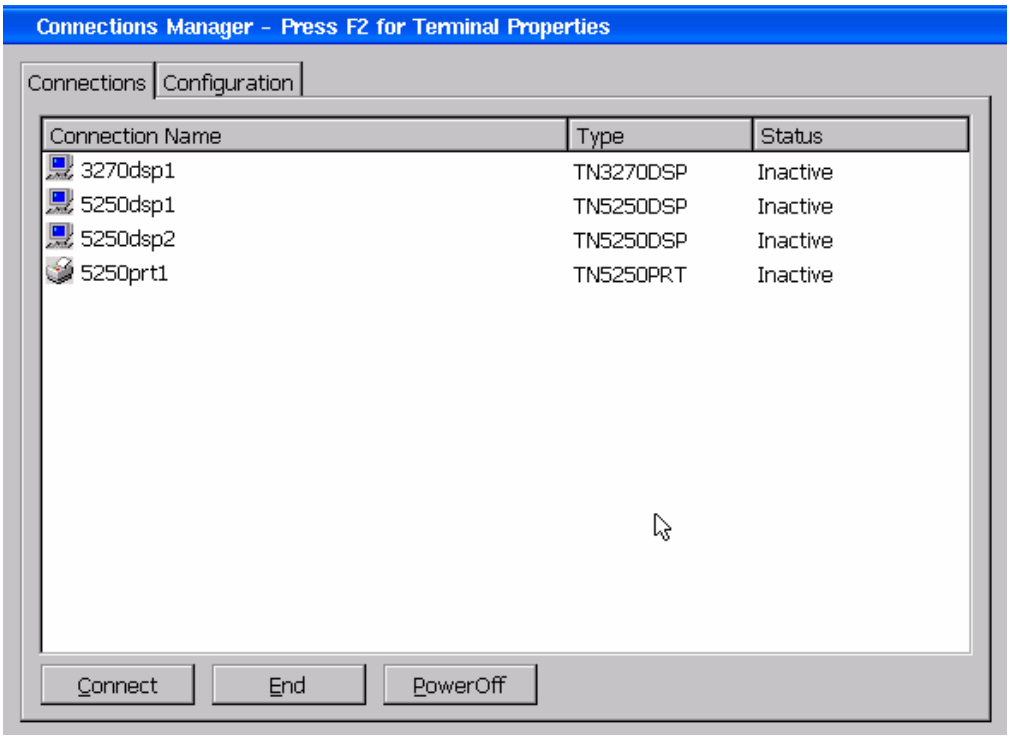
Terminal Properties

The Terminal Properties screen is exactly the same in WBT viewing mode as in Desktop viewing mode. It can be accessed with one of the following methods:

- Press **F2** while in the Connection Manager screen.
- If you are using an Affirmative Computer Products 122-key keyboard and are in an active emulation session, press the **SetUp** key.

Connections Manager

- The Connections Manager screen in the WBT viewing mode has separate tabs for connecting and configuring. To open the Connections Manager screen, use either of the following methods:
  - This is the default screen at bootup, unless you have Autostart sessions.
  - Press **Ctrl+Alt+End** at any time.



Connections Manager Screen for WBT Viewing Mode

Navigation

- To access Terminal Properties, press **F2** while in the Connections Manager screen.
- If you wish to activate more than one session in WBT viewing mode, press **Ctl+Alt+End** to be returned to the Connection Manager window. You can now select another session for activation. All sessions can be activated at the same time. You can also set any or all sessions to start automatically at boot-up.

- To move among active emulator sessions, use one of the following methods:
  - Press **Alt+PgUp** for 101 keyboards or **Alt+PgDn** for 122 keyboards.
  - Press **Ctrl+Alt+UpArrow/DownArrow** for all keyboards.
  - Press **RightAlt+Up/DownArrow** for all keyboards, if enabled in Editing Terminal Properties|Desktop.
  - Click on the appropriate button (**I, II, III**, or **IV**) in the tool bar.
  - Return to Connections Manager and select another session.
  - Move your mouse cursor to a new session if you are showing multiple sessions on the screen.

  Note: The first two hot key methods listed above are only valid if the default **WBT** is selected for HotKeys in Editing Terminal Properties|Desktop.
- To show multiple sessions in a split-screen, activate them and then press **Shift+Alt+F2**. Each session will get the same amount of space on the screen. To return to a single-session screen, move the input cursor to that session and again press **Shift+Alt+F2**.
- If your display session is configured to hide the Menu and Tool bars, you can invoke the **File** menu by pressing **Alt**. Then you can get to other menus by using the **RightArrow, LeftArrow**, and **Tab** keys.
- To close a display session, go to the Sign On screen, open the **File** menu, and activate **Close** or **Close All**. Also, if all your display sessions are at the Sign On screen, you can just power down.

TBT (Text Based Terminal)

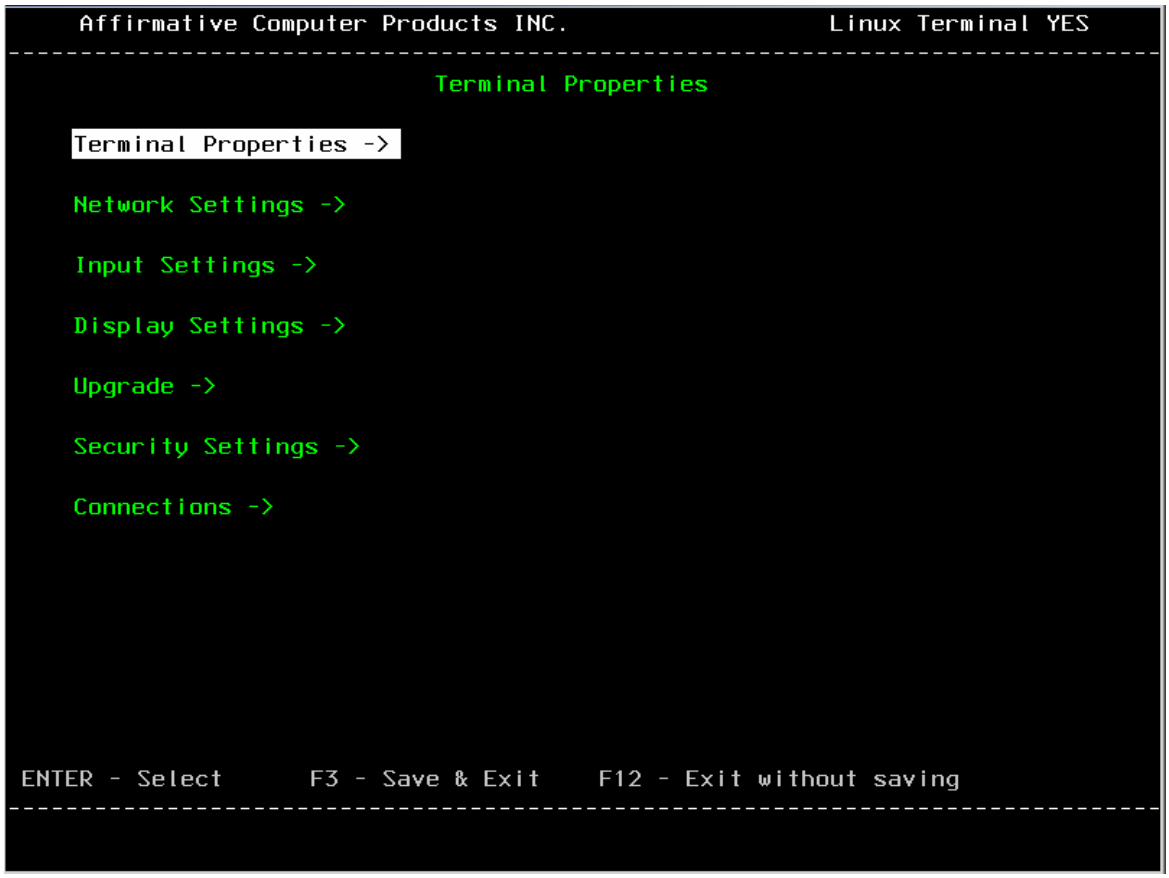
The Text Based Terminal mode is designed to allow terminal operation and basic configuration without a mouse. The screens are very familiar to those users who have stared at dumb terminal "green screens". Sessions are Autostart at bootup by default, and normally only one session is viewed on the screen at a time. However, all sessions can be viewed simultaneously in a split-screen mode, if desired; each session will get the same amount of space on the screen.

Note: Only emulation sessions can be opened and viewed in TBT mode

Terminal Properties

You can get to the Terminal Properties screen by:

- Pressing **Ctrl+Alt+End**, even from a blank screen.
- If you are using an Affirmative Computer Products 122-key keyboard and are in an active session, you can press the **SetUp** key.

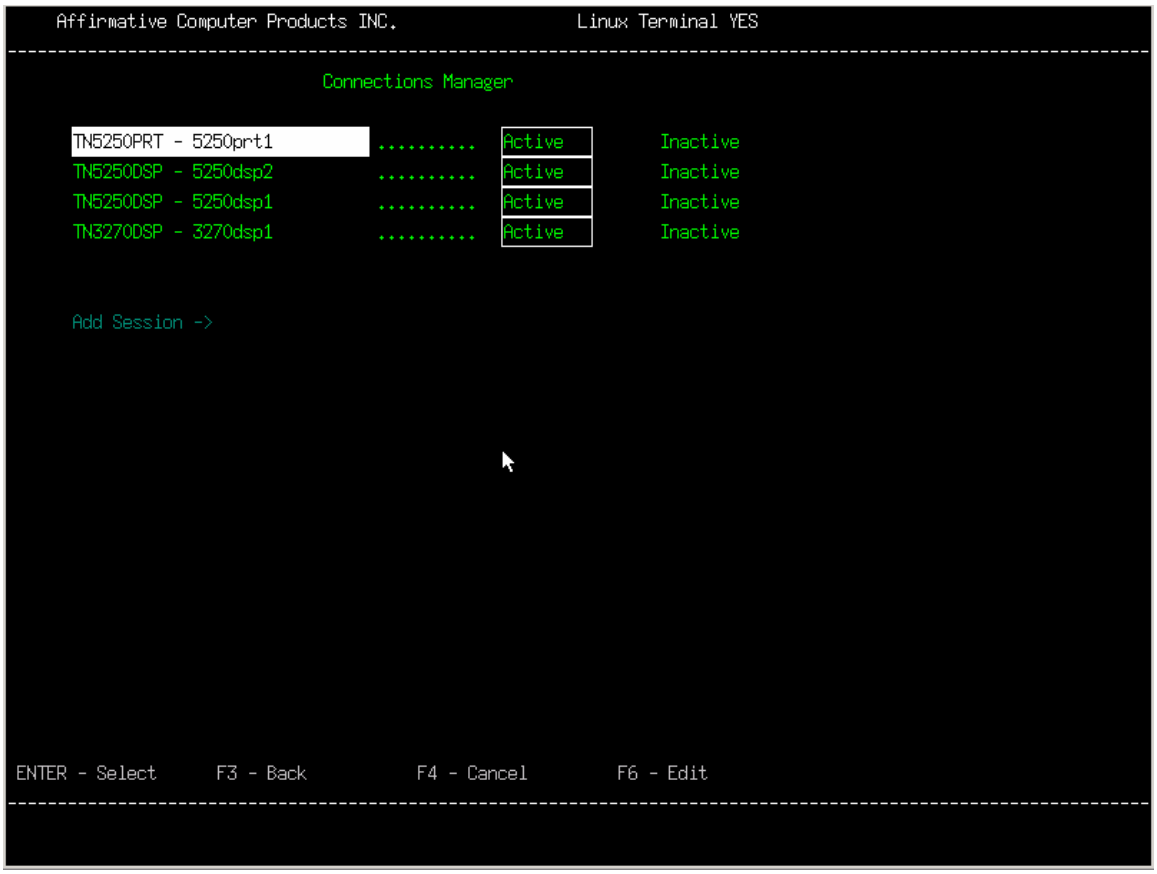


Terminal Properties Menu Screen in TBT Viewing Mode

The Terminal Properties screens in TBT mode provide a basic set of configuration parameters. To access the complete set, you will have to be in WBT or Desktop mode.

Connections Manager

The Connections Manager screen is accessed from the **Connections** category of the Terminal Properties screen. Since sessions are Autostart by default in TBT mode, Connections Manager need be accessed only when adding, deleting, or editing an emulation session. You can prevent a session from being launched at bootup by marking it as **Inactive** in this screen.



Connections Manager Screen for TBT Viewing Mode

Navigation

- In TBT viewing mode, you can get to the Terminal Properties screen by:
  - Pressing **Ctrl+Alt+End**, even from a blank screen.
  - If you are using an Affirmative Computer Products 122-key keyboard and are in an active session, you can press the **SetUp** key.
- To get back to an active session from Terminal Properties, use the **Esc** key if no changes are to be saved.
- To move among active emulator sessions:
  - Press **Alt+PgUp** for 101 keyboards.
  - Press **Alt+PgDn** for 122 keyboards.
  - Press **Ctrl+Alt+UpArrow/DownArrow** for all keyboards.
  - Press **RightAlt+Up/Down Arrow** for all keyboards, if this sequence is enabled (see Editing Terminal Properties|Desktop).

- Click on the appropriate button (I, II, III, or IV) in the tool bar.

- If your display session is configured to hide the Menu and Tool bars, you can invoke the **File** menu by pressing **Alt**. Then you can get to other menus by using the **RightArrow** and **LeftArrow** keys.
- To close a display session, go to the Sign On screen, open the **File** menu, and activate **Close** or **Close All**. Also, if all your display sessions are at the Sign On screen, you can just power down.
  Note: If you close a session, you cannot reopen it without rebooting the terminal

Connections Manager

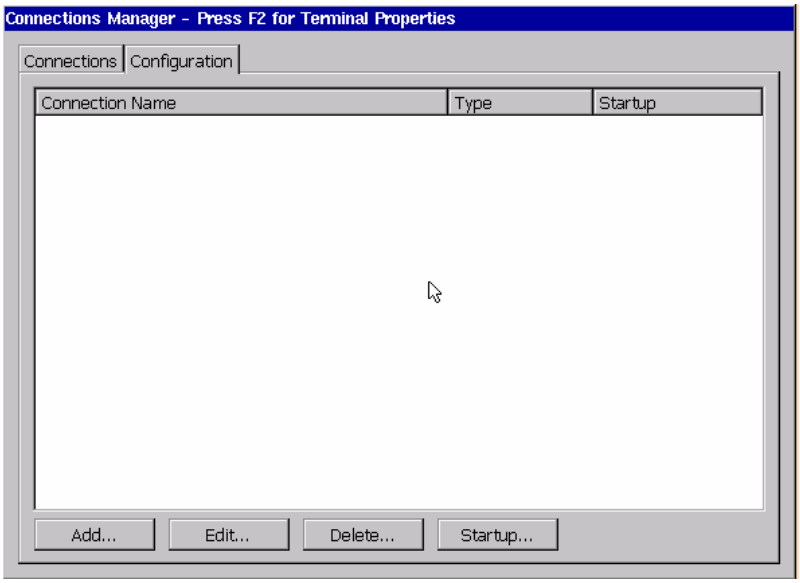
Note: The terms "connection" and "session" are used interchangeably in this document.

The Connections Manager window is used to manage or activate your terminal sessions in WBT and Desktop viewing modes. In WBT mode, Connections Manager has both a Connections tab and a Configuration tab. In Desktop mode, there is only a Configuration tab since connections are usually made from the Start menu.

Initially, Connections Manager starts without any sessions. Sessions are added from the Configuration tab.

Configuration

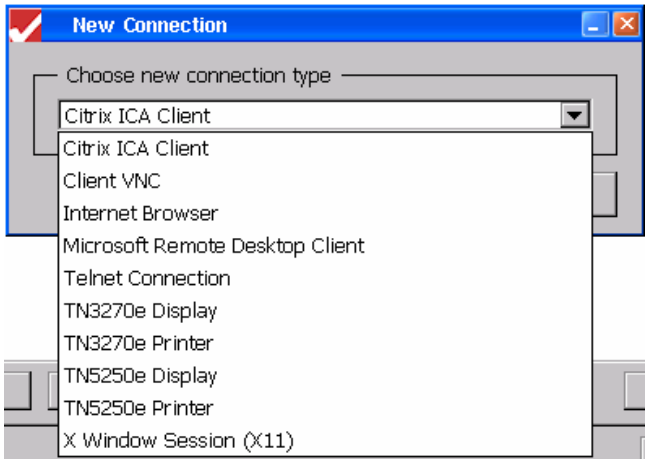
The Configuration tab in WBT mode allows four basic functions.



Configuration Tab in WBT Viewing Mode

Add

Activate the **Add** button to create a new session. A New Connection dialog box is displayed.



New Connection Dialog Box

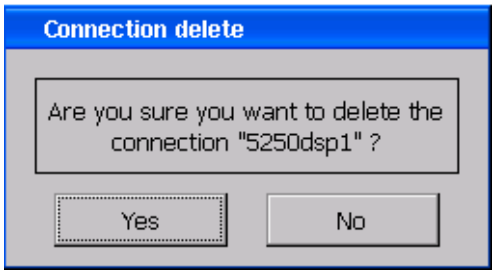
Click on the drop-down arrow to see a list of possible connection types. See Creating a New Connection for information on adding specific connections. As sessions are added, they will be displayed alphabetically.

Edit

Activate the **Edit** button to edit the properties of a selected connection. A property window for that session type will pop up. Please refer to Editing an Existing Connection for more information about editing a connection.

Delete

Activate the **Delete** button to delete the highlighted connection. When you activate this button, a Connection Delete dialog box is displayed.

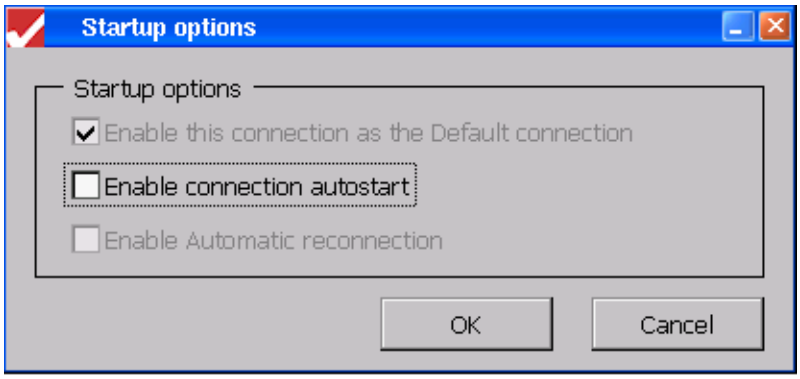


Connection Delete Dialog Box

Activate the **Yes** button to complete the deletion. Activate **No** to cancel the deletion.

Startup

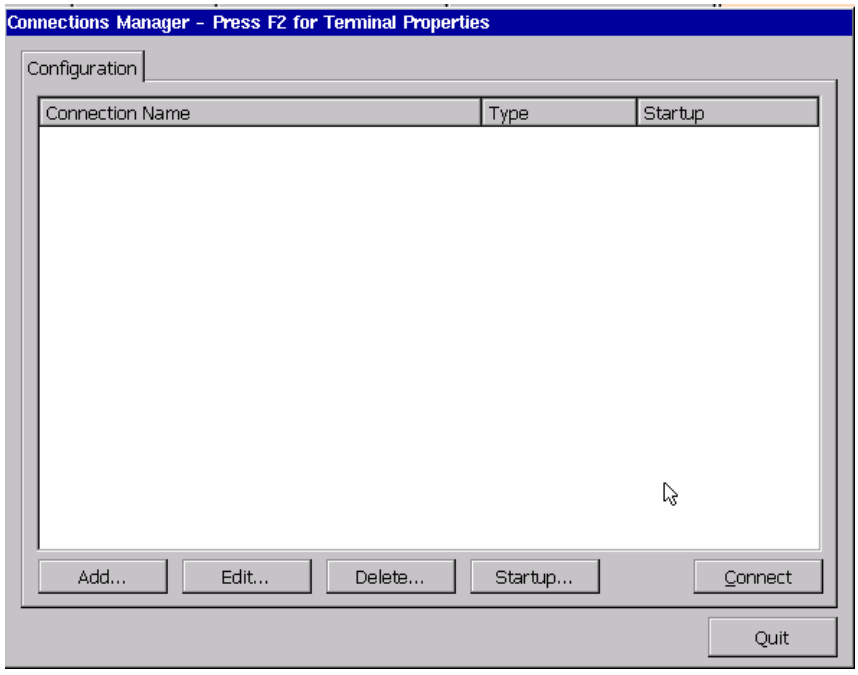
Activate the **Startup** button to configure startup options when the terminal boots up. The Startup Options dialog box displays after the Startup button is pressed. Using the dialog box, your terminal can be set to automatically connect to a server when the terminal is booted. Any or all sessions can be configured for automatic startup.



Connection Startup Dialog Box

- **Enable the connection as the Default connection.** Check this box to use the selected connection as the default connection. This connection will be highlighted in Connection Manager when the terminal is powered up. If there is only one configured session, this option is grayed out
- **Enable connection autostart**. Check this box to automatically start the selected connection when the terminal boots up.
- **Enable Automatic reconnection**. This is not supported in the 2x14 terminals.

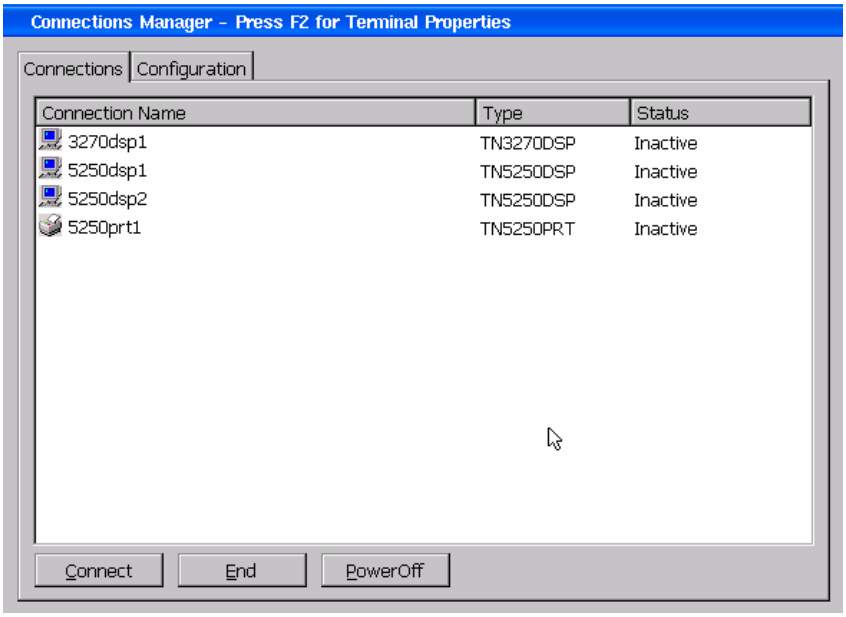
Connect



Connections Manager for Desktop Viewing Mode

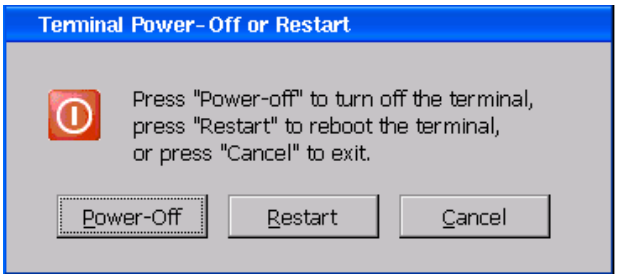
In Desktop viewing mode, you will see a **Connect** button in addition to the four buttons previously discussed. This allows you to start a session from Connections Manager even though the Connections tab is not available.

Connections



Connections Tab in WBT Viewing Mode

The Connections tab is used to make or end network connections with the server(s).
Connect. Highlight the session name and activate the **Connect** button to make a network connection. You can also activate a connection by double-clicking on it.
End. Highlight the session name and activate the **End** button to end a connection shown as Active in the status field. A dialog box will pop up asking for confirmation. You can also end a session from the session screen itself, without going to Connections, and that is the recommended way to end a session.
PowerOff. It is recommended that you shut down your terminal using this button, although usually just shutting off the power does no harm. You will see the following dialog box.



Power Off Dialog Box

- **Power-Off**. Click on this button to turn off terminal power. **Note:** This button does not have any effect in the 2614 terminal.
- **Restart**. Click on this button to reboot without turning off terminal power.
- **Cancel**. Click on this button to cancel any power-off action and return to Connections.

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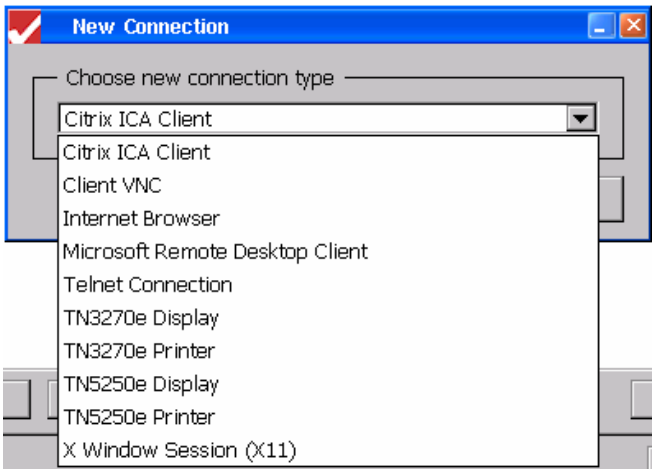
Creating a New Connection

Note: The terms "connection" and "session" are used interchangeably in this section.

Connections are created in the Configure tab of Connections Manager. Click on **Add** to see the New Connection dialog box. Then click on the drop-down arrow to see the drop-down list of possible connections.



New Connection Dialog Box

Each network client session can be to a unique server, if desired. The total number of concurrent active sessions is limited by the amount of RAM in your WBT, except that you are limited to have no more than four configured emulation sessions. The standard 128MB of RAM in your terminal is enough for almost all practical session combinations, unless you configure multiple browser sessions.

The connection types will be covered here in alphabetical order. Highlight the desired connection type and then click **OK** to open the associated dialog box.

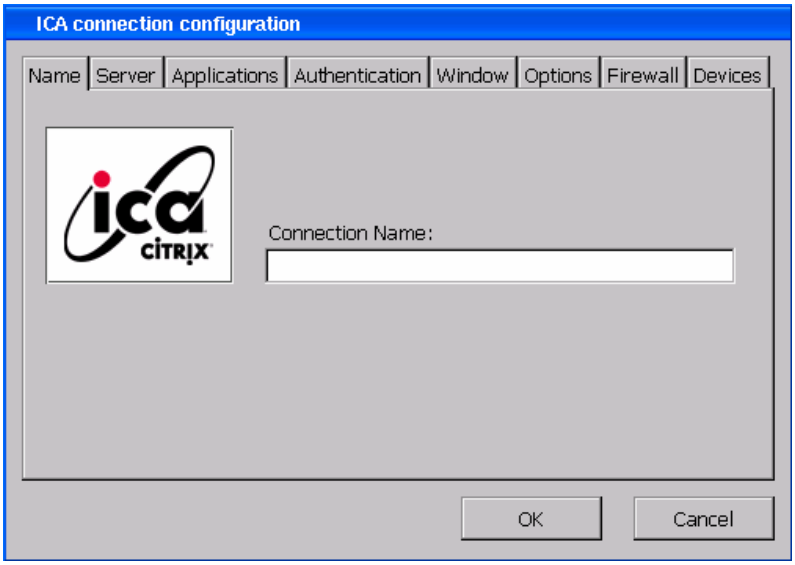
After your setup and configuration are complete, you can secure parameters from any user changes as follows:

1. Open Terminal Properties.
2. Select the **Security** tab.
3. Check the box for **Hide connections configuration Tab**.
4. Check the box for **Require password to modify configuration**.
5. Choose and confirm a password.
6. **OK** out of Terminal Properties.

Citrix ICA Client

This client is used to run applications from a Citrix MetaFrame server. When you click on **OK** after selecting **Citrix ICA Client**, the ICA Connection Configuration sheet will appear with eight property tabs.

Name



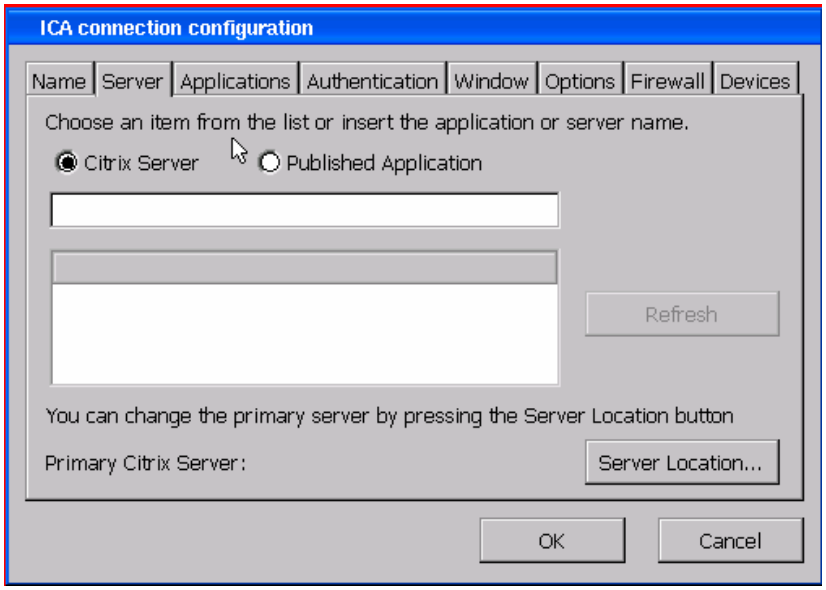
ICA Name Property Sheet

The name you enter here will be the name of the entry in the Connections Manager connection list and will appear in the title bar of the ICA session window.

Server

You can configure and run two types of ICA sessions: Citrix server connections and published applications.

- *Citrix server connections* allow you to connect to the Windows desktop of a specific Citrix server; you can run any applications that have been mad available on the desktop by your system administrator, in any order.
- *Published applications* are specific applications set up by an administrator for remote users. When connected, you are presented with the application itself.



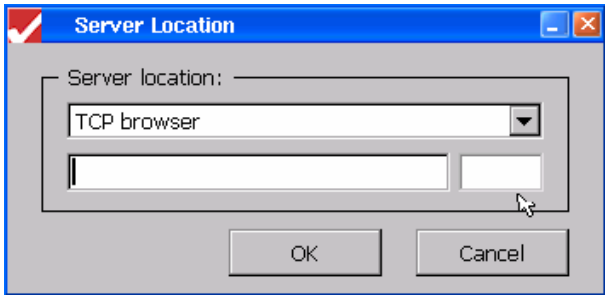
ICA Server Property Sheet

The procedure for using this property sheet is:

1. Select **Server** or **Published Application**.
2. If your server or published application is on the local sub-net, click on **Refresh**.
3. The terminal will search the local sub-net for all Citrix servers or published applications, and will present a list in the lower box. You will see an error message if none are found.
4. Double-click on the desired item in the list. It will appear in the upper box.
5. If your server or application is not found for some reason, you can type in the IP address or application name in the upper box, or you may want to choose an alternate server location.
   - If your terminal is not on the same network as the Citrix server you want to connect to (for example, if you are on the other side of a router, across the Internet, or using RAS to connect to a remote network containing Citrix servers), the Server and Published Application lists will not contain that server. In this case, click **Server Location** and go to the Server Location dialog box to choose, add or delete a Server Location.

Server Location

The information entered in this dialog box is used to help locate available Citrix servers and published applications.



Server Location Dialog Box

Server location (also called server browsing) provides a method for a user at a network-connected Citrix ICA Client to view a list of all MetaFrame servers on the network that have ICA connections configured for that network protocol, or a list of all published applications. You can specify a separate server location for each network protocol. **Tip:** Set a specific server address for the Citrix server that

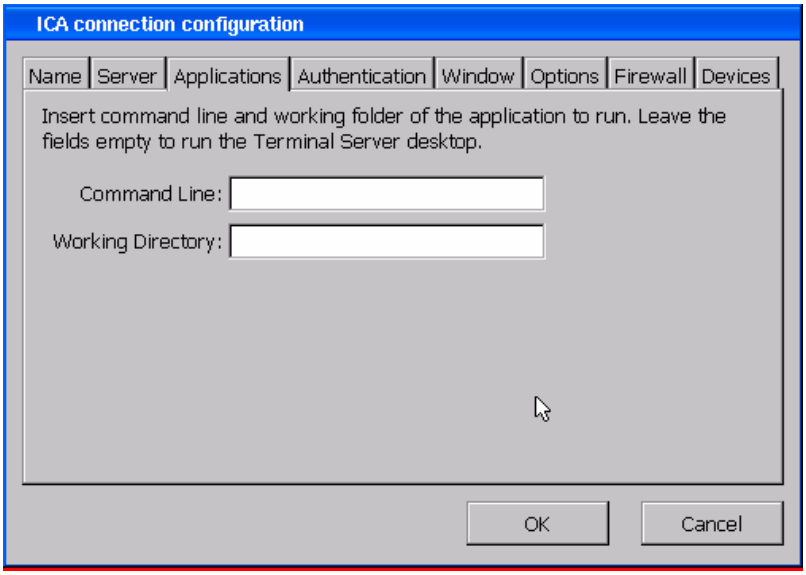
functions as the master ICA Browser when your network configuration uses routers or gateways, or to eliminate broadcasts on your network.

To configure server location:

1. Select the required network protocol from the drop-down list.
   - **HTTP browser** and **HTTPS +SSL browser**. The default server address is ica.*domainname*, where *domainname* is a TCP/IP domain name. The ICA Client uses the HTTP protocol to contact the MetaFrame servers. **Note:** If you are going to use SSL security for your ICA sessions, you must choose **HTTPS +SSL browser** protocol.
   - **TCP Browser**. You must set a specific address for one (any one) of the MetaFrame servers in your server farm, and then the auto-locate function will find the rest of them.
2. Enter the name or IP address of a MetaFrame server in the first entry field; ignore the second entry field. **Note:** For the **TCP/IP+HTTP** and **SSL+HTTPS** protocols, if you do not enter an IP address, you must have a MetaFrame server on your network mapped to the default name of ica.*domainname*, where *domainname* is a TCP/IP domain name. **TCP/IP+HTTP** and **SSL+HTTPS** server locations do not support the auto-locate function.
3. Click **OK**.

Applications

This sheet does not apply, and the two fields are grayed out, if you selected **Published Application** in the server sheet.



ICA Applications Property Sheet

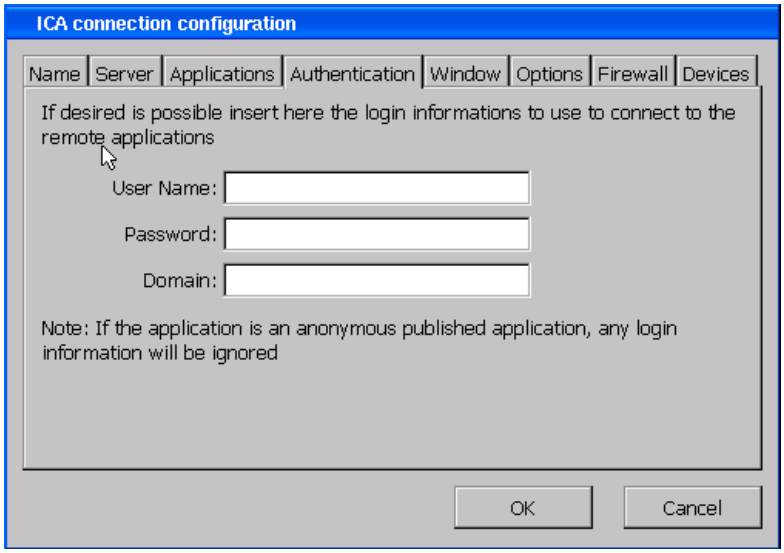
If you want this session to open in a specific application on the server after the logon to the Citrix server is successful, enter the path and executable file name of an application in the **Command Line** field. Leave this field blank to run a Windows desktop from the Citrix server. **Working Directory** lets you associate a directory with the application specified in Command Line.

For example, if the application **Notepad.exe** is in the **C:\WTSRV** directory on the Citrix server, type **C:\WTSRV\Notepad.exe** in the Command Line field. If you use Notepad to work on documents in the **C:\My Documents** directory, type **C:\My Documents** in the Working Directory field. When you log

on to the Citrix server, Notepad begins. In Notepad, if you click the File menu, the directory **C:\My Documents** is displayed.

Authentication

This page allows you to enter login details of your ICA connection so that you do not need to type them in each time you connect.

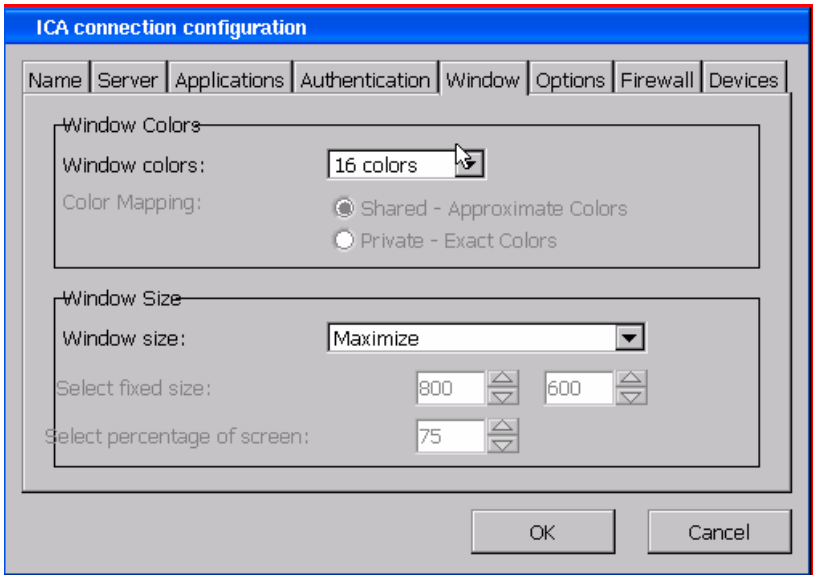


ICA Authentication Property Sheet

Type a valid user name, domain, and password. If you leave these fields blank, you are prompted for your user name, domain, and password whenever the ICA Client connects to the Citrix server.

Window

This page allows you to specify the size and color presentation of the session window.



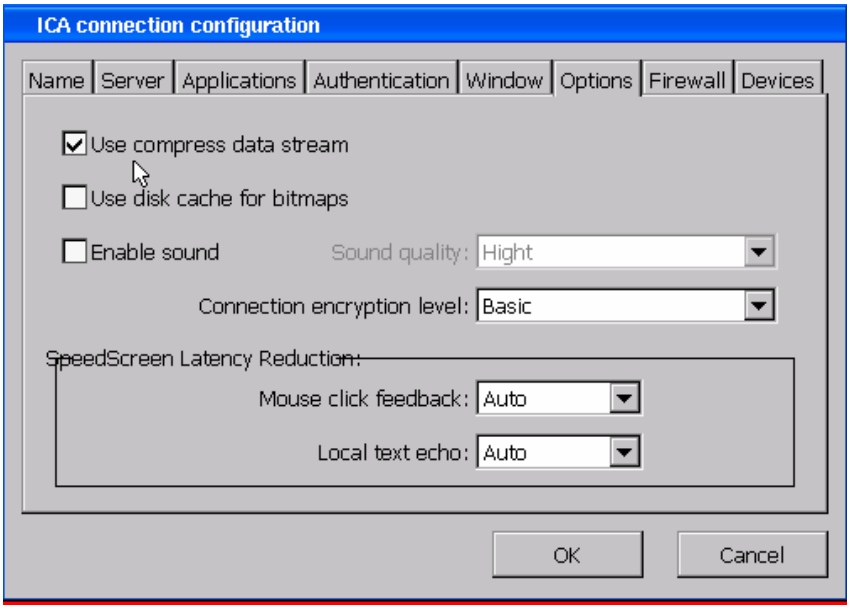
ICA Window Property Sheet

- **Window Colors** allows you to set the number of window colors to **16**, **256**, **32K**, or **16M**. Your display must be capable of displaying the resolution and color depth you select.
- **Color Mapping**. If you choose 256 colors, **Color Mapping** is enabled to allow you to set up 256 color sessions to use approximate or exact colors. Use **Shared - Approximate Colors** to eliminate color flashing when switching context. Note that if other applications have allocated all 256 colors, the client will use a private color map.
- **Window Size** allows you to select from **Maximize, Fixed Size**, **Percentage of Screen Size**, **Full Screen**, or **Seamless Window**.
- **Maximize**. This will display the ICA session in the available desktop screen without underlaying the Task Bar.
- **Fixed Size**. This will display the ICA session in a fixed number of pixels, as defined in the **Select fixed size** fields.
- **Percentage**. This will display the ICA session in a percentage of the available screen, as defined in the **Select percentage of screen** field
- **Full Screen**. This will display the ICA session in the available desktop screen, but it underlays the Task Bar. This means that part of the session is hidden behind the terminal desktop Task Bar unless the Task Bar is configured to be automatically hidden in Terminal Properties>Desktop.
- **Seamless Window**. If you are connecting to a published application, you can also make this selection, which integrates local and remote windows on the desktop.

.

Options

This page configures a variety of miscellaneous options.



ICA Options Property Sheet

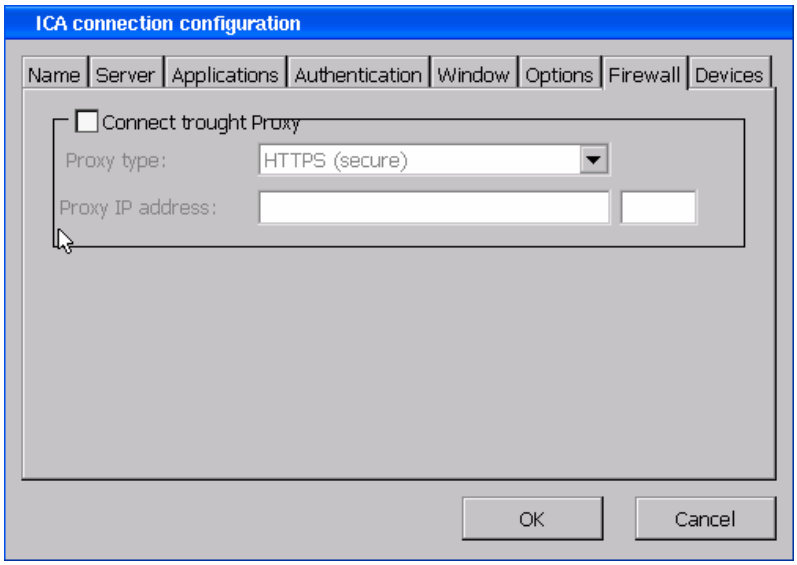
- **Use compress data stream**. Check this box to reduce the amount of data transferred between the ICA Client and the Citrix server hosting the session. (If your connection is bandwidth-limited, enabling compression may increase performance. If your terminal is on a high-speed LAN, you may not need compression.).
- **Use disk cache…**. Check this box to store commonly used bitmaps (images) locally on your client so that they do not have to be transferred over the ICA connection every time they are needed.

- **Enable sound**. Check this box to enable sound support. Remote applications will be able to play sounds on your client. From the pull-down list, select a sound presentation quality level. Remember that network bandwidth requirements go up as sound quality goes up. **Note:** If you wish to use an external speaker with your terminal, it must have auxiliary power.
- **Connection encryption level**. Encryption increases the security of your ICA connection. By default, basic encryption is enabled on all connections. If the Citrix server you are connecting to supports advanced encryption (e.g., Secure ICA services), you can use it to improve security. Select the level of encryption you want to use. Select RC5 128-bit Login Only to use encryption only during authentication. The Citrix server must be configured to allow the selected encryption level or greater. For example, if the Citrix server is configured to allow RC5 128-bit connections, the ICA client can connect with RC5 56 or 128-bit encryption. **Note:** To use advanced encryption, you need to install Secure ICA on your Citrix server. The Citrix server must also be configured to allow the selected encryption level or greater.
- **SpeedScreen Latency Reduction** improves responsiveness over high-latency connections by providing local feedback to the user in response to typed data or mouse clicks.
  - **Local Text Echo** accelerates display of the input text.
  - **Mouse Click Feedback** provides visual feedback of a mouse click, in that the mouse pointer is immediately changed to an hourglass indicator.

  Speed Screen will only work if the server-side Speed Screen feature is available and has been enabled on the Citrix server to which you are connecting. From the drop-down lists, select the settings you need.
  - For slower connections (for example, if you are connecting over a WAN or a dial-in connection), set mode to **On** to decrease the delay between user input and screen display.
  - For faster connections (for example, if you are connecting over a LAN), set mode to **Off**.
  - If you are not certain of the connection speed, set the mode to **Auto** to turn Speed Screen latency reduction on or off automatically depending on the latency of the connection.

Firewall

This page is applicable only if the network has a proxy server to limit access to your Citrix servers. In this case, you must enter the proxy server information here to handle connections between clients and the server.

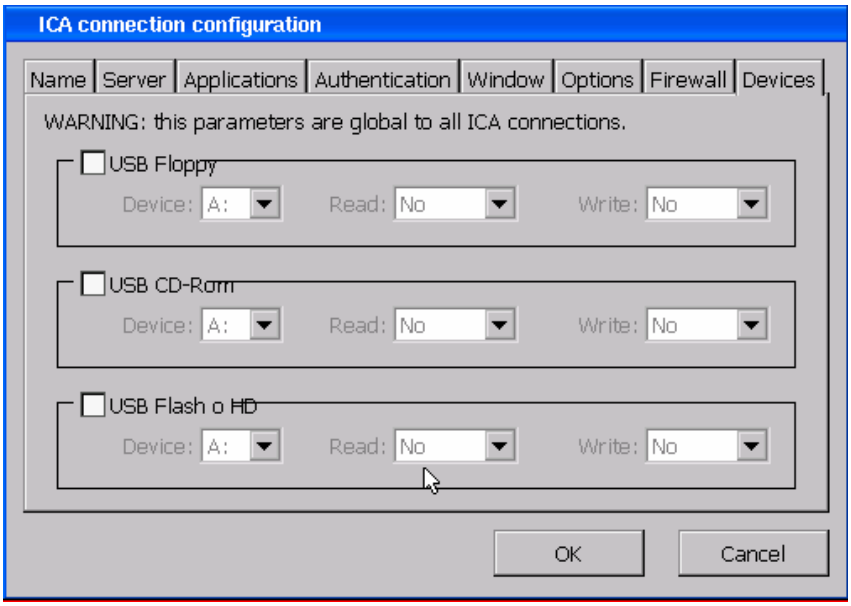


ICA Firewall Property Sheet

To configure a proxy server:
1. Check the Connect through Proxy box.
2. In the **Proxy type** drop-down list, select **SOCKS** or **HTTPS (secure)**.
3. In the **Proxy IP address** boxes, enter the proxy server's IP address in the first box and the server's port number in the second box (typically 1080) in the second box.
4. Click OK to save your changes.

Note: If you configure a proxy server, you must specify at least one server in the Server Location dialog box for server and published application browsing to work.

Devices



ICA Devices Property Sheet

Device mapping makes USB storage devices attached to the 2x14 terminal available to the user during ICA sessions on MetaFrame servers. When a MetaFrame server is configured to allow client drive mapping, users can access their-locally stored files, work with them during their ICA sessions, and then save them again either on a local drive or on a drive on the MetaFrame server.

You can control drive mapping at the MetaFrame server in the **Client Settings** dialog box in **Citrix Connection Configuration**. Use the **Connection** settings to specify the device to automatically map at login. You can also use the Devices property sheet to control the device mapping from the terminal during ICA Client sessions. Use this property sheet to specify which USB drive to automatically map at login. The settings apply for all ICA connection sessions. The procedure is:
1. Check the box of the appropriate USB drive type. **Note:** Only one USB drive can be mapped.
2. Leave **Device** at the default; the drive letter has no significance since only one drive can be mapped.
3. Select the desired Read and Write permissions. The **Prompt** permission invokes a prompt dialog at the first access for each session.
4. Click on **OK**.

Client VNC

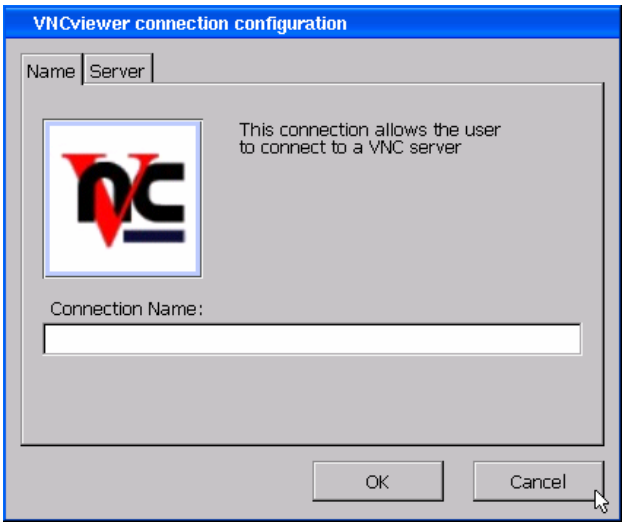
VNC (Virtual Network Computing) is, in essence, a remote display system which allows you to view a computing 'desktop' environment from anywhere on the Internet. It is platform-independent. A desktop running on a Linux machine may be displayed on a PC, or on your YES*tation*. VNC requires a server software module in the machine that is being viewed and a viewer software module in the viewing machine. With the VNC client on your 2x14, you can view and control the desktop on any machine that is running the VNC server software. Of course, you need a TCP/IP connection to allow this to happen.

You can learn much more about VNC from the Web site http://www.uk.research.att.com/vnc/index.html.

Note: You can add multiple Client VNC sessions, but only one can be active at a time.

When you select **Client VNC**, you will see the VNCviewer Connection Configuration sheet with two property tabs.

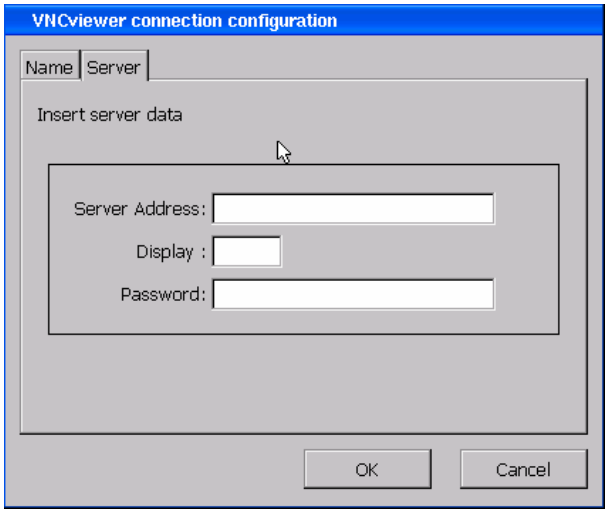
1.



VNCviewer Name Property Sheet

The name you enter here will be the name of the entry in the Connections Manager connection list.

2.



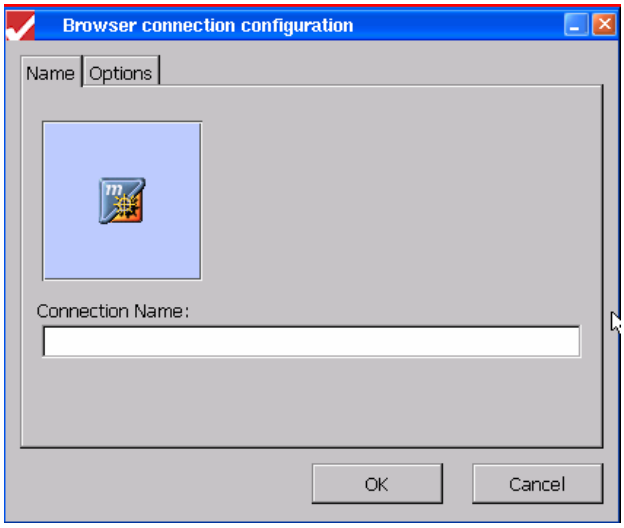
VNCviewer Server Property Sheet

- **Server Address**. Enter the network name or the IP address of the device that you wish to view.
- **Display**. Enter the display number on the device (display 0 always works for me. **NOTE:** You must enter a display number; the viewer will not default to 0.
- **Password**. The VNC viewer on the target device can be configured to allow client viewing only if a specific password is entered. If you want the viewing connection to be made automatically when you open it from the Connections Manager, enter the password here. If you do not enter the password here, you will see a password dialog box when you open the session.

Internet Browser

The 2214 and 2614 terminals incorporate the Netscape 4.78 browser; the 2814 incorporates the Netscape 7.x browser. When you select **Internet Browser**, you will see the Browser Connection Configuration sheet with two property tabs.

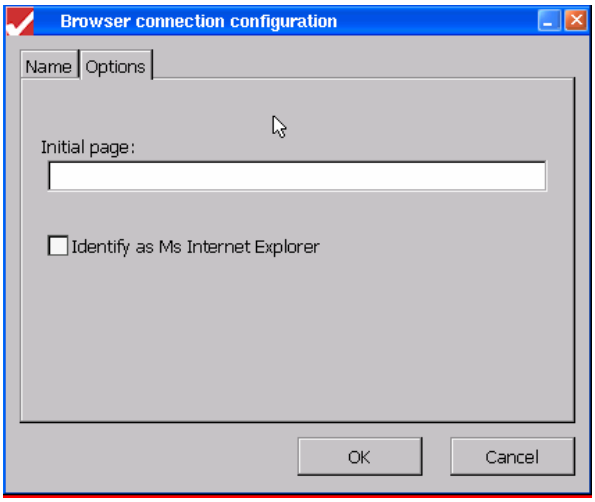
1.



Browser Name Configuration Sheet

The name you enter here will be the name of the entry in the Connections Manager connection list.

2.



Browser Options Configuration Sheet

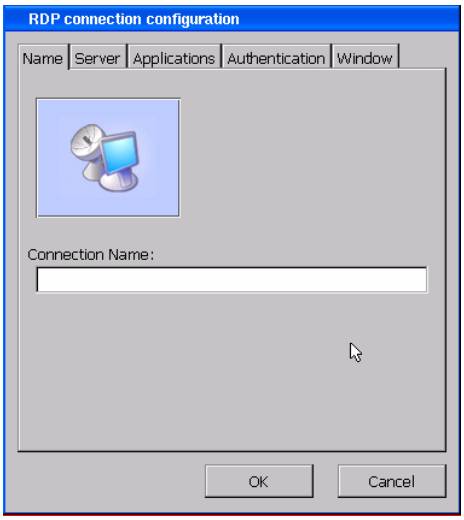
- **Initial page**. Enter the url that will be browsed automatically when this browser connection is opened.
- **Identify as…**. Some Web sites work better, or only, with the Microsoft Internet Explorer browser. The browser in this terminal is Netscape. Check this box to fool those particular Web sites.

Obviously, you do not get a chance to do much configuration here. Many more properties are accessible in the Menu bar at Edit>Preferences in an open session.

Microsoft Remote Desktop Client

This client is used to run Windows applications from a Microsoft Terminal Server. When you click on **OK** after selecting **Microsoft Remote Desktop Client**, the RDP Connection Configuration sheet will appear with five property tabs.

Name

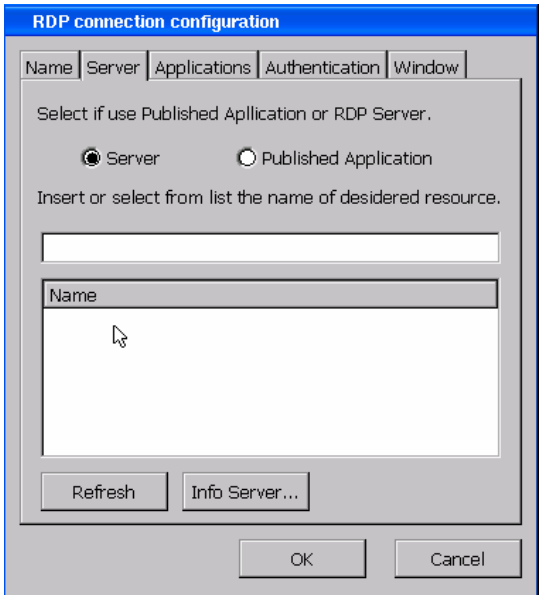


RDP Name Property Sheet

The name you enter here will be the name of the entry in the Connections Manager connection list and will appear in the title bar of the RDP session window.

Server

This sheet lets you specify the Terminal Server to be used with this session.



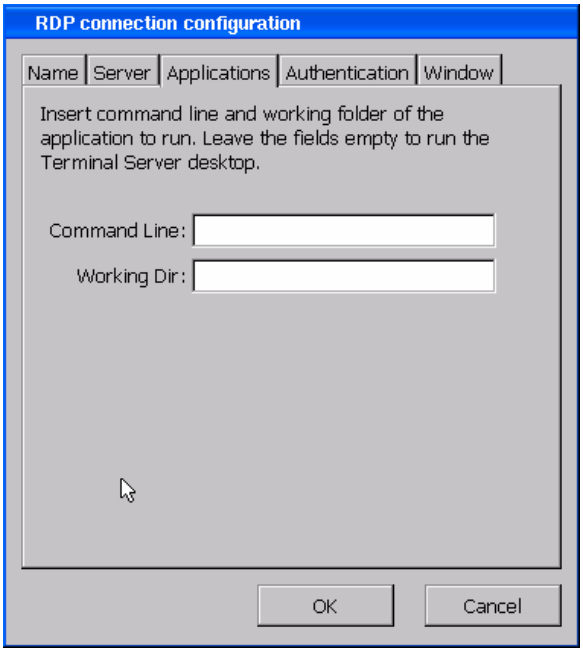
RDP Server Property Sheet

The procedure for using this property sheet is:

1. Select **Server**. **Published Application** is not supported for RDP connections.
2. If your server is on the local sub-net, click on **Refresh**.
3. The terminal will search the local sub-net for all Terminal Servers, and will present a server list in the lower box. You will get an error message if none are found.
4. Double-click on the desired item in the list. It will appear in the upper box.
5. If your server is not found for some reason, you can type in the IP address in the upper box.

Ignore **Info Server**. This is not supported in the 2x14.

Applications



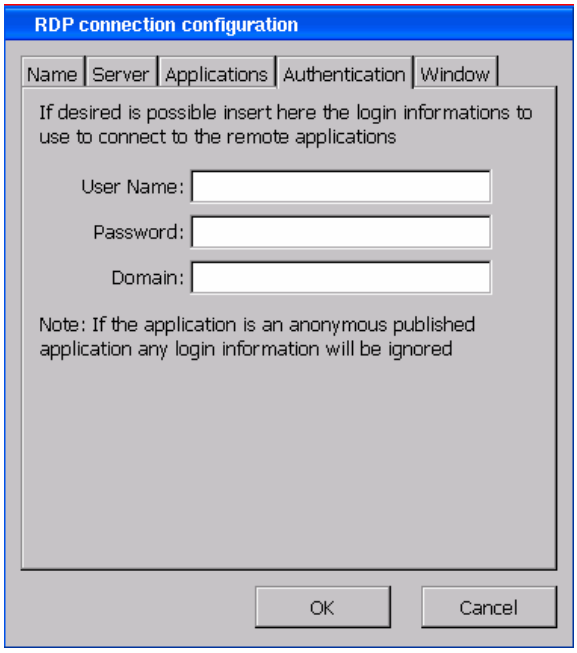
RDP Applications Property Sheet

If you want this session to open in a specific application on the server after the logon to the Terminal Server is successful, enter the path and executable file name of an application in the **Command Line** field. Leave this field blank to run a Windows desktop from the Terminal Server. **Working Dir:** lets you associate a directory with the application specified in Command Line.

For example, if the application **Notepad.exe** is in the **C:\WTSRV** directory on the Terminal Server, type **C:\WTSRV\Notepad.exe** in the Command Line field. If you use Notepad to work on documents in the **C:\My Documents** directory, type **C:\My Documents** in the Working Dir: field. When you log on to the Terminal Server, Notepad begins. In Notepad, if you click the File menu, the directory **C:\My Documents** is displayed.

Authentication

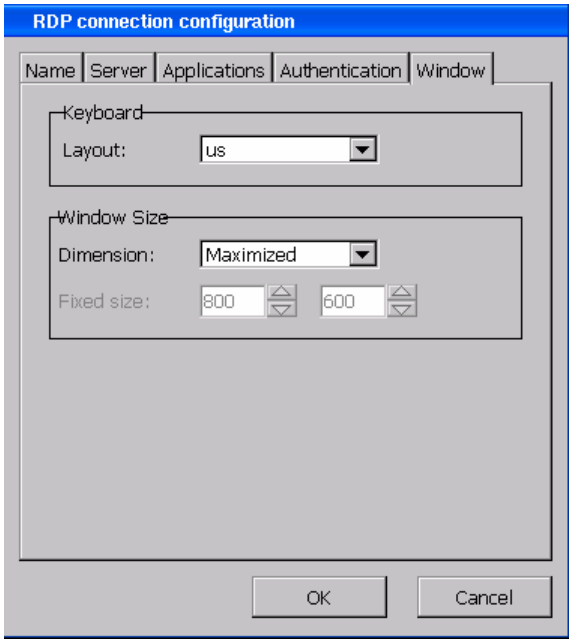
This page allows you to enter login details of your RDP connection so that you do not need to type them in each time you connect.



RDP Authentication Property Sheet

Type a valid user name, domain, and password. If you leave these fields blank, you are prompted for your user name, domain, and password whenever the RDP Client connects to the Terminal Server.

Window



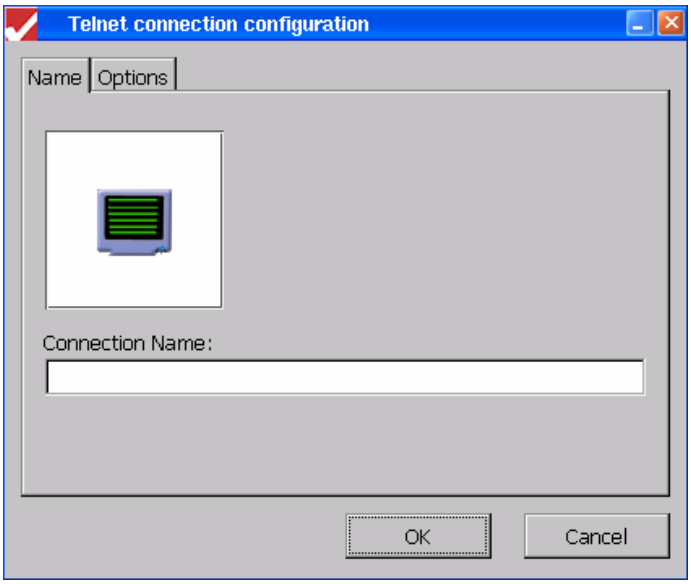
RDP Window Property Sheet

- **Keyboard Layout**. Choose a country from the drop-down list. This will define the input locale used by the Terminal Server for this session.
- **Window Size** allows you to select from **Maximize, Fixed Size**, or **Full Screen**.
- **Maximized**. This will display the RDP session in the available desktop screen without overlaying the Task Bar.
- **Fixed Size**. This will display the RDP session in a fixed number of pixels, as defined in the **Fixed size** fields.
- **Full Screen**. This will display the RDP session in the available desktop screen, but it overlays the Task Bar.

Telnet Connection (2214, 2814 models)

Telnet connections provide a choice of ASCII-terminal emulations for connection to UNIX, Linux, and older midrange computers. When you select **Telnet Connection**, you will see the Telnet Connection Configuration sheet with two property tabs.

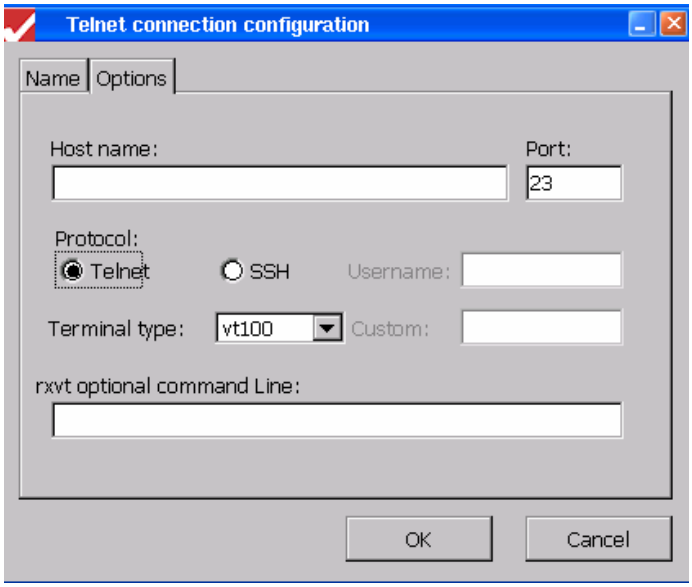
Name



Telnet Name Property Sheet

The name you enter here will be the name of the entry in the Connections Manager connection list and will appear in the title bar of the Telnet session window.

Options



Telnet Options Property Sheet

- **Host name**. Enter the IP address of the host.
- **Port**. Leave at **23** unless directed otherwise by your network administrator.
- **Protocol**.
  - **Telnet**. Select this radio button for unsecured communication.
  - **SSH**. Select this radio button for secured (Secure Shell) communication. Your host must be SSH-compatible.
    - **Username**. If you select SSH protocol, this field will become active. Enter a user name.
- **Terminal type**. Select a terminal type from the drop-down list.
  - **Custom**. If you selected **Custom** for terminal type, this field will become active. The 2x14 telnet emulator actually supports a large number of terminals—too many to be placed in the drop-down list. If you want to emulate one of the following terminal types, select Custom and enter its name, exactly as shown in the list, here.

aixterm	ansi	cygwin	dumb	gnome
hp	kvt	linux	qansi	rxvt
scoansi	sun	vt52	vt102	vt220
vt320	vt400	vt420	vt510	vt520
wyse30	wyse50	wyse350		

- **Rxvt…**. Enter an optional **r** UNIX command here.

TNXXXXe

The YES*term* IP TN3270e and TN5250e emulators provide users with a powerful capability to connect to an AS/400, iSeries, or IBM mainframe via the TCP/IP protocol. They provide enhanced emulation functions for a wide range of IBM terminals and "true" IBM 3812 or 3287 Printer emulation with the support of all the enhanced features normally available only on very expensive printer interfaces. Up to four concurrent TCP/IP connections can be configured with identical or unique hosts. In addition, YES*term*/IP TN5250E supports the "Enhanced Display Auto-Signon and Password Encryption" allowing a secure connection to the AS/400, with no need of any SSL option. Basic session configuration is made simple by a Wizard application that guides the user during the configuration process.

Significant characteristics of YES*term* IP display sessions are:

- IBM emulations supported: 3180-2, 3196, 3278/9, 3477-FG, 3477-FC, 5251, 5291.
- Numerous resident national keyboard templates and Code Pages.
- Enhanced keyboard mapping and customization, including macro assignment.
- EURO (€) symbol supported.
- Enhanced copy and paste options.
- Programmable Keypad.
- Attributes editing.
- Enhanced customizable Hot Spot feature.
- Enhanced macro Record/Playback feature.
- Supports "Enhanced Display Auto-Signon and Password Encryption" allowing a secure connection to the AS/400.
- **Choice of Windows or "Green Screen" Text presentation modes.**

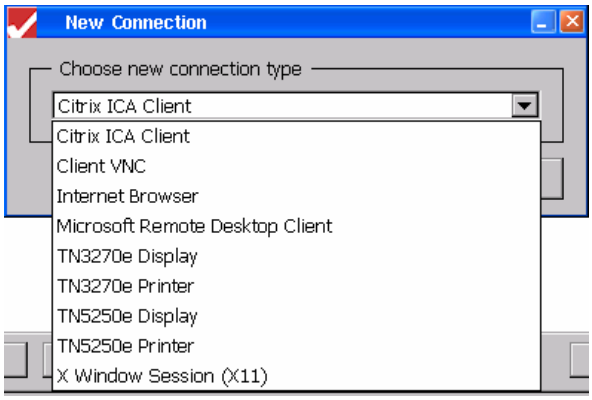
Significant characteristics of YES*term* IP printer sessions are

- IBM emulations supported: 3287, 3812.
- Support for continuous forms, multi drawers, envelope, manual feeders, simplex/duplex, auto page orientation, and COR (Computer Output Reduction).
- Supports CPI, LPI Override and LQ, NLQ.
- Supports Host Transform Feature (TN5250e only).
- Supports Hex Pass-Through (HPT) feature, with customizable leading and ending sequences and support of "non-printable characters".
- Supports EURO symbol (€).

Connections are created in Connections Manager, but the Add path is somewhat different in TBT and non-TBT viewing modes. Initially, there will be no sessions configured in the terminal, so you will have to add at least one in order to get any use out of the terminal.

Desktop and WBT Viewing Modes

In WBT and Desktop viewing modes, sessions are added from the Configure tab of Connections Manager. Each session can be to a unique server, if desired. Click on **Add** to see the New Connection dialog box. Then click on the drop-down arrow to see the drop-down list of possible connections.

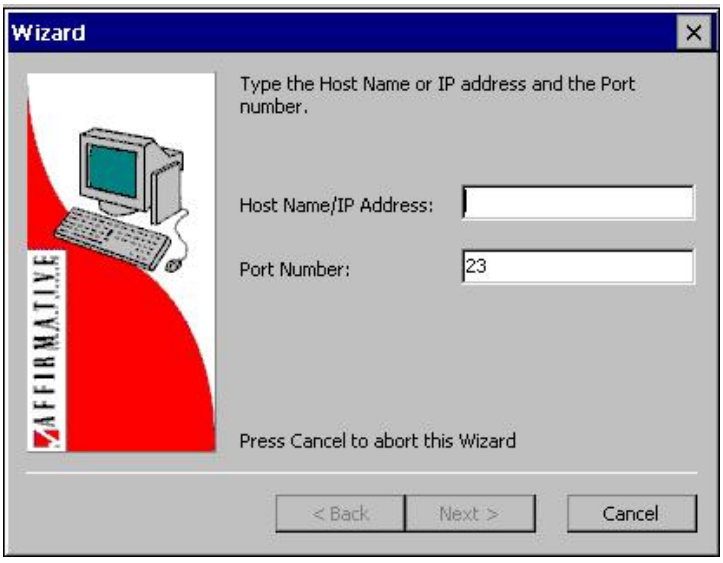


New Connection Dialog Box

Display Sessions

In the Add drop-down list, you are faced with a choice of TN3270e or TN5250e emulation types. After choosing one, a wizard will guide you through setup. The Setup Wizard will take you through three dialog boxes. Activate **Next** to go to the next box, **Back** to return to the previous dialog box, and **Cancel** or the **Esc** key to abort the process.

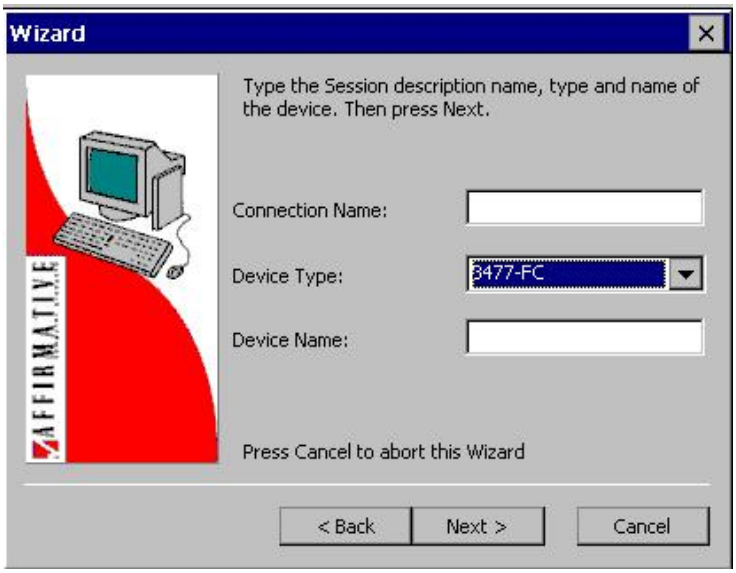
1.



Display Setup Wizard Dialog Box #1

- **Host Name/IP Address**. If you are using a Hosts table (see Editing Terminal Properties|Network|Advanced Parameters|Hosts Table), you can type in the host network name. Otherwise, type in the IP address of the host.
- **Port Number**. Use the default of **23** unless directed to do otherwise by your system administrator.

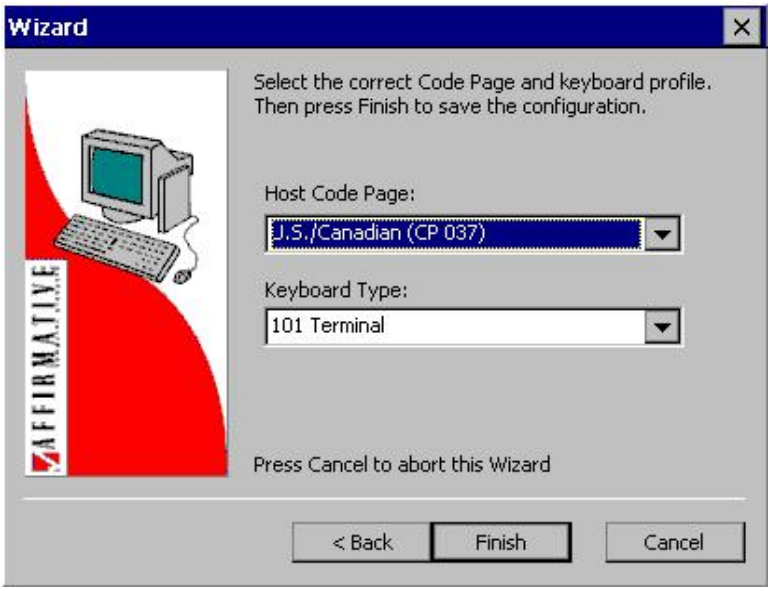
2.



Display Setup Wizard Dialog Box #2

- **Connection Name**. This is the friendly name that will appear in the Connection Manager screen and at the bottom of your session screens and in the Taskbar (in Desktop Mode).
- **Device Type**. Select one from the drop-down list. The default **3477-FC** works well for TN5250e emulation, unless you have special needs. If you are adding a TN3270e session, you will see a choice of 3278/9 terminal types here.
- **Device Name.** If you are using named sessions, enter the session name here.

3.



Final Display Setup Wizard Dialog Box

- **Host Code Page**. Choose the applicable country from the drop-down list.
- **Keyboard Type**. Choose **101 Terminal** if you are using the Affirmative Computer Products 1010T, 1019T, 1023T, or 1027T 101-key keyboard; choose **122 keys** if you are using the Affirmative Computer Products 1220T, 1223T, or 1227T 122-key keyboard; otherwise, choose **101 PC**.

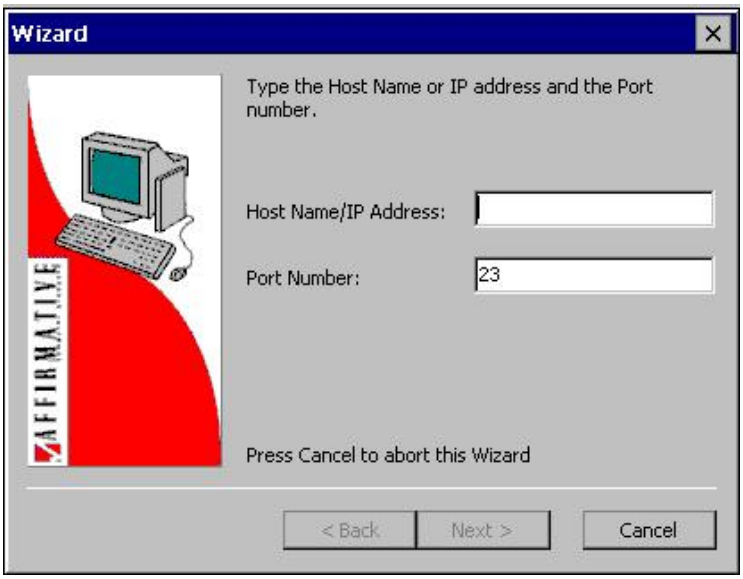
This concludes the configuration parameters covered by the Wizard. However, you can customize many more parameters in each display session by highlighting the connection name in the Configure tab of Connection Manager and activating **Edit**. See Editing an Existing Connection|TNXXXXe|Display Sessions for more information.

Printer Sessions

You can have multiple local printers connecting to identical or unique hosts, but you must create a printer session for each one. If you want to create a session for extended local Print Screens (see Editing an Existing Connection|TNXXXXe|Display Sessions|General|Print Screen), you can create it here, but you will have to edit it later (see Editing an Existing Connection|TNXXXXe|Printer Sessions) since the default is for standard host printing.

After you choose a session type, a Setup Wizard will take you through three dialog boxes.

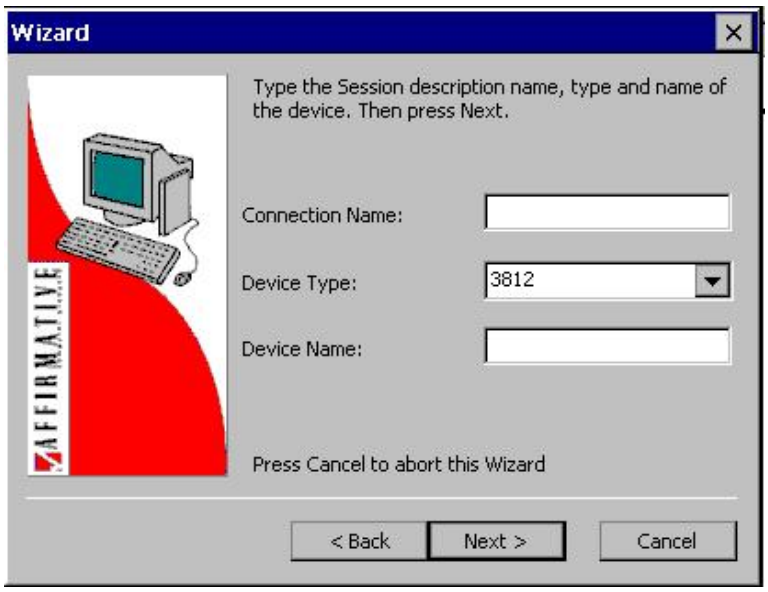
1.



Printer Setup Wizard Dialog Box #1

- **Host Name/IP Address**. If you are using a Hosts table (see Editing Terminal Properties|Network|Advanced Parameters|Hosts Table), you can type in the host network name. Otherwise, type in the IP address of the host. If you are creating this session for extended local print screens, an IP address is irrelevant, but you must enter at least one character to satisfy the Wizard.
- **Port Number**. Use the default of **23** unless otherwise directed by your system administrator.

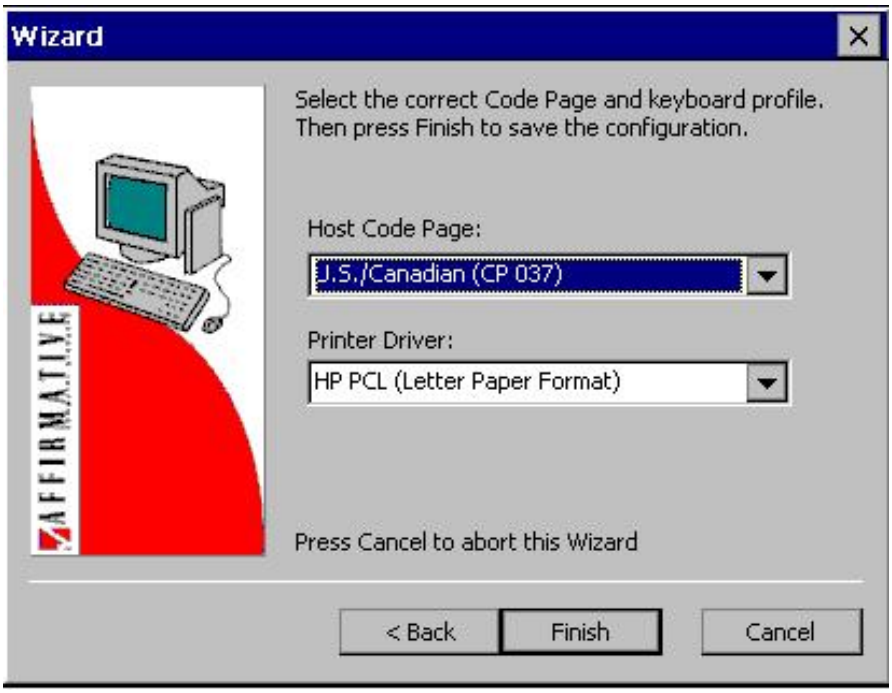
2.



Printer Setup Wizard Dialog Box #2

- **Connection Name**. This is the friendly name that will appear in the Connections Manager screen and at the bottom of your session screens and on the Taskbar (in Desktop mode).
- **Device Type**. Only **3287** (3270) or **3812** (5250) is available for TCP/IP devices.
- **Device Name**. If you are using named sessions, enter the session name here.

3.



Printer SetupWizard Dialog Box #3

- **Host Code Page**. Choose the applicable country from the drop-down list.
- **Printer Driver**. If you are doing extended local Print Screens, or if you are not using the AS/400 Host Print Transform, choose a driver here that is compatible with the local-attached or LAN printer. If you cannot find one in the list, try **Empty Driver**.

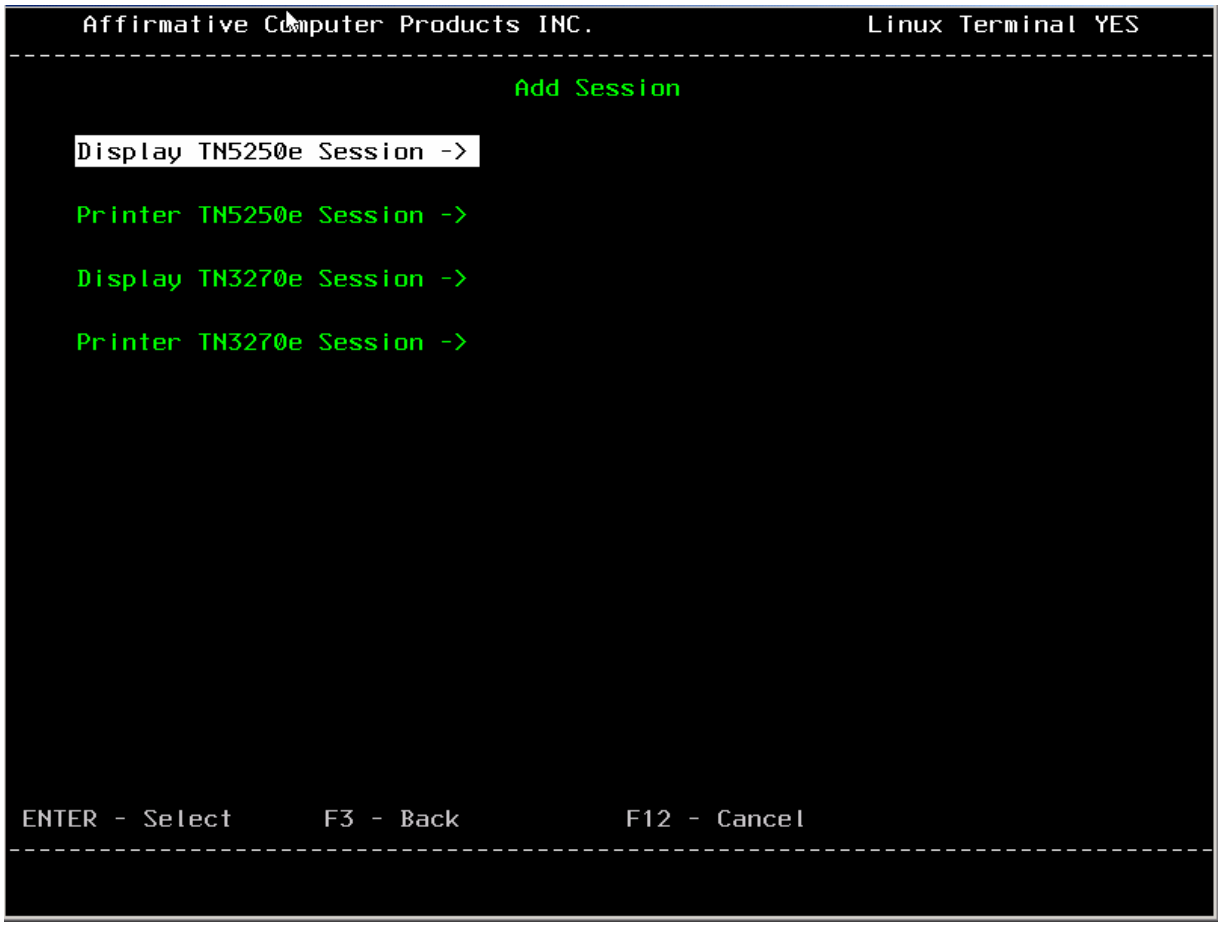
This concludes the configuration parameters covered by the wizard. However, you can customize many more parameters in each printer session by highlighting the connection name in the Configure tab of Connection Manager and activating **Edit** (see Editing an Existing Connection|TNXXXXe|Printer Sessions). If you are adding multiple printer sessions, you will have to edit the sessions in this manner in order to assign a unique port to each session; the default port for every session is **LPT1**.

TBT Viewing Mode

Select the Connections category in Terminal Properties to display the Connections Manager property sheet. In this sheet, you can add and edit emulation sessions.

Connections Manager Property Sheet for TBT Viewing Mode

Activate **Add Session** to see the session menu.



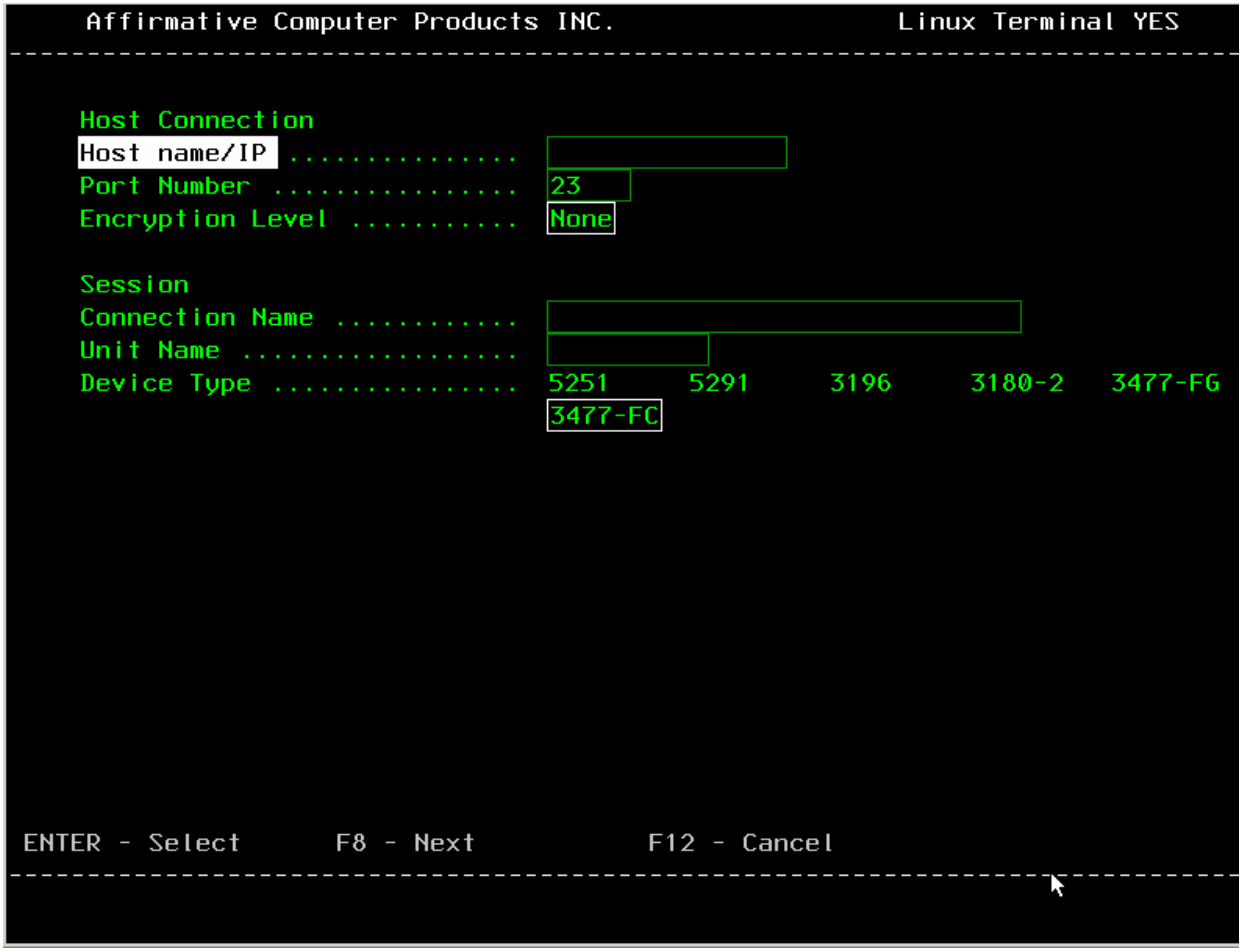
Add Session Menu

Select the desired menu type to begin the appropriate Add Wizard. In each wizard, press **F3** to advance to the next screen, or **F12** to cancel the add.

Display Sessions

Use TN5250e protocol to connect to AS/400 or iSeries hosts. Use TN3270e protocol to connect to IBM mainframes. You will be led through two configuration screens.

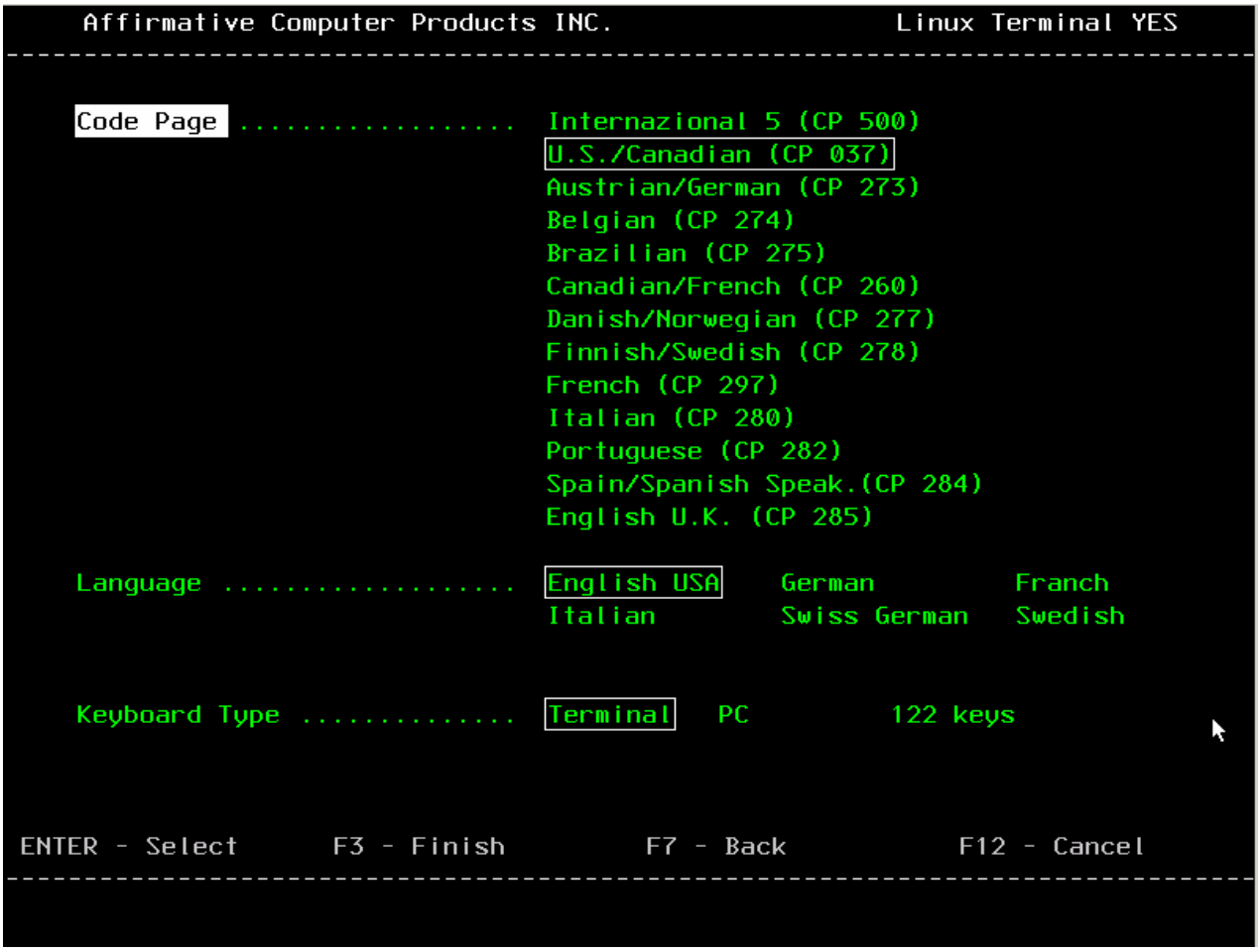
1.



Display Session Add Wizard Screen #1

- **Host Name/IP Address**. If you are using a Hosts table (see Editing Terminal Properties|Network|Advanced Parameters|Hosts Table), you can type in the host network name. Otherwise, type in the IP address of the host.
- **Port Number**. Use the default of **23** unless directed to do otherwise by your system administrator.
- **Encryption Level**. You have no choice here.
- **Connection Name**. This is the friendly name that will appear in the Connection Manager screen and at the bottom of your session screens and in the Taskbar (in Desktop Mode).
- **Unit Name** (aka Device Name)**.** If you are using named devices, enter the device name here
- **Device Type**. The default **3477-FC** works well for TN5250e emulation, unless you have special needs. If you are adding a TN3270e session, you will see a choice of 3278/9 terminal types here.

2.



Display Session Add Wizard Screen #2

- **Code Page**. Choose the applicable country from the list.
- **Language**. Choose a keyboard language.
- **Keyboard Type**. Choose **Terminal** if you are using the Affirmative Computer Products 1010T, 1019T, 1023T, or 1027T 101-key keyboard; choose **122 keys** if you are using the Affirmative Computer Products 1220T, 1223T, or 1227T 122-key keyboard; otherwise, choose **PC**.

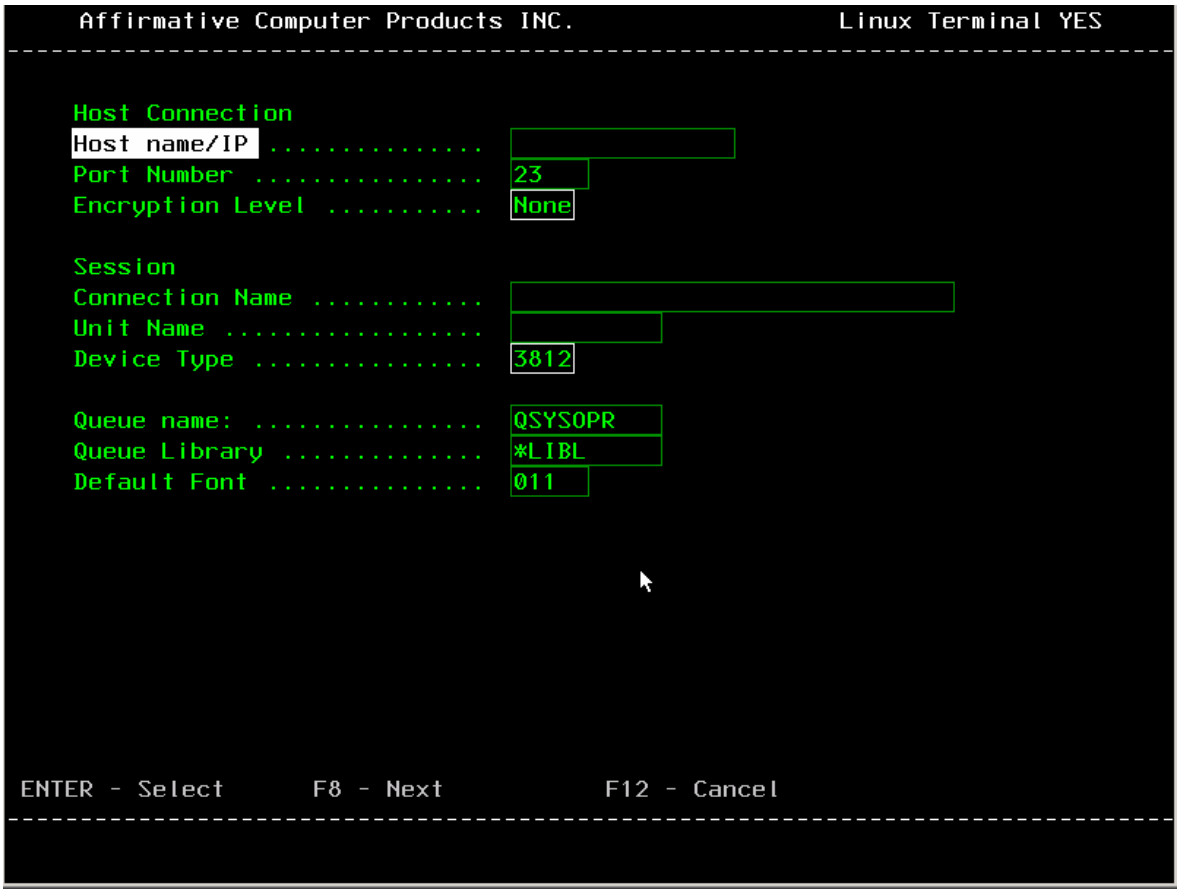
This concludes the configuration parameters covered by the wizard. However, you can customize many more parameters in each display session by using a non-TBT viewing mode and editing from the Configure tab of Connection Manager. See Editing an Existing Connection|TNXXXXe|Display Sessions for more information.

Printer Sessions

You can have multiple local printers connecting to identical or unique hosts, but you must create a printer session for each one. If you want to create a TN5250e session for extended local Print Screens (see Editing an Existing Connection|TNXXXXe|Display Sessions|General|Print Screen), you can create it here, but you will have to edit it in non-TBT mode (see Editing an Existing Connection|TNXXXXe|Printer Sessions|Connection (5250)) since the default is for standard host printing.

When you add a printer session, you will be led through three configuration screens.

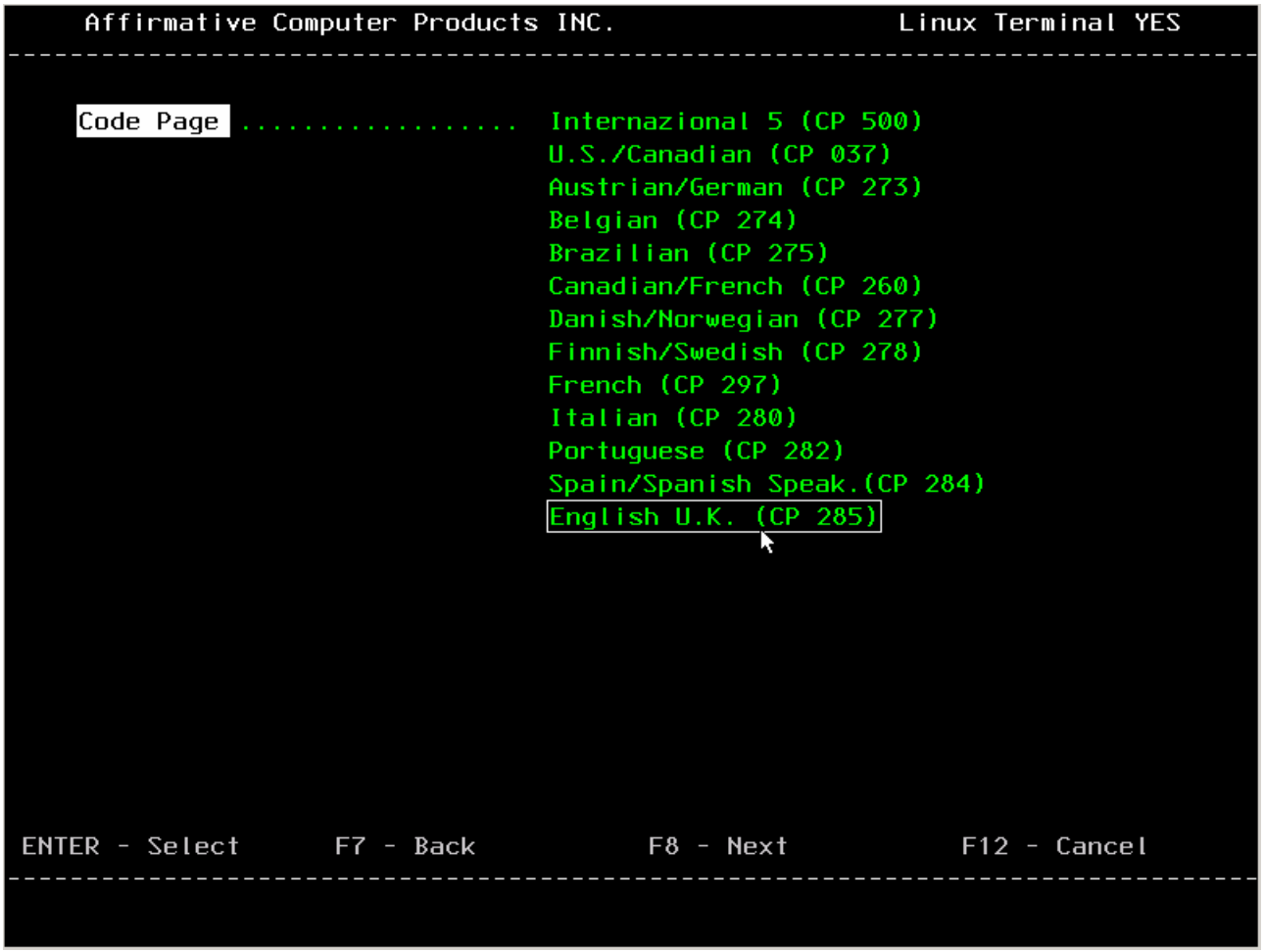
1.



Printer Session Add Wizard Screen #1

- **Host Name/IP Address**. If you are using a Hosts table (see Editing Terminal Properties|Network|Advanced Parameters|Hosts Table), you can type in the host network name. Otherwise, type in the IP address of the host. If you are creating this session for extended local print screens, an IP address is irrelevant, but you must enter at least one character to satisfy the wizard.
- **Port Number**. Use the default of **23** unless directed otherwise by your system administrator.
- **Encryption Level**. You have no choice here.
- **Connection Name**. This is the friendly name that will appear in the Connections Manager screen and at the bottom of your session screens and on the Taskbar (in Desktop mode).
- **Unit Name** (aka Device Name). If you are using named sessions, enter the session name here.
- **Device Type**. Only **3287** (3270) or **3812** (5250) is available for TCP/IP devices.
- **Queue Name/Queue Library/Default Port**. These are host parameters and should be given to you by your host administrator. If this session is for extended local print screens, these parameters are ignored.

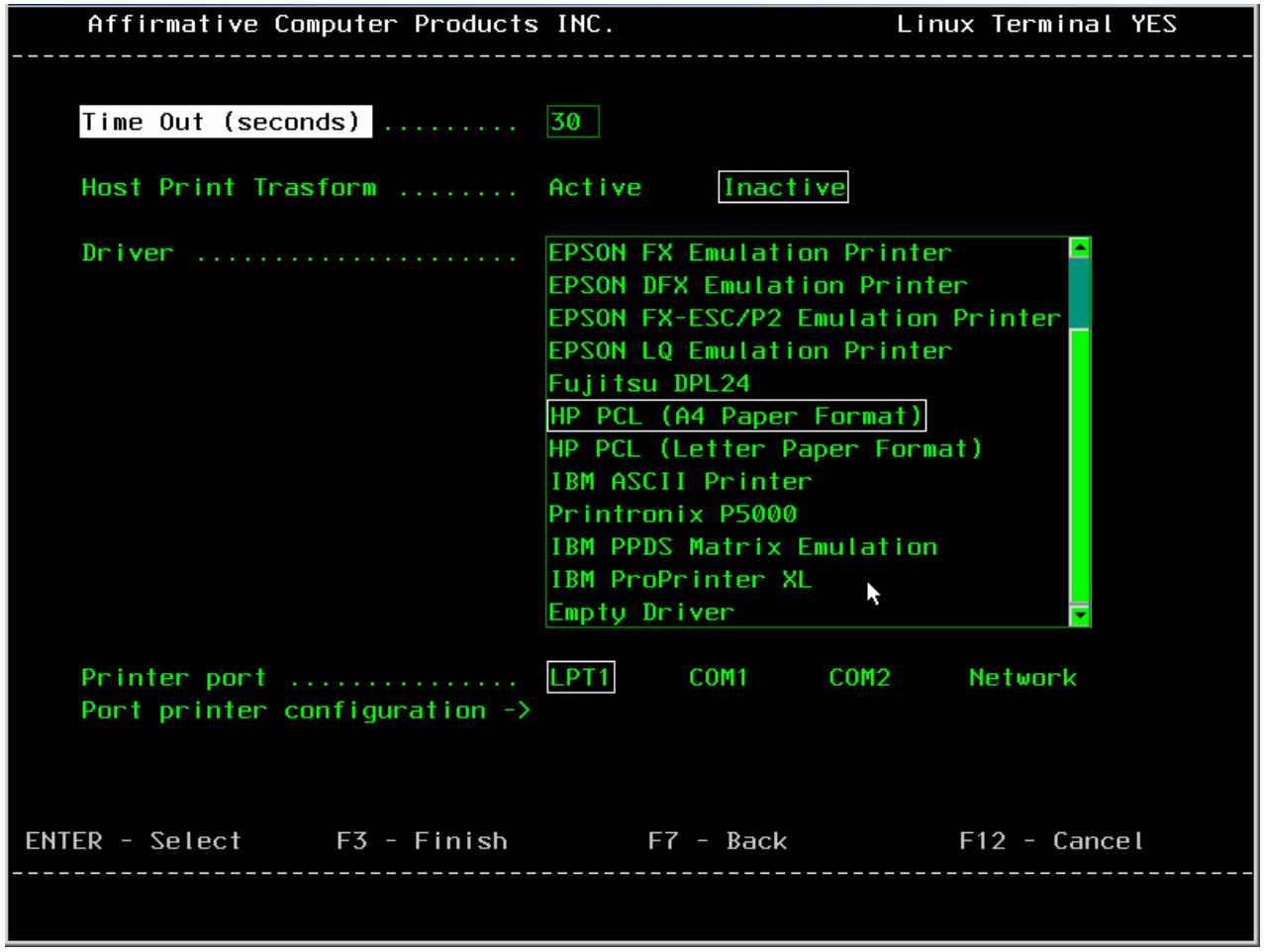
2.



Printer Session Add Wizard Screen #2

- **Host Code Page**. Choose the applicable country from the list.

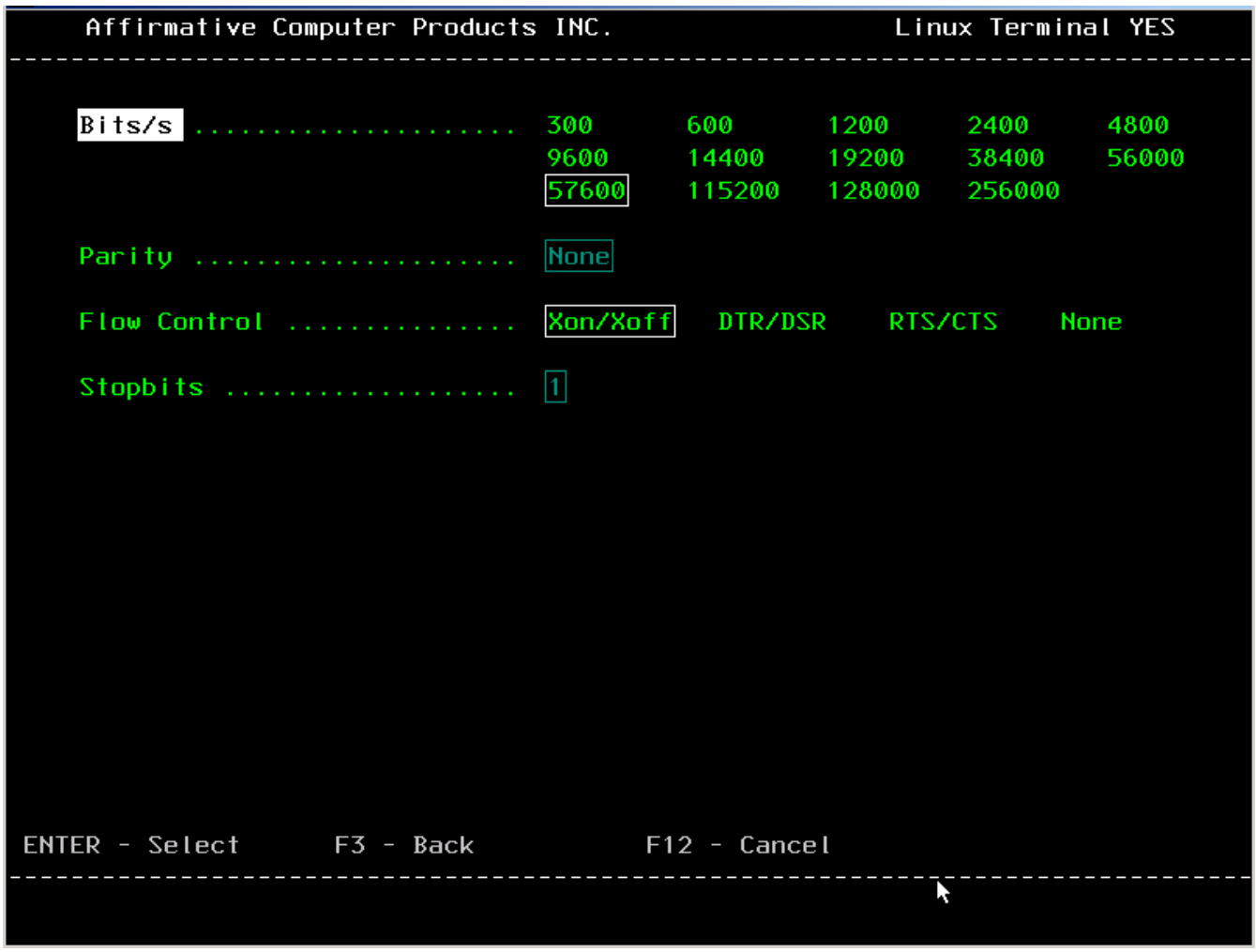
3.



Printer Session Add Wizard Screen #3

- **Time Out**. This parameter defines a timer (in seconds) that starts to count down every time, during a printing job, that the host system stops sending data. If no more data are received within the timeout value selected, the printer session will assume that the print job is finished, and a Form Feed command is sent to the printer.
- **Host Print Transform** (TN5250e only). When Host Print Transform is enabled, the host does the EBCDIC-to-ASCII conversion of the print stream, and the local Passthrough Driver is not used.
- **Driver**. If you are doing extended local Print Screens, or if you are not using the AS/400 Host Print Transform, choose a driver here that is compatible with the local-attached or LAN printer. If you can't find one in the list, try **Empty Driver**.
- **Printer port**. Choose **LPT1**, **Network**, or **COM1/2** (2614 only).
- **Port printer configuration**. After you choose a printer port, you need to configure it.
- **LPT1**. Click on **Port printer configuration** to configure whether or not to reset the printer at the start of every print job.

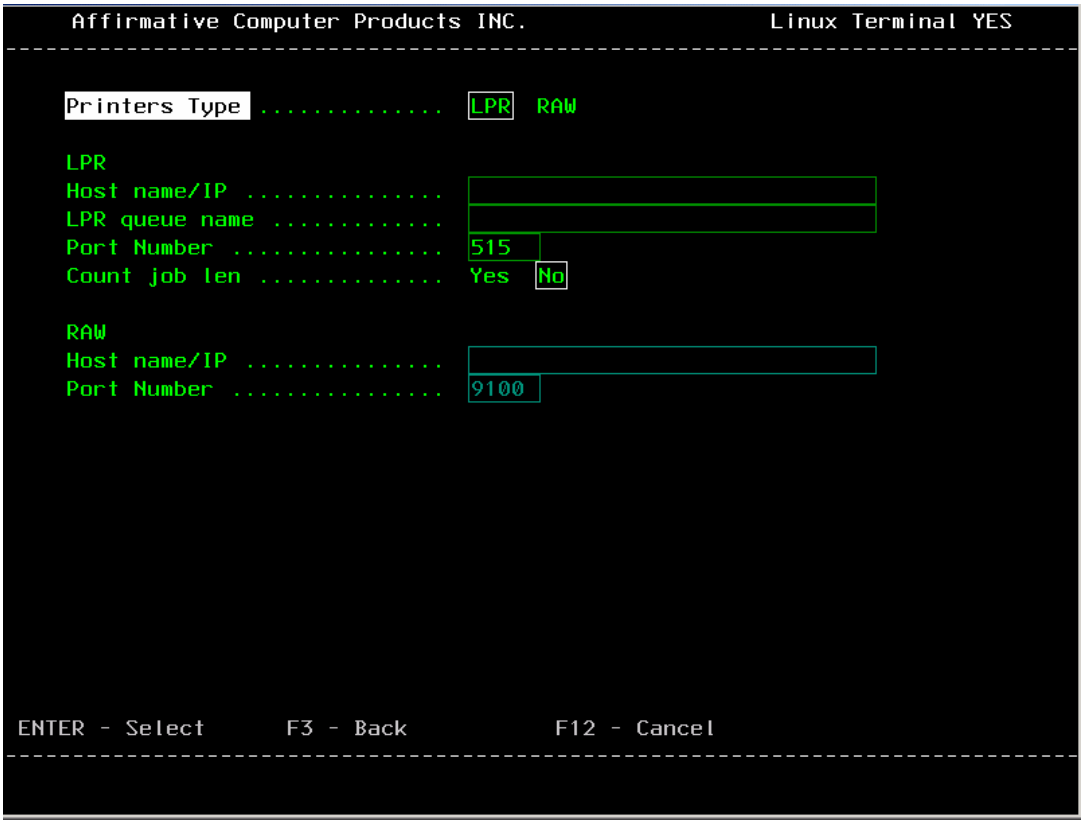
- **COM1/2**. If you chose one of the COM ports, you can click on **Port printer configuration** to see the COM Port configuration screen.



COM Printer Configuration Screen

- **Bits/s**. Select a data rate in bits/second.
- **Flow Control**. Select the type of data flow control.
- **Parity/Stopbits**. These parameters are not configurable.

- **Network**. If you chose a network printer, you can click on **Port printer configuration** to see the Network Printer configuration screen.



Network Printer Configuration Screen

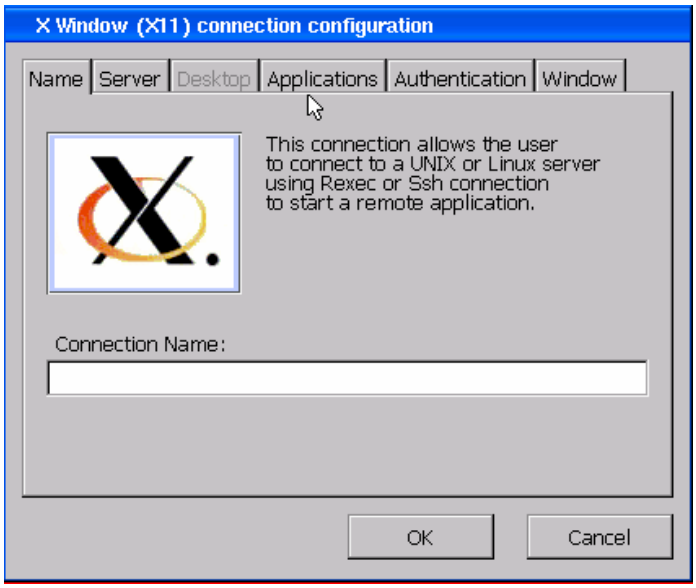
  - **Printer type-LPR**. Choose **LPR** (Line Printer Remote) to assign print jobs to a network printer that is configured as an LPD server.
    - **Host name/IP**. If you are using a Hosts table (see Editing Terminal Properties|Network|Advanced Parameters|Hosts Table), you can type in the host network name. Otherwise, type in the IP address of the LPD host.
    - **LPR queue name**. This will be the queue name assigned at the LPD host to be used by LPR devices to assign print jobs.
    - **Port Number**. Leave at the default unless otherwise directed by your network administrator.
    - **Count job length**. Leave at the **No** default unless otherwise directed by your system administrator.
  - **Printer type-RAW**. RAW is the default protocol for most TCP/IP networks. RAW data is not modified by the spooler at all, but is sent directly to the printer.
    - **Host name/IP**. If you are using a Hosts table (see Editing Terminal Properties|Network|Advanced Parameters|Hosts Table), you can type in the host network name. Otherwise, type in the IP address of the RAW host.
    - **Port Number**. Leave at the **9100** default unless otherwise directed by your system administrator.

This concludes the configuration parameters covered by the wizard. However, you can customize many more parameters in each printer session by using a non-TBT viewing mode and editing from the

Configure tab of Connection Manager. See Editing an Existing Configuration|TNxxxe|Printer Sessions for more information.

X Window Session (X11)

X Windows emulation provides a graphical look and feel in connections to UNIX or Linux hosts, in contrast to the older command-line interface seen in Telnet emulations. When you select **X Windows Session** and click on **OK**, you will see the X Window Connection Configuration sheet with six property tabs.



X Window Name Property Sheet

If you need assistance in adding an X Windows session, contact Affirmative Computer Products Technical Support.

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Editing Terminal Properties

If you are in TBT viewing mode, you can edit many terminal properties using the property sheets in Terminal Properties. However, you can see a more comprehensive set of terminal properties in the Terminal Properties window of the WBT or Desktop viewing modes, and that comprehensive set will be discussed in this section.

Invoke the Terminal Properties window by pressing the **F2** key in the Connections Manager window or by selecting it from the Start menu. If a password has been enabled (see Security) for this terminal, you will see the Password dialog box when you press **F2**. Type in your password and activate **OK**.

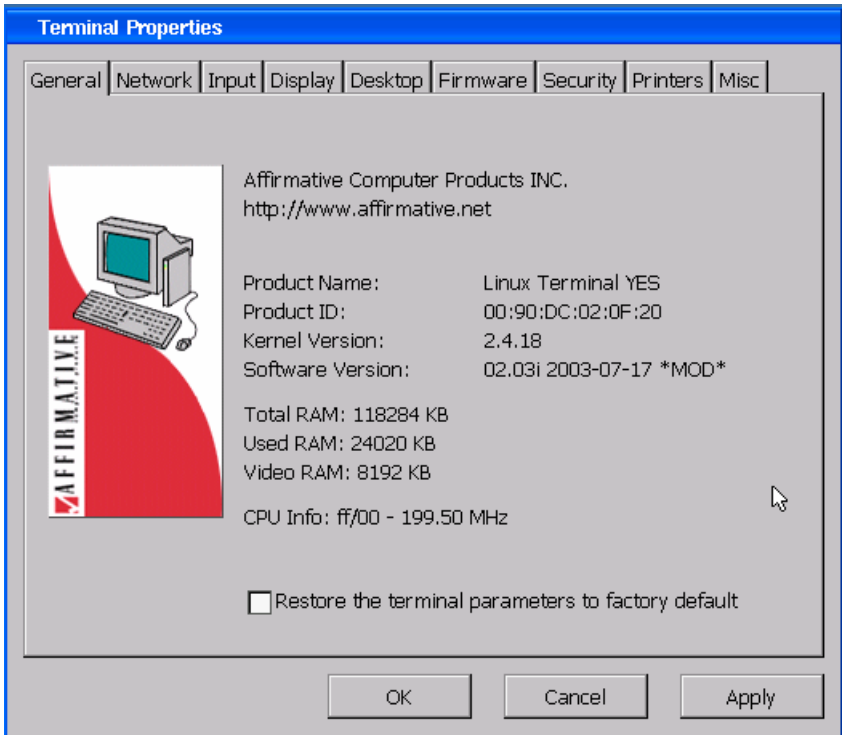
The Terminal Properties window consists of nine property sheets that can be invoked by activating their individual tabs. At the bottom of each sheet are three buttons:

- **OK**. Activate **OK** to save changes and exit Terminal Properties *after* you have set desired properties in *all* the property sheets. Some settings will take effect immediately after you **OK** out, while others may cause the screen to go blank for several seconds, and some will cause the terminal to reboot.
- **Cancel**. Activate **Cancel** to quit Terminal Properties without saving any changes. You can also do this by clicking on **X** in the upper right corner.
- **Apply**. Activate **Apply** to immediately apply the settings on the current properties sheet without exiting Terminal Properties. **Note:** You must subsequently **OK** out of Terminal Properties to save any changes in these settings. If you **Cancel** out, the changes will be lost after the next reboot.

NOTE: We recommend that you change terminal properties only when all sessions are inactive. Many of the changes will invoke a restart (the screen goes black for several seconds and any active sessions are disconnected) or reboot of the terminal.

General

This property sheet is informational except for **Restore…**.

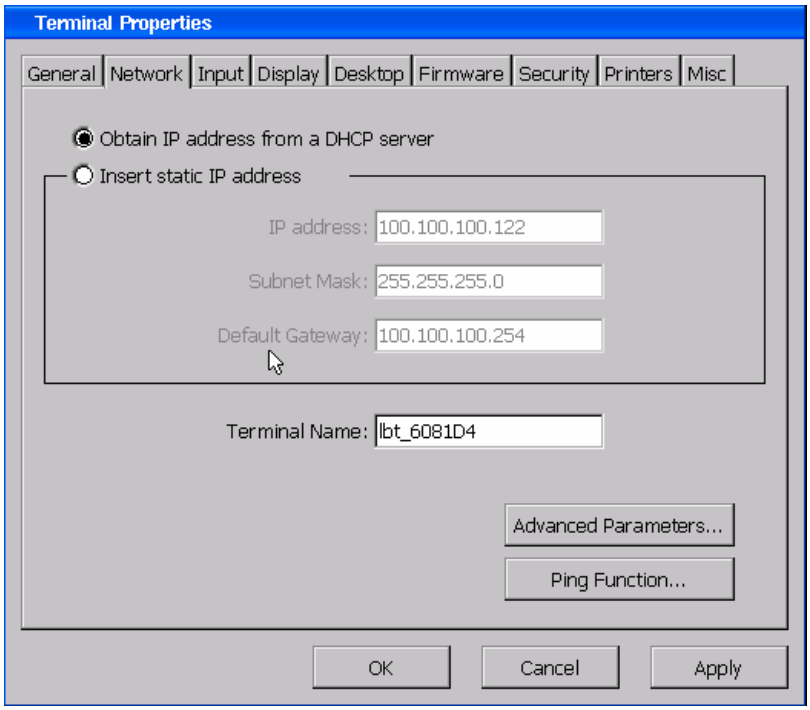


General Property Sheet

- **Product ID**. This is a unique product identification code that also happens to be the terminal MAC address. Every device on every LAN in the world is supposed to have a unique MAC address.
- **Kernel Version**. This is the version of the Linux kernel used on the terminal.
- **Software Version**. This is the version of the firmware installed in this terminal. If you contact Affirmative Computer Products Tech Support about a problem, please have this version information available.
- **Total RAM**. This is the amount of DRAM in the terminal after subtracting the memory used for some basic functions and the memory reserved for video.
- **Used RAM**. This is the amount of total RAM that is currently being used.
- **Video RAM**. This is the amount of RAM that has been reserved for video display. This amount is set in the terminal BIOS and is not a configurable parameter.
- **CPU Info**. This shows some basic information about the CPU in the terminal.
- **Restore the terminal parameters to factory default**. Activate this check box to reset the terminal to its factory default settings. When you do this, you will get a dialog box asking you to confirm your intentions.

Network

The Network property sheet lets you control the terminal IP address, name server addresses, and network speed, as well as providing the useful ping function.

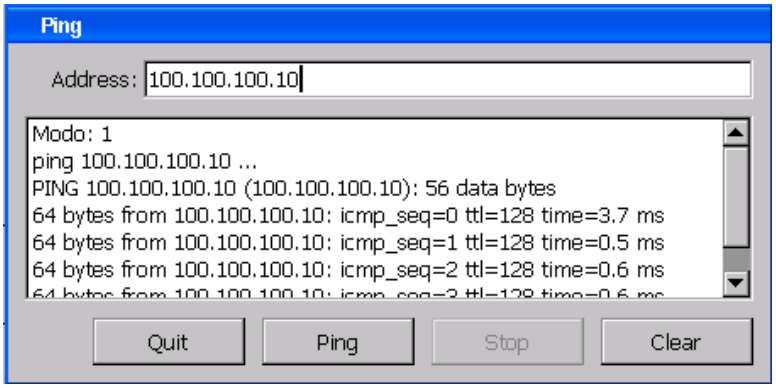


Network Property Sheet

- **Obtain an IP address from a DHCP Server**. Select this radio button to enable DHCP addressing.
- **Insert static IP address**. Select this radio button to enable the following three fields for a specific IP address setting.
  - **IP Address**. Enter a static IP address in this field. If you have selected DHCP addressing, the assigned address will appear in grey in this field.
  - **Subnet Mask**. Enter the subnet mask of the local network. If you have selected DHCP addressing, the assigned subnet mask will appear in grey in this field
  - **Gateway**. Enter the IP address of a gateway if any server is not on the local sub-net.
- **Terminal Name.** We recommend that you enter a unique name here for easy identification when using network management and administration software.

Ping Function

Activate this button to display the Ping dialog box. You can ping the name or IP address of a host or any other device connected on the network. You can even ping a web site through a gateway.

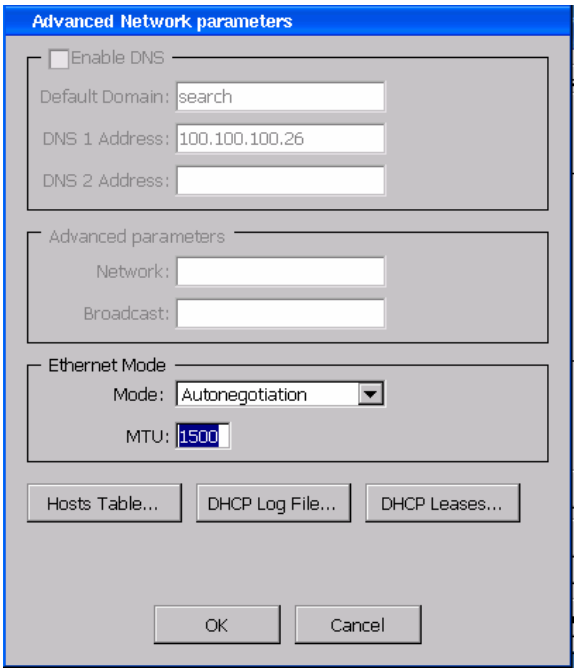


Ping Dialog Box

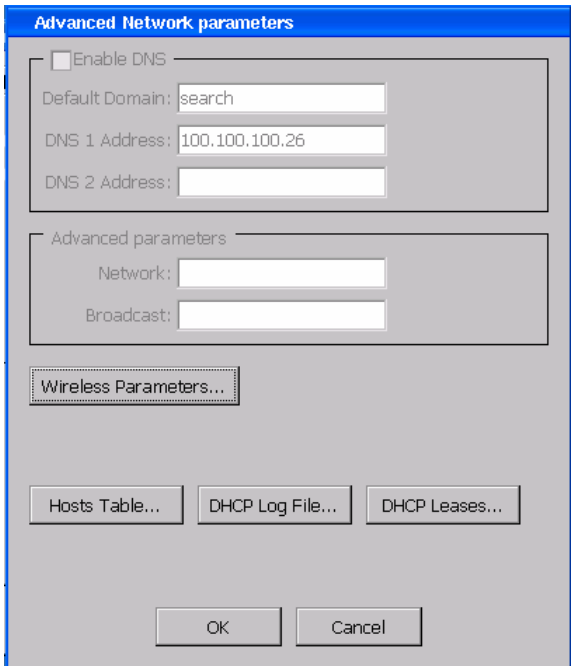
- **Address**. Enter the network name or the IP address of the device to be pinged.
- **Ping**. Activate this button to begin the ping action. Results will be displayed in the scroll box.
- **Stop**. After you start pinging, the ping action will continue until you press **Stop**.
- **Clear**. Activate this button to clear the scroll box.
- **Quit**. Activate this button to exit the Ping dialog box.

Advanced Parameters

Activate this button to configure name server settings or proceed to other advanced parameters. You will see the Advanced Network Parameters dialog box. If you have a 2214 with an attached Actiontec USB wireless adapter, you will also set the wireless parameters here.



Advanced Network Parameters Dialog Box



Advanced Network Parameters Dialog Box with USB Wireless

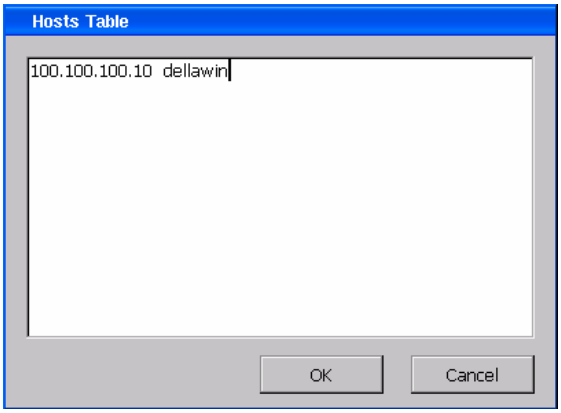
- **Enable DNS.** You will only see this box if you if you have selected the radio button for **Insert static IP address.** Activate this check box to enable the three fields for the DNS setting. Get the entries from your network administrator. If you have selected DHCP addressing and *are not* using a USB wireless LAN adapter, the assigned DNS information will appear in grey in these fields.

- **Advanced parameters**. These entries will be active only if you have selected the radio button for **Insert static IP address.** For typical networks, nothing need be entered here. But some networks will require that you enter the first three octets of the network IP address in **Network** and the IP address of the network gateway in **Broadcast**. Let your network administrator determine the need.
- **Ethernet Mode**.
  - **Mode**. Select network speed and traffic mode from the drop-down list, or let the network circuitry perform auto-negotiation with the hub or switch.
  - **MTU**. Leave this number alone unless your network administrator dictates a change.

Hosts Table

A Hosts table allows you to create your own mini-DNS server, for use by your terminal only. You can make one or more entries in the table—each entry correlating an IP address with a friendly name for that address. These friendly names can be your sole creations; they do not have to be identical to the network names for that address. After you make these entries, you can then use the friendly names in place of IP addresses in any configuration dialog box or utility on your terminal that requires an IP address.

Activate the **Hosts Table** button to see the Hosts Table dialog box.

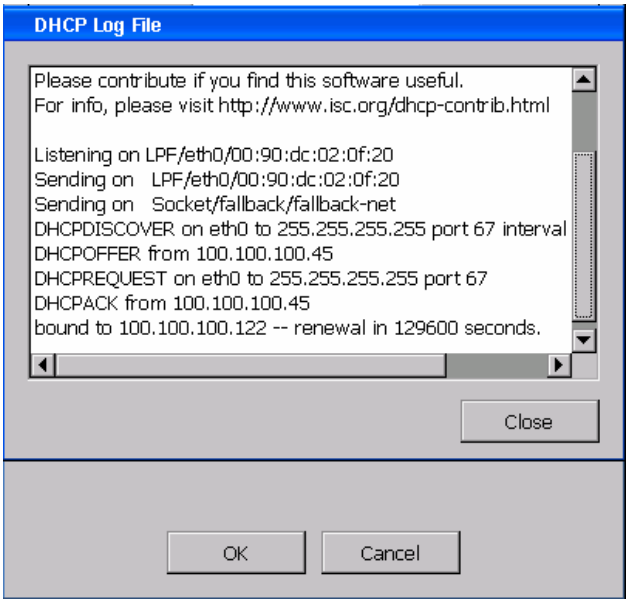


Hosts Table Dialog Box

In this example, the friendly name "dellawin" is equated to the IP address 100.100.100.10. Make all your entries in this format, one per line.

DHCP Log File

Activate this button to see the DHCP Log File.box.

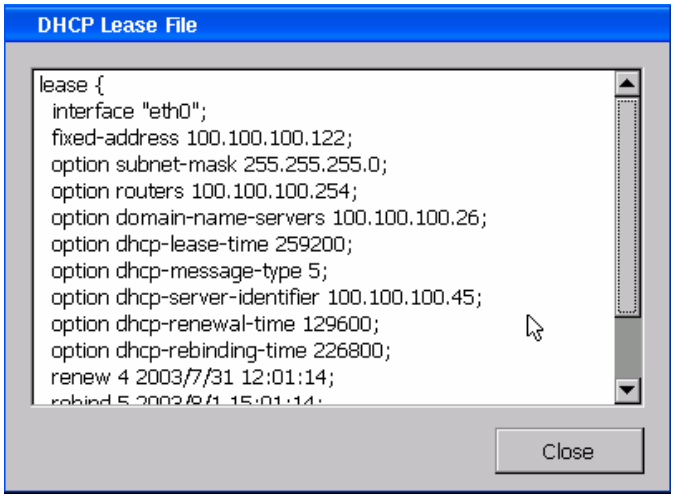


DHCP Log File Box

This file logs the steps encountered by the terminal in obtaining a DHCP address.

DHCP Leases

Activate this button to see the DHCP Lease File box.

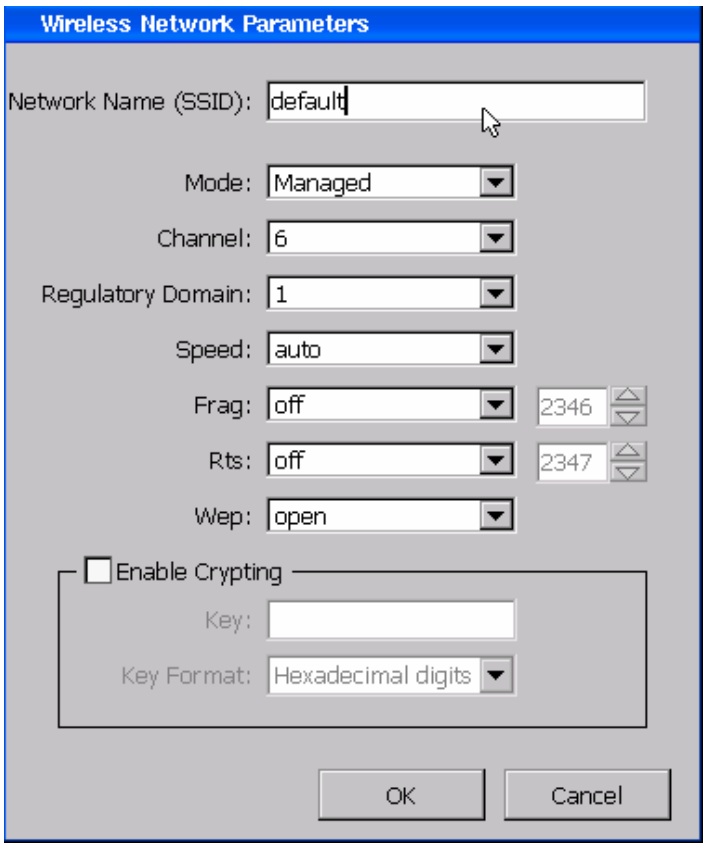


DHCP Lease File Box

This file shows the current state of the DHCP address lease, as well as showing a list of the options configured at the DHCP server.

Wireless Parameters (2214, 2814 models)

If you have a 2214 with an attached Actiontec USB wireless adapter, you will see a button labeled **Wireless Parameters** instead of **Ethernet Mode**. Click on this button to see the Wireless Network Parameters dialog box. **Note:** *Only* the Actiontec wireless adapter can be used with the 2214.



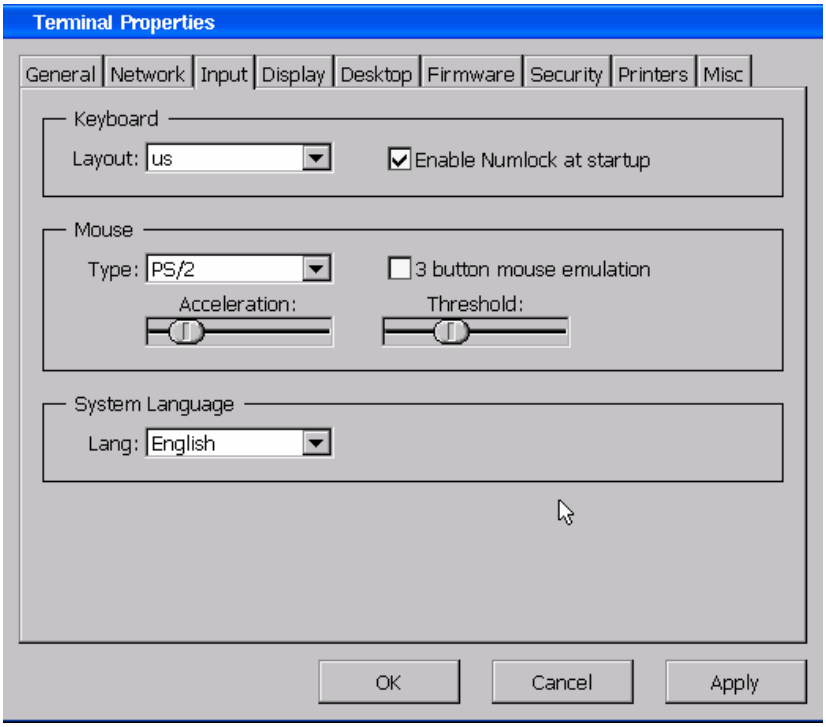
Wireless Network Parameters Dialog Box

- **Network Name (SSID)**. All points in an 802.11b wireless network share a unique name called a Service Set ID (SSID). This name is specified in each access point, and is configured in the 2214 in one of two ways.
  - **Default**. An access point can be configured to broadcast its SSID. Under the **default** setting, the Actiontec adapter will detect a broadcast SSID within its range. **Note:** You must have "default" entered into this field. A blank field will not work.
  - **Non-Broadcast**. For security purposes, an access point may be configured to disable SSID broadcasts. In this case, the SSID must be manually entered into this field. Note that SSIDs are case-sensitive.
- **Mode**. Choose one of the following two modes. Ignore the others in the drop-down list.
  - **Managed**. This mode is also known as the "infrastructure" mode in the wireless world. Use this mode when your wireless network is connected to a wired Ethernet network through an access point. This is the most common situation.
  - **Ad-hoc**. It is possible for a small network of wireless devices to communicate with each other without using an access point. This is called the **ad-hoc** mode.
- **Channel**. The Actiontec adapter will scan across all channels, starting with the channel entered in this box, until it finds an access point or ad-hoc connection. The default channel, **6**, is also the default channel for most access points.

- **Speed**. You have three choices.
  - **Auto**. The adapter uses the 11Mbps data rate when possible but drops to lower rates when necessary.
  - **11M**. The adapter uses the 11Mbps data rate only. This offers the greatest throughput, but the shortest range.
  - **5.5M**. The adapter uses the 5.5Mbps data rate only. This offers the longest range, but the lowest throughput.
- **Wep**. WEP (Wired Equivalency Protocol) is a data privacy mechanism based on 64-bit or 128-bit encryption. To use WEP encryption, all points in the wireless network must enable WEP and have the same 40-bit or 104-bit key setting. WEP is disabled unless **Enable Crypting** is checked.
  - **Open.** If your network is using Extensible Authentication Protocol (EAP), an authentication server assigns WEP keys dynamically for each session. Choose **Open** if you are using EAP.
  - **Restricted**. Choose **Restricted** if your network is not using EAP. You will have to enter a WEP key as described below.
- **Enable Crypting**. Check this box to enable the WEP encryption.
  - **Key**. If your network is not using EAP, enter a WEP key of ten hexadecimal digits (0-9, A-F). This key must match the key set in the access point.
  - **Key Format**. Leave at the default **Hexadecimal digits**. ASCII characters are not supported in the 2214.
- **Regulatory Domain/Frag/Rts**. These parameters are not supported in the 2214.

Input

This property sheet allows you to configure your keyboard and mouse parameters.

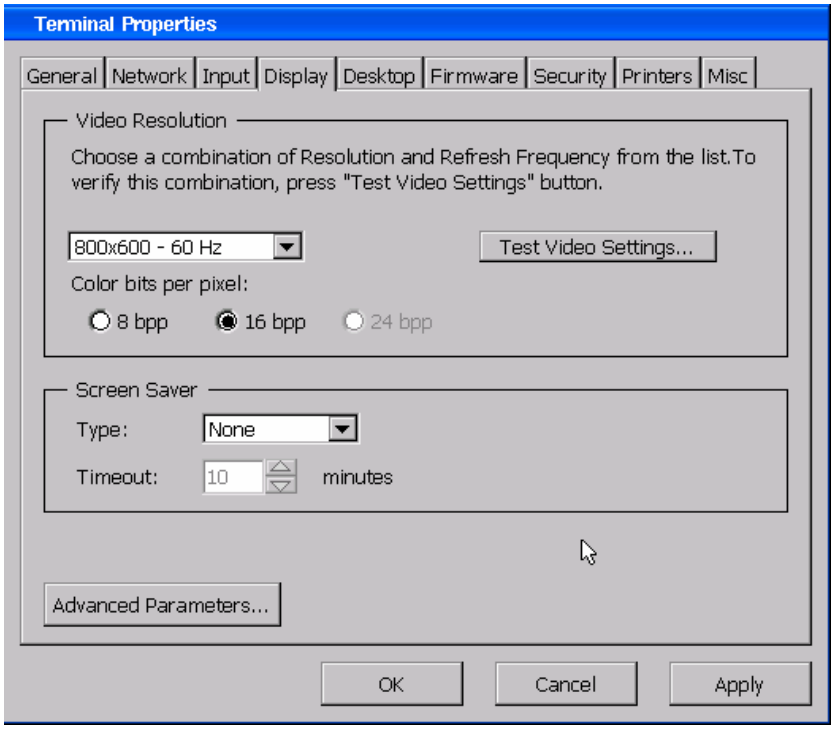


Input Property Sheet

- **Keyboard**
  - **Layout**. Use the scroll list to select a language for the keyboard.
  - **Enable Numlock at startup**. Check to force Numeric Pad NumLock when the 2x14 boots up.
- **Mouse**.
  - **Type**. Choose from **PS/2**, **Serial** (2614 only), or **Wheel Mouse**.
  - **3 button mouse emulation**. Check this box to emulate the third button of a 3-button mouse by left and right clicking simultaneously.
  - **Acceleration**. Use the slider control to set the speed of the cursor movement on screen vs. the movement of the mouse.
  - **Threshold**. Use the slider control to set the double-click sensitivity.
  - **Test**. If you make any changes to the mouse parameters, the **Test** button will appear. When you click on it, you will see a test screen that allows you to test your acceleration setting. **Note:** You will not be allowed to exit the Input property sheet, except via **Cancel**, until you test.
  - **Mouse Miscellanea**. PS/2 and USB wheel mice work well in ICA and RDP sessions. The extra wheel/button does not work in native applications (emulators, viewers, browsers).

Display

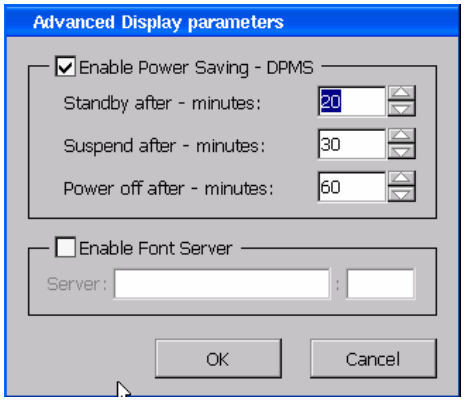
Use the Display property sheet to configure the terminal's display screen properties.



Display Property Sheet

- **Video Resolution**. Use the drop-down list to select the terminal display resolution, and the radio buttons to select the color depth. The terminal will support resolutions from 600x480x8x60 up to1280x1024x16x75 if the monitor will support them. Eight-bit color is typically sufficient for emulator sessions
  - **Test Video Settings**. Use this button to preview your video changes. If you make any change in the video settings, you will not be allowed to advance from this sheet until you have tested the new settings.
- **Screen Saver**. By default this function is not activated.
  - **Type**. If you want a screen saver, choose, from the drop-down list, a blank screen, X logo, or the Linux penguin.
  - **Timeout**. Adjust the amount of idle time before your Screen Saver is activated.

- **Advanced Parameters**. Click on this button to see the following dialog box.

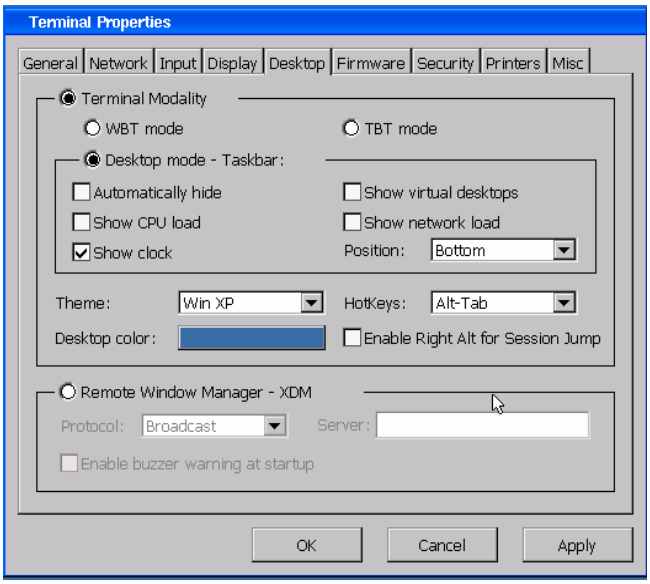


Advanced Display Parameters Dialog Box

- **Enable Power Saving**. If you check this box to enable power saving, you will activate the following three settings:
  - **Standby**. Enter the number of minutes (1-999) for the Standby timeout. Standby acts much like a blank screen saver.
  - **Suspend**. Enter the number of minutes (1-999) for the Suspend timeout.. Suspend turns off most terminal functions, such as the video sync signal.
  - **Power off**. Power Off is not supported at this time.
  - **Note:** The timeout numbers are *not* cumulative; if the Suspend timeout is shorter than the Standby timeout, the terminal will go into Suspend without ever going into Standby.
- **Enable Font Server**. 2x14 terminals have a limited number of fonts stored in flash memory. Therefore, you may occasionally be disappointed at the appearance of some Web pages in the browser. However, this limitation can be overcome if you have a font server on your network. With an enabled font server, the browser will automatically ask it for any font that is not stored locally. Enter the IP address and port number of your font server here.

Desktop

This tab provides a number of desktop appearance and session-jump Hot Key options.



Desktop Property Sheet

- **Terminal Modality**. These are the three viewing modes discussed in Viewing Modes. Change to a different mode here if you wish.
- **Desktop mode-Taskbar**. If you choose Desktop mode, you are presented with a number of Taskbar appearance options.
  - **Position**. You may choose to either place the Taskbar at the top or bottom edge of the Desktop screen.
  - **Automatically hide**. Check this box to hide the Taskbar. With this setting, the Taskbar will appear only when you move the cursor to the Desktop edge where the Taskbar is hidden.
  - **Show CPU load**. Check this box to display a small moving line graph representing the load on the terminal CPU.
  - **Show clock**. Check this box to display the system clock. You can set the clock from the Misc. tab.
  - **Show virtual desktops**. Virtual desktops are not supported in the 2x14.
  - **Show network load**. Check this box to display a small moving bar graph representing the load on the terminal network.
  - **Theme**. Select a **Windows XP** or a **Windows 2000** appearance in the Taskbar and the Start menu.
- **Desktop color**. Click on the color bar to display a color palette from which to choose the background screen color. This choice will be applied in both WBT and Desktop viewing modes.
- **HotKeys**. This drop-down list provides a number of options for task switching in WBT and Desktop viewing modes.
  - **WBT**. This is the default task-switching option, and is the only one available for the TBT viewing mode. See Viewing Modes|TBT|Navigation for an explanation of WBT Hot Keys.
  - **Alt-Tab**. Switch among tasks by pressing **Alt+Tab**.
  - **Ctrl-Tab**. Switch among tasks by pressing **Ctrl+Tab**.

- **Alt-Tab List**. This is very similar to Alt-Tab task switching in Windows. Press **Alt+Tab** to see an iconed list of tasks. Each depression of the **Alt** key will highlight the next icon, and lifting the **Tab** key will select the highlighted task.

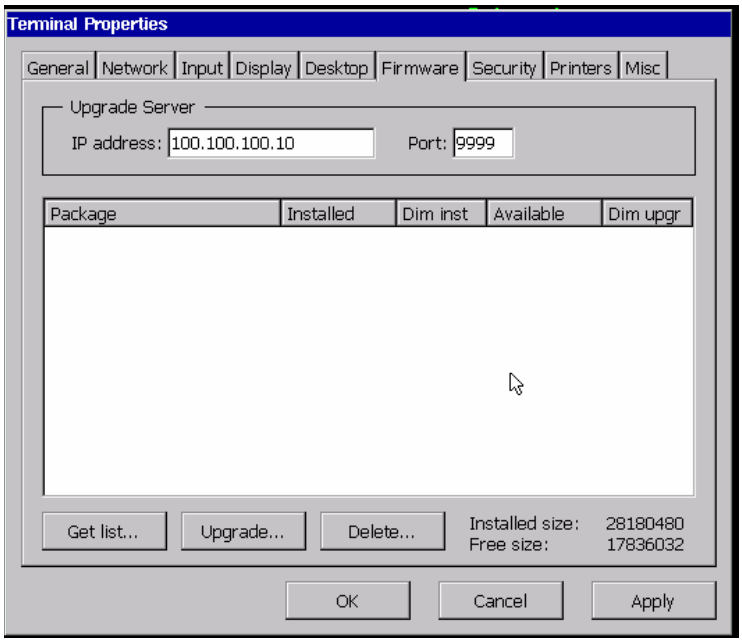
Enable Right Alt…. Check this box to allow the hot key combinations **RightAlt+Up/DownArrow** for task switching in all viewing modes.

Remote Window Manager. If you have a UNIX or Linux Remote Window Manager (RWM), and you only want to run X Window sessions, you can check this box. This setting may seem to duplicate the Remote Window Manager setting in Creating a New Connection|X Window Session. But there is an important difference. If you enable Remote Window Manager here, you will see only the desktop provided by the specified RWM. So you will not be able to run any of the sessions that you may have created in the Connections Manager session list; in fact, you won't even see Connections Manager or the Start menu. If you want to run sessions from Connections Manager, add your X Windows sessions there and enable RWM there if you wish. This will put each session in its own window in the normal Desktop environment. **Note: Do not make this selection unless you really mean it. After enabling it, you cannot switch back to Terminal Modality without resetting the terminal to factory defaults. Ignore any instructions about disabling Remote Windows Manager during bootup.**

- **Protocol**. If you enable RWM, you have to choose a protocol for finding one.
- **Broadcast**. The 2x14 will do a broadcast over the local sub-net, looking for any RWM that will respond.
- **Query**. You must enter the IP address of a specific RWM in the address box.
- **Indirect**. Enter the IP address of a meta-RWM in the address box. This meta-RWM will provide you with a list of available RWMs.

Firmware

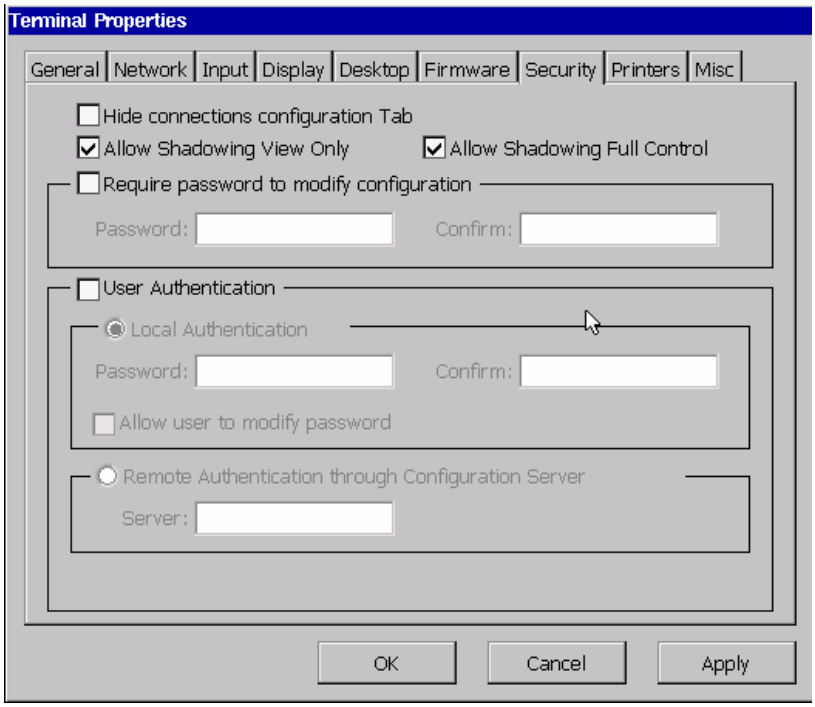
Use the Firmware properties sheet if you wish to update your terminal's firmware over the network. For more information, please refer to the Firmware Upgrades section.



Firmware Property Sheet

Security

A 2x14 provides four levels of security.



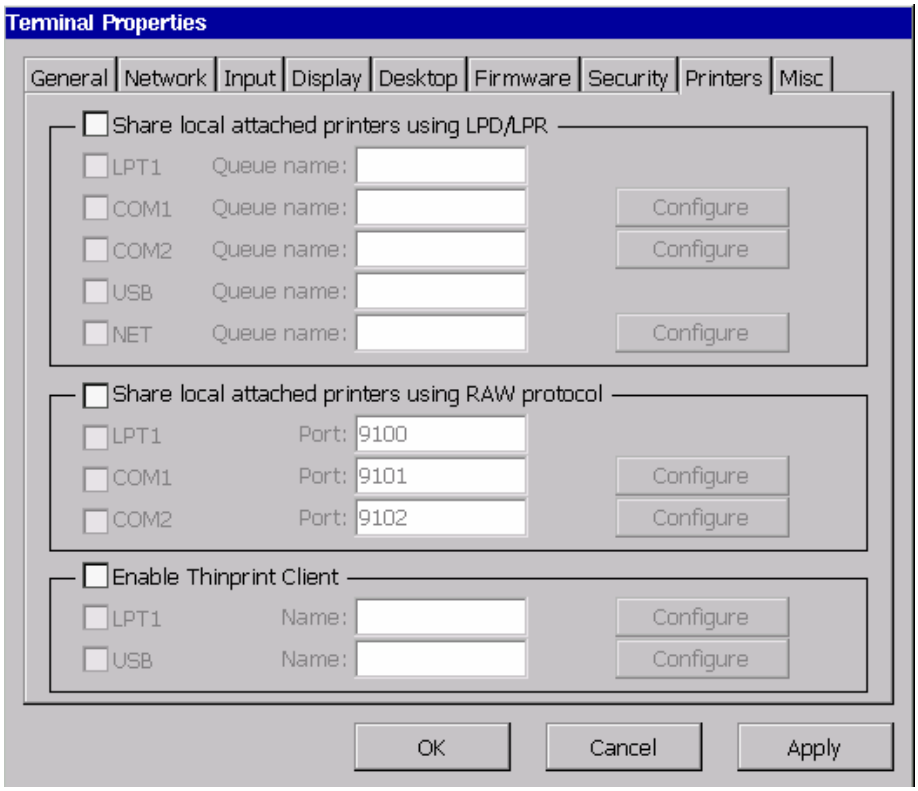
Security Property Sheet

- **Hide connections configuration tab**. Check this box to hide the Connections tab in Connections Manager. This prohibits a user from adding, deleting, or editing sessions. **Note:** In Desktop viewing mode, this renders the Connections Manager useless.
- **Shadowing**. When used in conjunction with YES*manager*, Affirmative Computer Products' powerful Remote Central Manager, the terminal's screens can be viewed remotely, and full remote control of the terminal can be enabled.
  - **Allow Shadowing View Only**. Check this box to allow the terminal screens to be viewed at the remote YES*manager* console.
  - **Allow Shadowing Full Control**. Check this box to allow full control of terminal functions from the remote YES*manager* console. Actually, when shadowing is activated in YES*manager*, control will be shared between the remote administrator and the local user. **Note:** Enabling **Full Control** will have no effect unless you also enable **View Only**.
- **Require Password…**. Check this box to enable password security for terminal configuration. Then enter and confirm a password in the boxes.
  Note: The password is designed to avoid any unreasonable change to the Terminal Properties Settings. Please do NOT activate the password unless you are the administrator. If you forget the password, it will be difficult to recover. There is only one local method of recovery if you forget the password.
  - Ask your system administrator to use the secret hot key sequence to reset Terminal Properties to factory defaults.
- **User Authentication**. Check this box to enable password security for user access to sessions.
  - **Local Authentication**. This radio button is always enabled. If you checked **User Authentication**, enter and confirm a password in the boxes. You can also allow or forbid the user to change the user password.

- **Remote Authentication…**. This is not supported in the 2x14 terminals.

Note: Even if a user password is required, the user can still access Terminal Properties without entering the correct password. Therefore, it is strongly recommended that you also enable **Require Password…** if you are going to use user authentication.

Printers



Printers Property Sheet

In addition to using local printers for TNXXXXe printer emulation sessions, 2x14 terminals can be configured as network print servers for use from Windows sessions or from other stations on the network. Either local printers or network printers can serve as the printing devices. Three modes of network printing are possible.

LPD

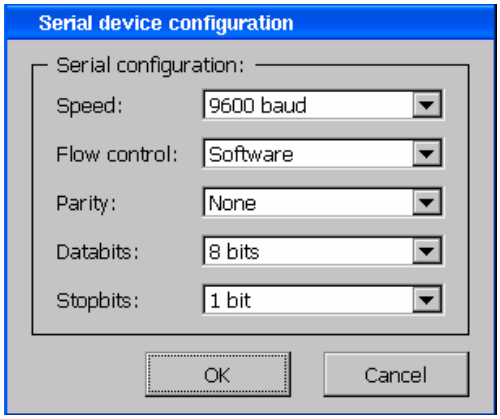
The Berkeley versions of the UNIX™ operating system provide printer spooling with a collection of programs: lpr (assign to queue), lpq (display the queue), lprm (remove from queue), and lpc (control the queue). These programs interact with an autonomous process on network print servers called the line printer daemon (LPD).

Each 2x14 terminal includes an LPD module that allows an LPR device on the network to assign print jobs to a local printer or network printer attached to the terminal. Check the **Share local…using LPD/LPR** box to enable LPD printing.

.

- **Printer Port**. Select one, two, or three ports from **LPT1**, **COM1/2** (2614, 2814 only), **Net,** and **USB**.
- **Queue name**. Define a queue name for each printer port. This will be the queue name used by LPR devices to assign print jobs to that port.

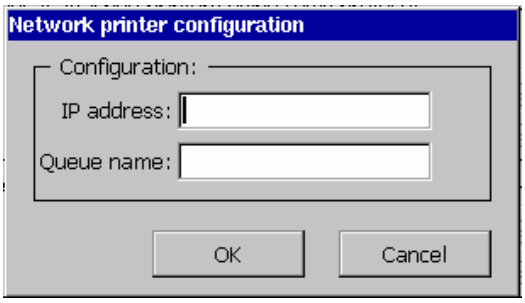
- **Configure**.
  - **COM1/2**. If you chose a COM port, you can change the default port settings to match your serial printer. Click on the appropriate **Configure** button to see the Serial Devices Configuration dialog box.



Serial Devices Configuration Dialog Box for LPD Printing

Select the desired settings from the drop-down lists.

- **Net**. If you chose **Net**, you will have to configure the network printer. Click on the **Configure** button to see the Network Printer Configuration dialog box.



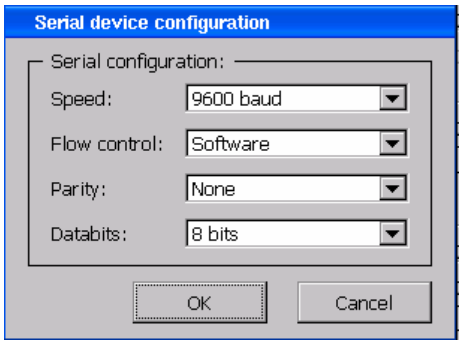
Network Printer Configuration Dialog Box

  - **IP address**. Enter the IP address of the network printer.
  - **Queue name**. Enter the queue name used to assign print jobs to the network printer. It is *not* the same name as the Net **Queue name** assigned in the Printers properties sheet.

RAW

RAW is the default protocol for network printing from a Windows client. Check the **Share local…using RAW protocol** box to enable RAW printing.

- **Printer Port**. Select one, two, or three ports from **LPT1** and **COM1/2** (2614, 2814 only).
- **Port**. There should be no reason to change the default port numbers.
- **Configure**. If you chose a COM port, you can change the default port settings to match your serial printer. Click on the appropriate **Configure** button to see the Serial Devices Configuration dialog box.



Serial Devices Configuration Dialog Box for RAW Printing

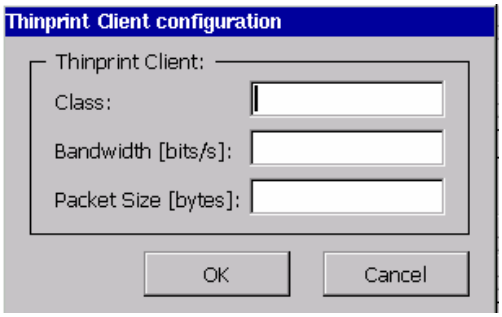
Select the desired settings from the drop-down lists.

ThinPrint

ThinPrint enables direct printing from the terminal and other network devices to local printers. With the ThinPrint Client and a ThinPrint server (usually, but not necessarily, a Citrix MetaFrame server), a print job can be delivered over the network to the terminal and from there direct to the selected printer. To learn more about ThinPrint advantages, go to http://www.thinprint.com/ on the Web.

To configure ThinPrint:

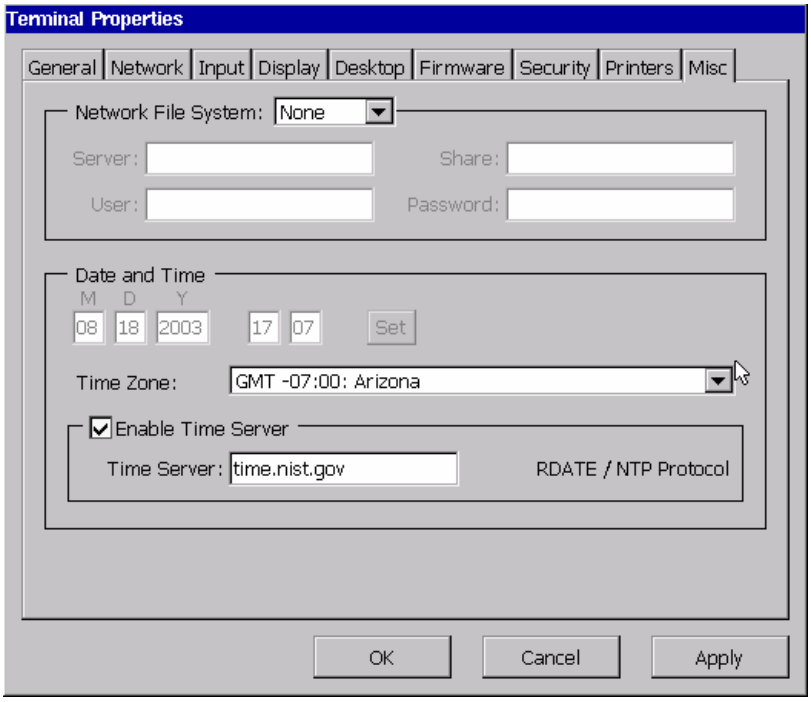
1. Check **Enable Thinprint Client.**
2. Check the box for your local printer port. Note that only one port can be selected.
3. Enter a name for this ThinPrint printer. The name will identify this printer at the ThinPrint server. Unix conventions generally apply when entering printer names. If a name contains a blank space, for instance, it is captioned in quotation marks **“”**. For example, the name for *HP LaserJet 5L* is **”HP LaserJet 5L”**. If the printer name contains quotation marks, a backslash is entered at the beginning. For example, the name for *HP “super” LaserJet 5L* is **”HP \”super\” LaserJet 5L”.**
4. Optionally, you can click on **Configure**. The Thinprint Client Configuration dialog box will appear. ThinPrint will work without filling in any of these fields, but you may want to fine-tune the client.



Thinprint Client Configuration Dialog Box

- **Class**. Printer classes can be defined at the ThinPrint server. If you want this printer to be in such a class, enter the class name here.
- **Bandwidth**. You can enter a bandwidth value which is the same or smaller than that set at the ThinPrint server. If client control is disabled at the server, server settings are applied. No input or 0 (zero) means that the server setting will be applied.
- **Packet Size**. You can enter the size of packets for streaming. No input or 0 (zero) means that the server setting will be applied. Typically this does not need to be defined in the client.

Miscellaneous



Miscellaneous Property Sheet

- **Network File System**. This is a parameter for mounting network drives as local drives.
  - **None**. Do not mount network drives locally.
  - **SMB**. Mount Windows drives. Enter the appropriate settings in the entry boxes.
  - **NFS**. Mount UNIX/Linux drives. Enter the appropriate settings in the entry boxes.
- **Date and Time**. You can enter the date and time here.
- **Time Zone**. You can choose your time zone here from the drop-down list, but it will be of no use unless you also enable a timeserver.
- **Enable Time Server**. Check this box to allow the terminal to sync the local current time, shown in the Date/Time dialog box, with any timeserver using the Network Time Protocol (NTP). If you don't have a local timeserver, there are several available on the Web. If you check the box, and then enter a valid timeserver (**time.nist.gov** works well for us) in the **Time Server** box, the local clock will connect to the timeserver and sync the local clock every time the terminal is booted up.

Editing an Existing Connection

For all connections except Internet Browser and TNXXXXe, properties must be edited from the Configure tab of Connections Manager. Highlight the session of interest and click on **Edit**. For TNXXXXe connections, there is a choice of viewing modes, as discussed in TNXXXXe later in this section.

Citrix ICA Client

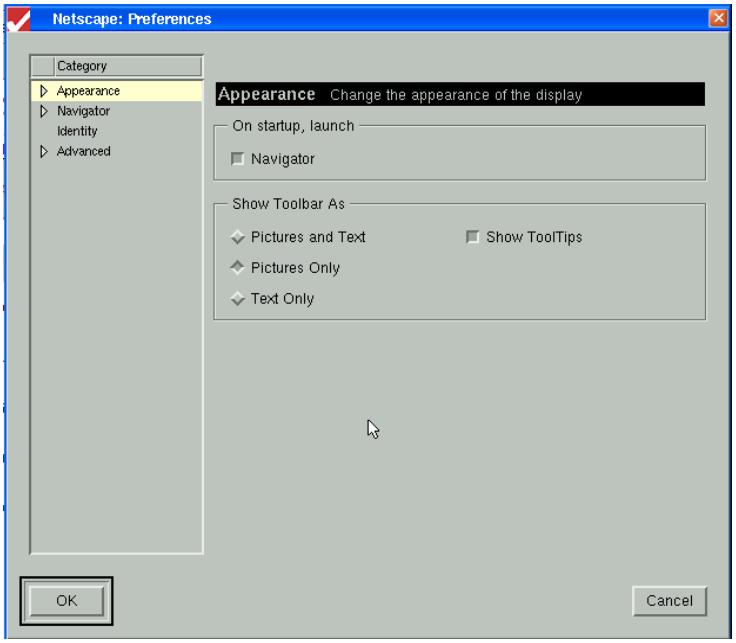
When you click on **Edit**, you will see the same ICA Connection Configuration sheet that you saw when creating the session. See Creating a New Connection|Citrix ICA Client for property details.

Client VNC

When you click on **Edit**, you will see the same VNCviewer Connection Configuration sheet that you saw when creating the session. See Creating a New Connection|Client VNC for property details.

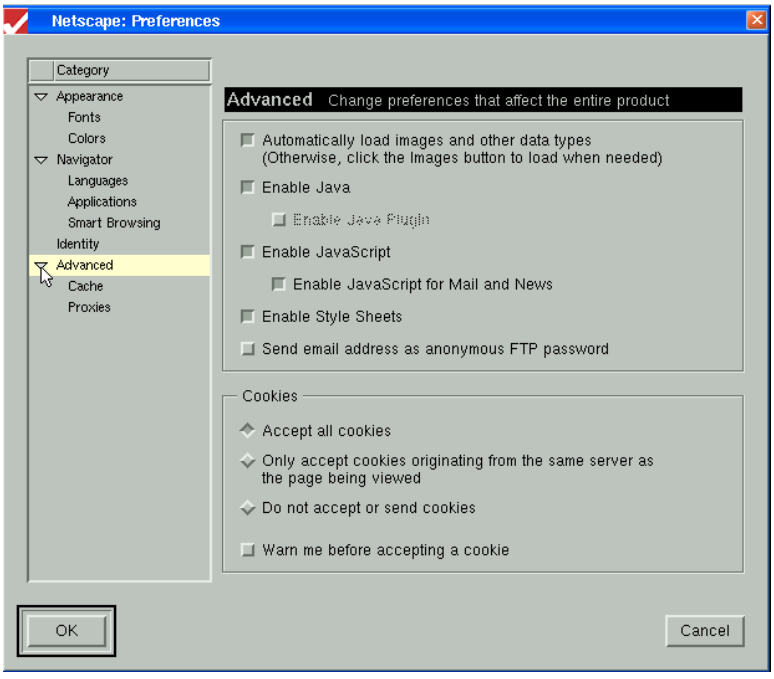
Internet Browser

When you click on **Edit**, you will see the same Browser Connection Configuration sheet that you saw when creating the session. See Creating a New Connection|Internet Browser for property details. However, many more properties can be configured from within an open browser session. Go to **File>Edit>Preferences** in the Menu bar to open the Netscape Preferences dialog box and fine-tune your browser session.



Netscape Preferences Dialog Box

The **Category** list can be opened to show sub-categories by clicking on the category arrow, as shown below.



Netscape Preferences Dialog Box Showing Sub-Categories

Microsoft Remote Desktop Client

When you click on **Edit**, you will see the same RDP Connection Configuration sheet that you saw when creating the session. See Creating a New Connection|Microsoft Remote Desktop Client for property details.

Telnet Connection

When you click on **Edit**, you will see the same Telnet Connection Configuration sheet that you saw when creating the session. See Creating a New Connection|Telnet Connection for property details.

TNXXXXe

Editing an existing emulation connection is quite different in TBT and non-TBT viewing modes. Many more configuration parameters are accessible in a non-TBT mode, and you may have to edit from one of those modes in order to get the emulation settings you need. Settings made in non-TBT mode remain in effect if you return to the TBT viewing mode.

Editing in TBT mode is done from the same parameter screens used when adding a connection. Highlight the connection name in Connections Manager and press **F6** to open the parameter screens for that connection. Refer to Creating a New Connection|TNXXXXe|TBT Viewing Mode for parameter details.

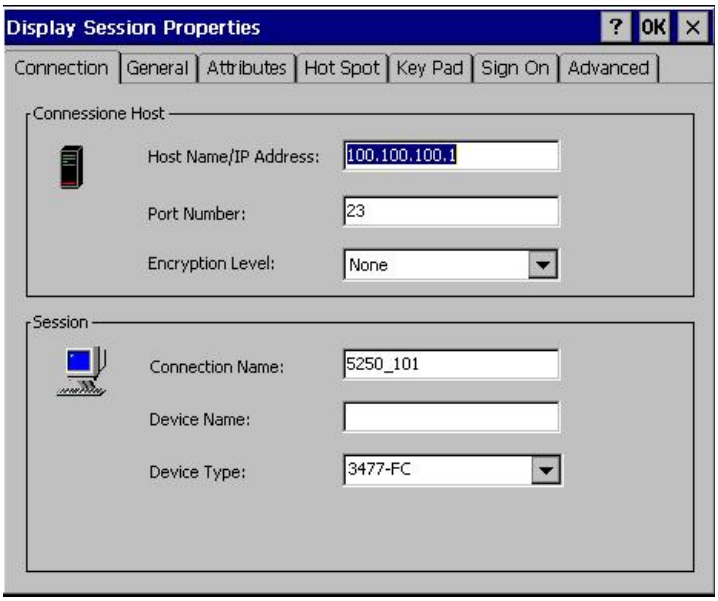
The remainder of this section will discuss editing in the Desktop and WBT viewing modes. Connection properties are edited in the Configure tab of Connections Manager. Highlight the session of interest and click on **Edit**.

Display Sessions

The screen shots you see in this section are TN5250e editing screens. There are very few differences between the 5250 and 3270 screens, and any significant differences for TN3270e sessions will be discussed in the text.

For TN5250e sessions, you will see a Displays Sessions Properties sheet with seven property tabs. For TN3270e sessions, you will see a Displays Sessions Properties sheet with six property tabs. The opening view is of the Connections tab and property sheet.

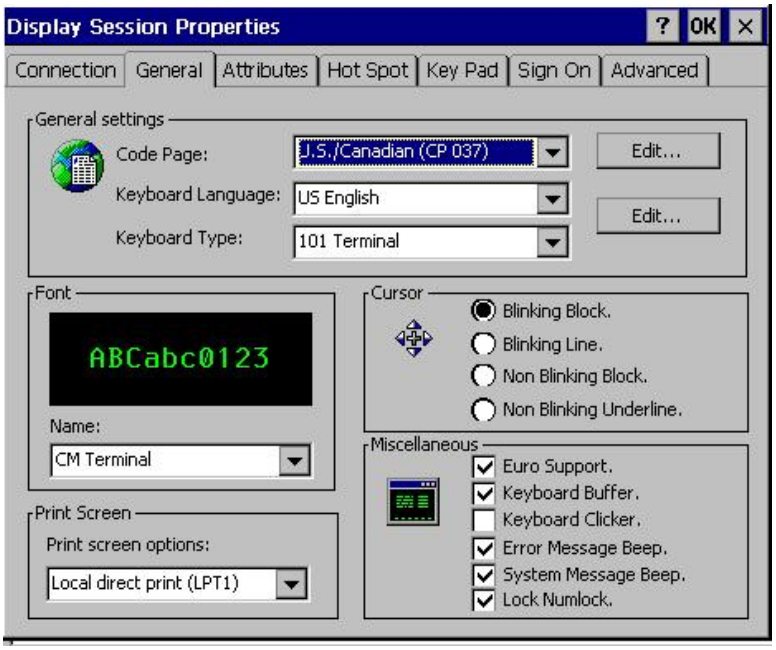
Connection



Connection Property Sheet for TN5250e

The properties on this property sheet were already configured in the Setup Wizard when this session was created, although you can change them here if you wish

General



General Property Sheet for TN5250e

Code Page

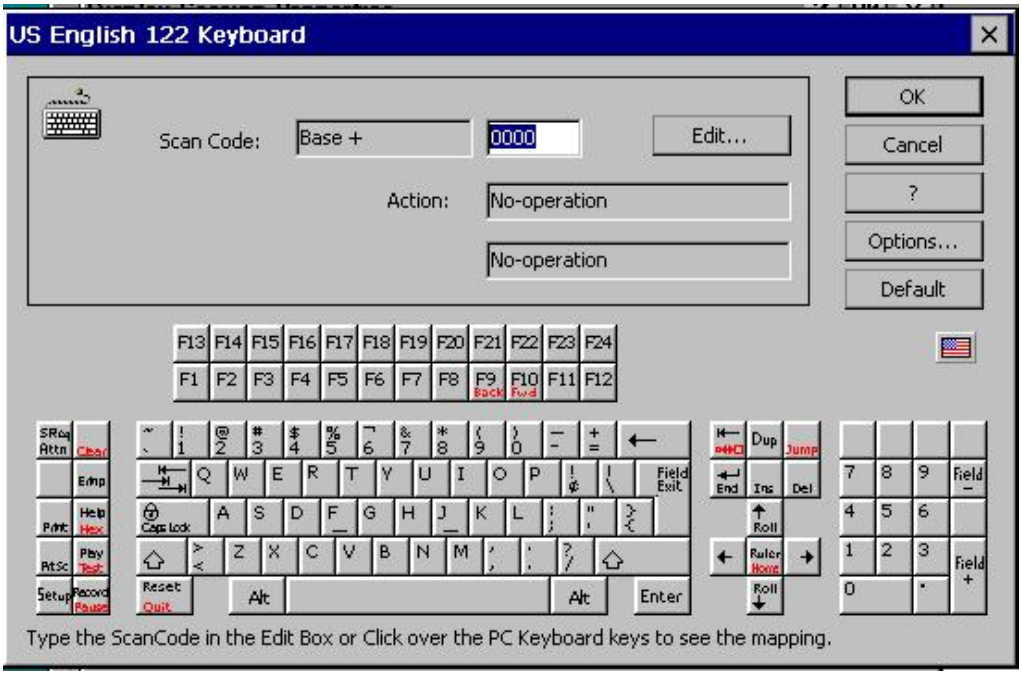
YES*term*/IP supports numerous language Code Pages. The Code Page selected here from the drop-down list should be the same one configured on the host for this specific device. It is also possible to create a new custom Code Page Table. See How To…|Create a Custom Language Code Page for instructions.

Keyboard Language

YES*term*/IP supports several non-English keyboard languages. If you wish to use one of them, select it from the drop-down list.

Keyboard Type

YES*term*/IP supports three different keyboard types (101 PC, 101 Terminal, and 122 Key) for several different languages. It is also possible to create a custom keyboard map, if desired. Activate **Edit** to get to the keyboard map page.



Keyboard Map Page for 5250 122-Key U.S. English Keyboard

You can check the current mapping in one of two ways:

- Scan Codes. The keyboard sends a unique scan code to the terminal when a key is pressed. If you want to see what key is associated with a specific scan code, type that code in the Edit box, shown highlighted in the above figure. The associated key will highlight, and any command mapped to that key will show in the Action boxes. Of course, most people couldn't care less about scan codes, so this method may be of little use to you.
- Mouse Clicks. Position the cursor over the key of interest and click. The scan code for that key will show in the Edit box, and any mapped command will show in the Action boxes. If you want to see the effect of that key plus a modifier key (**Shift, Alt, Ctrl**), click on the modifier key and then on the action key.

Edit

Activate this button to initiate custom keyboard mapping. See How To…|Create a Custom Keyboard Map for the mapping procedure.

Default

This button will erase any custom mapping that exists in this map. Everything goes back to defaults. Obviously, you want to be very careful around this key if you have done much custom mapping.

Options

Keyboard Options Dialog Box

This button opens a special dialog box where you can specify the Host Keyboard Language Option, and enable the Multinational character set.

Font

Select one of two Font styles to be used as the default Font for the display session.

Print Screen

From the drop-down list, select how the Print Screen function is to be performed:

- **Local Direct Print**. Make this selection if you wish to print to a local printer attached to the LPT1 port.
- **Through the Host**. Make this selection if you wish to print to a remote printer through the host.
- **Extended Local Print**. This selection provides local printing on steroids. To use it, you must create a printer emulation session. This session can be used with either a local or a network printer, and it allows you to format your print output. See Printer Sessions for more information. If you select this option, you must choose a printer session from the lower drop-down list.
- **Function Disabled**. Screens cannot be printed.

The Print Screen function can be activated from:

- Emulator Button bar.
- Emulator Menu bar (**File|Print**)
- Keyboard in accordance with the keyboard map.

Key Pad, if it contains a corresponding button.

Cursor

Select the type of cursor you want to use.

Miscellaneous

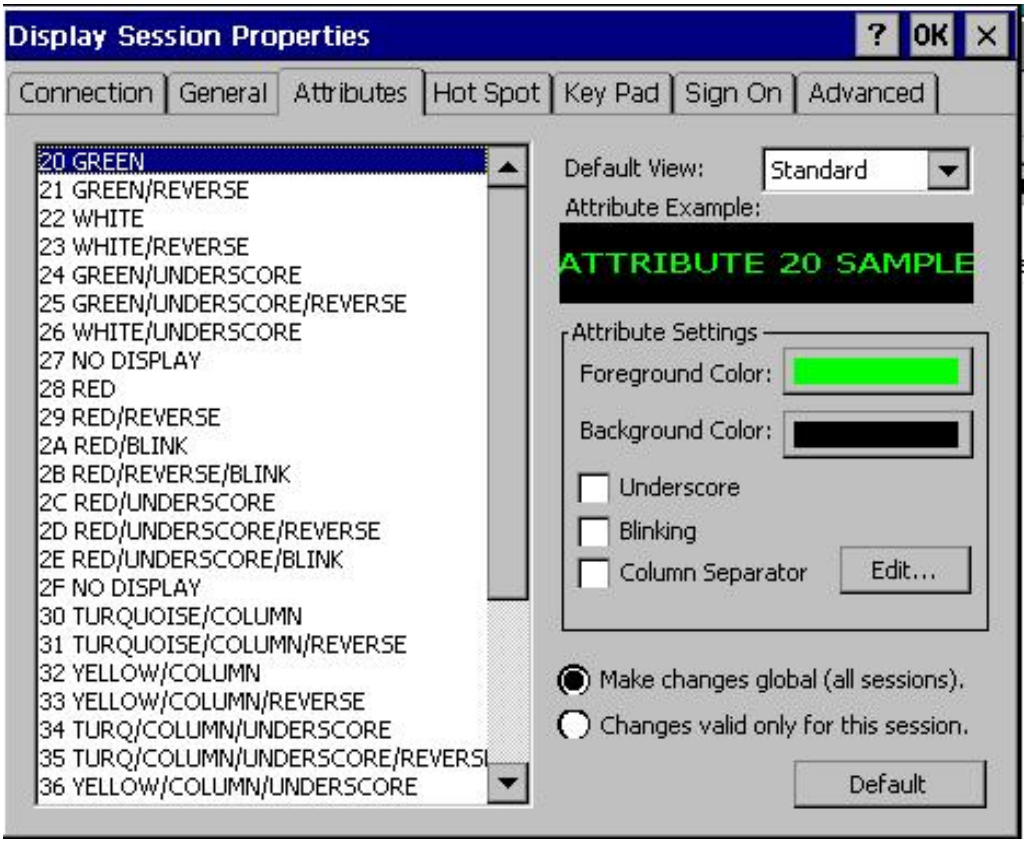
- **Euro Support**. When this option is enabled, you will enter the Euro symbol when you press **Alt+E**.
- **Keyboard Buffer**. This option enables Typeahead.
- **Keyboard Clicker**. If this option is enabled, you can hear an enhanced click every time you press a key on the keyboard.

- **Error Message Beep**. If this option is enabled, you can hear a "Beep" when an input error is made.
- **System Message Beep**. If this option is enabled, you can hear a "Beep" when a message is received from the Host.

Lock NumLock. This option has no effect since NumLock is always enabled in an emulator session.

Attributes

This properties sheet allows extensive editing of your screen appearance. At the lower right corner of this sheet are two radio buttons allowing you to make these edits global for all sessions, or to restrict their use to only this session.



Attributes Property Sheet for TN5250e

Default View

You have a choice of **Standard** or **Advanced** views. Both options support mouse click interfaces. A single left-click moves the screen cursor to the location of the mouse cursor, and a double left-click sends the Enter command to the host. See the Hot Spot section for screen shots of both views. Either view can be overridden from the emulation screen Toolbars if desired.

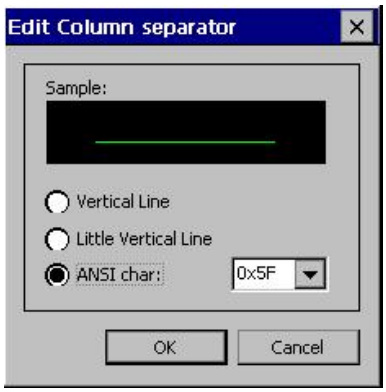
- **Standard.** This selection provides the standard green screen "text" appearance for your session screens, duplicating terminal screens. Hot Spots are invisible unless the mouse cursor is placed over one of them, and then only that one Hot Spot is visible. If you are in TBT mode, the Standard view is most familiar to you. But you can operate in the Advanced view if you wish, although the efficiency of the Advanced view is lost without use of a mouse.
- **Advanced** (Recommended for WBT and Desktop modes). This selection provides a "graphics" appearance for your session screens, resembling a Windows application. All the Hot Spots are shown as raised buttons. Input fields are shown as recessed panels with background colors of

white, peach, or gray. All colors are automatically re-mapped to present maximum contrast, and readability. Advanced View is the most productive way to operate in non-TBT viewing modes since all menu items, Function Keys, sub-file options, and custom hot spots are always visible and accessible as raised buttons which can be activated by a mouse left-click.

Attribute Settings (Standard View Only)

Set the appearance of your green screens by modifying field color attribute settings and other visual effects. This includes properties such as foreground and background color, blinking, underscore, and the use of column separators. You will see a preview of the "new look" in the Sample field. Be careful with the colors you choose; a wrong choice can cause text or fields to be invisible on the screen because of lack of color contrast.

- **Edit** (Column Separator). Activate this button to invoke this dialog box.

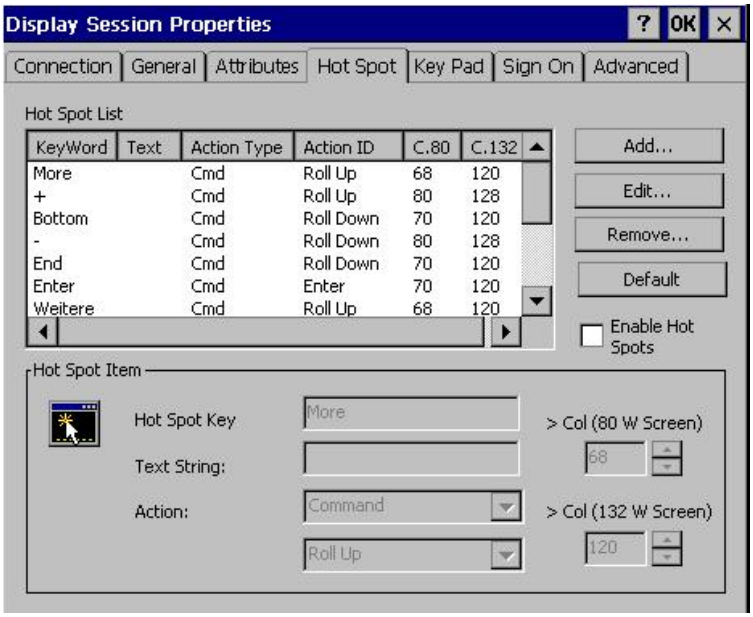


Edit Column Separator Dialog Box

Make your choices and view them in the Sample field.

Hot Spot

Changes made in this property sheet affect all sessions. There is only one Hot Spot configuration per emulator, not one per session. Hot Spots are of little value if you are using the TBT viewing mode.



Hot Spot Property Sheet

A Hot Spot is an area of the session window on which you can single-click the left mouse button to execute a command or function. Actually, a Hot Spot is the result of a text search by the emulator for the specified Keyword on the screen. The Function Key and Numeric fields (from 1 to 99 followed by a "period" or "space") Hot Spots are active by default, but you can add other Hot Spot keys and/or edit/remove them.

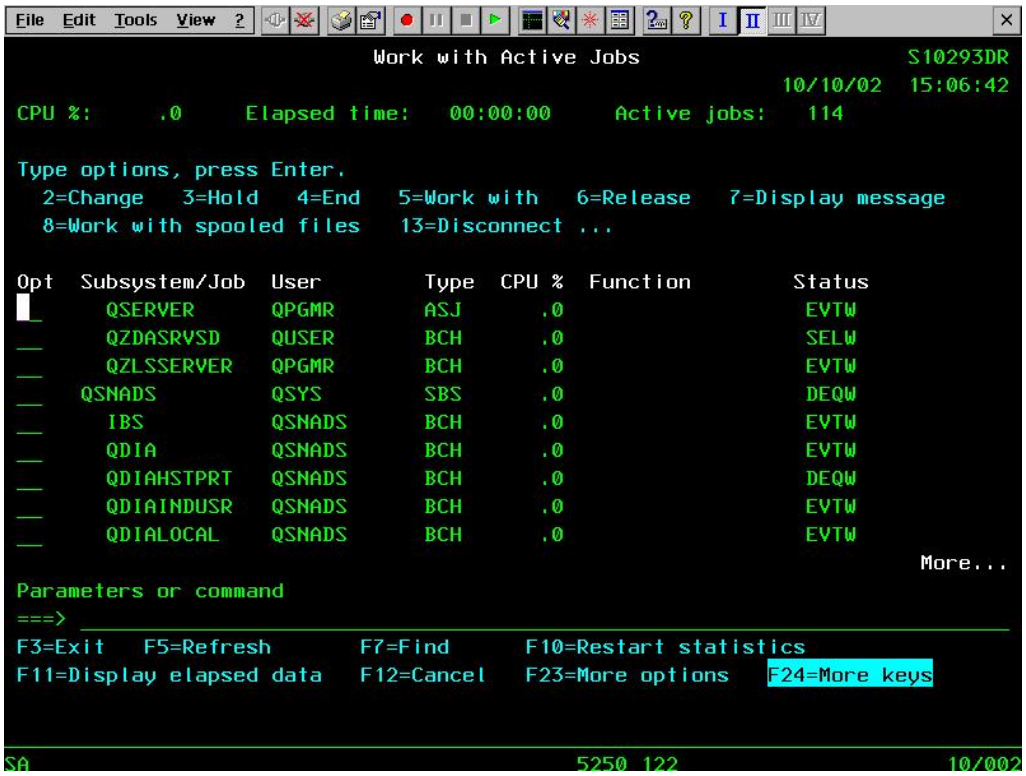
A Hot Spot can be used to:

- Simulate a menu selection.
- Simulate a function key.
- Simulate a sub-file option (double-click).
- Execute a Recorded Sequence that has the same name as the word that you select on the screen.
- Execute a command that you select.

To enable the use of Hot Spots, you must check the **Enable Hot Spots** box.

Standard View

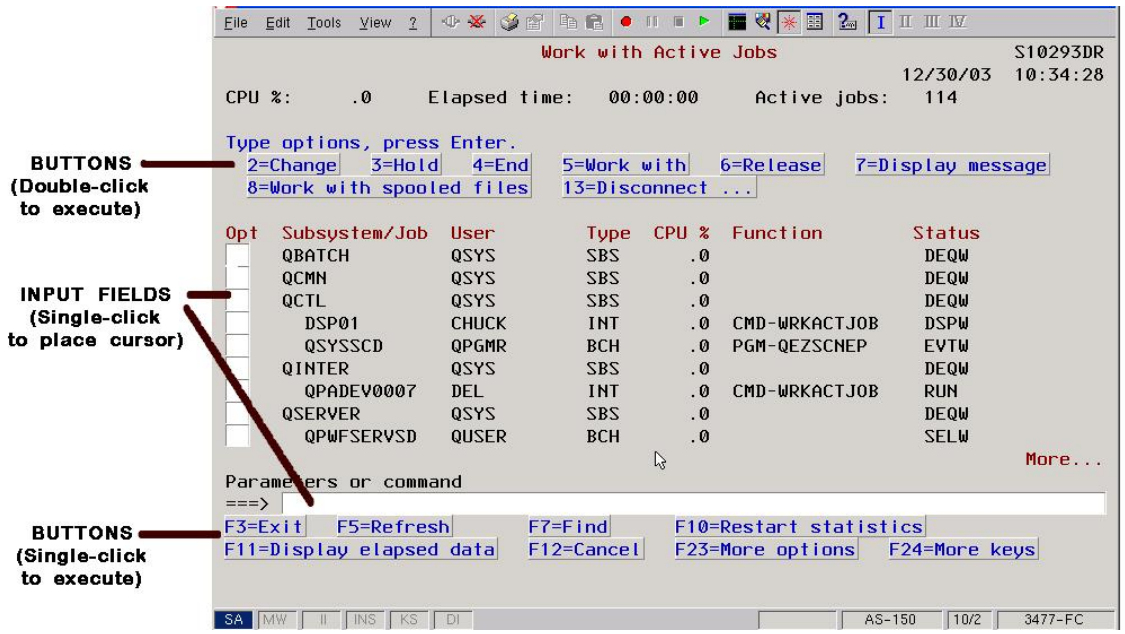
If **Standard View** is selected in the Advanced tab or the emulation screen Toolbars, Hot Spots are invisible unless a mouse cursor is dragged over them, and then only the one under the mouse cursor becomes visible.



Emulation Screen with Standard View and Hot Spots

Advanced View

Hot Spots are displayed as raised buttons if the **Advanced View** option is selected in the Attributes tab or the emulation screen Toolbars. Advanced View is the most productive way to operate in non-TBT viewing mode since all menu items, Function Keys, sub-file options, and custom hot spots are always visible and accessible as raised buttons.



Emulation Screen with Advanced View and Hot Spots

To Edit a Hot Spot:

1. Select the Function Key you want to modify.
2. Click on **Edit.**
3. If you want to send a Text String to the host every time you press the Function key, type it into the Text String field.
4. Select the Action from the Drop-Down List
5. From the drop-down list, select the command or the Recorded Sequence that you want to associate to the Hot Spot key.
6. In c.80, specify where, in an 80-column screen, the text search engine should start looking for the specified Keyword. For example, the default start for the word "More" is column 68. So if there is a word "More" to the left of that column, it will not be defined as a Keyword or Hot Spot.
7. In c.132, specify where, in a 132-column screen, the text search engine should start looking for the specified Keyword.
8. Click on **Accept.**
9. Click on **Apply**.

To Remove a pre-defined Hot Spot:

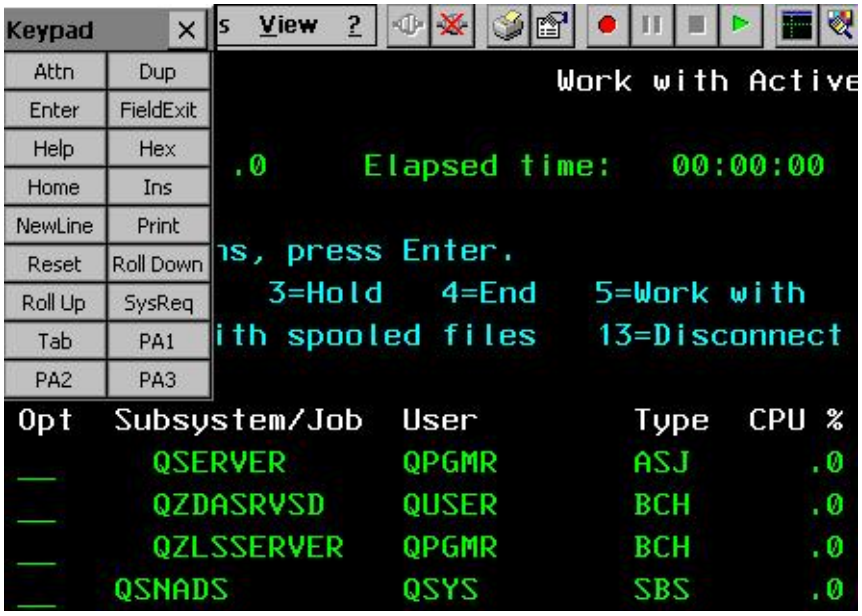
1. Select the Function Key.
2. Click on **Remove**.

To Add a Hot Spot:

1. Click on **Add**.
2. Type the Hot Spot Key Word you want to detect. If you want to send a Text String to the host, type it into the Text String field.
3. Select the Action from the Drop-Down List
4. From the drop-down list, select the command or the Recorded Sequence that you want to associate to the Hot Spot.
5. Specify the text search start columns in c.80 and c.132.
6. Click on **Accept**.
7. Click on **Apply**.

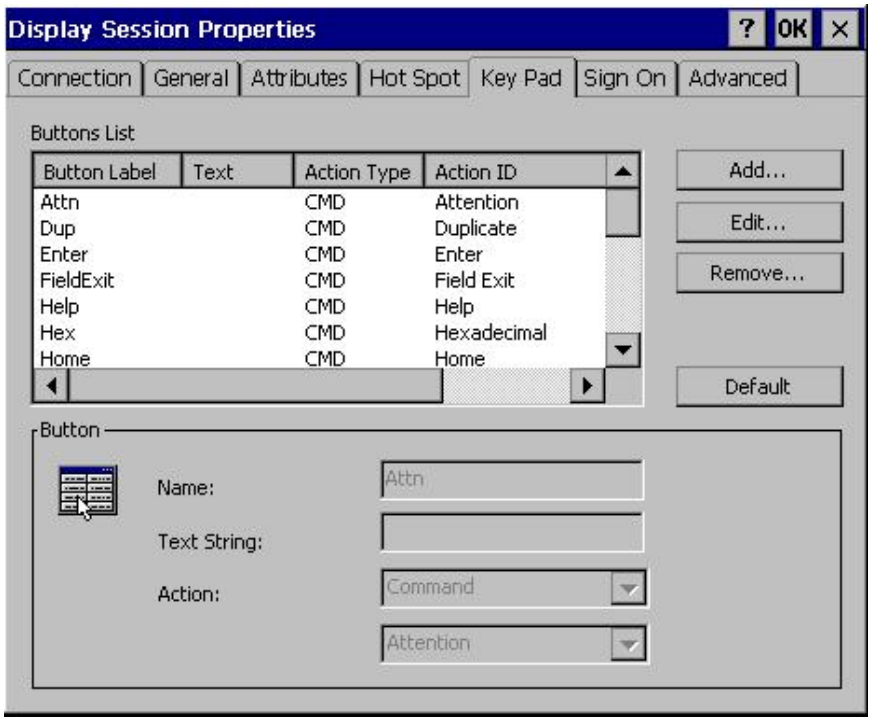
Key Pad

A Key Pad is a small window with several customizable push buttons, each having an assigned function. You can make it visible on the screen by clicking on the **Key Pad** button on the Buttons toolbar, or selecting **View/Key Pad** from the Menu bar. You can choose a function from the Key Pad with your mouse instead of typing the equivalent command, pressing a key, or running a Recorded Sequence.



Emulation Screen with Key Pad

The Key Pad tab allows you to change the characteristics of the pop-up Key Pad. Changes made in this property sheet affect all sessions. There is only one Key Pad configuration per emulator, not one per session.



Key Pad Property Sheet for TN5250e

To Edit a Key Pad button:
1. Select the Function Key you want to modify from the Button Label list.
2. Click on **Edit**.
3. If you want to send a Text String to the host every time you press the Function key, type it into the Text String field.
4. Select the Action from the Drop-Down list
5. Select the command or the Recorded sequence from the Drop-Down list that you want to associate to the Hot Spot key.
6. Click on **Accept**.
7. Click on **Apply**.

To Remove a Key Pad button:
1. Select the Function Key you want to remove.
2. Click on **Remove**.

To Add a Key Pad button:
1. Click on **Add**.
2. In the Name field, type the text you want to associate to the button when you pop up the Key Pad.
3. If you want to add a Text String to be sent to the host, type it into the Text String field.
4. Select the Action from the Drop-Down List.
5. From the Drop-Down list, select the command or the Recorded sequence that you want to associate to the Key Pad button.
6. Click on **Accept**.
7. Click on **Apply**.

Sign On (5250 Only)

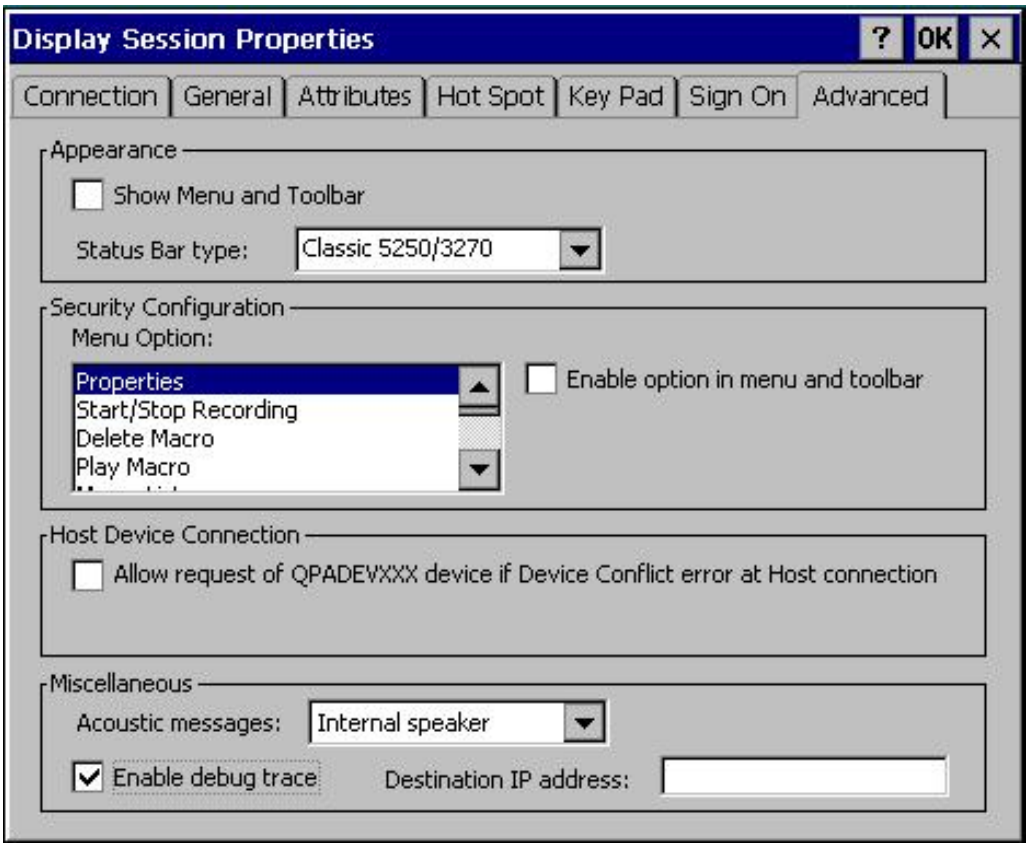
The Sign On feature of the emulator uses the "Enhanced Display Auto-Signon and Password Encryption" feature of the AS/400 to allow a secure connection to the AS/400 without using SSL.

Sign On Property Sheet for TN5250e

For this feature to work to your benefit, the "Remote Signon" parameter of the AS/400 configuration should be enabled. To verify if this parameter is enabled, use the WRKSYSVAL command. To enable this parameter, you may use the following command:
CHGSYSVAL SYSVAL(QRMTSIGN) VALUE('*VERIFY')

Advanced

The Advanced property sheet allows enabling/disabling of several useful features.



Advanced Property Sheet for TN5250e

Appearance

- **Show Menu and Toolbar**. *If you want to eliminate the "Windows" look, uncheck this box. In addition to changing the appearance, this will also prevent the user from using Hot Spots or Key Pad, and from viewing the keyboard mapping.*
- **Status Bar type**.
  - ***Classic 5250/3270***. *Provides the classic "green screen" look in the status bar.*

  - ***Graphic***. *Provides the "Windows" look to the status bar and displays the connection name.*

Security Configuration

YES*term*/IP provides extreme flexibility in allowing, or prohibiting, the user to view and change the characteristics of the display screen. If you choose to show the Menu and Tool bars in Appearance above, you can choose to individually enable or hide every option item shown in the Menu bar, and its corresponding button in the Buttons bar. The default is that all options except Properties are enabled.

1. Select the appropriate item from the drop-down list
2. Click on the **Enable…** check box.to insert a check in the check box, or to remove one that is already there.

Host Device Connection

When using named devices, careless name assignment or unusual session activation circumstances, such as a power failure/reconnect, can cause two sessions to request the same name. In such a case, the host will not open the second session. Checking the **Allow request of….** box will cause the emulator to request a virtual assignment for the second session if it is rejected because of name conflict. This does not fix the basic problem, but at least the session can be opened.

For AS/400 hosts, IBM recommends setting an AS/400 "Keep Alive Timeout" to 40 seconds in order to facilitate reconnection of named sessions. The AS/400 command CHGTELNA, executed from an AS/400 green screen, followed by the F4 key will display the screen that controls the setting of this parameter.

Miscellaneous

- **Acoustic messages**. You can select **Wave device** if you have external speakers.
- **Enable debug trace**. If you enable the trace, enter the Destination IP Address.

Printer Sessions

For TN5250e sessions, you will see a Printer Sessions Properties sheet with six properties tabs. For TN3270e sessions, you will see a Printer Sessions Properties sheet with four properties tabs. The opening view is of the Connections tab and properties sheet.

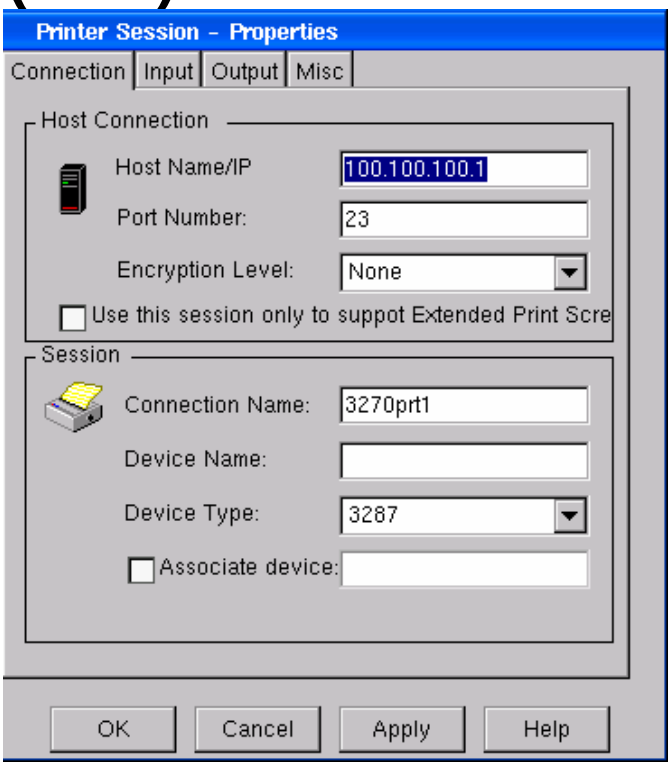
Connection (5250)

Connection Property Sheet for TN5250e

Six of the seven parameters on this property sheet were already configured in the Setup Wizard when this session was created, although you can change them here if you wish. The additional parameter is:

- **Use this session to support…**. If this session is used for Print Screen Extended Local Printing, check this box.

Connection (3270)



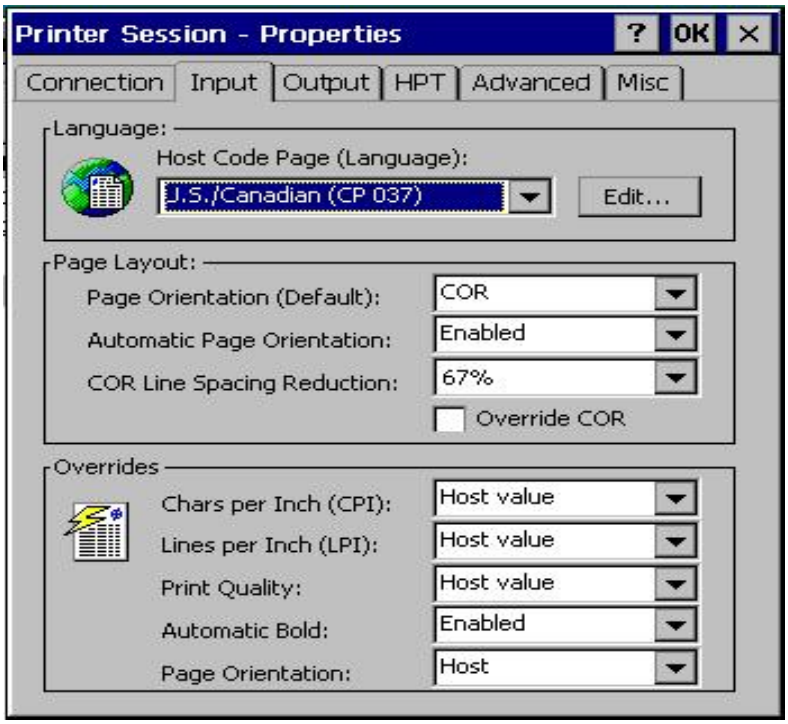
Connection Property Sheet for TN3270e

Six of the eight parameters on this property sheet were already configured in the Setup Wizard, although you can change them here if you wish. The additional parameters are:

- **Use this session to support…**. If this session is used for Print Screen Extended Local Printing, check this box.
- **Associate device**. Usually a printer session is associated with a specific printer device name. However, there are some mainframe configurations with no "free" printer devices, but only printer devices associated to specific display devices. In this case, you have to specify a display session name to which a printer is associated.

Input (5250)

The Input tab allows you to define specific parameters that affect the appearance of the printed page.
Note: If you are using Host Print Transform (see Advanced), the Input settings do not apply.



Input Property Sheet for TN5250e

Language

YES*term*/IP supports a number of different Code Pages. The Code Page selected here from the drop-down list should be the same as that configured on the AS/400 for the specific device.

It is also possible to create a new custom Code Page Table. See How To…|Create a Custom Language Code Page for instructions.

Page Layout

Set the default page layout. Parameters are:

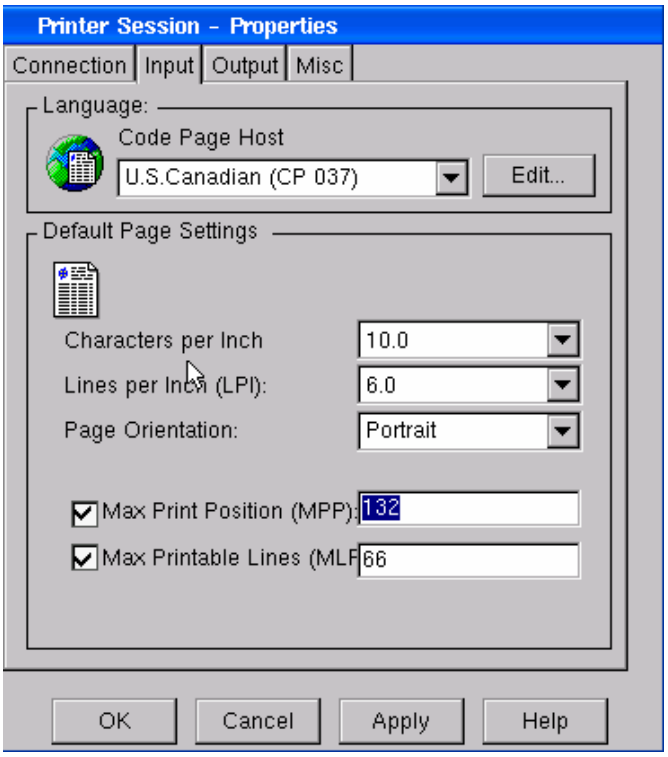
- **Page Orientation**. Select from **Portrait**, **Landscape**, and **COR** (Computer Output Reduction). **Note:** If you are using an impact dot-matrix printer, **Portrait** is recommended.
- **Automatic Page Orientation**. This option is enabled by Default. **Note:** If you are using an impact dot-matrix printer, it is recommended that this be **Disabled**.

- **COR Line Spacing Reduction.** This feature solves the problem of nonprintable margin area on the printer. **Note**: It is recommended that this feature be used only with laser printers.
- **COR Override**. This function corresponds to the IBM 3812 configuration parameter and defines that a job with draft quality is printed in COR.

Overrides

If you wish to override the host system output settings, you can do so here.
Note: If you are using an impact dot-matrix printer, it is recommended that you set Print Quality to **Force Draft**.

Input (3270)



Input Property Sheet for TN3270e

Language

YES*term*/IP supports a number of different Code Pages. The Code Page selected here from the drop-down list should be the same as that configured on the mainframe for the specific device.

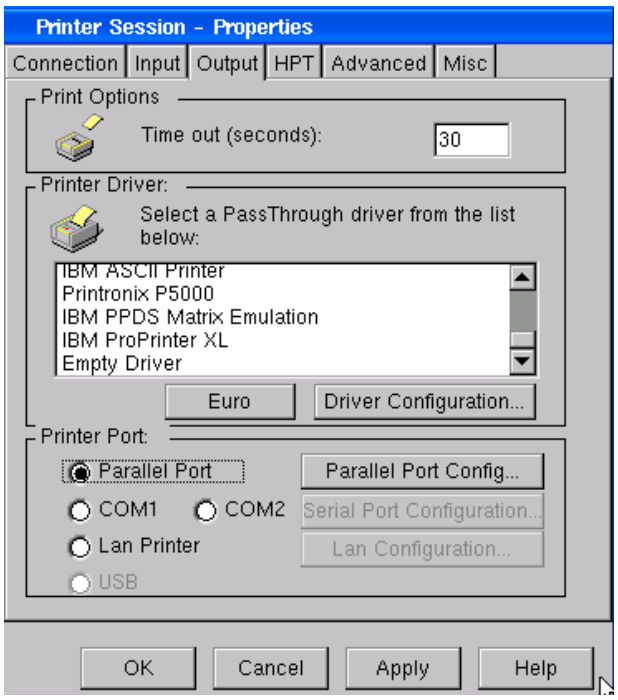
It is also possible to create a new custom Code Page Table. See How To…|Create a Custom Language Code Page for instructions.

Default Page Settings

Select the desired default settings from the drop-down lists and enter the maximum print parameters.
Note: If you are using an impact dot-matrix printer, **Portrait** is recommended for Page Orientation.

Output

The Output properties define the communication with the printer.

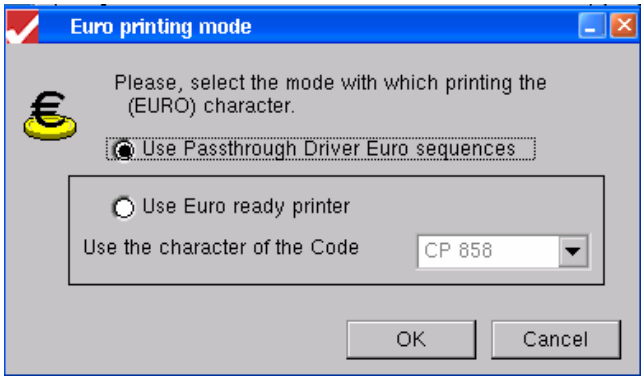


Output Property Sheet for TN5250e

- **Time Out.** This parameter defines a timer (in seconds) that starts to count down every time, during a printing job, that the host system stops sending data. If no more data are received within the timeout value selected, the printer session will assume that the print job is finished, and a Form Feed command is sent to the printer.
- **Printer Driver.** The PassThrough Drivers offered here, specifically developed by Affirmative, generate a standard text data stream. Everything is sent to the printer in text mode allowing better control of the printer and better performance. Select a PassThrough Driver from the drop-down list of pre-configured Printer Profiles for your selection and use. Even if your printer is not on this list, it probably emulates one of the listed printers. **Note:** If you are using an HP PCL printer, it is recommended that you use **HP PCL (Standard COR)** for U.S. operation and **HP PCL Laser Emulation** for European operation. **Note:** If you are using Host Print Transform (see Advanced), select **Empty Driver**.
- **Driver Configuration**. If you wish, you can modify parameters of a listed driver. For more information on how to customize or create a new Passthrough Printer Driver, refer to How To…|Modify a Passthrough Driver.

Euro

If your printer is Euro ready, you may wish to bypass the PassThrough Euro sequence. To do so, activate the **Euro** button to bring up the Euro Printing Mode dialog box



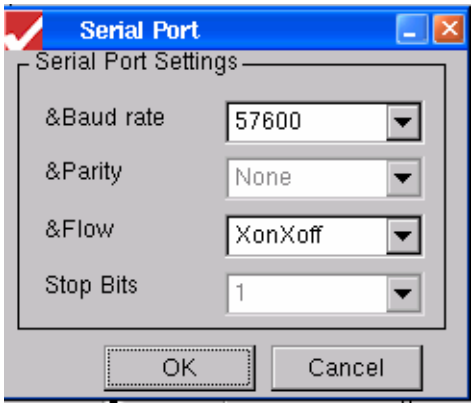
Euro Printing Mode Dialog Box

Select the **Use Euro ready printer** radio button and choose a Code Page character.

Printer Port

Choose and configure the local or network printer port used in this session. Choose **Parallel port**, **COM1/2** (2614 only), or **Lan printer**. Direct USB printing is not yet supported in emulation sessions, although it will be supported in a future firmware release.

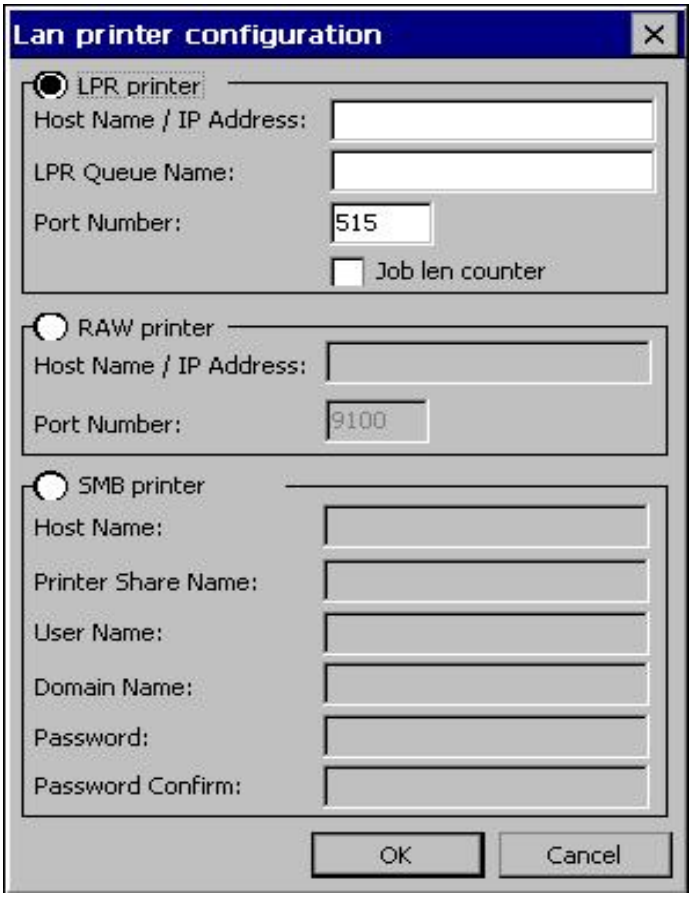
- **Port printer configuration**. After you choose a printer port, you need to configure it.
  - **Parallel Port**. Click on **Parallel Port Config…** to configure whether or not to reset the printer at the start of every print job.
  - **COM1/2** (2614 only). Click on **Serial Port Configuration** to see the Serial Port dialog box.



Serial Port Dialog Box

Select the baud rate and flow control from the drop-down lists. Note that parity and stop bits are not configurable.

- **Lan Printer**. Click on **Lan Configuration** to see the Lan Printer Configuration dialog box. Note that **SMB printer** is grayed out, since it is not supported in emulation sessions.



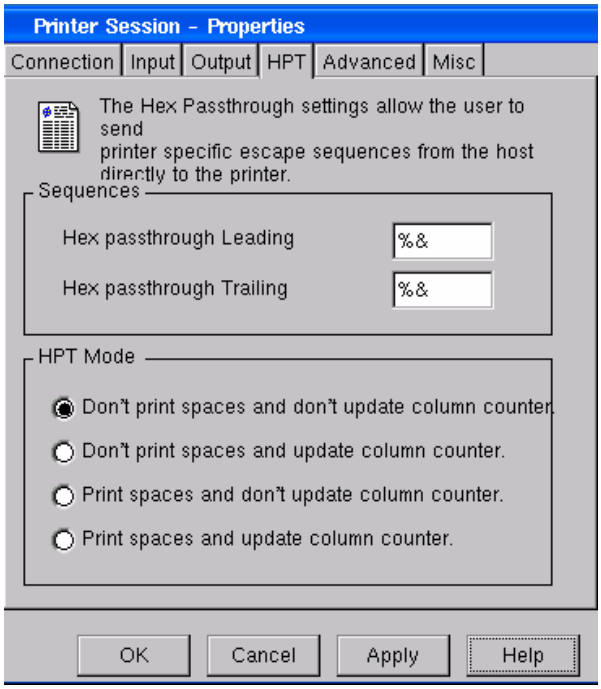
LAN Printer Configuration Dialog Box

  - **LPR printer**. Make this selection to assign print jobs to a network printer that is configured as an LPD server.
    - **Host name/IP Address**. If you are using a Hosts table (see Editing Terminal Properties|Network|Advanced Parameters|Hosts Table), you can type in the host network name. Otherwise, type in the IP address of the LPD host.
    - **LPR queue name**. This will be the queue name assigned at the LPD host to be used by LPR devices to assign print jobs.
    - **Port Number**. Leave at the default unless otherwise directed by your network administrator.
    - **Job length counter**. Leave unchecked unless otherwise directed by your system administrator.
  - **RAW printer**. RAW is the default protocol for most TCP/IP networks.
    - **Host name/IP**. If you are using a Hosts table (see Editing Terminal Properties|Network|Advanced Parameters|Hosts Table), you can type in the host network name. Otherwise, type in the IP address of the RAW host.
    - **Port Number**. Leave at the **9100** default unless otherwise directed by your system administrator.
- **USB**. Even though USB is grayed out, there is a circuitous way to print to a local USB printer. If you wish to do this, proceed as follows:

1. Set up the printer as an LPD printer, as described in Editing Terminal Properties|Printers|LPD.
2. Select **Lan printer** under Printer Port.
3. Configure the LAN printer as an **LPR printer**.
   - **Host name/IP Address**. Enter the IP Address of this terminal.
   - **LPR queue name**. Enter the queue name that you assigned in step 1.
   - **Port Number**. Leave at the default.
   - **Job length counter**. Leave unchecked.
4. Now you should be able to print to this printer from this session.

HPT (Hex Passthrough) (5250 only)

Hex Passthrough allows portions of a data stream to be sent directly from the host to the printer. There is no modification done to these portions by the emulator driver. In order for the emulator to recognize these inviolate data stream portions, they must be identified at the beginning and end by escape sequences – a combination of special characters that the emulator can identify.

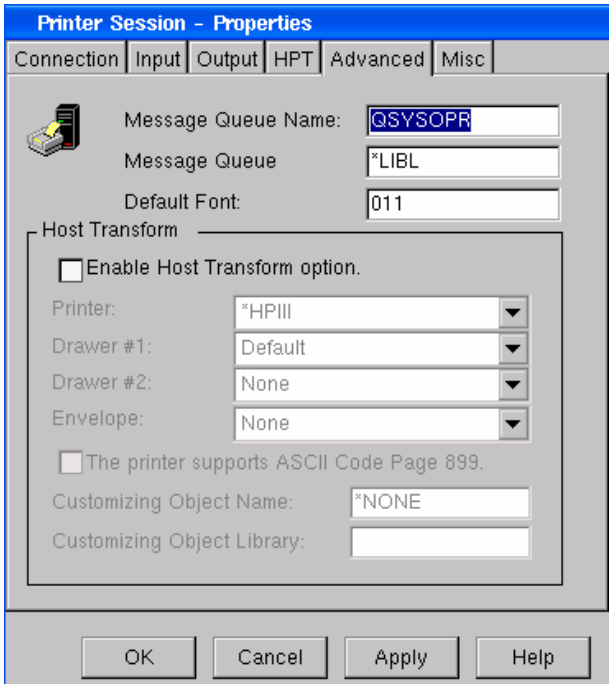


Hex Passthrough Property Sheet for TN5250e

- **Sequences**. Enter the Leading Sequence and the Trailing Sequence you want to use. The default sequences are **%&** and **%&**; however, most printers use the reverse (&%). You can enter up to 4 characters for each sequence.
- **HPT Mode**. Select one of four modes to define rather or not HPT prints spaces and rather or not it updates the column counter.

Advanced (5250 only)

The Advanced Tab allows you to set Default parameters and enable the Host Print Transform feature.



Advanced Property Sheet for TN5250e

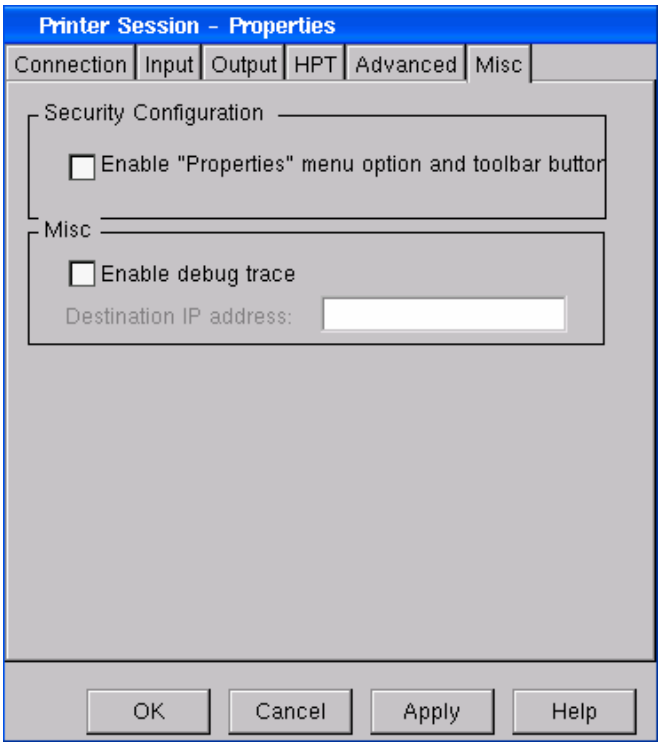
- **Queue Name/Queue Library/Default Font**. These are host parameters and should be given to you by your host administrator.

Host Transform

When Host Print Transform is enabled, the host does the EBCDIC-to-ASCII conversion of the print stream, and the local Passthrough Driver is not used.

- **Printer**. You must choose a compatible model from the drop-down list. Your AS/400 may have a more extensive list of compatible printers. If your printer is on the AS/400 list, but not on our list, you can type in the printer model here as it appears in the AS/400 list; be sure to put an asterisk in front of the model name.
- **Drawer # 1**. Choose an input print media size if applicable.
- **Drawer # 2**. Choose an input print media size if applicable.
- **Envelope**. Choose an envelope size if applicable.
- **Customizing Object Name**. Enter the object name here if you have chosen ***WSCTS** from the Printer drop-down list.
- **Customizing Object Library**. Enter the object library name here if you have chosen ***WSCTS** from the Printer drop-down list.

Miscellaneous



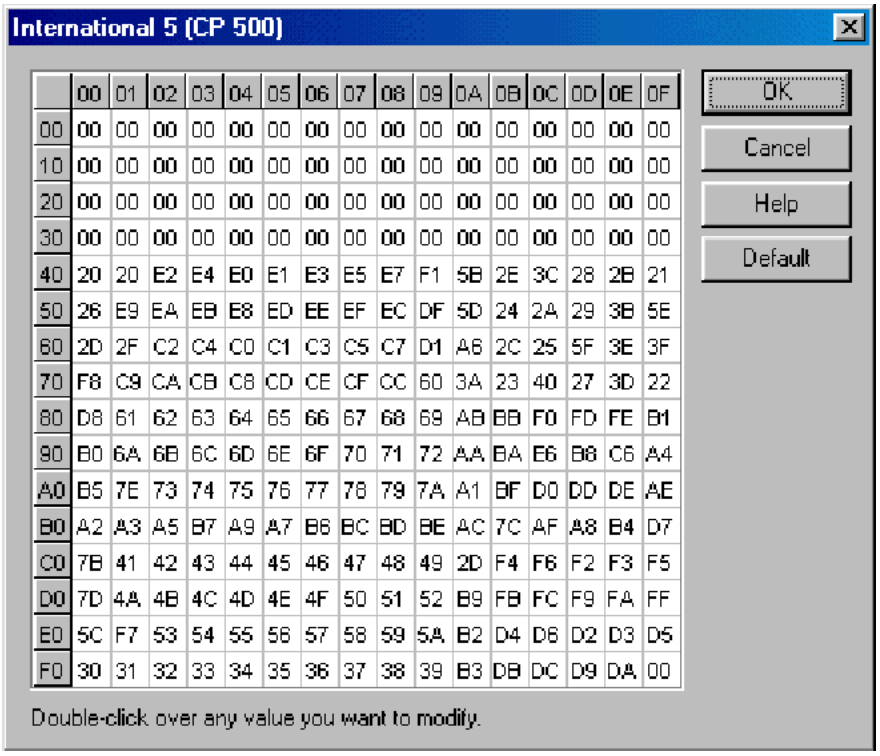
Miscellaneous Property Sheet for TN5250e

- **Security Configuration**. Default mode is to hide the Properties entries from the Tool bar and the Menu bar so that the user cannot make configuration changes. Check this box if you wish to provide user access to the configuration parameters.
- **Misc**. If you enable the debug trace, enter the **Destination IP Address**.

How To…

Create a Custom Language Code Page

This procedure is the same for either a display or a printer session. To do this, select one of the available Code Pages (the one that comes closest to the one you want to create) and click on **Edit**. Assuming that your base Code Page is International 5, the following screen will appear:



	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
20	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
30	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
40	20	20	E2	E4	E0	E1	E3	E5	E7	F1	5B	2E	3C	28	2B	21
50	26	E9	EA	EB	E8	ED	EE	EF	EC	DF	5D	24	2A	29	3B	5E
60	2D	2F	C2	C4	C0	C1	C3	C5	C7	D1	A6	2C	25	5F	3E	3F
70	F8	C9	CA	CB	C8	CD	CE	CF	CC	60	3A	23	40	27	3D	22
80	D8	61	62	63	64	65	66	67	68	69	AB	BB	F0	FD	FE	B1
90	B0	6A	6B	6C	6D	6E	6F	70	71	72	AA	BA	E6	B8	C6	A4
A0	B5	7E	73	74	75	76	77	78	79	7A	A1	BF	D0	DD	DE	AE
B0	A2	A3	A5	B7	A9	A7	B6	BC	BD	BE	AC	7C	AF	A8	B4	D7
C0	7B	41	42	43	44	45	46	47	48	49	2D	F4	F6	F2	F3	F5
D0	7D	4A	4B	4C	4D	4E	4F	50	51	52	B9	FB	FC	F9	FA	FF
E0	5C	F7	53	54	55	56	57	58	59	5A	B2	D4	D6	D2	D3	D5
F0	30	31	32	33	34	35	36	37	38	39	B3	DB	DC	D9	DA	00

International 5 Code Page Table

To read the table, use the left column for the first hex character of the EBCDIC code, and the top row for the second hex character of the EBCDIC code. For example, the standard EBCDIC code for A is C1; the standard ASCII code for A is 41. Look at the table above and you see that the cell corresponding to EBCDIC C1 has the value 41 in it.

Double-click the cells you want to change and enter the new values. To assist you in your customization, the standard code tables for EBCDIC and ASCII are shown here.

HEX DIGITS 1ST → 2ND ↓	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0	(SP) SP010000	& SM030000	- SP100000	ø LO610000	Ø LO620000	° SM190000	µ SM170000	^ SD150000	{ SM110000	} SM140000	\ SM070000	0 ND100000
-1	(RSP) SP300000	é LE110000	/ SP120000	É LE120000	a LA010000	j LJ010000	~ SD190000	£ SC020000	A LA020000	J LJ020000	÷ SA060000	1 ND010000
-2	â LA150000	ê LE150000	Â LA160000	Ê LE160000	b LB010000	k LK010000	s LS010000	¥ SC050000	B LB020000	K LK020000	S LS020000	2 ND020000
-3	ä LA170000	ë LE170000	Ä LA180000	Ë LE180000	c LC010000	l LL010000	t LT010000	· SD630000	C LC020000	L LL020000	T LT020000	3 ND030000
-4	à LA130000	è LE130000	À LA140000	È LE140000	d LD010000	m LM010000	u LU010000	© SM520000	D LD020000	M LM020000	U LU020000	4 ND040000
-5	á LA110000	í LI110000	Á LA120000	Í LI120000	e LE010000	n LN010000	v LV010000	§ SM240000	E LE020000	N LN020000	V LV020000	5 ND050000
-6	ã LA190000	î LI150000	Ã LA200000	Î LI160000	f LF010000	o LO010000	w LW010000	¶ SM250000	F LF020000	O LO020000	W LW020000	6 ND060000
-7	å LA270000	ï LI170000	Å LA280000	Ï LI180000	g LG010000	p LP010000	x LX010000	¼ NF040000	G LG020000	P LP020000	X LX020000	7 ND070000
-8	ç LC410000	ì LI130000	Ç LC420000	Ì LI140000	h LH010000	q LQ010000	y LY010000	½ NF010000	H LH020000	Q LQ020000	Y LY020000	8 ND080000
-9	ñ LN190000	ß LS610000	Ñ LN200000	` SD130000	i LI010000	r LR010000	z LZ010000	¾ NF050000	I LI020000	R LR020000	Z LZ020000	9 ND090000
-A	¢ SC040000	! SP020000	¦ SM650000	: SP130000	« SP170000	ª SM210000	¡ SP030000	[SM060000	(SHY) SP320000	1 ND011000	2 ND021000	3 ND031000
-B	. SP110000	$ SC030000	, SP080000	# SM010000	» SP180000	º SM200000	¿ SP160000	] SM080000	ô LO150000	û LU150000	Ô LO160000	Û LU160000
-C	< SA030000	* SM040000	% SM020000	@ SM050000	ð LD630000	æ LA510000	Ð LD620000	¯ SM150000	ö LO170000	ü LU170000	Ö LO180000	Ü LU180000
-D	(SP060000	) SP070000	_ SP090000	' SP050000	ý LY110000	¸ SD410000	Ý LY120000	¨ SD170000	ò LO130000	ù LU130000	Ò LO140000	Ù LU140000
-E	+ SA010000	; SP140000	> SA050000	= SA040000	þ LT630000	Æ LA520000	Þ LT640000	´ SD110000	ó LO110000	ú LU110000	Ó LO120000	Ú LU120000
-F	| SM130000	¬ SM660000	? SP150000	" SP040000	± SA020000	¤ SC010000	® SM530000	× SA070000	õ LO190000	ÿ LY170000	Õ LO200000	(EO)

Code Page 00037

EBCDIC Code Page

In this code page, the top row corresponds to the first digit of the EBCDIC hex character pair, and the left row corresponds to the second digit. For example, the hex pair 5B represents an $.

HEX DIGITS 1ST → 2ND ↓	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0		► SM590000	(SP) SP010000	0 ND100000	@ SM050000	P LP020000	` SD130000	p LP010000	Ç LC420000	É LE120000	á LA110000	▒ SF140000	└ SF020000	╨ SF460000	α GA010000	≡ SA480000
-1	☺ SS000000	◄ SM630000	! SP020000	1 ND010000	A LA020000	Q LQ020000	a LA010000	q LQ010000	ü LU170000	æ LA510000	í LI110000	▓ SF150000	┴ SF070000	╤ SF470000	ß LS610000	± SA020000
-2	☻ SS010000	↕ SM760000	" SP040000	2 ND020000	B LB020000	R LR020000	b LB010000	r LR010000	é LE110000	Æ LA520000	ó LO110000	▓ SF160000	┬ SF060000	╥ SF480000	Γ GG020000	≥ SA530000
-3	♥ SS020000	!! SP330000	# SM010000	3 ND030000	C LC020000	S LS020000	c LC010000	s LS010000	â LA150000	ô LO150000	ú LU110000	│ SF110000	├ SF080000	╙ SF490000	π GP010000	≤ SA520000
-4	♦ SS030000	¶ SM250000	$ SC030000	4 ND040000	D LD020000	T LT020000	d LD010000	t LT010000	ä LA170000	ö LO170000	ñ LN190000	┤ SF090000	─ SF100000	╘ SF500000	Σ GS020000	⌠ SS260000
-5	♣ SS040000	§ SM240000	% SM020000	5 ND050000	E LE020000	U LU020000	e LE010000	u LU010000	à LA130000	ò LO130000	Ñ LN200000	╡ SF190000	┼ SF050000	╒ SF510000	σ GS010000	⌡ SS270000
-6	♠ SS050000	▬ SM700000	& SM030000	6 ND060000	F LF020000	V LV020000	f LF010000	v LV010000	å LA270000	û LU150000	ª SM210000	╞ SF200000	╞ SF360000	╓ SF520000	μ GM010000	÷ SA060000
-7	• SM570000	↨ SM770000	' SP050000	7 ND070000	G LG020000	W LW020000	g LG010000	w LW010000	ç LC410000	ù LU130000	º SM200000	╖ SF210000	╟ SF370000	╫ SF530000	τ GT010000	≈ SA700000
-8	◘ SM570001	↑ SM320000	(SP060000	8 ND080000	H LH020000	X LX020000	h LH010000	x LX010000	ê LE150000	ÿ LY170000	¿ SP160000	╕ SF220000	╚ SF380000	╪ SF540000	Φ GF020000	° SM190000
-9	○ SM750000	↓ SM330000	) SP070000	9 ND090000	I LI020000	Y LY020000	i LI010000	y LY010000	ë LE170000	Ö LO180000	⌐ SM680000	╣ SF230000	╔ SF390000	┘ SF040000	Θ GT620000	• SA790000
-A	◙ SM750002	→ SM310000	* SM040000	: SP130000	J LJ020000	Z LZ020000	j LJ010000	z LZ010000	è LE130000	Ü LU180000	¬ SM660000	║ SF240000	╩ SF400000	┌ SF010000	Ω GO320000	· SD630000
-B	♂ SM280000	← SM300000	+ SA010000	; SP140000	K LK020000	[SM060000	k LK010000	{ SM110000	ï LI170000	¢ SC040000	½ NF010000	╗ SF250000	╦ SF410000	■ SF610000	δ GD010000	√ SA800000
-C	♀ SM290000	∟ SA420000	, SP080000	< SA030000	L LL020000	\ SM070000	l LL010000	| SM130000	î LI150000	£ SC020000	¼ NF040000	╝ SF260000	╠ SF420000	▬ SF570000	∞ SA450000	n LN011000
-D	♪ SM930000	↔ SM780000	- SP100000	= SA040000	M LM020000	] SM080000	m LM010000	} SM140000	ì LI130000	¥ SC050000	¡ SP030000	╜ SF270000	═ SF430000	▌ SF580000	φ GF010001	2 ND021000
-E	♫ SM910000	▲ SM600000	. SP110000	> SA050000	N LN020000	^ SD150000	n LN010000	~ SD190000	Ä LA180000	Pts SC060000	« SP170000	╛ SF280000	╬ SF440000	▐ SF590000	ε GE010000	■ SM470000
-F	☼ SM690000	▼ SV040000	/ SP120000	? SP150000	O LO020000	_ SP090000	o LO010000	⌂ SM790000	Å LA280000	ƒ SC070000	» SP180000	┐ SF030000	╧ SF450000	▬ SF600000	∩ SA380000	(RSP) SP300000

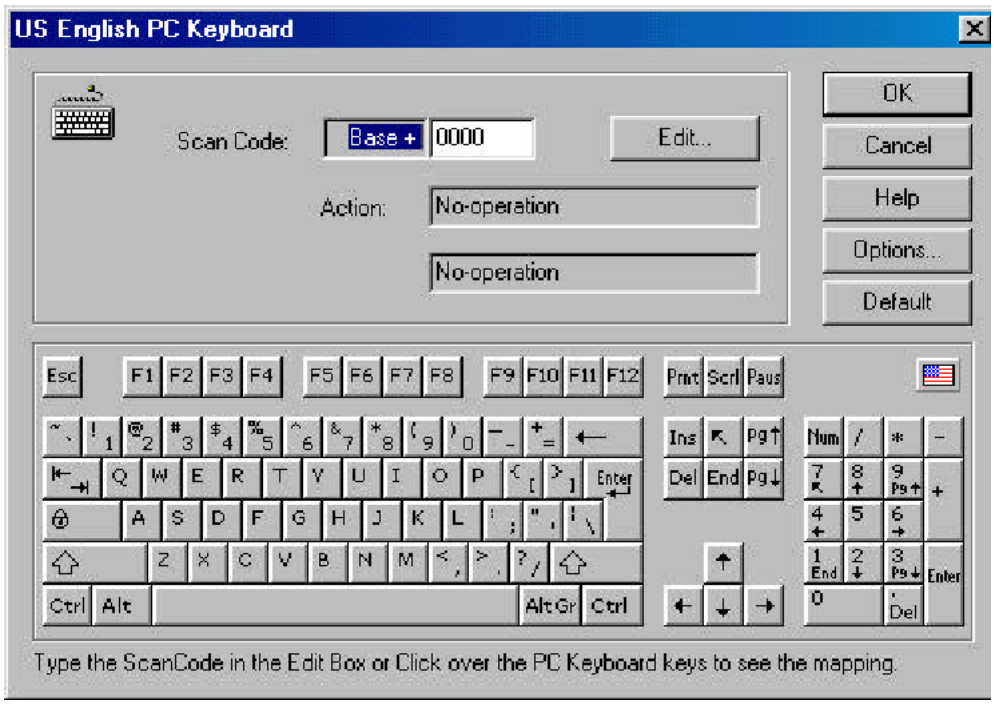
Code Page 00437

ASCII Code Page for Terminal Font

In this code page, the top row corresponds to the first digit of the ASCII hex character pair, and the left row corresponds to the second digit. For example, the hex pair 24 represents an $.

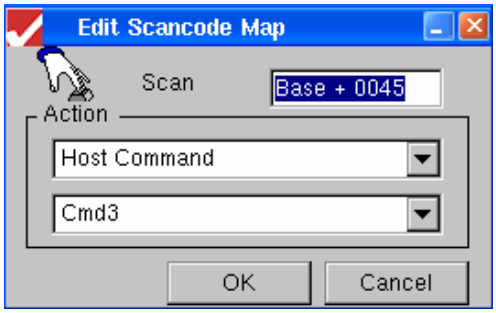
Create a Custom Keyboard Map

To do this, select, in Display Session Properties>General>Keyboard Type, one of the available Keyboard Layouts (the one that best matches the one you want to create) and click on **Edit**. Assuming that you chose the 101 PC keyboard for U.S. English, the following screen will appear.



Keyboard Map Page for 101 PC Keyboard

Select the key, or key plus modifier (**Ctrl, Alt, Shift**) to which you want to associate a specific action. On the upper half of the window, you can see the keyboard Scan-Code and the associated default action. To modify the action, click on **Edit**. The following dialog box will appear:



Edit Scancode Map Dialog Box

From the Action drop-down list, you can select the action that you want to associate with the selected key from among the following options:

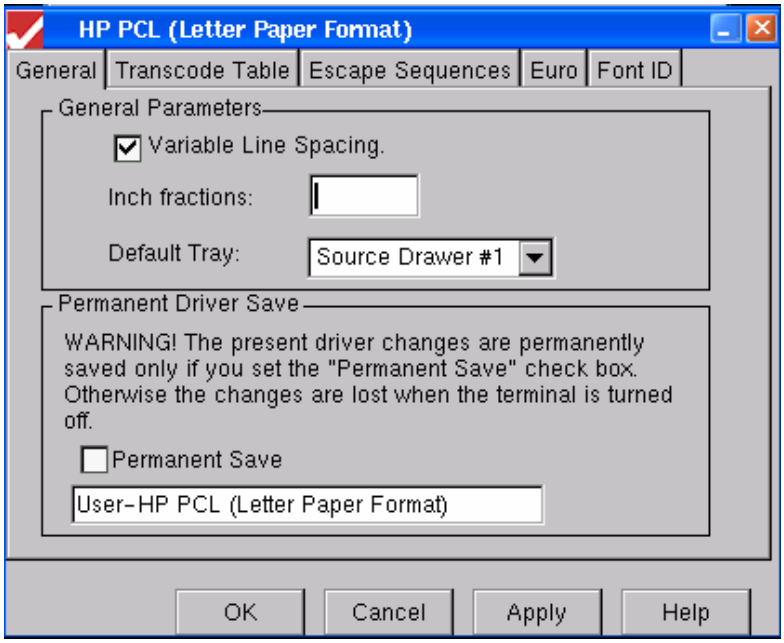
- **No operation**. No action will be performed when you press the key.
- **Host Command**. Choose the desired command function from the lower drop-down list.
- **Recorded Key Sequence**. If you have previously recorded one or more key sequences, you will see their names in the lower drop-down list. Choose the desired Recorded Sequence from this list.
- **EBCDIC Characters Sequence**. Enter the Scan-Code sequence you want to associate to the key. Although you can use this to enter multiple characters, like a Recorded Sequence, this option is typically used to access some special character not normally seen on a keyboard. See Create a Custom Language Code Page for a standard code page for EBCDIC.

Modify a Printer Passthrough Driver

Any Passthrough Driver can be customized, and it is also possible to create a new Driver. To edit an existing Passthrough Driver, do the following:

1. Highlight the connection name in the Configure tab of Connection Manager and activate **Edit**.
2. Follow the path Printer Session Properties>Output>Printer Driver.
3. Select the Driver from the drop-down list and activate **Driver Configuration** in the Output. You will see a screen with five tabs.

General

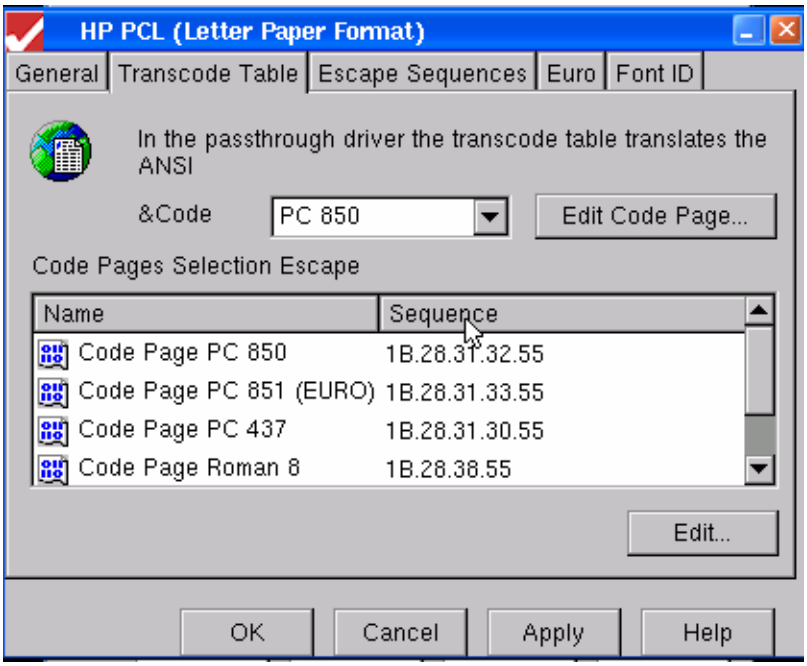


Driver General Property Sheet

This sheet allows you to select:

- **Variable Line Spacing**. If you enable this function you must enter the Inch fractions.
- **Default Tray**.
- **Permanent Save**. You *must* check this box if you wish to save the driver changes.
- **New Driver Name**. This name will appear in the Passthrough Driver drop-down list *if* you check **Permanent Save**. The default new name is User- in front of the selected driver name. But you can enter a completely new name if you wish.

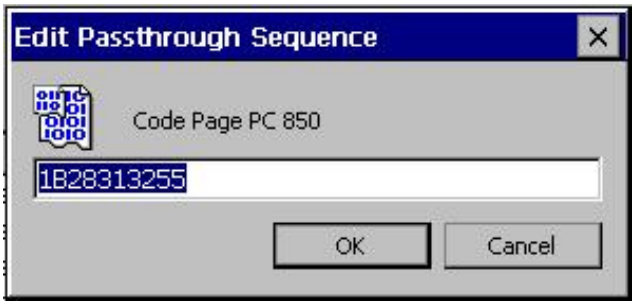
Transcode Table



Driver Transcode Property Sheet

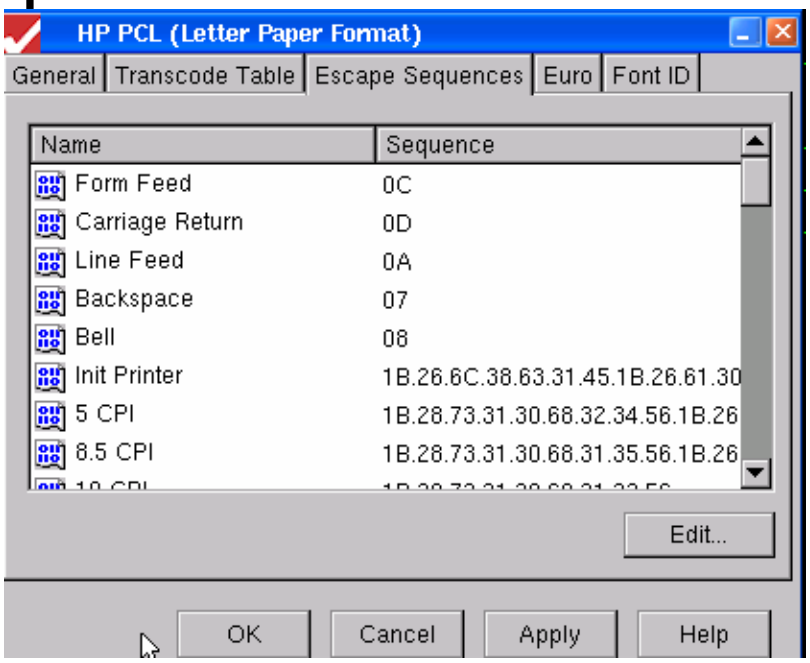
This sheet allows you to:

- **Define the Default Code Page**. If you want, you can also edit the Code Page by clicking on **Edit Code Page**. Select a value that you wish to modify, click on **Edit**, and a Code Page screen will appear where you can enter the new value. See Create a Custom Language Code Page for editing instructions.
- **Customize the Escape sequence** used to call the Code Page. Select the Code Page from the list, activate **Edit**, and an Edit Passthrough Sequence dialog box will appear where you can enter the new value.



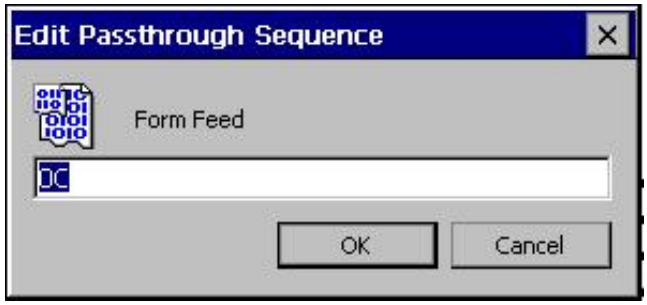
Transcode Edit Passthrough Sequence Dialog Box

Escape Sequences



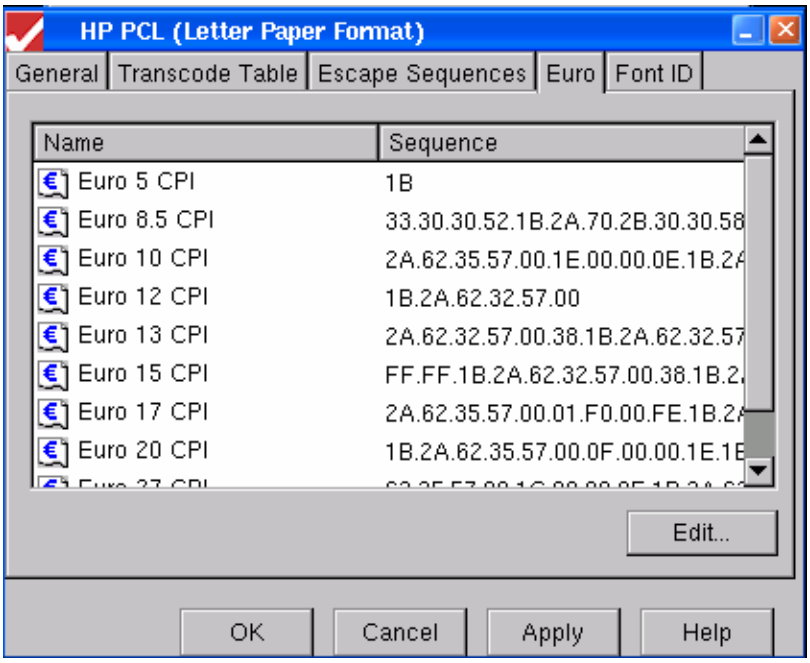
Driver Escape Sequences Property Sheet

This sheet allows you to customize all the Escape commands used to perform specific functions. Select a function, activate **Edit**, and an Edit Passthrough Sequence dialog box will appear. Make your changes there.



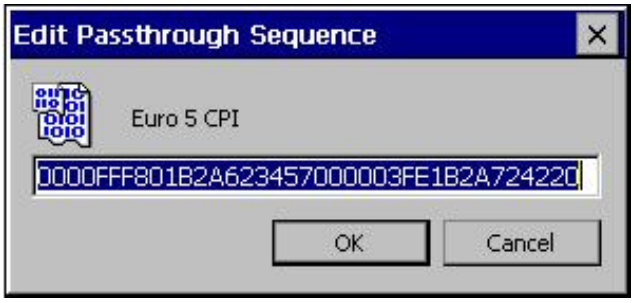
Edit Passthrough Sequence Dialog Box

Euro



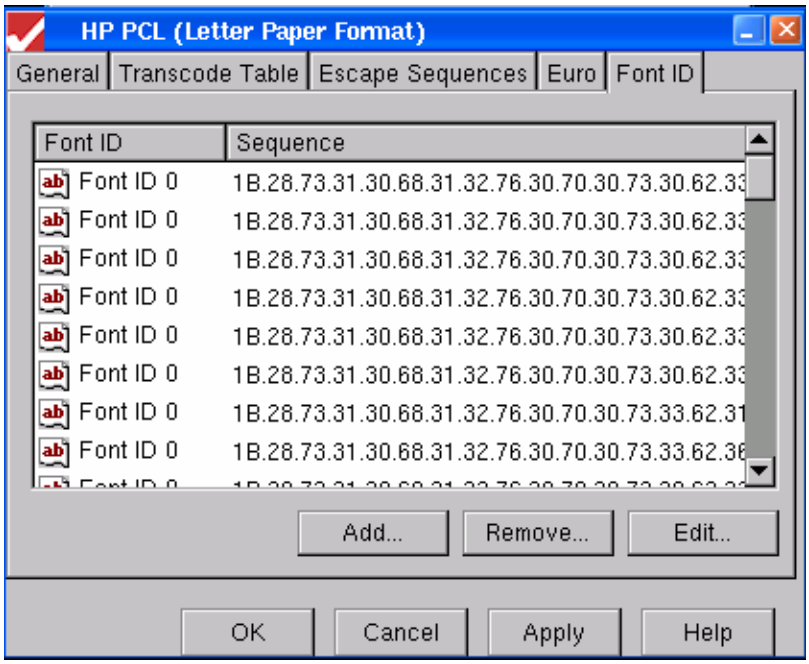
Driver Euro Property Sheet

This sheet allows you to customize the Escape command used to print the EURO symbol. This special function allows you to print the EURO symbol even on those printers that are not EURO ready. Select the command you wish to customize, then activate **Edit**, and an Edit Passthrough Sequence dialog box will appear where you can enter the new value.



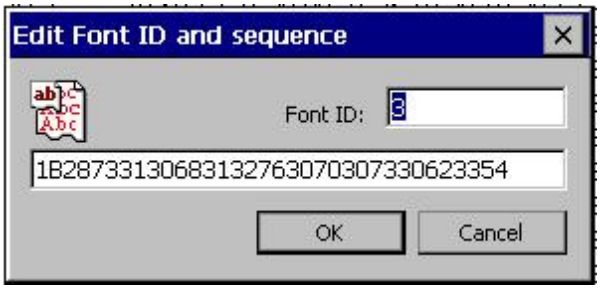
Edit Passthrough Sequence Dialog Box

Font ID



Driver Font ID Property Sheet

This sheet allows you to customize the Escape commands used to call a Printer Font that has been associated with a Host System Font ID. To edit a Font ID, select the item, activate **Edit**, and an Edit Font ID and Sequence dialog box will appear where you can enter the new value.



Edit Font ID and Sequence Dialog Box

You can also remove a font or add a new font to the list. If you activate **Add**, an Edit Font ID and Sequence dialog box will appear where you can enter the new values.

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Using a Connection

Connections are typically opened, or activated, in one of four ways.

1. In Desktop viewing mode, display connections in the Start menu and then click on the connection of choice.
2. In Desktop viewing mode, open Connections Manager, highlight the connection of choice, and then click on **Connect**.
3. In WBT viewing mode, open Connections Manager, highlight the connection of choice in the Connections tab, and then click on **Open**.
4. Configure a session to Autostart (see Connections Manager|Configurtion|Startup) at bootup. In TBT viewing mode, all sessions are Autostart by default.

Most connection types can be used without any explanation here. But we have user information for several types that may be unfamiliar to you.

Client VNC

1. Open the Client VNC session from the Start menu or Connections Manager.
2. If you have configured the session correctly, including password, and if VNC Server is on at the target device, you will see the target screen. If the terminal video resolution is less than the target video resolution, you will have to scroll to see the complete target screen.
3. If you have not included a password in the session configuration, you will have to enter a password in a dialog box before you can see the target screen.
4. If any of the configuration parameters are incorrect, if VNC Server is not on at the target device, or if you enter an incorrect password, you will see no action. You *will not see* any error message.

Notes:

1. You can configure multiple Client VNC sessions, but only one can be active at any one time.
2. If the terminal video resolution is equal to or less than the target video resolution, and you are in the Desktop viewing mode, you will need to hide the Task Bar (see Editing Terminal Properties|Desktop) in order to see the whole target screen or do horizontal scrolling.

Internet Browser

No doubt you are familiar with Web browsing in general. However, here are some details about using the Netscape 4.78 browser. When you open the browser session, you will go to your designated initial page and see something like the following screen

Browser Screen Example

Basic operations can be controlled from the Menu Bar, the Navigation Toolbar, the Location Toolbar, and the Personal Toolbar. Everything that can be done from the Navigation and Location Toolbars can also be done from the Menu Bar, and the Menu Bar will also allow additional operations or configuration

Menu Bar

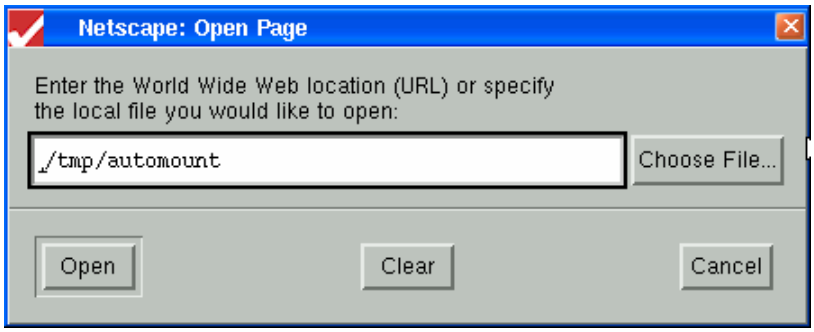
Browser Menu Bar

The Menu Bar contains six menus. Open the desired menu by left-clicking on it.

File

Browser File Menu

- **Navigator Window**. Click on this selection to go to your Home page. **Note:** Your Home page is the one designated in Edit>Preferences. It is not necessarily the Initial page designated in the Browser Connection Configuration dialog box when the session was created.
- **Open Page**. Click here to open the Open Page dialog box.



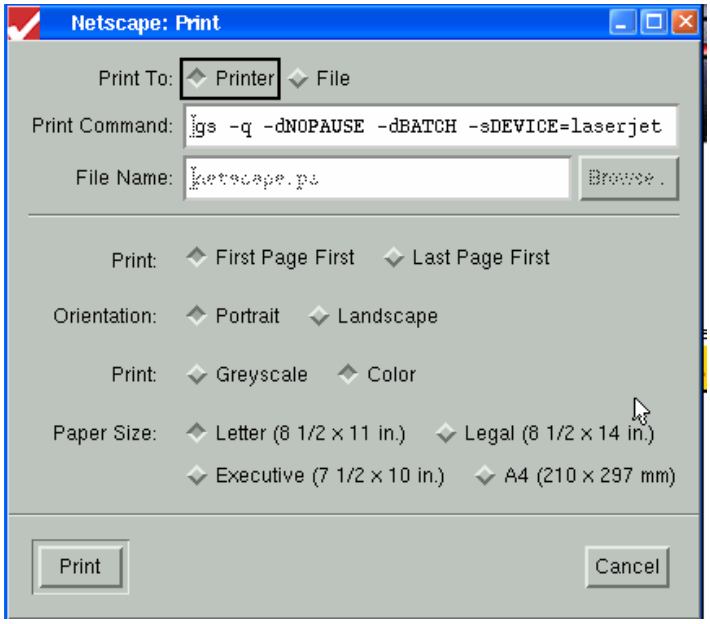
Browser Open Page Dialog Box

Enter the url of the Web page that you wish to browse and click on **Open**. You can even open a local file if you wish, although it's not likely to be very useful.

- **Save As**. Click here to open the Save As dialog box to save the current page in Text, Html, or Postscript format.
- **Close**. It is possible to open multiple windows (see Window|Multiple Windows) in the same session. If you have multiple windows, click on **Close** to close the current window.
- **Exit**. Click here to close the browser session. This will close all open windows in this session

Print

Click here to open the Print dialog box.



Browser Print Dialog Box

Browser printing uses a derivation of a popular Open Source program called Ghostscript. The **Print Command** box automatically contains a Ghostscript command line that allows you to print to the first printer configured in Terminal Properties>Printers. If you have more than one configured printer, and you do not want to print to the first one, you can change the queue name (the last term in the script) to designate the desired printer. You can also change the default device type from laserjet (as in **-sDEVICE=laserjet**) to one in the following table.

Table 1. Compatible Printers for Browser Printing

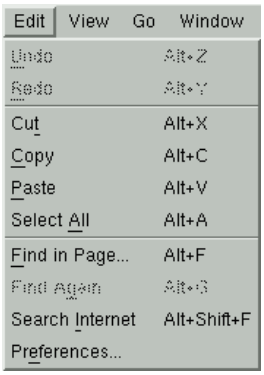
Device Type	Compatible Printers
• bj10e	• Canon BJ10e, BJ20
• bj200	Canon BJ200, BJC70, 210, 240, 250 (b/w only)
• bjc600	CanonBJC-50, 70, 80, 210 (color), 240 (color), 250, 600, 610, 1000, 2000, 4000, 4100 (b/w only), 4200, 4300, 4550, 6000, C2500
bjc800	Canon BJC-800, 4300, 4650, 7000,
cdeskjet	HP DeskJet 500C
• cdj550	HP DeskJet 550C, 570C, 600, 660C, 672C (b/w only), 682C, 683C, 693C, 694C, 695C, 850, 870Cse (color only), 895Cxi, 970, 1220C, OfficeJet 590, Olivetti jp450, Xerox XJ6C
cdjcolor	HP DeskJet 400, 500C, 540C, 690C, 693C (color only)
cdjmono	HP DeskJet 500C, 510, 520, 540C, 693C b/w only
cljet5	HP Color LaserJet 5, 5M
cljet5c	HP Color LaserJet 5, 5M
deskjet	HP DeskJet, DeskJet Plus
djet500	HP DeskJet 500, DeskJet Portable, OfficeJet 590
epson	Canon 4100 (color), Epson-compatible dot matrix
epswrite	Encapsulated PostScript

Device Type	Compatible Printers
ibmpro	IBM 9-pin Proprinter
ijs	HP InkJet Server
laserjet	HP LaserJet
lj5gray	HP LaserJet 5, 6
lj5mono	HP LaserJet 5, 6
ljet2p	HP LaserJet IId, IIp, III, IIIp
ljet3	HP LaserJet III, IIIp
ljet3d	HP LaserJet IIID
ljet4	HP DeskJet 870Cse, Laserjet 4, 5, 5L, 6L, 1100
ljet4d	HP LaserJet 4 with duplex
ljetplus	HP LaserJet Plus, Canon Laser LBP-600, NEC SuperScript
pj	HP PaintJet XL
pjxl	HP PaintJet XL color
pjxl300	HP CopyJet, DeskJet 600 (300dpi only), 1200C, 1600C, PaintJet 1200C, XL300
psgray	PostScript Level 1 8-bit gray
psmono	PostScript Level 1 monochrome
psrgb	PostScript Level 2
pswrite	PostScript
pxlcolor	HP color PCL XL
pxlmono	HP monochrome PCL XL
uniprint	Canon BJC 610, HP DeskJet 550C, NEC P2X, Epson Stylus Color, Color II, Color 500, Color 600, Color 800, Color 1520, Sun rasterfile

If you do not see your printer in this list, do not despair. Your printer probably is compatible with PostScript, PCL or one of the listed printers. For more details on device types and printer compatibility, see http://www.cs.wisc.edu/~ghost/doc/printer.htm
http://www.cs.wisc.edu/~ghost/doc/AFPL/devices.htm

Note: Do not change any other terms in the command unless you really know your Ghostscript. But if you should happen to do so by mistake, you can restore the default command by resetting the terminal to factory defaults in Terminal Properties>General or by retyping the command into the **Print Command** box. If you do not have the command memorized, here it is:
gs -q -dNOPAUSE -dBATCH -sDEVICE=<device name> **-sOutputFile- -|lpr -P** <queue name>.

Edit



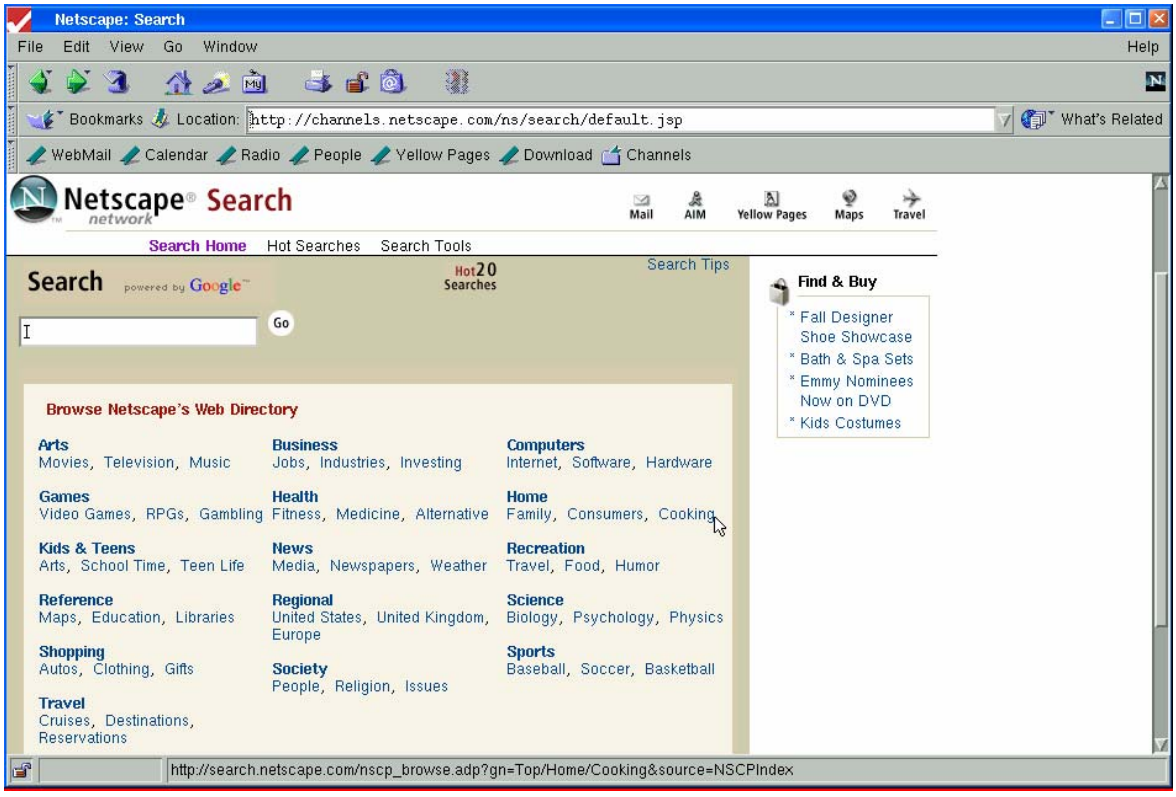
Browser Edit Menu

- **Cut**. This selection will seem to be active if you have highlighted some material in the current page. But it is not applicable in a browser session, and you will get an error beep if you attempt to use it.
- **Copy**. You can highlight and select material to be copied from an open Web page. Select the material in the typical Windows fashion, and then click on **Copy**. You can also go this by right-clicking to open a menu which includes the **Copy** option.
- **Paste**. This selection will seem to be active if you have some material in the Clipboard. But it is not applicable in a browser session, and you will get an error beep if you attempt to use it.
- **Select All**. Click here to select the whole page for copying.
- **Find in Page**. Click here to open the Find dialog box.

Browser Find Dialog Box

Enter the text string that you wish to find on the open page, and click on **Find**.

- **Search Internet**. Click here to open the Netscape Search Page.

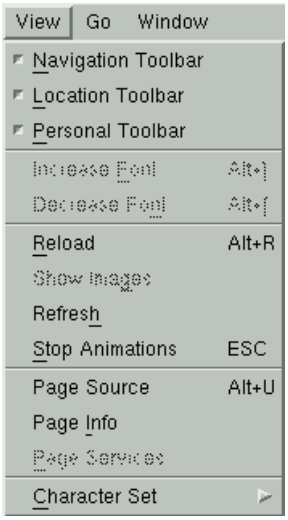


Browser Netscape Search Page

Enter keywords for the URL you are seeking, or open one of the more-specific directories.

- **Preferences**. This option is only available from the Menu Bar. Click here to open the Netscape Preferences dialog box and fine-tune your browser session. See Editing an Existing Connection|Internet Browser for more information.

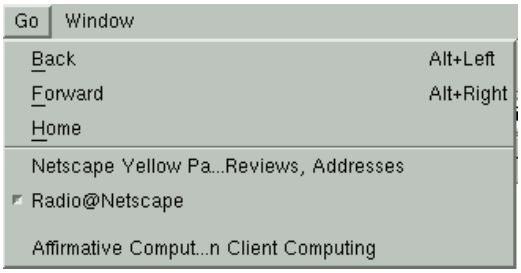
View



Browser View Menu

- **Navigation Toolbar**. Click here to toggle the appearance or disappearance of the Navigation Toolbar.
- **Location Toolbar**. Click here to toggle the appearance or disappearance of the Location Toolbar.
- **Personal Toolbar**. Click here to toggle the appearance or disappearance of the Personal Toolbar.
- **Reload**. Click here to reload the current Web page from the source server.
- **Show Images**. You can inhibit image downloading in **Edit>Preferences>Advanced**. If you do this, the **Show Images** option will be activated, and clicking on it will download the images for the current Web page.
- **Refresh**. Click here to refresh the current Web page from local cache.
- **Stop Animations**. Click here to stop any animations that are present in the current Web page.
- **Page Source**. Click here to view the html source code controlling the current Web page.
- **Page Info**. Click here to view details about the structure of the current Web page.
- **Character Set**. When the browser encounters a foreign character set, it automatically adjusts to display the different characters. But you can choose a default character set here.

Go

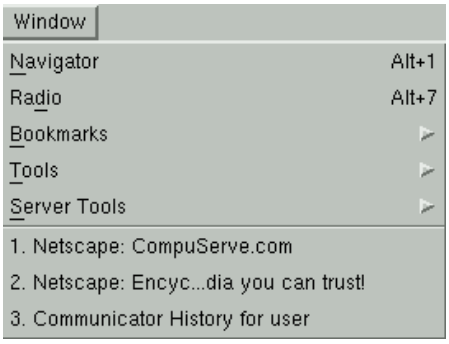


Browser Go Menu

This menu allows you to navigate to Web pages within the focused browser window.

- **Back**. Click here to go back to the previous Web page.
- **Forward**. Click here to return to the page that you most recently came **Back** from.
- **Home**. Click here to go to the Home page configured in **Edit>Preferences>Navigator**.
- **List**. At the bottom of this menu, below **Home**, you see a list of the Web pages that you have visited since opening this window. Click on an entry to go directly to that page.

Window

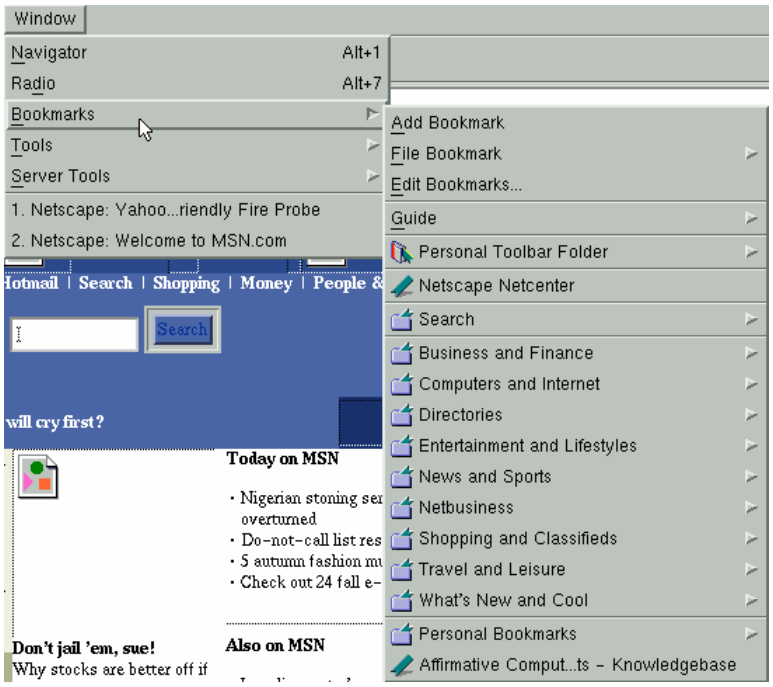


Browser Window Menu

- **Navigator**. Click here to open a window browsing your Home page.
- **Radio**. Click here to go to the Netscape Radio page.
- **Server Tools**. This is not supported in the 2x14 terminals.

Bookmarks

Click here to see the Bookmarks (also known as Favorites in the Windows Internet Explorer world) menu.

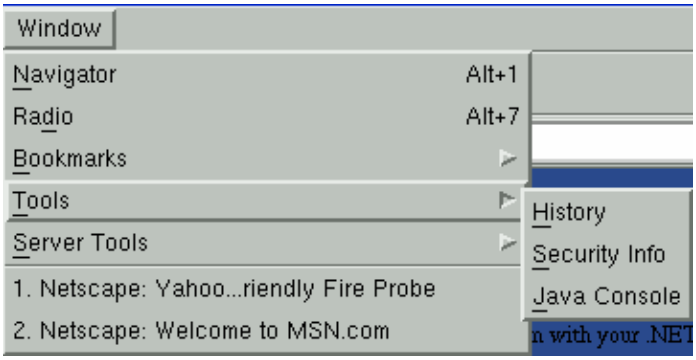


Browser Bookmark Menu

There are a number of predefined Bookmarks in various categories, and of course you can add, delete, and edit existing and new Bookmarks. Also note that you can customize your Personal Toolbar from this menu by dragging and dropping your favorite Bookmarks into it.

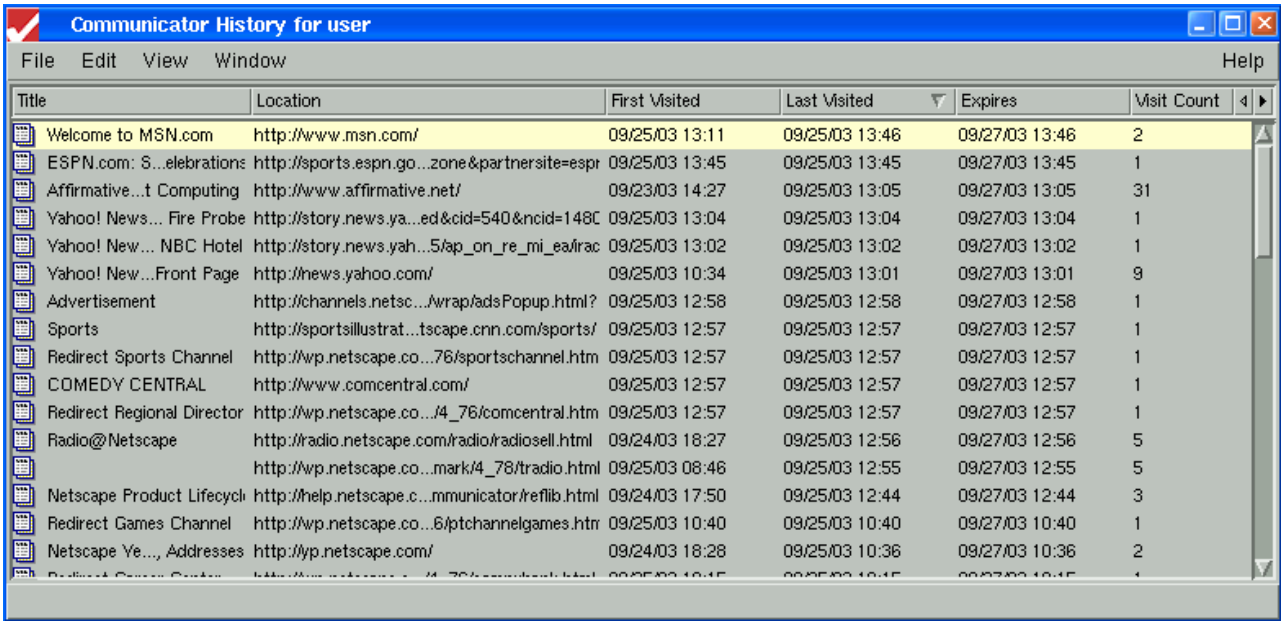
Tools

Click here to see the Tools menu.



Browser Tools Menu

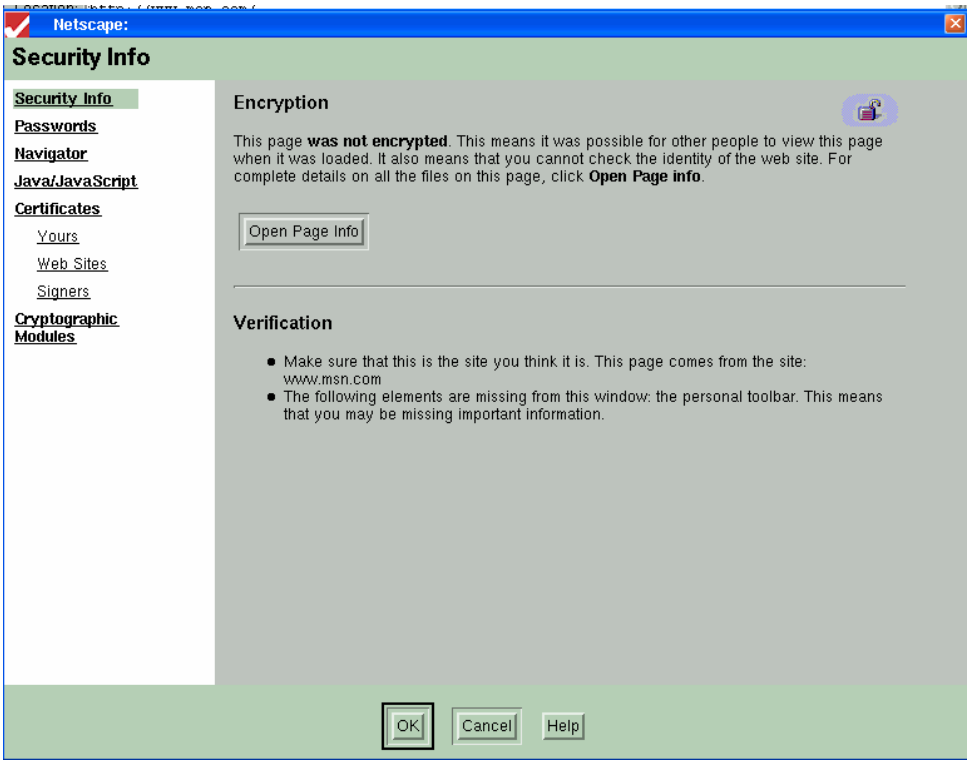
- **History**. Click here to see the Communications History window.



Browser Communications History Window

This window shows a list of all the Web sites visited in the last x days by all windows in all browser sessions. The number of days, x, is specified in **Edit>Preferences>Navigator**. Click on a column heading to re-sort the list. Double-click on a site name to go there again.

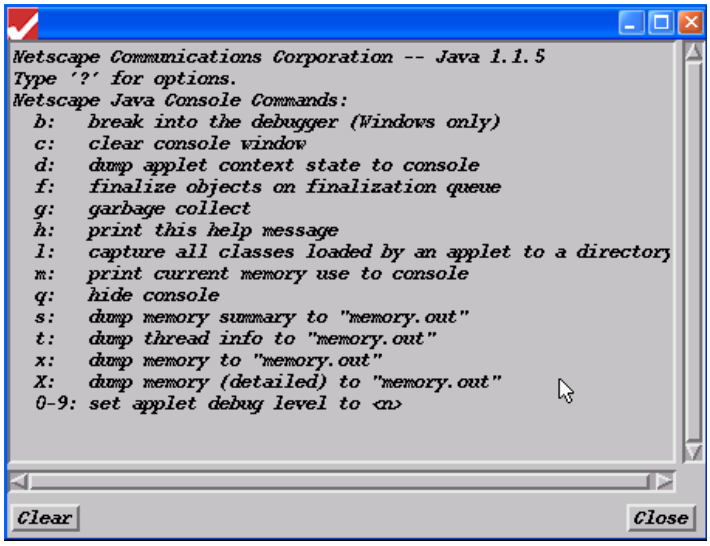
- **Security Info**. Click here to see the Security Info sheet.



Browser Security Info Sheet

In addition to security information, you can set many security parameters from dialog boxes opened by clicking on items in the left-hand list.

- **Java Console**. Click here to open the Java Console screen.



Browser Java Console Screen

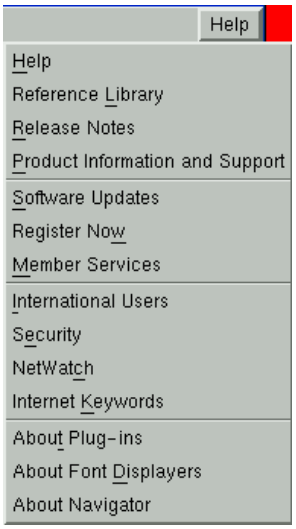
Multiple Windows

It is possible to open up to three active windows—two URL windows and one History file window--in one browser session using the Window menu. But you have to do it in a certain way; the procedure is as follows:

1. Open a Web page other than the Home page.
2. Open the Window menu. You will see the title of the Web page listed as number 1 in the window list at the bottom of the Window menu.
3. Click on **Navigator**. This will open, as a second window, your Home page, and you will see the title of the Home page listed as number 1 and the first Web page listed as number 2 in the window list at the bottom of the Window menu.
4. Now both windows are active within the same session, and both have placeholders in the Desktop Toolbar. You can switch focus between them by clicking on the desired window title in the window list, or by clicking on the placeholder in the Desktop Toolbar.
5. You can also open, at any time, a window showing the History file by clicking on **Tools>History**.

Note: It is possible to change the appearance of a window from the View menu, or the preferences of a window from **Edit>Preferences**. In such a case, each window in the session will have its own configuration *until* you close the session. When you close the session, the session will assume, when it is re-opened, the configuration of the last window in focus.

Help



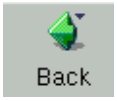
Browser Help Menu

Open this menu to gain access to a variety of on-line help from Netscape.

Navigation Toolbar

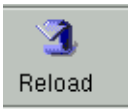
Browser Navigation Toolbar with Text

The Navigation Toolbar provides quick and easy access to a number of the most popular options in the Menu Bar. If you do not need it, you can hide it to increase the size of your display window. When the toolbar is displayed, a small square appears next to the Navigation Toolbar option in the View menu. This toolbar can be configured (**Edit>Preferences>Appearance**) to show icons only, text only, or icons plus text as seen above. It can also be configured to show tool tips when the cursor is placed on the icon or text.



This button duplicates the action of the menu **Go>Back** command.

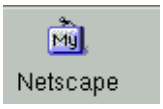
This button duplicates the action of the menu **Go>Forward** command.



This button duplicates the action of the menu **View>Reload** command.

This button duplicates the action of the menu **Go>Home** command.

This button duplicates the action of the menu **Edit>Search Internet** command.



This button loads your personal version of the Netscape home page.

This button duplicates the action of the menu **File>Print** command.

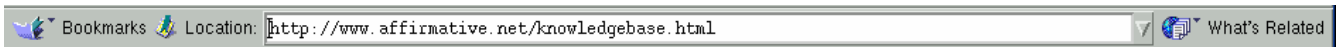
This button duplicates the action of the menu **Window>Tools>Security Info** command.

This button is unusable.

If the browser is downloading a new Web page, this button will stop the download.

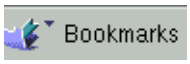
This button loads the generic version of the Netscape home page.

Location Toolbar



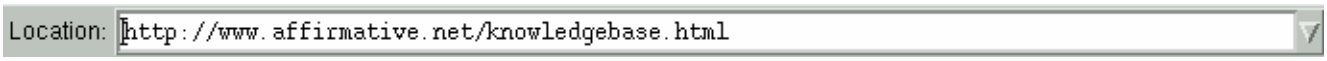
Browser Location Toolbar

The Location Toolbar allows you to specify a Web site for browsing or keywords for a Netscape search. If you do not need it, you can hide it to increase the size of your display window. When the toolbar is displayed, a small square appears next to the Location Toolbar option in the View menu.



This button duplicates the action of the menu **Window>Bookmarks** command.

This icon gives you a quick and easy way to put a link to the current page on your Personal Toolbar. Just drag the icon to the Personal Toolbar, and a button will be created there with a link to the current page. But after you drag it there, you cannot drag it off the Personal Toolbar. If you want to delete it, you will have to do it from **Bookmarks>Edit Bookmarks**.

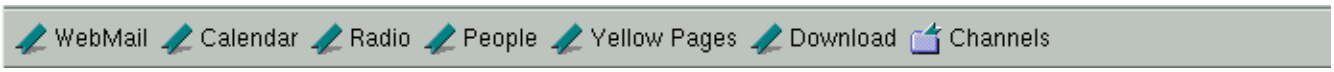


This section of the Location Toolbar serves three purposes:

1. Type in a url and press **PC Enter** to go directly to a desired Web site.
2. Type in key words and press **PC Enter** to do a Netscape search on the Web without going to the Netscape search site via **Edit>Search Internet**.
3. Click on the drop-down arrow at the right to show a list of any previous search results. Then you can click on a list item to go directly to those results.

This button accesses the Smart Browsing feature as configured in **Edit>Preferences>Navigator>Smart Browsing**.

Personal Toolbar



Browser Personal Toolbar

The Personal Toolbar allows you to create your own toolbar with iconed links to the Web sites of your choice. If you do not need it, you can hide it to increase the size of your display window. When the toolbar is displayed, a small square appears next to the Personal Toolbar option in the View menu.

This toolbar initially has the default links shown above. You can delete any of these links, and add new links via drag and drop, from **Window>Bookmarks**. You can also add links with the Location Bar  icon as described as above.

Multiple Sessions

It is possible to create multiple browser sessions. Each one will have its own name in the Connections list, and each one can have its own Initial and Home pages.

- If you change the appearance of an open session from the View menu, or the preferences from **Edit>Preferences**, all the other browser sessions that are on the Connections list will assume that same configuration when you close that open session, except for Initial and Home pages.
- If you have multiple sessions open at the same time, the configurations can be unique until you close the sessions. At that time, all the sessions will take on the configuration of the final one closed.

TNXXXXe

Display Session

Menu Bar

Menu-bar commands of the display session window consist of commands and functions that are unique for each window (session).

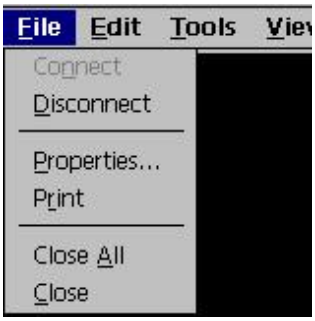
Display Session Menu Bar

The system administrator may disable any or all of the Menu bar commands. See Editing an Existing Connection|TNXXXXe|Display Sessions|Advanced|Security Configuration.

If you have a mouse, open the desired menu by left-clicking on the menu name. Without using a mouse, you can view the File menu by pressing and releasing the **LeftAlt** key. Then you can use the **Tab** or **Left/RightArrow** keys to move to other menus. Or you can press **Alt+e/t/v/?** to open the Edit/Tools/View/? menu.

The Menu bar may be enabled but invisible, if visibility is not enabled in Editing an Existing Connection|TNXXXXe|Display Sessions|Advanced|Appearance. In this case, use the mouseless method of menu viewing described above

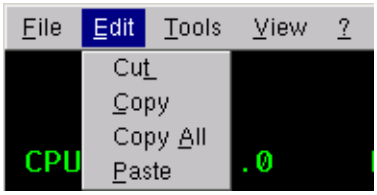
File (Alt)



Display File Menu

- **Connect** (**n**). A display session typically comes up in the connected state. But if, for some reason, the session is not connected, this command will attempt to connect the display session to the host.
- **Disconnect** (**d**). This command disconnects the display session from the host. It is recommended that you disconnect only from the Sign-On screen.
- **Properties** (**p**)… This command allows you to edit/modify the Properties of the display session in use. For more information on this function, please refer to Editing an Existing Connection|TNXXXXe|Display Sessions. When you change properties here, most changes are effective immediately, but some require that you exit the session and reopen it.
- **Print** (**r**). This command prints the contents of the display screen to the printer designated in Editing an Existing Connection|TNXXXXe|Display Sessions|General|Print Screen.
- **Close All** (**a**). This command closes all active sessions, including printer sessions.
- **Close** (**c**). This command closes the display session in use.

Edit



Display Edit Menu

- **Cut (t)**. This command copies, into the Clipboard, data contained in the selected area and removes it from the display. A mouse is required for this operation, since the mouse cursor is used to draw a box around the selected area. The Cut process is:
  1. Use the mouse cursor to draw a box around the area to be copied. Be precise when you draw the box, or else the paste process may try to copy the data into a restricted area. The selected area will be highlighted in white.
  2. Open the **Edit** menu.
  3. Activate **Cut. Note:** Cut does not duplicate host attributes such as color and intensity.
  4. Return the mouse cursor to the green screen and left click. The white highlight will disappear.
- **Copy (r)**. This command accomplishes the same function as **Cut**, except that the selected data is not removed from the display. The Copy process is the same as the Cut process, except that you activate **Copy** in Step 3.
- **Copy All (a)**. This command copies the entire screen into the Clipboard.
- **Paste** (**p**). This command pastes the current contents of the Clipboard onto the session window, starting at the current cursor position. If the contents of the clipboard are larger than the space available in the presentation space (screen), they may be clipped. Paste does not overlay the clipboard contents onto areas that are protected by the host application.

Tools

Display Tools Menu

Tools commands allow you to work with the Record/Playback function. If you regularly do the same things when you work with a host system, it is convenient to record the keystrokes you make and have YES*term*/IP play them back when you want to do the same job again. Record/Playback allows you to do this. All your keystrokes can be saved in a macro file; when you play the file back (Playback), everything that happened will be reproduced exactly. Any macro that you create is available in all display emulation sessions. For more information on how to work with Record/Playback, refer to How To…|Record a Keystrokes Sequence.

- **Start Recording** (**s**). This command starts the Keystrokes Recording process.
- **Stop Recording** (**r**). This command stops the Keystrokes Recording process.

Macro Recording Dialog Box

When you Stop Recording, the Macro Recording dialog box will be displayed, allowing you to save the recorded keystrokes into a named file for subsequent playback.

- **Pause Recording** (**p**). Including a Pause command into a recorded sequence will cause the Playback operation to pause at this point in the sequence. This pause is typically used to enter variable data during Playback.
- **Delete Macro** (**d**). This command will bring up the Recorded Macro Delete dialog box.

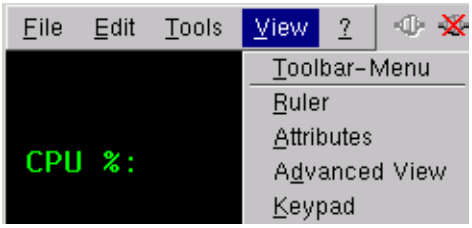
Recorded Macro Delete Dialog Box

In this box will be a list of the available macros for this session. Select the one to be deleted and activate **OK**. This macro will now be deleted from all display emulation sessions.

- **Playback**. No, you do not see an actual Playback command. But, at the bottom of the Tools menu below the line, you will see a list of the available macros for this session. Select the one to be played and press the PC **Enter** key; that macro will then be executed.

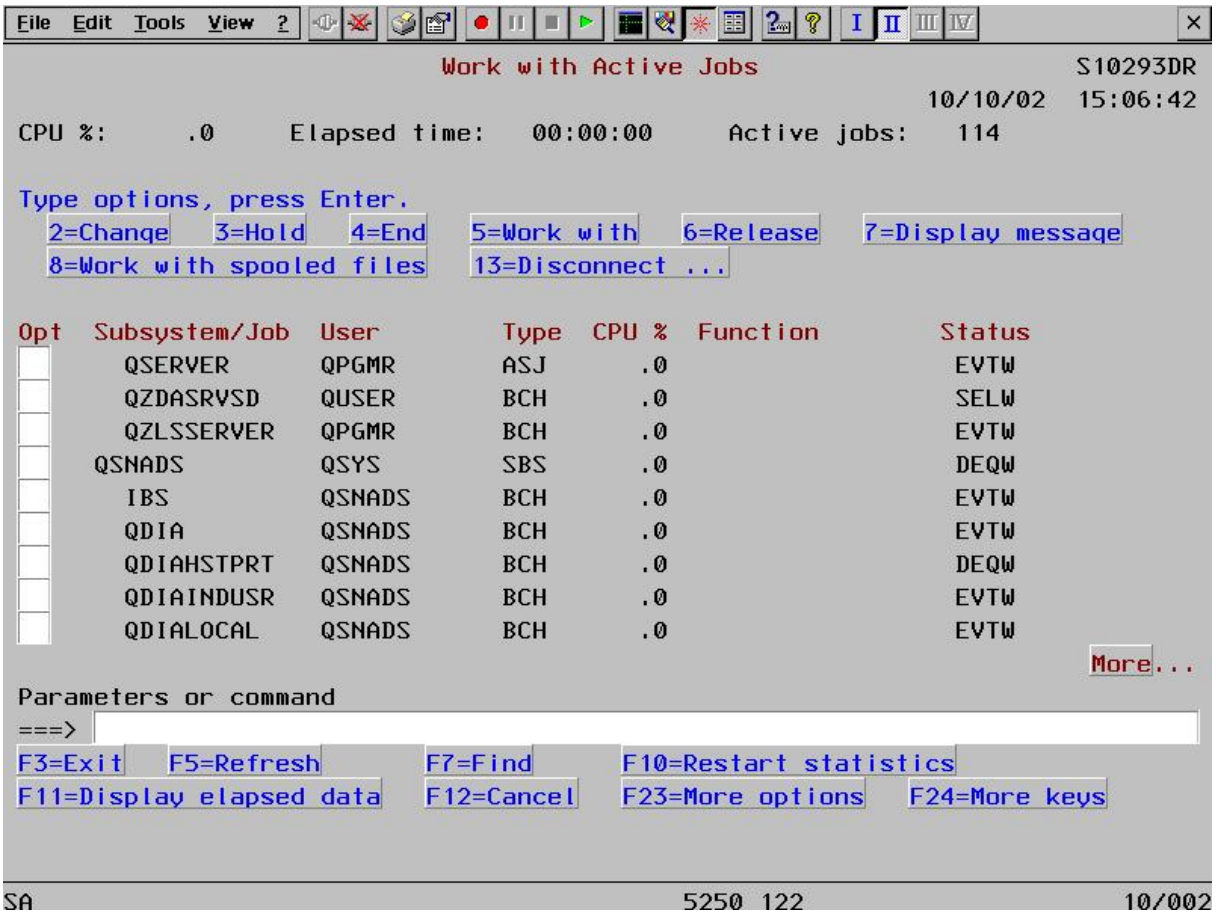
View

Commands in the View menu are used to manipulate the Emulator display window.



Display View Menu

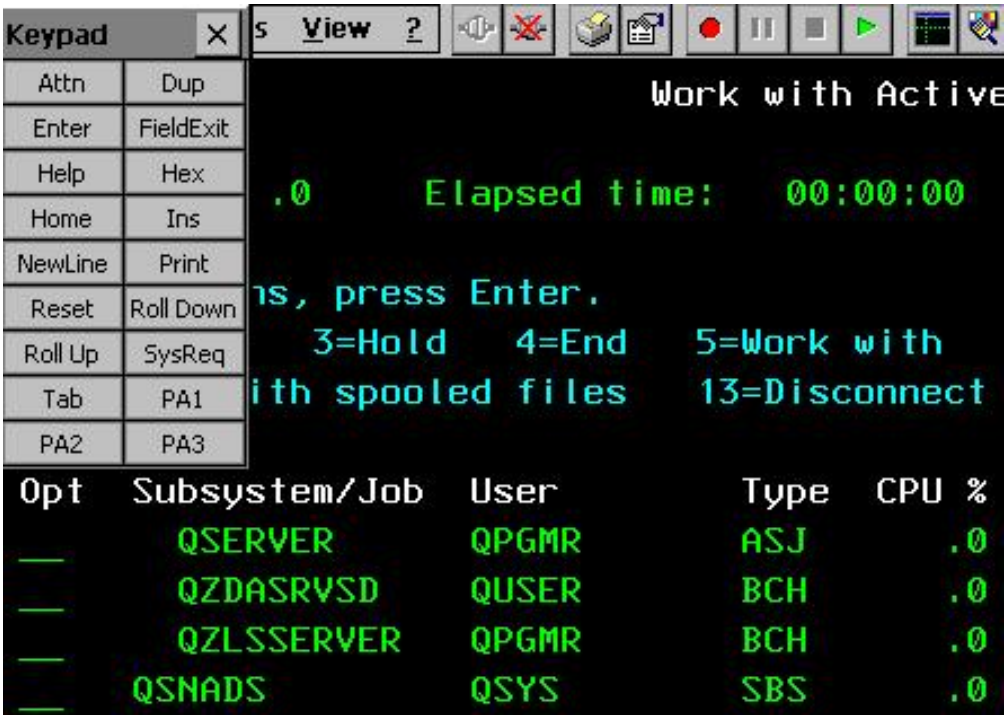
- **Toolbar-Menu** (t). This toggle command hides or displays the Menu and Buttons toolbars. After you hide the toolbars, you will have to use **LeftAlt** and the **Arrow** keys to access menu options.
- **Ruler** (**r**). This toggle command hides or displays the crosshairs Ruler. It has the same effect as the Rule key on the keyboard. When the command is checked, the Ruler is displayed.
- **Attributes** (**a**). This toggle command hides or displays the 5250 attribute fields.
- **Advanced View (d)**. This toggle command activates/deactivates the graphics Windows look, with Hot Spots displayed as raised buttons if they have been enabled.



Emulation Screen with Advanced View and Hot Spots

Hot Spots are only useful if you have a mouse. For more information on the Hot Spot feature, refer to Editing an Existing Connection|TNXXXXe|Display Sessions|Hot Spot.

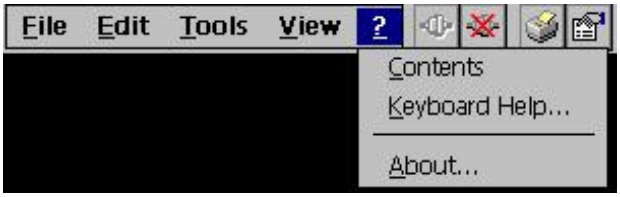
- **Keypad** (**k**). This toggle command hides or displays the Key Pad. The Key Pad can be repositioned as desired on the screen by dragging and dropping.



Partial Emulation Screen Showing Keypad

Key Pad is only useful if you have a mouse. For more information on the Key Pad feature, refer to Editing an Existing Connection|TNXXXXe|Display Sessions|Key Pad.

?



Display Help Menu

- **Contents** (**c**). This command is not used in the TBT.
- **Keyboard Help…**(**k**). This command displays the keyboard map in use. You can see the mapping, but you cannot edit it from this screen. This display can be used in two ways:
  1. If you click on a key to which a command has been mapped, you will see that command highlighted in the List Box.
  2. If you highlight a command in the List Box, the key or key combination that executes that command will be highlighted on the keyboard graphic. Some commands can be executed from several different key combinations. In that case, you will see the notation (x of y), which indicates that this is the xth sequence out of y possibilities. To cycle through the combinations for that command, click on **Next Sequence**.
- **About…**(**a**). This command displays detailed information on the YES*term*/IP program such as version, copyrights, and other useful information.

Buttons Bar

The Buttons bar is displayed across the top of the application window to the right of the Menu bar. The Buttons bar provides quick access to commands you use on a regular basis, if you have a mouse. If you do not need it, you can hide it and the Menu bar to increase the size of your display window. When the toolbar is displayed, a check mark appears next to the Toolbar option in the View menu.

Display Session Buttons Bar

The system administrator may disable any or all of the Menu bar commands. See Editing an Existing Connection|TNXXXXe|Display Sessions|Advanced|Security Configuration.

The command/button definitions are:

Connect. Duplicates the function of the menu File>Connect command.

Disconnect. Duplicates the function of the menu File>Disconnect command.

Print. Duplicates the function of the menu File>Print command.

Properties. Duplicates the function of the menu File>Properties command.

Copy. Duplicates the function of the menu Edit>Copy command.

Paste. Duplicates the function of the menu Edit>Paste command

Start Recording. Duplicates the function of the menu Tools>Start Recording command. In fact, if you use the menu version, you will see that this button is also depressed.

Pause. Duplicates the function of the menu Tools>Pause command. If you use the menu version, you will see that this button is also depressed.

Stop Recording. Duplicates the function of the menu Tools>Stop Recording command.

Playback. Displays a list of available macros. Click on the one to be played, and that macro will then be executed.

Ruler. Duplicates the function of the menu View>Ruler command.

Attributes. Duplicates the function of the menu View>Attributes command.

Hot Spots. Duplicates the function of the menu View>Advanced View command.

Keypad. Duplicates the function of the menu View>Keypad command.

Keyboard Help. Duplicates the function of the menu ?>Keyboard Help command.

I, II, III, IV. These buttons correspond to the emulation sessions shown in order in the Terminal Connections Manager screen. Inactive sessions will have corresponding grayed-out buttons, while buttons for active sessions will not be grayed-out. To jump to another active session, just click on the button for that session.

Printer Session

Menu Bar

Menu-bar commands of the printer session window consist of commands and functions that are unique for each printer window (session).

If you have a mouse, open the desired menu by left-clicking on the menu name. Without using a mouse, you can view the File menu by pressing and releasing the **LeftAlt** key. Then you can use the **Tab** or **RightArrow** keys to move to other menus. Or you can press **Alt+t/?** to open the Tools or ? menu.

Printer Session Menu Bar

File (Alt)

Printer File Menu

- **Connect** (**n**). A printer session typically comes up in the connected state. But if, for some reason, the session is not connected, this command will attempt to connect the printer session to the host.
- **Disconnect** (**d**). This command disconnects the printer session from the host.
- **Properties…** (**p**). This command allows you to view/edit/modify the Properties of the printer session in use. It will be grayed out and inactive unless it has been enabled in Editing an Existing Connection|TNXXXXe|Printer Sessions|Miscellaneous. For more information on Properties, please refer to Editing an Existing Connection|TNXXXXe|Printer Sessions. When you change properties here, most changes are effective immediately.
- **Close** (**c**). This command closes the printer session.

Tools

Printer Tools Menu

- **Abort Print Job** (**a**). This command aborts the print job in process.
- **Clear Document List** (**c**). This command clears the Document List. The Document List contains a history of all documents printed since the session was started.

.

?

Printer Help Menu

- **Contents** (**c**). This command is not used in the TBT.
- **About…** (**a**). This command displays detailed information on the YES*term*/IP program such as version, copyrights, and other useful information.

Buttons Bar

The Buttons bar is displayed across the top of the application window to the right of the Menu bar. The Buttons bar provides quick access, if you have a mouse, to commands you use on a regular basis.

Printer Session Buttons Bar

The command/button definitions are:

Connect. Duplicates the function of the menu File>Connect command.

Disconnect. Duplicates the function of the menu File>Disconnect command.

Properties. Duplicates the function of the menu File>Properties command.

Contents. Duplicates the function of the menu ?>Contents command.

I, II, III, IV. These buttons correspond to the emulation sessions shown in order in the Terminal Connections Manager screen. Inactive sessions will have corresponding grayed-out buttons, while buttons for active sessions will not be grayed-out. To jump to another active session, just click on the button for that session.

How To…

Record a Keystrokes Sequence (Macro)

If you regularly do the same things when you work with a host system, it is convenient to record the keystrokes you make and have YES*term*/IP play them back when you want to do the same job again. Record/Playback allows you to do this. All your keystrokes can be saved in a file; when you play the file back (Playback), everything that happened will be reproduced. Your macro will be available in all display sessions of the same type.

Note: Macros are limited to 512 data "items". A character keystroke counts as one item, while a cursor movement keystroke counts as two items. If you try to enter more than 512 items, an error message will appear and a spurious character will be attached to the macro that may make the macro useless.

Graphics Display Session

When configuring a display emulation session, you have the choice of a graphics display mode or a 5250 text display mode. See Editing an Existing Connection|TNXXXXe|Display Sessions|Advanced|Appearance for details on making this choice.

In order to create a macro in a graphics display session, you have to:
1. Open a display session.
2. Place the cursor in the field where you wish to start the sequence.
3. Activate **Tools>Start Recording** or press the **Recrd** key or click on the corresponding Toolbar button. You will see, in the right side of the Status bar, the information **REC: 0**. This tells you how much information has been entered into the macro.
4. Type the data and cursor movements that you want to record. As you type, the information counter will advance by one for each character and by two for each cursor movement.
5. Stop the recording by activating **Tools>Stop Recording** or pressing the **Recrd** key or clicking on the corresponding Toolbar button.
6. Name the macro. There are no naming restrictions.

Example:
Assume you want to record the CL command to display the description of a specific device. The command is WRKDEVD PRTXXXX, where PRTXXXX identifies a specific printer. So, the procedure is:
1. Place the cursor.
2. Activate **Start the Recording**.
3. Type **WRKDEVD**
4. Activate **Pause**.
5. Type **PRTXXXX** (the name of the device) and press **Enter**.
6. Activate **Stop the Recording**. When you stop, you will be prompted to save the recorded keystrokes to a file.

Note: The Pause function will automatically end when you press the **Enter** key.

5250 Text Display Session

In a 5250 text display session, you can record a macro by using Menu commands or Toolbar icons in exactly the same way as in a graphics display session (see above). But, if you are using a 122-key keyboard, the **Recrd** key works differently. This additional procedure for recording macros is as follows:
1. Place the cursor in the field where you want to record the macro.
2. Press **Recrd**. You will see, in the center of the Status bar, an **R** indicating Record mode and a countdown counter. For the first macro, this count starts at 8161. (Why 8161? I have no idea.)
3. Press the **F** key, **Fx**, that you wish to associate with the forthcoming macro. You will see the **R** in the status bar replaced by **Fx**.
4. Type the data and cursor movements that you want to record. The counter will count down by one for each character keystroke and down by two for each cursor movement keystroke
5. When you are finished with the desired keystrokes, press **Recrd** again. This ends the recording process. You now have a macro named **Fx**. This macro will appear in the Macro list as **Fx**.
6. When you record the next macro, the counter will start at the final count of the preceding macro. This count is for information purposes only; there is no limit to the total number of keystrokes in all the macros.

Note: You must use the keyboard **Recrd** key. Activating **Start Recording** from the Menu or Button bars will result in the graphical procedure explained in the previous section.

Play a Recorded Keystrokes Sequence (Macro)

Graphics Display Session

In order to play a recorded keystrokes sequence in a graphics display session, you have to:

1. Place the cursor on the screen where you want to play the sequence.
2. Activate **Tools** or press the **Play** key or click on the corresponding Toolbar button. You will see a list of available macros.
3. Select the sequence from the list. The sequence will be executed.

If you have assigned a sequence to a key as part of a custom keyboard map, you can also play the sequence as follows:

1. Place the cursor on the screen where you want to play the sequence.
2. Press the designated key. The sequence will be executed.

5250 Text Display Session

In a 5250 text display session, you can play back a macro from the Tools menu or from the Toolbar in exactly the same way as in a graphics display session (see above). But you also have another option if you are using a 122-key keyboard and if you have used the alternate method of sequence recording. This additional procedure for playing macros is as follows:

1. Place the cursor on the screen where you want to play the sequence.
2. Press the **Play** key. You will see, in the center of the Status bar, a **P** indicating playback mode and a count that has no bearing whatsoever on the macro execution.
3. Press the **F** key corresponding to the desired macro. The macro will be executed, and the Status bar will resume its regular appearance.

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Firmware Upgrades

You will need to use the Affirmative Computer Products remote central management software, YES*manager*, to upgrade the 2x14 firmware. YES*manager* is available free of charge; contact Affirmative Computer Products to obtain the latest version. The User Guide for YES*manager* is available at http://www.affirmative.net/pub/YESmanagerUserGuide.pdf.

After you have obtained the install files for YES*manager*, proceed as follows:

1. Install YESmanager on a PC or server on the same network as the target terminal. The operating system can be Windows 98 on up through XP. It installs quite easily, and you will not need to reboot the computer.
2. Download the latest 2x14 firmware per Affirmative Computer Products' instructions. It will arrive in a zipped .tar format. **Note:** Do not extract the zipped files.
3. Move the .tar file to the computer with the YESmanager installation.
4. From this point, you have a choice of two methods to upgrade your firmware:
   - "Push" the new firmware from YES*manager*.
   - "Pull" the new firmware from YES*manager*.

"Push"

There are advantages to pushing the new firmware down to your 2x14 terminals.

- There need be no user interaction at the terminal end, other than to power up the terminal.
- The system administrator can upgrade all the 2x14 terminals without ever leaving the YES*manager* console.
- The system administrator can save the terminal properties and session configurations before the upgrade and reinstall them after the firmware upgrade.

The push procedure is as follows:

1. Turn on the 2x14.
2. Open YES*manager*.
3. In the left pane of the YES*manager* screen, you will see a list of all the Affirmative terminals found on your network.
4. Select the 2x14 needing the upgrade.
5. Right click
6. Select **Configurations>Upload from device**. The current configuration of the terminal will be uploaded and stored in YES*manager*.
7. Select the 2x14 again.
8. Right click.
9. Select **Firmware Update**.
10. Browse to the .tar file containing the new firmware.
11. Select **OK**. YESmanager will push the new firmware down to the 2x14, and the 2x14 will automatically reboot upon completion.

12. When the terminal status light in YES*manager* turns green again, select the terminal. If the terminal is on a different sub-net than the YES*manager* console, you will have to exercise Refresh on the terminal in order to see the status.
13. Right click.
14. Select **Special Functions>Factory Default** and confirm that you want to reset the terminal to defaults.
15. When the terminal status light in YES*manager* turns green again, select the terminal. If the terminal is on a different sub-net than the YES*manager* console, you will have to exercise Refresh on the terminal in order to see the status.
16. Select **Configurations>Download to device**. The original configuration that you uploaded in step 6 will be downloaded to the terminal, and the terminal will be rebooted.
17. The terminal will now have the new firmware with all of the original sessions and terminal properties.

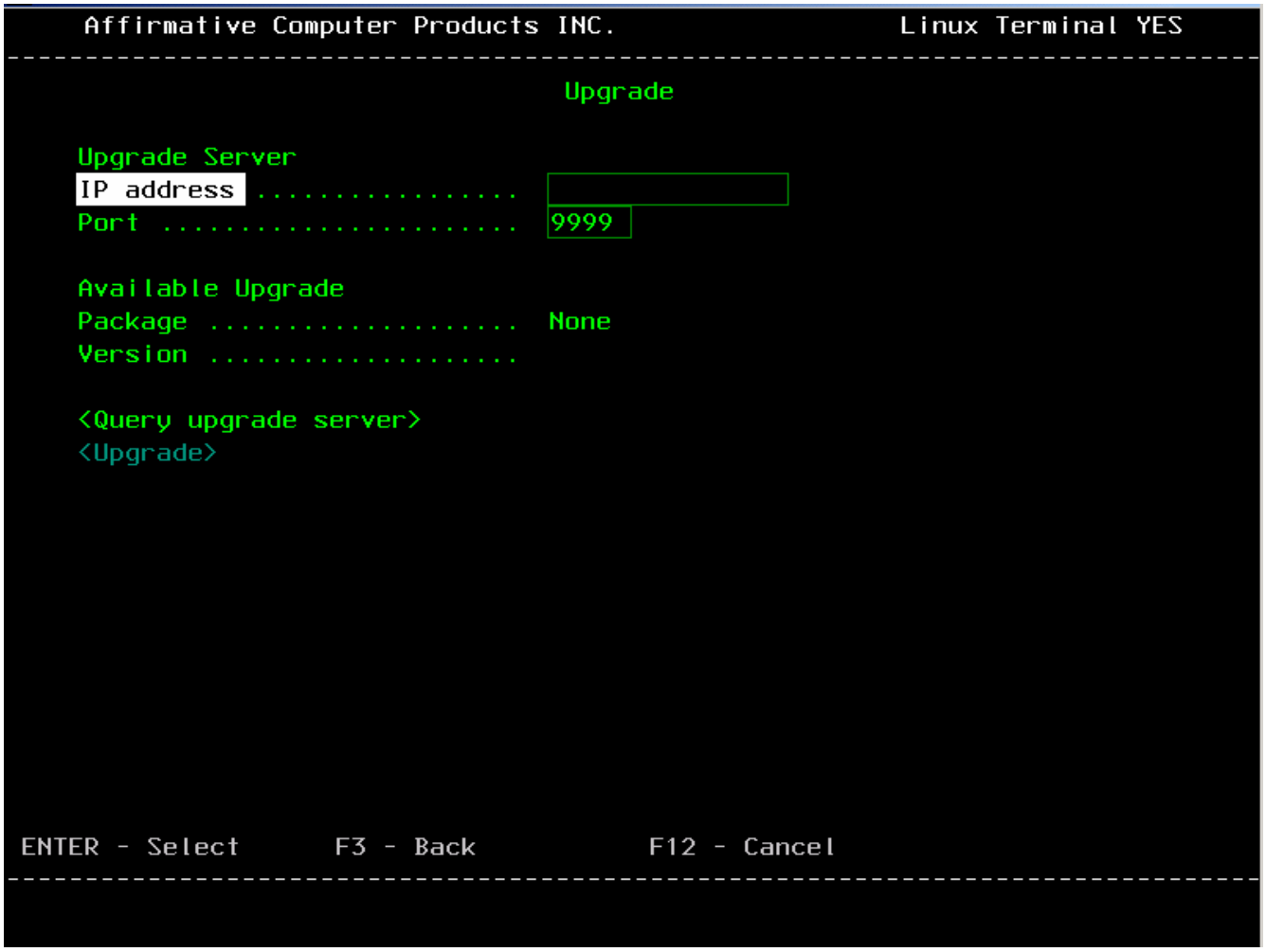
"Pull"

A firmware upgrade can also be initiated from the terminal, after some initial preparation at the YES*manager* console. The procedure is:

1. At the YES*manager* console, move the new firmware .tar file into the folder **C:\Program Files\Affirmative\YESmanager\htdocs**.
2. Turn on the 2x14.
3. Open YES*manager*.
4. In the left pane of the YES*manager* screen, you will see a list of all the Affirmative terminals found on your network.
5. Select the 2x14 needing the upgrade.
6. Right click
7. Select **Configurations>Upload from device**. The current configuration of the terminal will be uploaded and stored in YES*manager*. You are doing this because, after the upgrade, the terminal should be reset to factory defaults for stability purposes. But with this step, you have the terminal and session configuration details safely stored and can restore them after the reset.
8. The look and feel of the succeeding steps will be different, depending upon viewing mode, although the actions will be the same, so the rest of the procedure will be separated into TBT and non-TBT.

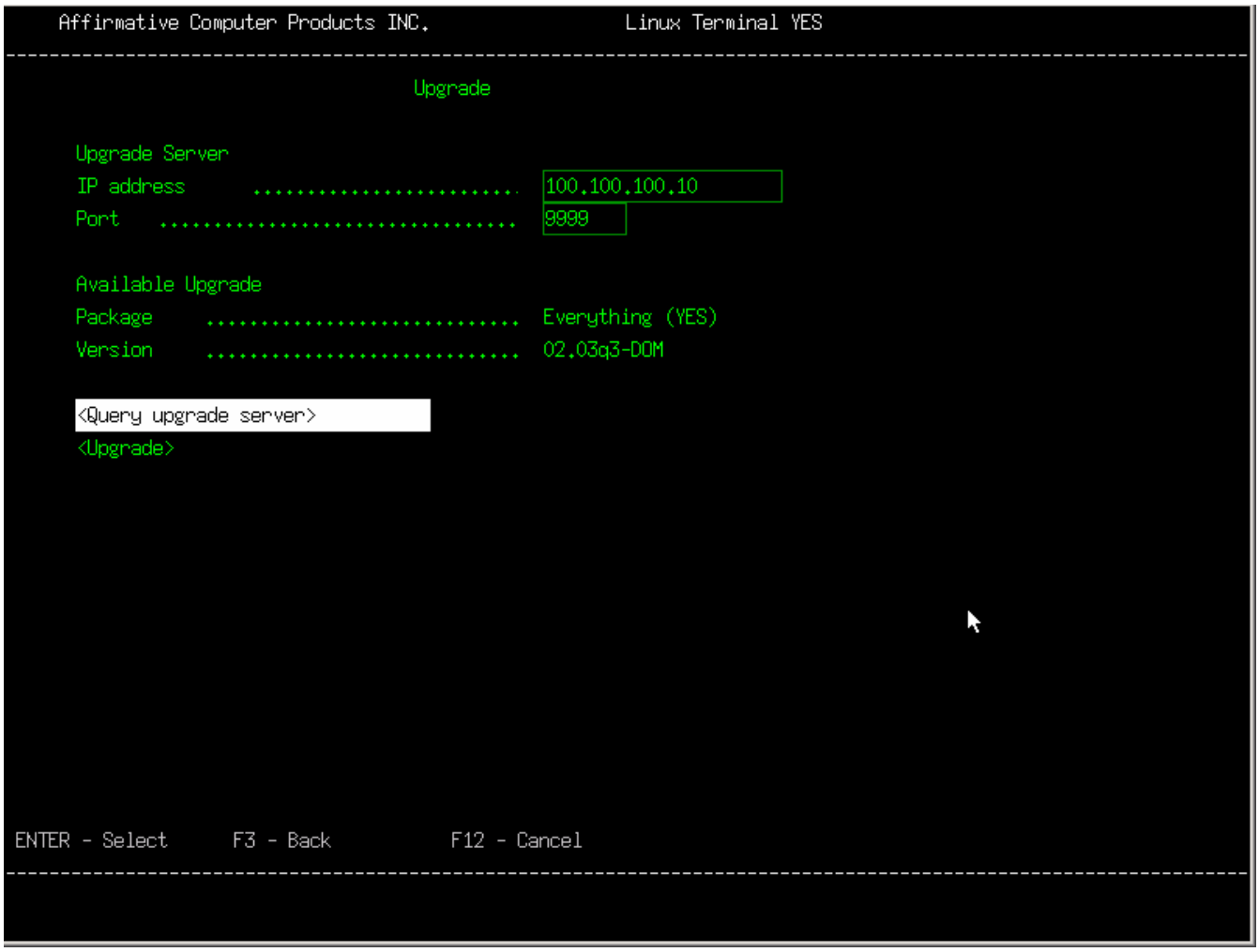
TBT Viewing Mode

9. At the terminal, go to **Terminal Properties>Upgrade**.



Upgrade Property Sheet for TBT Viewing Mode

10. In Upgrade Server, enter the IP address of the YES*manager* console.
11. Leave Port at **9999**.
12. Activate **Query update server**. You will see the Available Upgrade information filled in as shown in the next screen.

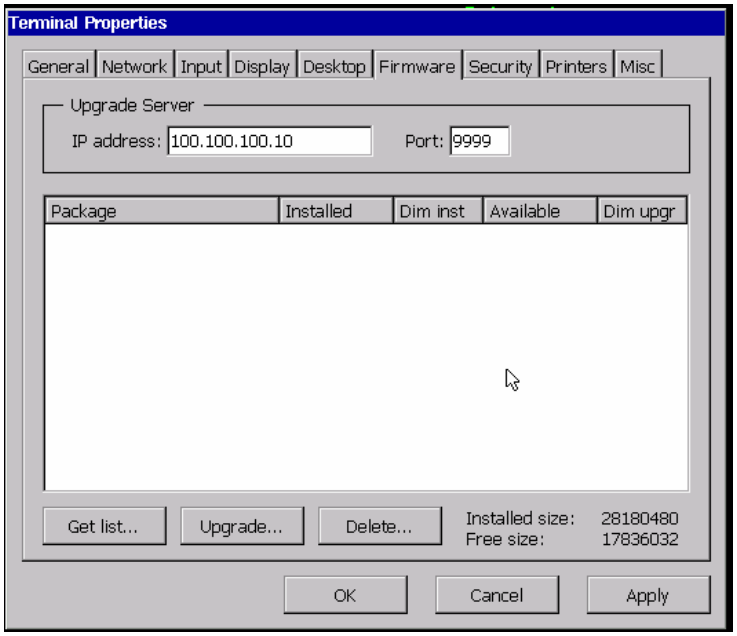


Upgrade Property Sheet with Upgrade Information for TBT Viewing Mode

13. Information about the Available Upgrade is now displayed. If you do not see this information, your Upgrade Server parameters are incorrect or the .tar file is not in the correct folder on the YES*manager* server.
    - **Package**. This is the upgrade description.
    - **Version**. This is the version of the upgrade. **NOTE: Verify that this is the version you are expecting**. If you try to upgrade to a firmware package intended for another model of Affirmative Computer Products terminal, strange things can happen.
14. After verifying the upgrade version, activate **Upgrade**.
15. You will see the upgrade progress displayed on the screen in a series of messages as each module in the firmware is upgraded. When the upgrade is complete, the terminal will be automatically rebooted.
16. It is recommended that you do a reset to factory defaults at this point. If you do not, you may experience some performance instability, depending upon the nature of the upgrade, and when you call Affirmative Computer Products Tech Support, the first thing they will ask you to do is to reset to defaults. So save yourself the aggravation and reset now.
17. Remember back in step 7, where we had you do a configuration upload in YES*manager*? Well, now you can do a configuration download from YES*manager* and restore all your pre-upgrade settings and sessions.
18. You can resume normal terminal operation.

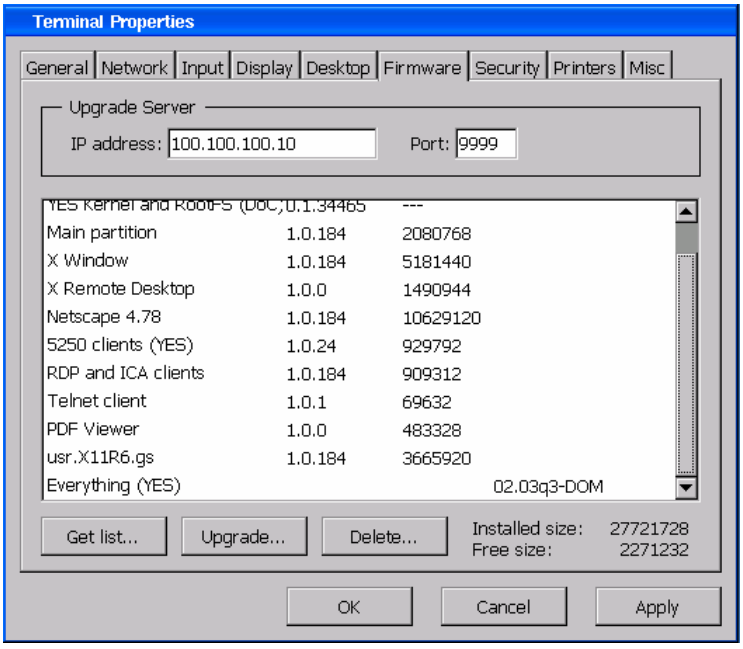
Non-TBT Viewing Mode

9. At the terminal, go to **Terminal Properties>Firmware**.



Firmware Property Sheet for Non-TBT Viewing Mode

10. In Upgrade Server, enter the IP address of the YES*manager* console.
11. Leave Port at **9999**.
12. Activate **Get list**. You will see the properties sheet updated with information similar to that shown in the next screen.



Firmware Property Sheet with Upgrade Information for Non-TBT Viewing Mode

13. You probably have more information here than you need, or want, to know. This is a list of the modules making up the terminal firmware:
    - **Package**. This is the module name.
    - **Installed**. This is the module version.
    - **Dim inst**. This the amount of flash memory required for the module.
    - **Available**. This is the available module upgrade. It is possible to upgrade or delete individual modules, but we see no advantage to doing that at the user level, so you won't see any individual module information here. Instead, you will see **Everything (YES)** at the bottom of the list, and the new firmware package version on the right. If you don't see this information, your Upgrade Server parameters are incorrect or the .tar file is not in the correct folder on the YES*manager* server. **NOTE: Verify that this is the version you are expecting**. If you try to upgrade to a firmware package intended for another model of Affirmative Computer Products terminal, strange things can happen.
    - **Dim upgr**. This is the amount of flash memory required for the upgraded module, if we were providing individual module upgrades.
14. After verifying the upgrade version, activate **Upgrade**.
15. You will see the upgrade progress displayed on the screen in a series of messages as each module in the firmware is upgraded. When the upgrade is complete, the terminal will be automatically rebooted.
16. It is recommended that you do a reset to factory defaults at this point. If you do not, you may experience some performance instability, depending upon the nature of the upgrade, and when you call Affirmative Computer Products Tech Support, the first thing they will ask you to do is to reset to defaults. So save yourself the aggravation and reset now.
17. Remember back in step 7, where we had you do a configuration upload in YES*manager*? Well, now you can do a configuration download from YES*manager* and restore all your pre-upgrade settings and sessions.
18. You can resume normal terminal operation.

Troubleshooting Your Terminal

The following table provides some solutions to common problems that can occur during setting up or using your 2x14 terminal.

	Problems	Solution
1	The monitor screen is blank	• Make sure the terminal is turned on. • Make sure the monitor is plugged into an AC outlet and turned on. • Make sure the VGA connector is plugged into the terminal.
2	Your monitor can not display after advancing past the logo screen or after changing the display setting	The display setting may be at a higher resolution or refresh frequency than the monitor will support. Execute one of the following recovery options: • Use a better monitor for display. • Use a better monitor for display while changing the display settings to be compatible with the original monitor. • Ask your MIS or network administrator to reset your terminal to factory default settings through the Remote Management" software, if it is installed at your server site.
3	The mouse does not work	• If it is a PS/2 mouse, make sure the mouse is plugged into the mouse port, not the keyboard port. • Test the terminal using a known good mouse.
4	The keyboard does not respond	• Make sure the keyboard is plugged into the keyboard port, not the mouse port. • Test the terminal using a known good PS/2 keyboard.
5	The network connection does not work	• Check the network connection. • Verify the terminal IP address is correct in Terminal Properties. • Check the server's IP address. • If you are using the terminal default setting of DHCP address assignment, make sure there is a workable DHCP server on your network. • If you are using a specified IP address, make sure that there is not another network device with the same IP address.

6	Forgot the password setting and cannot reconfigure the terminal.	Ask your system administrator to use the secret hot key sequence to reset Terminal Properties to factory defaults.
7	The mouse cursor is jittery.	• Your terminal is being shadowed from the Remote Management console. • Your network is overloaded and data collisions are occurring.
8	You are using a USB wireless network adapter, and the terminal did not connect to the network at terminal bootup	• Verify your SSID. • If you are using WEP encryption, verify your key. • Reboot your terminal.

Support

Affirmative Computer Products offers Technical Support services for all the Affirmative products. You can access Affirmative Technical Support in one of the following ways:

- via Phone
  - 480-946-1444
  - 888-353-5250
- via Fax
  - 480-946-9250
- via E-mail
  - support@affirmative.net

Appendix 1. Specifications

2214

ITEM	SPECIFICATIONS
Processor	• SIS 550 200 MHz
Communication and Ports	• 10/100 dual-speed Ethernet, Twisted Pair (RJ45). • One parallel port (DB-25 Female connector). • Enhanced ps/2 keyboard interface. • Enhanced ps/2 mouse interface. • Two USB ports. • Audio out
Embedded O.S.	• Linux
Video	• SVGA • 640x480, 800x600, 1024x768, and 1280x1024 with high color. • Refresh frequency up to 85 Hz
Memory	• SDRAM -- 128 MB SDRAM standard. (Max. 256MB) • Flash -- 32 MB DOM standard
Server Operating System Support	• Microsoft Windows 2003 Server • Microsoft Windows 2000 (Server Edition) • Microsoft Windows NT 4.0 (TSE) • Citrix MetaFrame XP • Citrix MetaFrame • Citrix WinFrame • UNIX • Linux

ITEM		SPECIFICATIONS
Optional Devices		• USB storage • USB to COM port adapter • USB wireless adapter (802.11b)
• Software Features		• Netscape 4.78 browser with PDF viewer and JVM plug-in • Time zone and SNTP support • Terminal access password for security • Multi-session Autostart • LPD • Terminal emulation • VNC viewer • Remote management software • Wake on LAN (WOL)
Environment	Temperature	• Operating: 5 ºC to 40 ºC (41 ºF to 104 ºF) • Storage: -40 ºC to 60 ºC (-4 ºF to 140 ºF)
	Relative Humidity	• 90% maximum, non-condensing
	Operating Altitude Range	• 0 to 10,000 feet (0 to 3050 meters)
	Power	• Full range auto-sensing 100 ~ 240 VAC at 50 Hz ~ 60 Hz • 10 Watts
Regulatory Compliance		• UL • C-UL • TUV • FCC Class B • CE mark
Physical Characteristics	Dimension (WxDxH)	• 194.5 x 151.5 x 40 (mm)
	Weight	• 0.65 Kg

2614

ITEM	SPECIFICATIONS
Processor	• National Semiconductor Media Gx1 300 MHz with 5530A support chip
Communication and Ports	• Microsoft RDP and Citrix ICA protocol compliant • 10/100 dual speed Ethernet, Twisted Pair (RJ45) • One parallel port (DB-25 Female connector) • Two serial ports with RS-232C (DB-9 male connectors) • Enhanced ps/2 keyboard interface • Enhanced ps/2 mouse interface • Two USB ports • Audio out and Microphone in
Embedded O.S.	• Linux
Video	• SVGA • 640x480, 800x600, and 1024x768 with high colors • 1280x1024 with 256 colors • Refresh frequency up to 85 Hz
Memory	• SDRAM -- 128 MB SDRAM standard. (Max. 256MB) • Flash -- 32 MB DOC or DOM standard
Server Operating System Support	• Microsoft Windows 2003 Server • Microsoft Windows 2000 (Server Edition) • Microsoft Windows NT 4.0 (TSE) • Citrix MetaFrame XP • Citrix MetaFrame • Citrix WinFrame • UNIX • Linux
Optional Devices	• USB storage

ITEM		SPECIFICATIONS
Software Features		• Netscape 4.78 browser with PDF viewer and JVM plug-in. • Time zone and SNTP support • Terminal access password for security • Multi-session Autostart • LPD & ThinPrint support • VNC viewer • Terminal emulation • Remote management software
Environment	Temperature	• Operating: 5 ºC to 40 ºC (41 ºF to 104 ºF) • Storage: -40 ºC to 60 ºC (-4 ºF to 140 ºF)
	Relative Humidity	• 90% maximum, non-condensing
	Operating Altitude Range	• 0 to 10,000 feet (0 to 3050 meters)
	Power	• Full range auto-sensing 100 ~ 240 VAC at 50 Hz ~ 60 Hz • 15 Watts
Regulatory Compliance		• UL • C-UL • TUV • FCC Class B • CE mark
Physical Characteristics	Dimension (WxDxH)	• 231 x 201 x 45 (mm)
	Weight	• 1.35 Kg

2814

ITEM	SPECIFICATIONS
Processor	• VIA Eden 733 MHz
Communication and Ports	• Microsoft RDP and Citrix ICA protocol compliant • 10/100 dual speed Ethernet, Twisted Pair (RJ45) • One parallel port (DB-25 Female connector) • Two serial ports with RS-232C (DB-9 male connectors) • Enhanced ps/2 keyboard interface • Enhanced ps/2 mouse interface • Two USB ports • Audio out and Microphone in
Embedded O.S.	• Linux
Video	• SVGA • 640x480, 800x600, 1024x768, and 1280x1024 with true colors • Refresh frequency up to 85 Hz
Memory	• SDRAM -- 128 MB SDRAM standard. (Max. 256MB) • Flash -- 64 MB Compact Flash standard • 8MB shared system RAM for video
Server Operating System Support	• Microsoft Windows 2003 Server • Microsoft Windows 2000 (Server Edition) • Microsoft Windows NT 4.0 (TSE) • Citrix MetaFrame XP • Citrix MetaFrame • Citrix WinFrame • UNIX • Linux
Optional Devices	• USB storage • USB 802.11b wireless

ITEM		SPECIFICATIONS
Software Features		• Netscape 7.x browser (Mozilla) with PDF viewer and JVM plug-in. • Time zone and SNTP support • Terminal access password for security • Multi-session Autostart • LPD & ThinPrint support • VNC viewer • Terminal emulation • Remote management software
Environment	Temperature	• Operating: 5 ºC to 40 ºC (41 ºF to 104 ºF) • Storage: -40 ºC to 60 ºC (-4 ºF to 140 ºF)
	Relative Humidity	• 80% maximum, non-condensing
	Operating Altitude Range	• 0 to 10,000 feet (0 to 3050 meters)
	Power	• Full range auto-sensing 96 ~ 264 VAC at 50 Hz ~ 60 Hz
Regulatory Compliance		• UL 1950 • C-UL • TUV • FCC Class B • CE mark • CB IEC60950 • C-TICK • BSMI
Physical Characteristics	Dimension (WxDxH)	• 51 x 202 x 232 (mm)
	Weight	• 2.20 Kg

Appendix 2. TCP/IP Error Codes

Here is a comprehensive list of standard TCP/IP error codes that can occur during network operation. Some of them are quite esoteric and may not be applicable to YES*tation* operation, but this list should include any networking error code that you encounter. They should be useful in troubleshooting network errors, many of which are caused by incorrect configuration.

10004
Interrupted function call.

10013
Permission denied.

10014
Bad address.

10022
Invalid argument.

10024
Too many open sockets.

10035
Resource temporarily unavailable.

10036
Operation now in progress. A blocking operation is in progress.

10037
Operation already in progress.

10038
Socket operation on non-socket.

10039
Destination address required.

10040
Message too long.

10041
Protocol wrong type for socket.

10042
Bad protocol option.

10043
Protocol not supported.

10044
Socket type not supported.

10045
Operation not supported.

10046
Protocol family not supported.

10047
Address family not supported by protocol family.

10048
Address is already in use. If you attempt to set up a server on a port that is already is in use, you will get this error.

10049
Cannot assign requested address.

10050
Network is down.

10051
Network is unreachable.

10052
Network dropped connection on reset.

10053
Software caused the connection to abort, usually due to connection or protocol error.

10054
Connection reset by peer. This occurs when an established connection is shut down for some reason by the remote computer.

10055
No buffer space available.

10056
Socket is already connected.

10057
Socket is not connected.

10058
Cannot send after socket shutdown.

10060
Connection timed out. Bad IP address or bad LAN connection.

10061
Connection refused. You will usually see this error when a server refuses a connection from a client, because the server is not listening on that port, or the server is not a valid host.

10064
Host is down.

10065
The IP address of the host is unreachable from your terminal. Check IP addresses of host, terminal, and gateway.

10067
Too many processes.

10091
Network subsystem is unavailable.

10092
Unsupported version of WINSOCK.DLL.

10093
TCP networking has not been initialized on your computer.

10094
Graceful shutdown in progress.

11001
Host not found. (DNS error.)

11002
Non-authoritative host not found. Temporary DNS error.

11003
Non-recoverable error. (DNS error.)

11004
Valid name, no data record of requested type. (DNS error).