



10ZiG Technology

---

---

RBT

---

---

# Configuration Guide

---

# RBT Configuration Guide

---

## **10ZiG Technology Ltd**

2012 W Lone Cactus Dr  
Phoenix, AZ 85027  
Phone 866-864-5250 • Fax 623-516-8697  
support@10zig.com  
sales@10zig.com  
www.10zig.com

## **10ZiG Technology UK**

Action Business Centre  
Swan Street - Leicester  
United Kingdom  
LE3 5AT  
Phone 44 1509 276252 • Fax 44 1509 276253  
support@10zig.eu  
sales@10zig.eu  
www.10zig.eu

May 6, 2009

## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>Product Description</b>                              | <b>5</b>  |
| <b>Introduction To Configuration</b>                    | <b>5</b>  |
| <b>Configuring The RBT - Text Based Mode</b>            | <b>5</b>  |
| <b>Configuring The RBT - Setup Wizard</b>               | <b>8</b>  |
| <b>Terminal Properties – General Tab</b>                | <b>11</b> |
| <b>Terminal Properties – Network Tab</b>                | <b>12</b> |
| <b>terminal Properties – Input Tab</b>                  | <b>21</b> |
| <b>Terminal Properties – Displaytab</b>                 | <b>25</b> |
| <b>terminal Properties – Desktop Tab</b>                | <b>27</b> |
| <b>Terminal Properties - Firmware Tab</b>               | <b>36</b> |
| <b>Terminal Properties - Misc Tab</b>                   | <b>48</b> |
| <b>VNC Shadowing Configuration:</b>                     | <b>49</b> |
| <b>Client ICA - Global Settings</b>                     | <b>51</b> |
| <b>Preferences</b>                                      | <b>51</b> |
| <b>Hot Keys</b>   | <b>51</b> |
| <b>ICA Server Location</b>                              | <b>52</b> |
| <b>Firewall Settings</b>                                | <b>53</b> |
| <b>Devices</b>  | <b>53</b> |
| <b>Sound Configuration</b>                              | <b>54</b> |
| <b>Network Filesystem</b>                               | <b>55</b> |
| <b>Java Cache</b>                                       | <b>56</b> |
| <b>Date &amp; Time</b>                                  | <b>57</b> |
| <b>ICA PNAgent: - Citrix Program Neighborhood Agent</b> | <b>58</b> |
| <b>CrossRun Agent Configuration</b>                     | <b>59</b> |
| <b>Connections Manager</b>                              | <b>61</b> |
| <b>TN5250e Display</b>                                  | <b>62</b> |

**TN5250e Printer 84**

**Citrix ICA Client 95**

**Microsoft Remote Desktop Client 103**

**Hot Key Combinations 113**

# PRODUCT DESCRIPTION

The RBT Series of thin clients provides a powerful, simple, and affordable solution to desktop computing. The RBT Ethernet terminal offers the very best TN5250e and TN3270e emulation available for a LAN environment in a Windows-enabled text-based terminal.

10ZiG thin clients and terminals are simple to configure either locally or remotely using the remote terminal administrator which enables the following tasks:

- Complete terminal configuration from a central location, including terminal emulation settings
- User lock-out from configuration changes, keeping the cost of ownership down
- Shadowing of the user's desktop
- Cloning of user environments
- Control over which applications can be run on a particular terminal

## INTRODUCTION TO CONFIGURATION

RBT thin clients support four modes of operation:

- TBT Mode – Text Based Terminal
- Desktop – Windows XP look & feel (recommended!)
- WBT – Windows Based Terminal (supporting full-screen only)
- KIOSK – Restricted desktop that limits access to a specific connection.

## CONFIGURING THE RBT - Text Based Mode

Upon first boot the unit will display a progress bar with *Press Spacebar To Enter Text Based Terminal Mode* displayed above it. If the spacebar is pressed at this time you will be taken to the **QUICK SETUP** screen in TBT mode.

**QUICK SETUP:** To navigate between fields on this screen you will use the TAB key. To change a value in a field use the Page Up and Page Down keys on your keyboard.

## QUICK SETUP

## NETWORK

|                                |               |
|--------------------------------|---------------|
| Use DHCP .....                 | Yes           |
| IP Address: .....              | 172.16.6.22   |
| Subnet Mask: .....             | 255.255.255.0 |
| Default Gateway: .....         | 172.16.6.1    |
| Primary DNS Server IP address: | 172.16.6.174  |

## I-SERIES/AS400

|                             |                              |
|-----------------------------|------------------------------|
| # of Display Sessions ..... | 2                            |
| Device Name Prefix .....    |                              |
| Keyboard Type .....         | Terminal                     |
| Keyboard Language .....     | English USA                  |
| Host name/IP .....          |                              |
| Printer .....               | No                           |
| Device Name .....           |                              |
| Driver .....                | HP PCL (Letter Paper Format) |

F3 - Save &amp; Exit

F12 - Cancel

Space Bar - Change Option

**NETWORK:**

**Use DHCP:** If you answer YES, the RBT-366 will pull a DHCP address. If you answer NO, the four fields below will need to be completed.

**IP Address:** If you answered NO to use DHCP, you will need to enter the IP address for this unit in this field. If you answered YES to use DHCP, the IP address the unit has been assigned by the DHCP server will be displayed.

**Subnet Mask:** If you answered NO to use DHCP, you will need to enter the Subnet Mask in this field. If you answered Yes to use DHCP, the Subnet Mask the unit has been assigned by the DHCP server will be displayed.

**Default Gateway:** If you answered NO to use DHCP, you will need to enter the IP address of your default gateway. If you answered Yes to use DHCP, the default gateway the unit has been assigned by the DHCP server will be displayed.

**Primary DNS Server IP Address:** If you answered NO to use DHCP, you will need to enter a Primary DNS Server IP address if used. If you answered Yes to use DHCP, the Primary DNS Server IP Address the unit has been assigned by the DHCP server will be displayed.

## **iSeries/AS400:**

In this section you will enter information for your iSeries/AS/400 5250 sessions.

**Sessions:** This is where you can specify the number of display sessions needed. The RBT supports 8 sessions.

**Device Name Prefix:** This is the prefix that will be given to your 5250 sessions when created on the iSeries/AS/400. The maximum number of characters is five. To complete the logical device name, a *sequence number* is appended to the prefix name. This sequence number is unique among all defined device instances using the same prefix name.

**Keyboard Type:** You can choose PC for a standard 101/104 key keyboard or Terminal for a 101/104 key keyboard. Terminal will map the ENTER key to Field Exit and the Right CTRL key to ENTER.

**Keyboard Language:** Used to set your keyboard language.

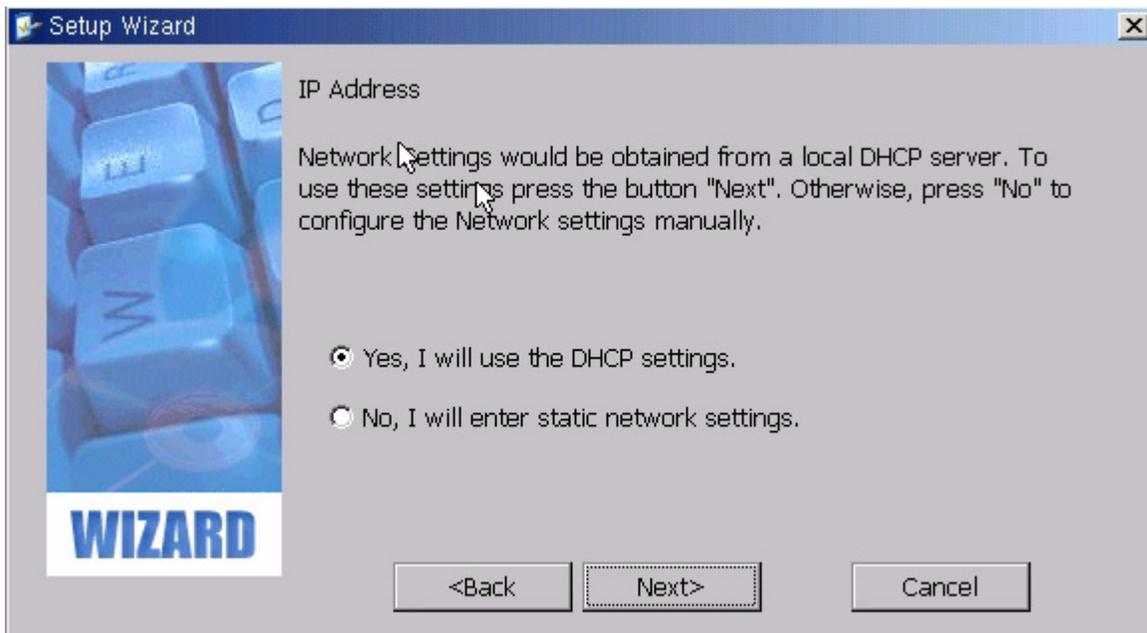
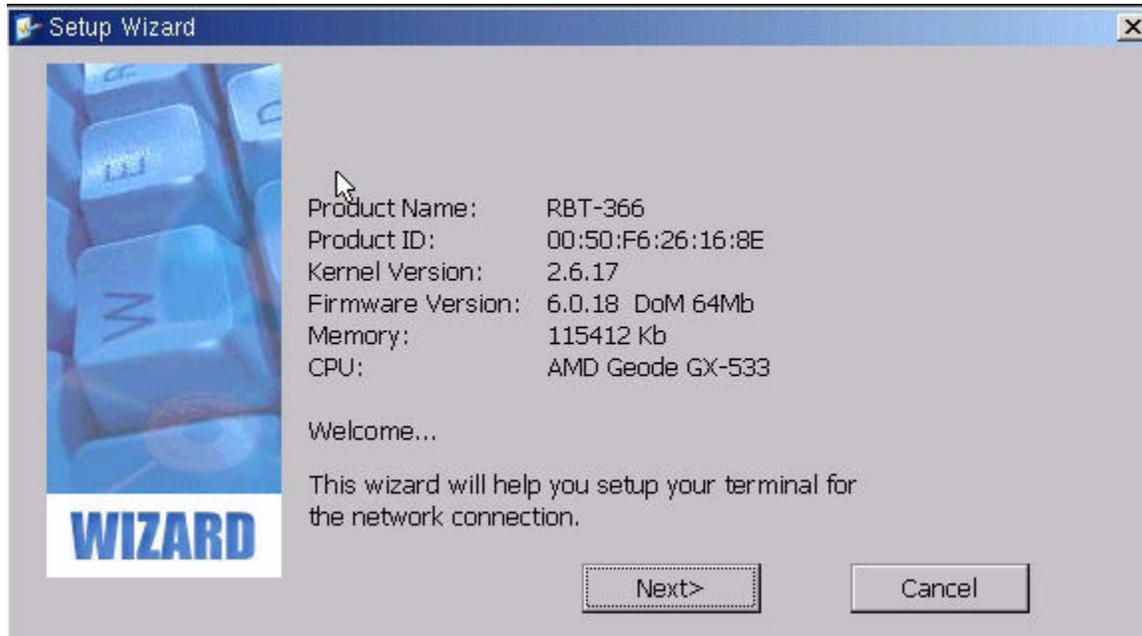
**Host Name/IP:** Enter the IP address of the iSeries/AS/400 or the DNS name of the iSeries/AS/400. If entering a DNS name, the Primary DNS Server information is used.

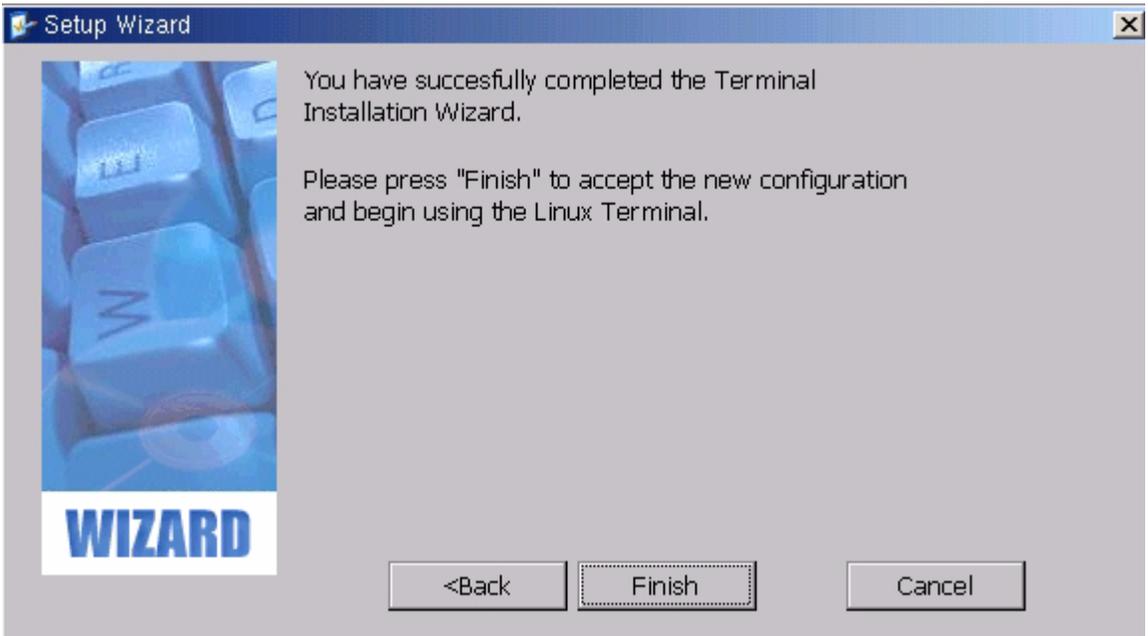
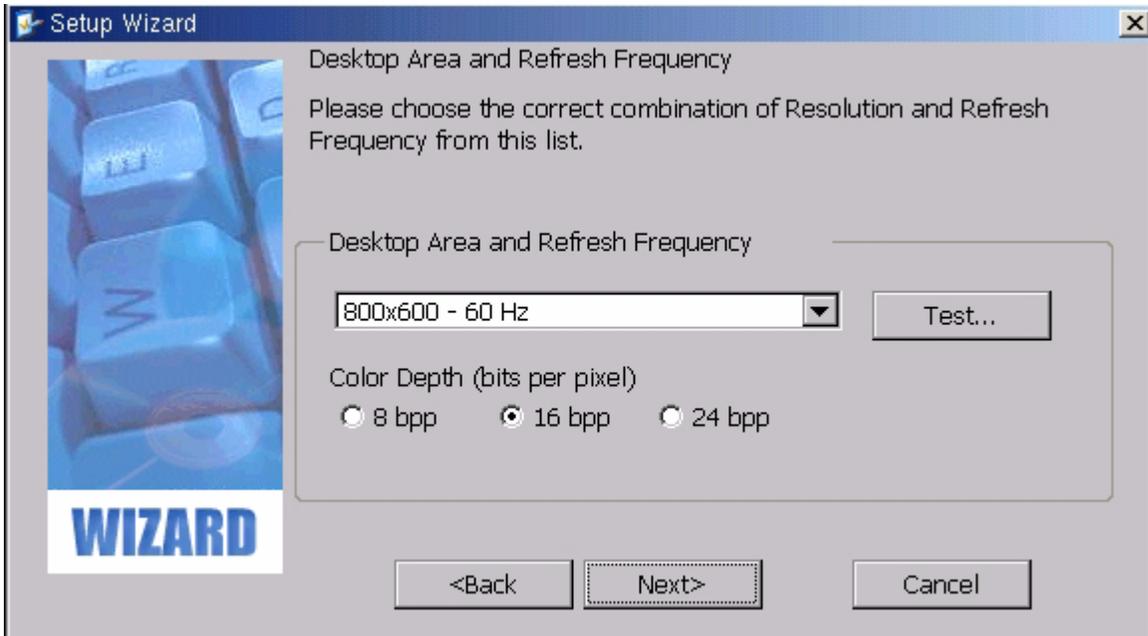
**Printer:** If there is a locally attached printer that will be used as a 5250 printer session, enter YES and enter the printer name. Select the closest match printer driver listed.

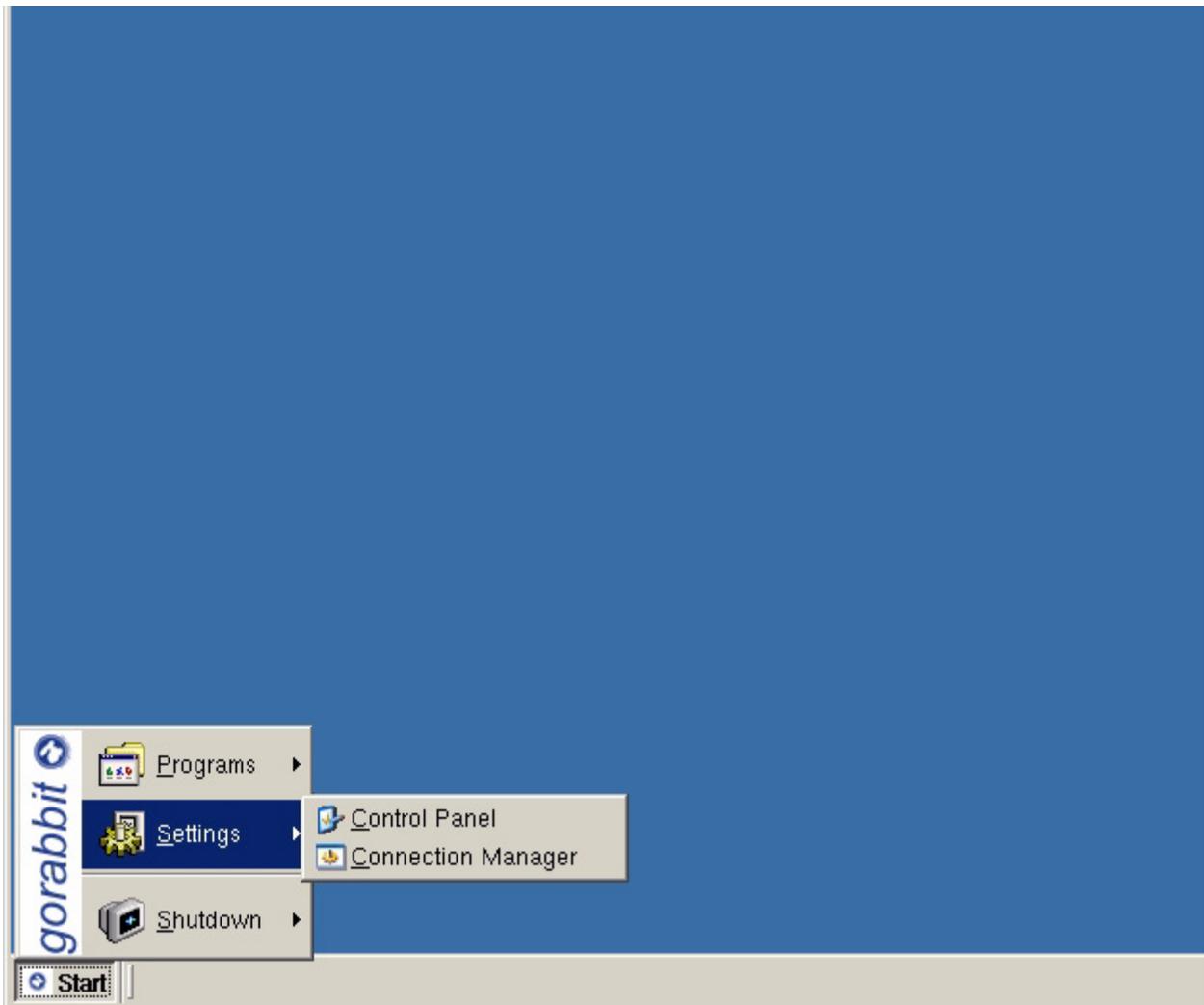
**To SAVE the changes in the QUICK SETUP screen press F3.**

# CONFIGURING THE RBT - Setup Wizard

If the spacebar is not pressed during the bootup, the **Setup Wizard** will run.





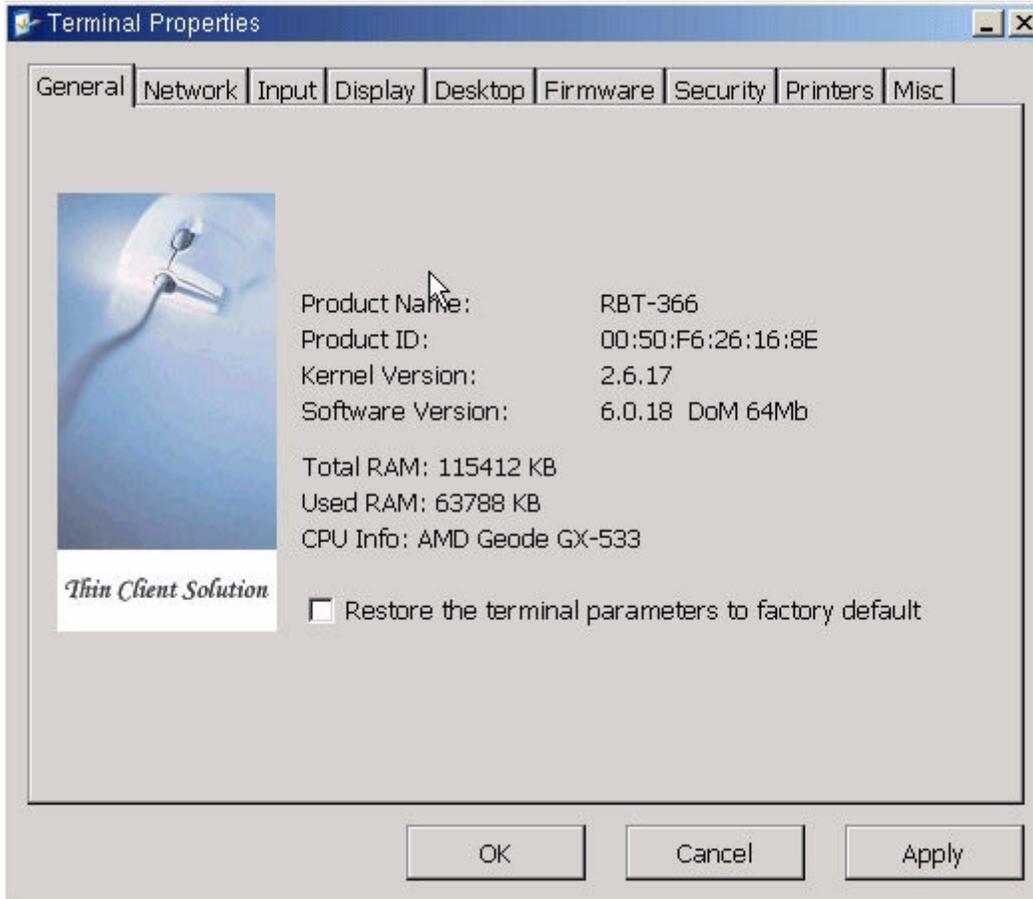


Once the configuration wizard has finished, configuration of RBT Thin Client Linux terminals is accomplished by launching the Terminal Configuration Utility from the main toolbar by selecting Start-Settings Control Panel.

The Terminal Configuration Utility is divided into a number of functionally distinct tab pages as described in the following pages.

# Terminal Properties – General Tab

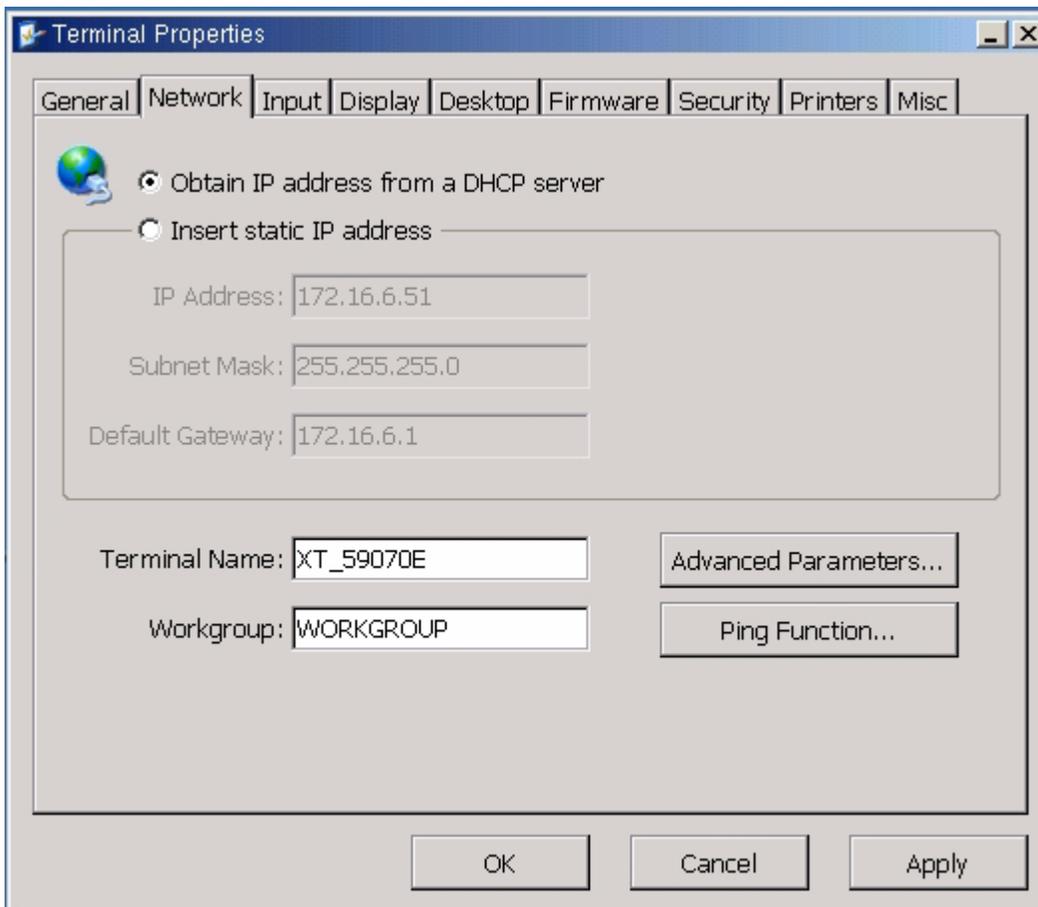
The **General** page displays the firmware revision as well as the Thin Client hardware configuration.



Checking the **Restore the terminal parameters to factory default** will reset all terminal parameters to the default state. Upon rebooting the terminal the Terminal Configuration Setup Wizard will appear. Factory defaults can also be reset from the terminal itself by pressing SHIFT-CTL-ALT F or from the manager by right clicking on the unit and selecting Special Functions - Factory Default.

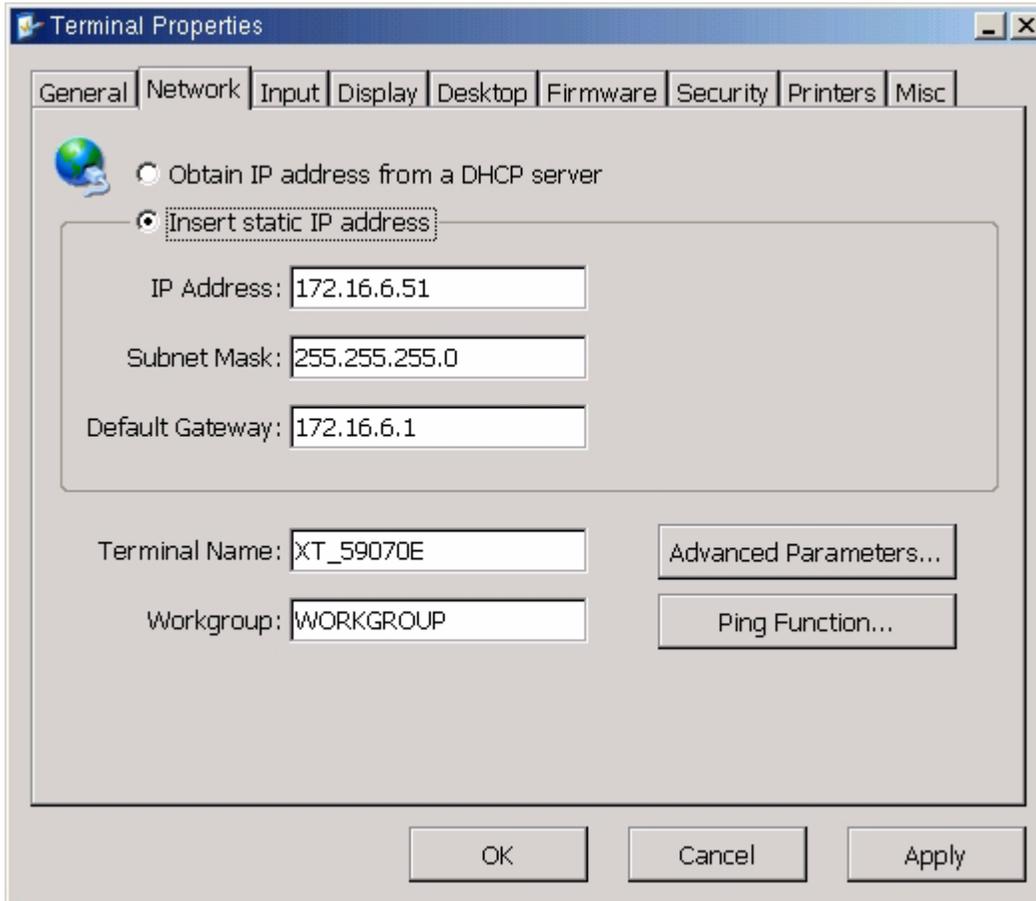
# Terminal Properties – NetworkTab

The Network Configuration page allows the user to set the network specific parameters of the Thin Client. If you have a DHCP server on your network, select the **Obtain IP address from a DHCP server** option; this allows the network configuration to be performed automatically by a DHCP server resident on your LAN. The information typically provided by the DHCP server includes the IP address and gateway.



The terminal name can be changed by modifying the Terminal Name field.

If you do not have a DHCP server on the network, the IP address and gateway must be set manually.



Access Advanced Parameters by clicking on the Advanced Parameters option.

Advanced Parameters page allows for setting the DNS server to enable the browser to resolve host addresses. This most likely would be used only when you set the IP address manually.

Advanced Network parameters

Enable DNS

Default Domain: file

DNS 1 Address:

DNS 2 Address:

Advanced parameters

Network:

Broadcast:

Ethernet Mode

Mode: Autonegotiation

MTU: 1500

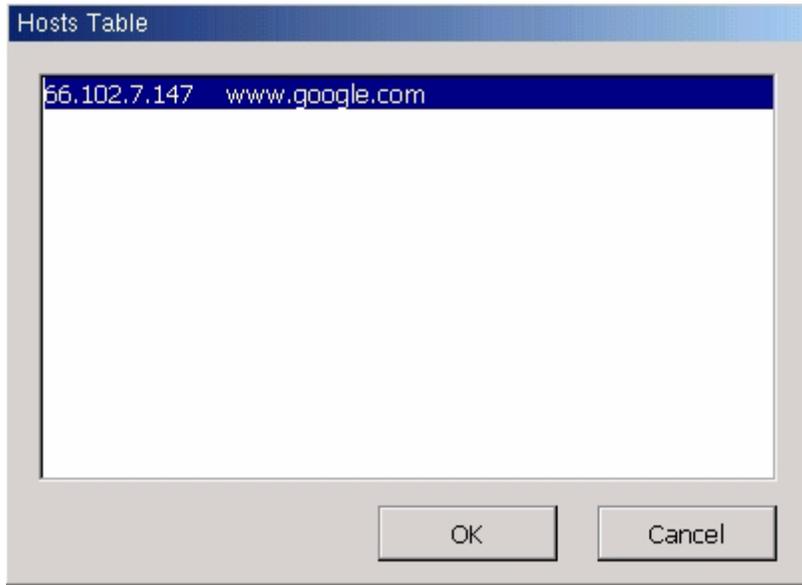
Hosts Table... DHCP Log File... DHCP Leases...

OK Cancel

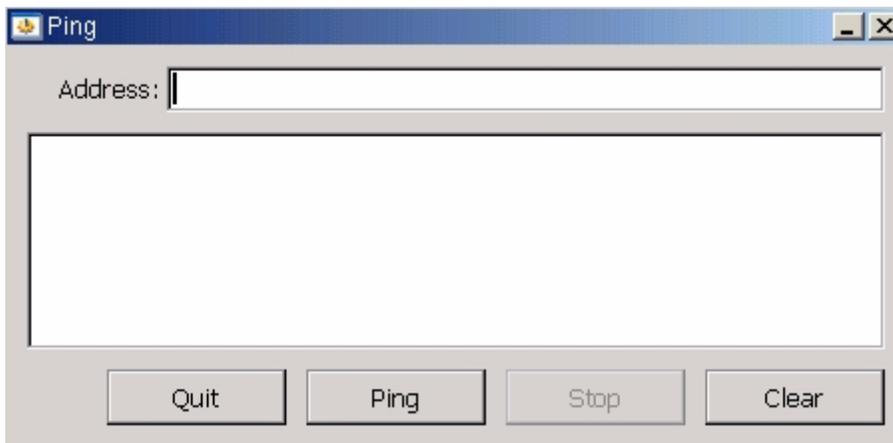
If Insert Static IP address is selected you will not see the DHCP Log File and DHCP Leases options.

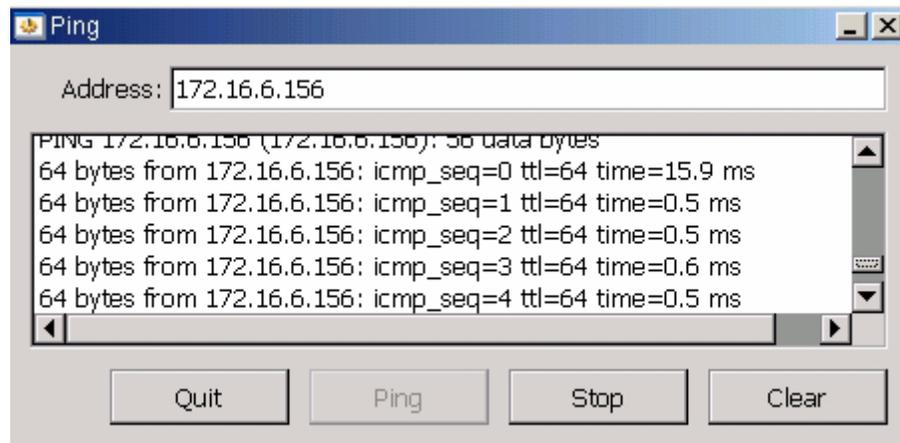
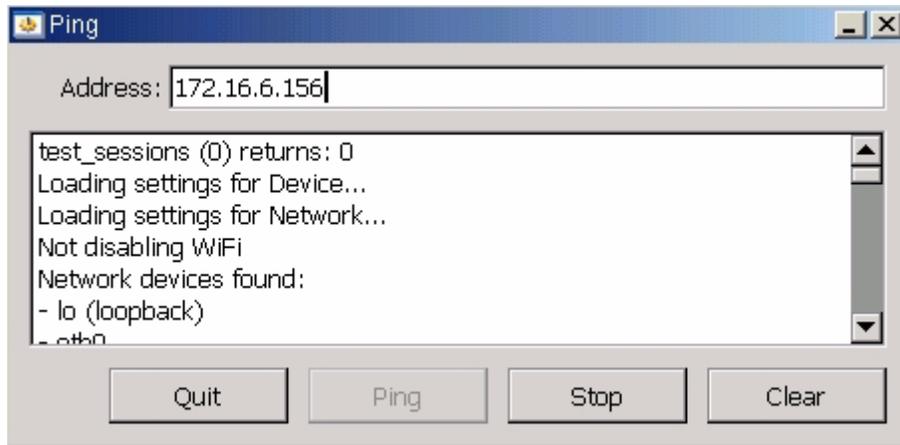
The Host Table may be used to set the host table; this table associates IP addresses with logical names.

A Hosts Table entry might be used for example to access a web page by domain name when a DNS server is not accessible.



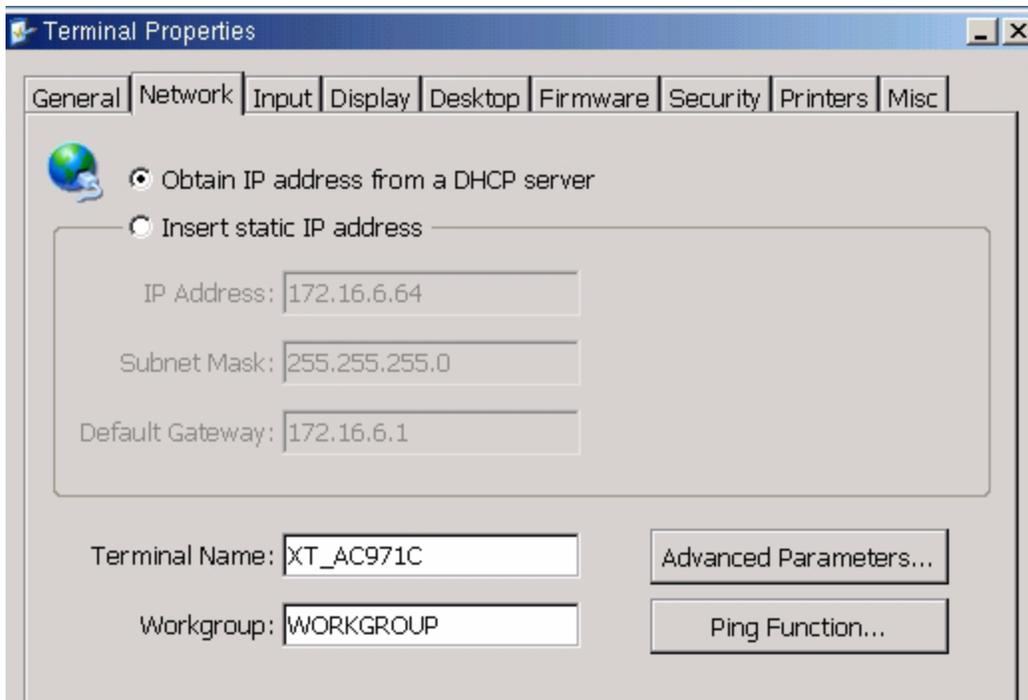
The Ping Function may be used to ping other terminals or servers on the network to verify the network connection.





## Configure Wireless NIC

From the Terminal Properties Network tab select Advanced Parameters.



The Wireless Parameters option does not appear unless the unit recognizes it has a wireless NIC.

Select Wireless Parameters

Advanced Network parameters

Enable DNS

Default Domain:

DNS 1 Address:

DNS 2 Address:

Advanced parameters

Network:

Broadcast:

Wireless Parameters...

Hosts Table...    DHCP Log File...    DHCP Leases...

Disable WiFi    DHCP Renew

OK    Cancel

Enter the Network Name (SSID)

To use WEP:

Check to Enable Crypting and select the WEP Encryption. Enter the Hex or ASCII Key configured in the wireless router.

Wireless Network Parameters

MAC address: 00:40:96:AC:97:1C

Network Name (SSID):

Mode:

Channel:

Enable Crypting

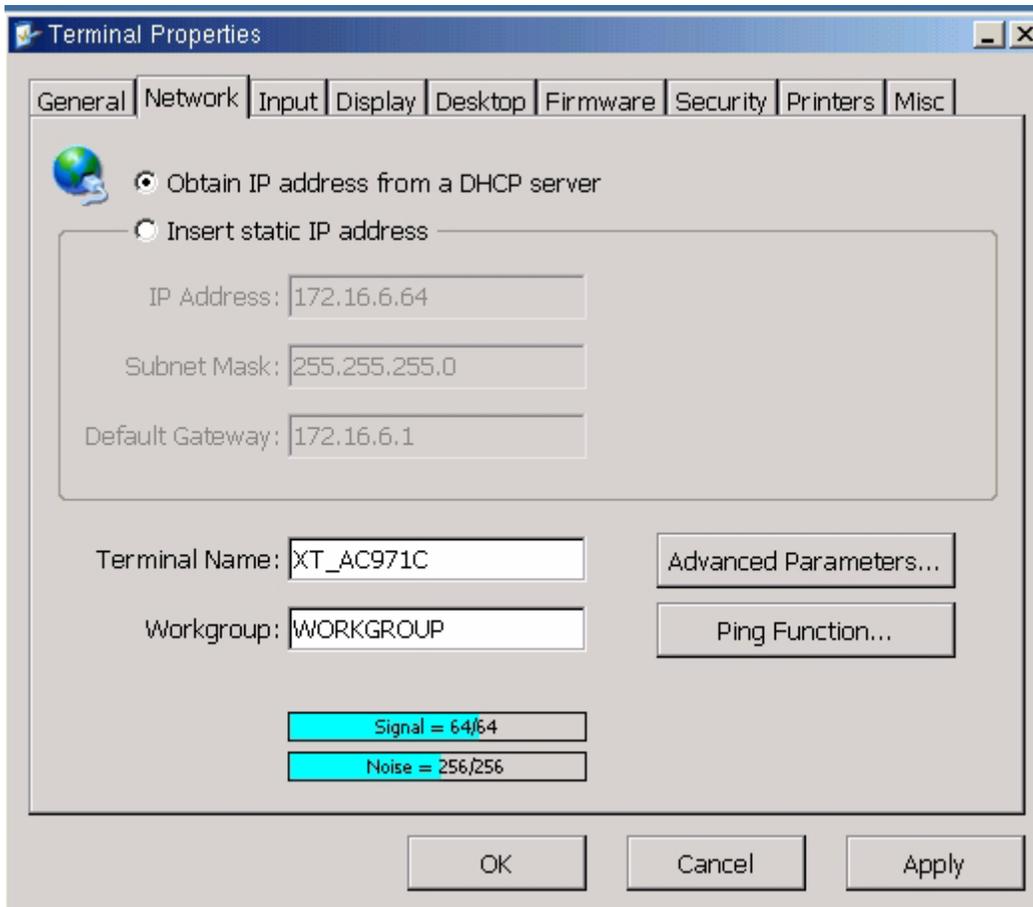
Security Mode:

WEP Encryption:

Passphrase:

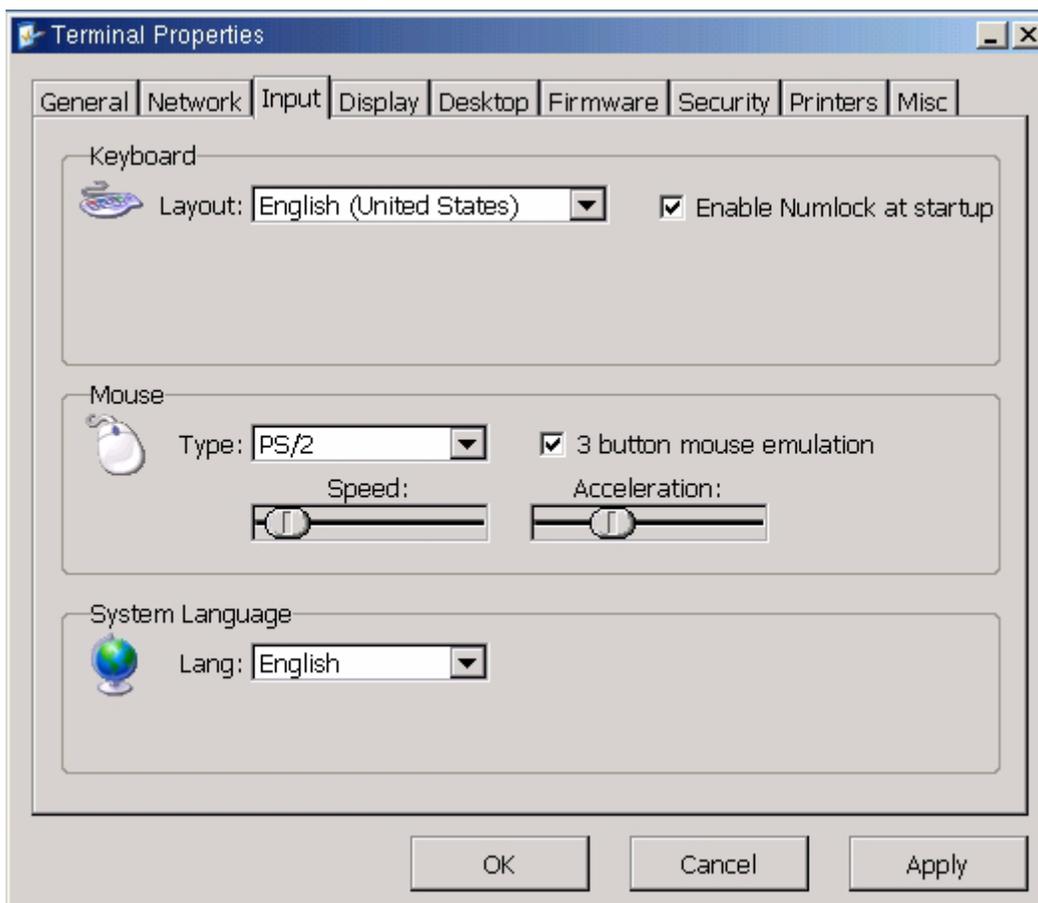
Hex or ASCII Key:

Once configured correctly and connected to the network the signal strength will show on the network tab.

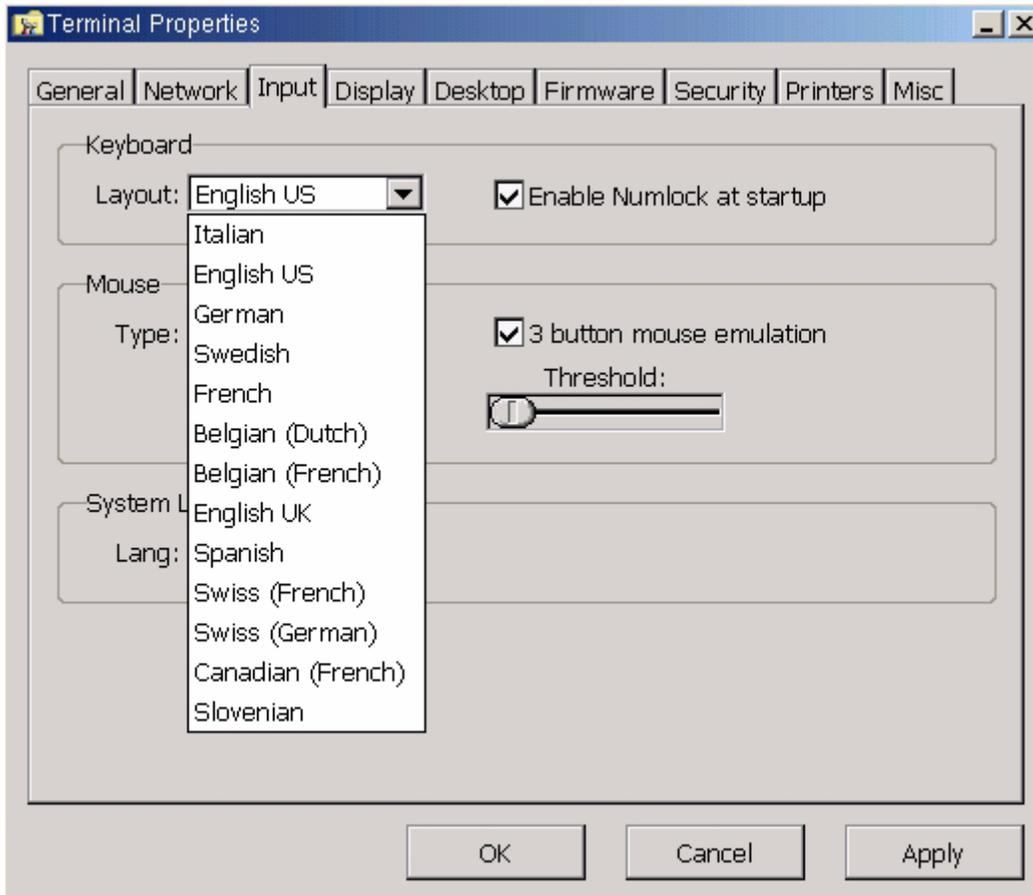


## Terminal Properties – Input Tab

The Input configuration page allows the user to set the default keyboard layout, the mouse type, and the default language for the terminal as shown in images below.

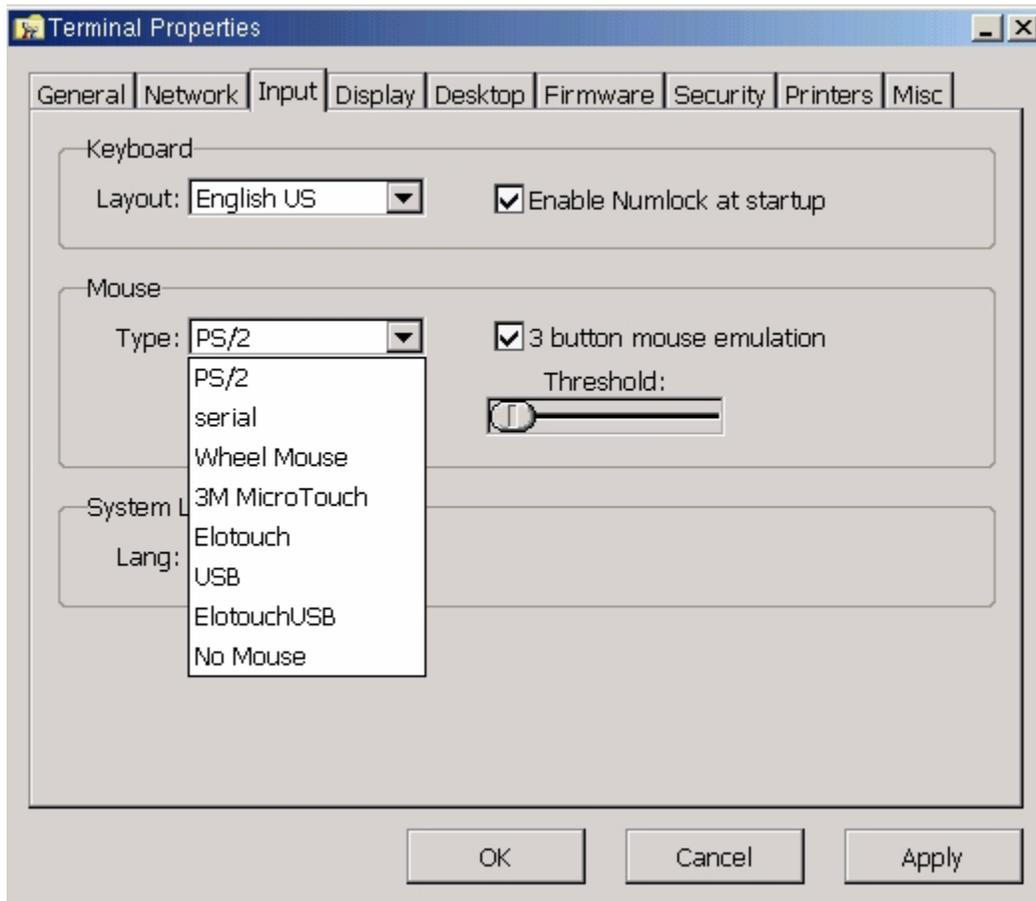


Options for Keyboard Layout:



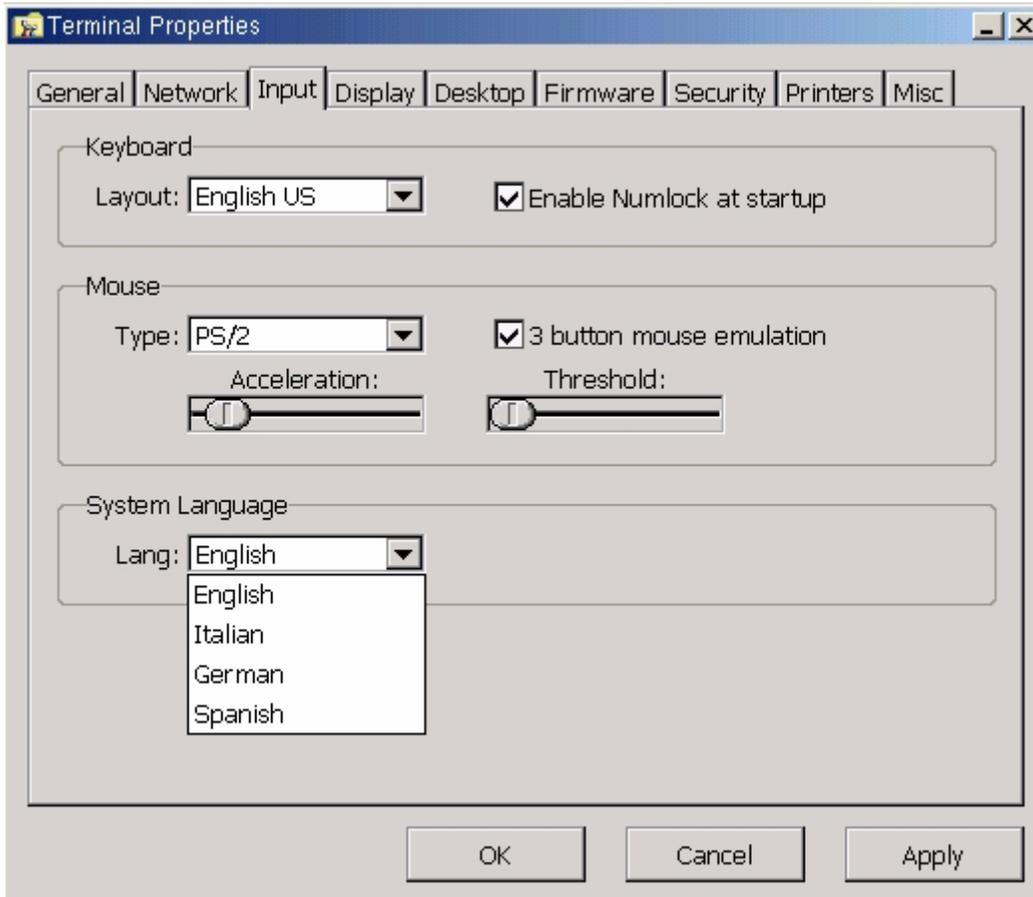
**Enable numlock at startup** is checked by default, to disable, uncheck.

Mouse Type options below:



Mouse type must be selected correctly or the keyboard may not respond as expected. The default is type PS/2. If no mouse is to be used, the **No Mouse** type must be selected by either using the BOSmanager to configure or by using a mouse, applying the change and then removing the mouse.

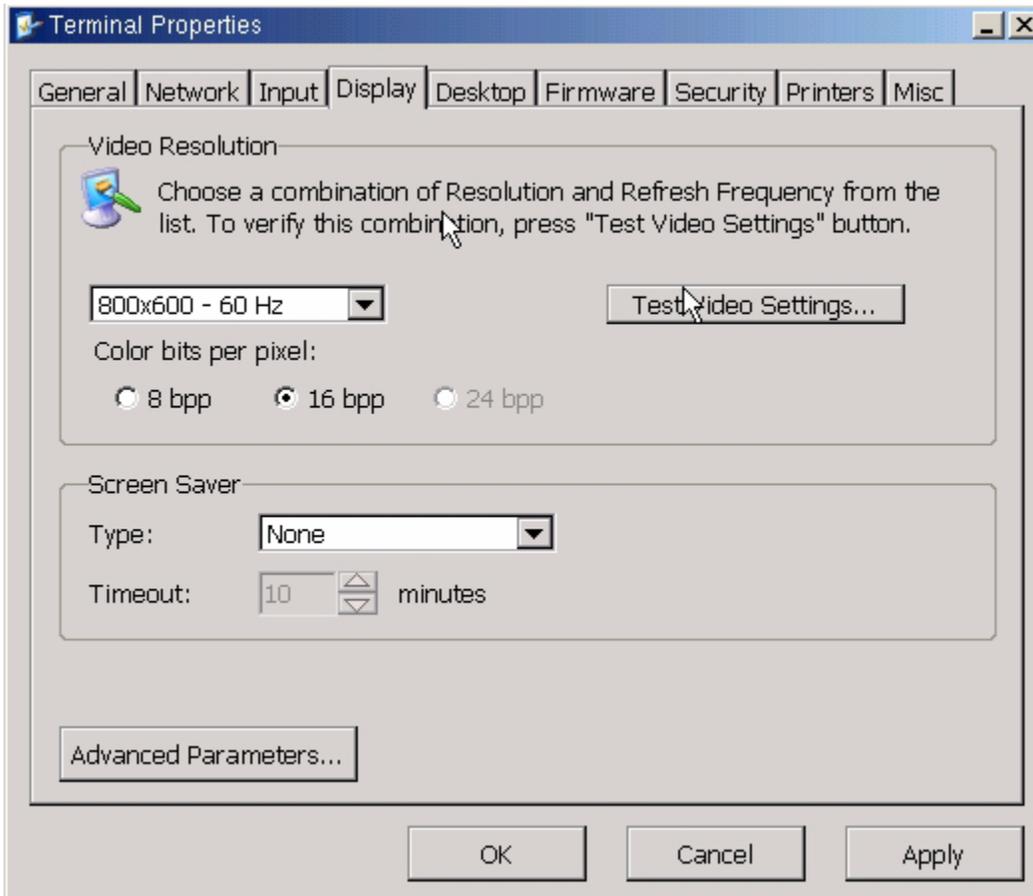
System Language options below:



# Terminal Properties – DisplayTab

The Display configuration page allows the user to control the parameters of the video display. The Video Resolution drop down box displays the available resolutions and frequencies for the video adapter. Whenever choosing a resolution / display frequency make sure to use the Test Video Settings option to make sure this setting is viewable on your monitor.

The Screen Saver option controls the mode of the screen saver.

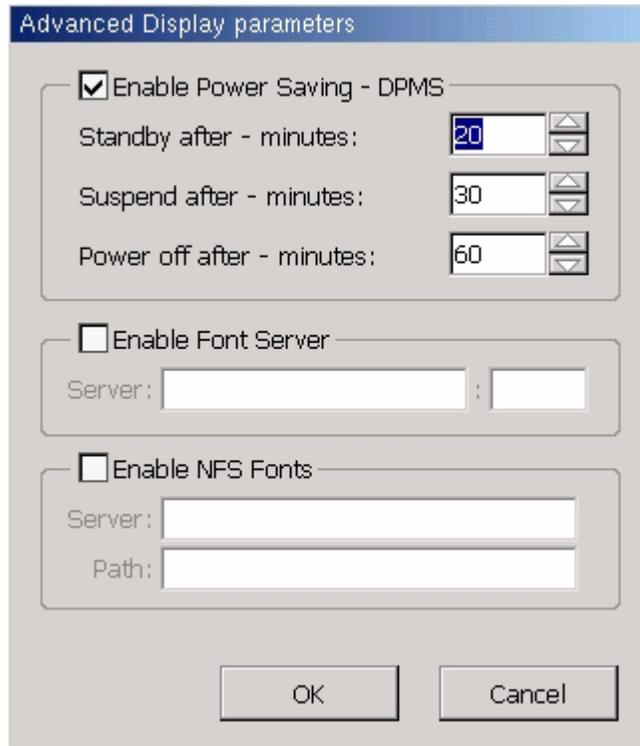


## NOTE:

It is possible to set the thin client's video resolution out of range for the monitor. A good indication of this issue would be, after making the change, the unit boots to a blank black screen yet can be seen and configured from the BOSmanager. To resolve this issue, reset the factory defaults and set the resolution to a frequency the monitor can support. (see page 7)

For additional parameters select the **Advanced Parameters** option.

Advanced Display Parameters allow for the settings of various power saving modes.



To supply additional fonts to the unit, check the Enable Font Server box and enter the server IP and port of the font server.

To access fonts available on an NFS font server, check the Enable NFS Fonts box and enter the server IP and path information to access the NFS fonts.

## Terminal Properties – Desktop Tab

The Desktop configuration controls the layout and scheme for the user's desktop. There are four modes for the Window Manager, the TBT mode, WBT mode, KIOSK mode and the Desktop mode. The TBT or Text Based Terminal Mode allows for a terminal green screen session that can be set to auto-start and auto-reconnect. The WBT, or Windows Based Terminal mode, only allows the user to launch predefined applications; these applications may include RDP, browser, ICA, or emulation sessions. The Desktop mode is similar to a traditional desktop on a Windows based system; this mode provides a task bar, and a start menu similar to Windows 2000. All available programs loaded on the terminal are present on the start menu in this mode. Once the configuration is complete, unused programs can be hidden using the Security Tab. The KIOSK mode is a user restricted mode.

The TBT mode is a text based setup (no mouse required) with terminal green screen.

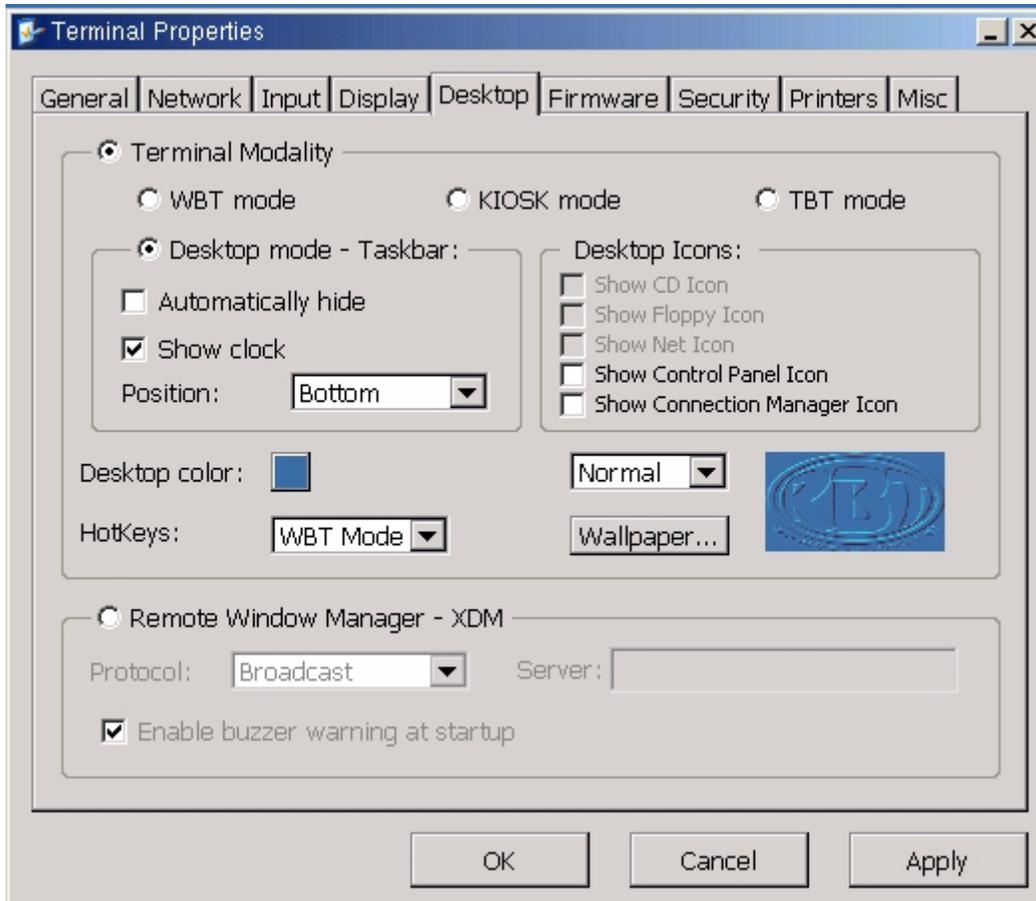
The WBT mode is suited for environments where administrators need to limit the flexibility of the user interface.

KIOSK mode is a user restricted mode.

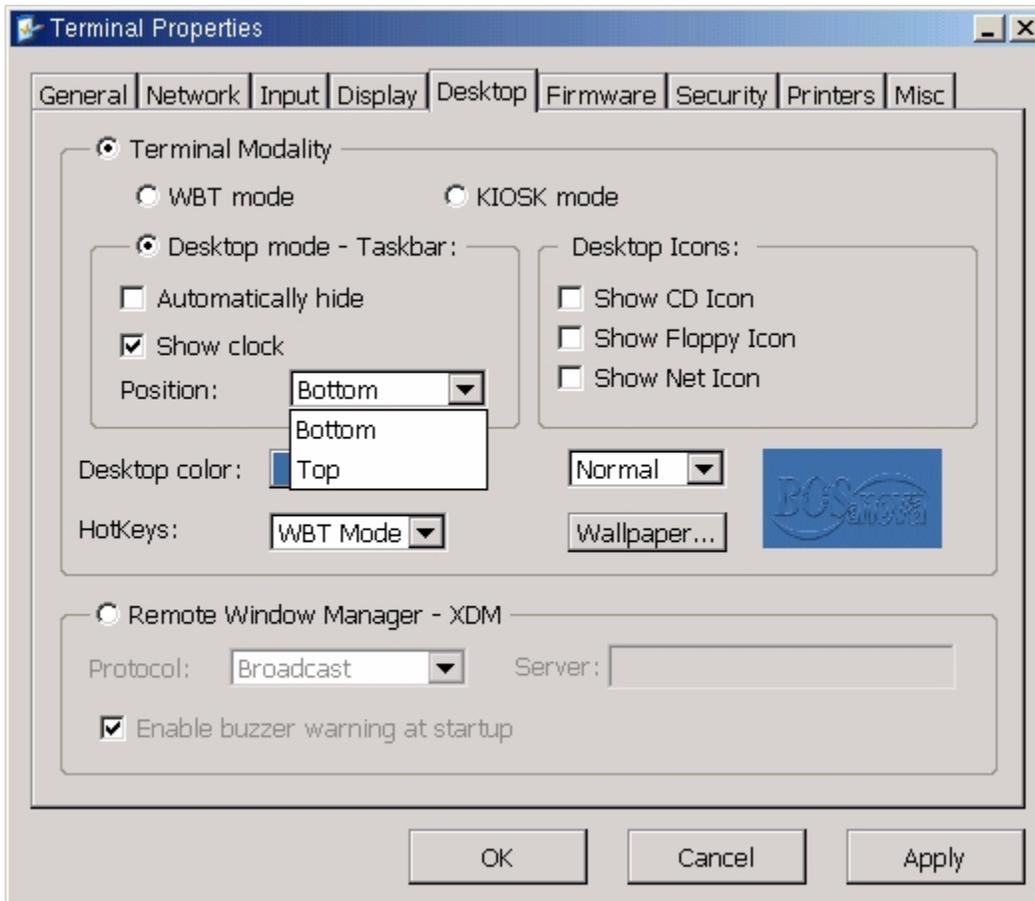
In the Desktop mode, there are a number of features shown on the task bar which may be enabled or disabled. These include the clock, the CPU load, the network load, and the virtual desktop. Additionally the taskbar position may be at the bottom or right. The taskbar also has an auto hide feature.

The Desktop color option controls the color of the desktop background.

If a share has been defined in the Misc tab, check the Show Net ICON for the share ICON to appear on the desktop.



Desktop mode will give the most control in the look and feel of your desktop. To automatically hide the taskbar, check to Automatically hide under taskbar. Uncheck Show clock to keep the clock from displaying on the taskbar. When a USB CD or USB Floppy is attached, check to show the ICON on the desktop for the corresponding peripheral device.



For a custom wallpaper:

Map to a drive which contains the jpeg image to be used.

Open the browser and browse the share then select the image.

Open the image, right click and Save Image As to /tmp/config/files.

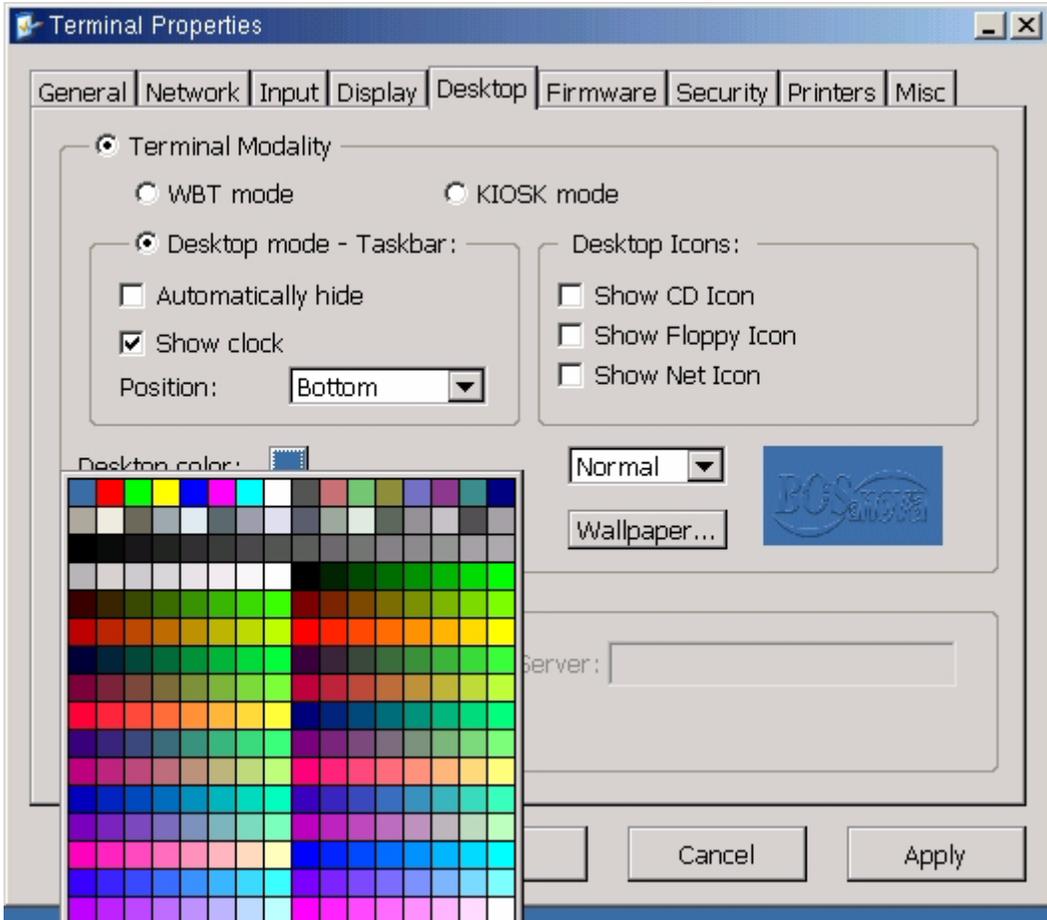
Exit the browser.

Reboot and background will be the selected image. Only JPEG format is supported and file size should be < 100K.

Once you set the background on one terminal, you can "clone" it using the BOSmanager.

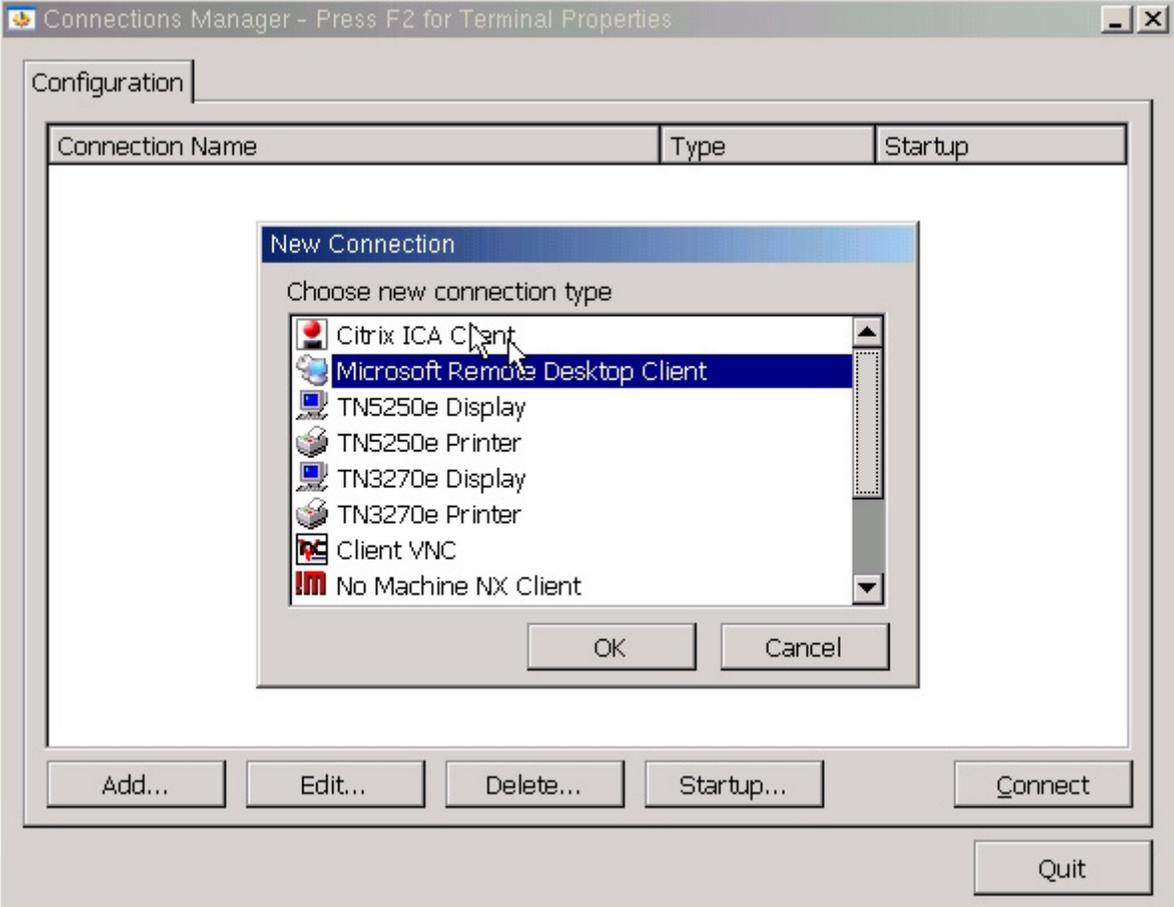
To delete background image, open a shell and run command **rm /tmp/config/files/\*.jpg freeze**

To change the desktop color, click on the color box and a grid of colors is presented. Click on the desired color change.



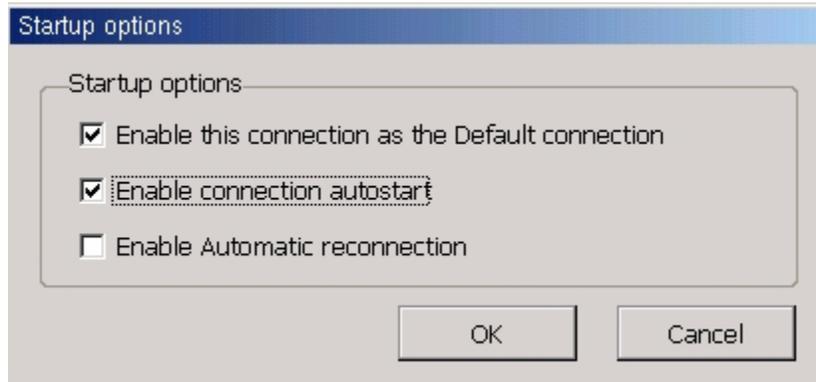
KIOSK Mode will limit the user's access to a specific program. Example of kiosk mode using an RDP session below:

Add a new Microsoft Remote Desktop Client

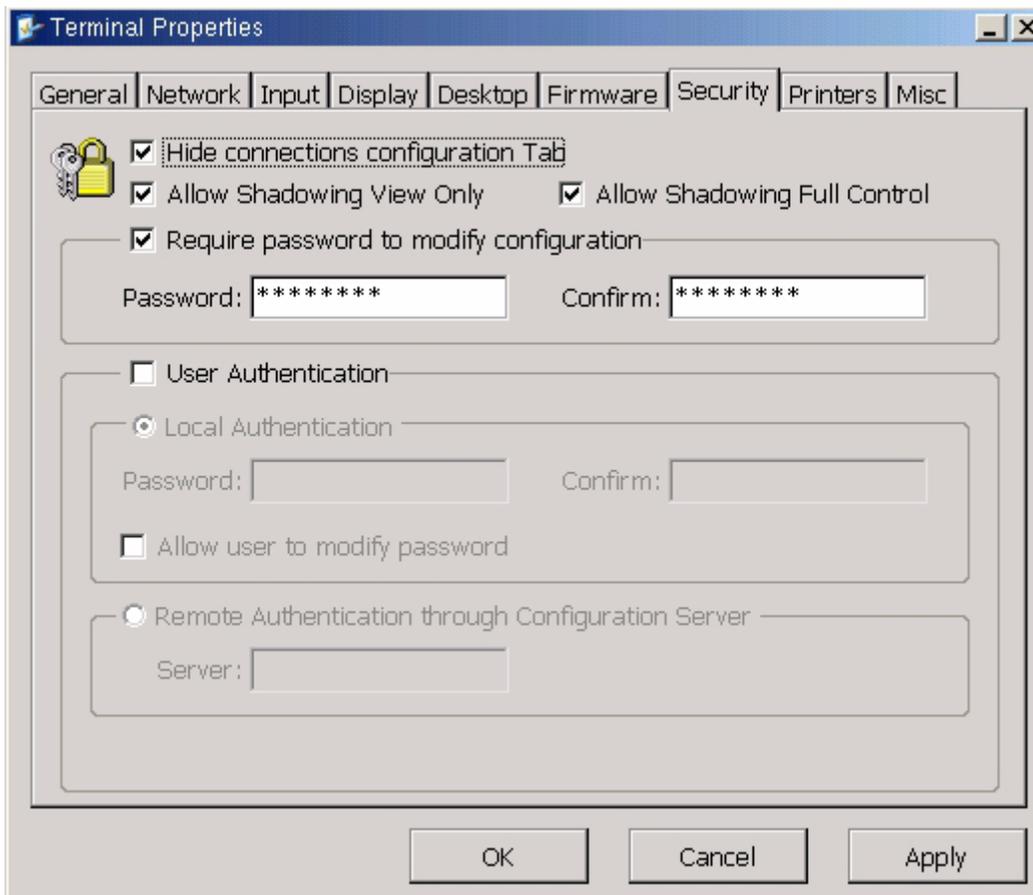


From the connections manager highlight the RDP session and select startup.

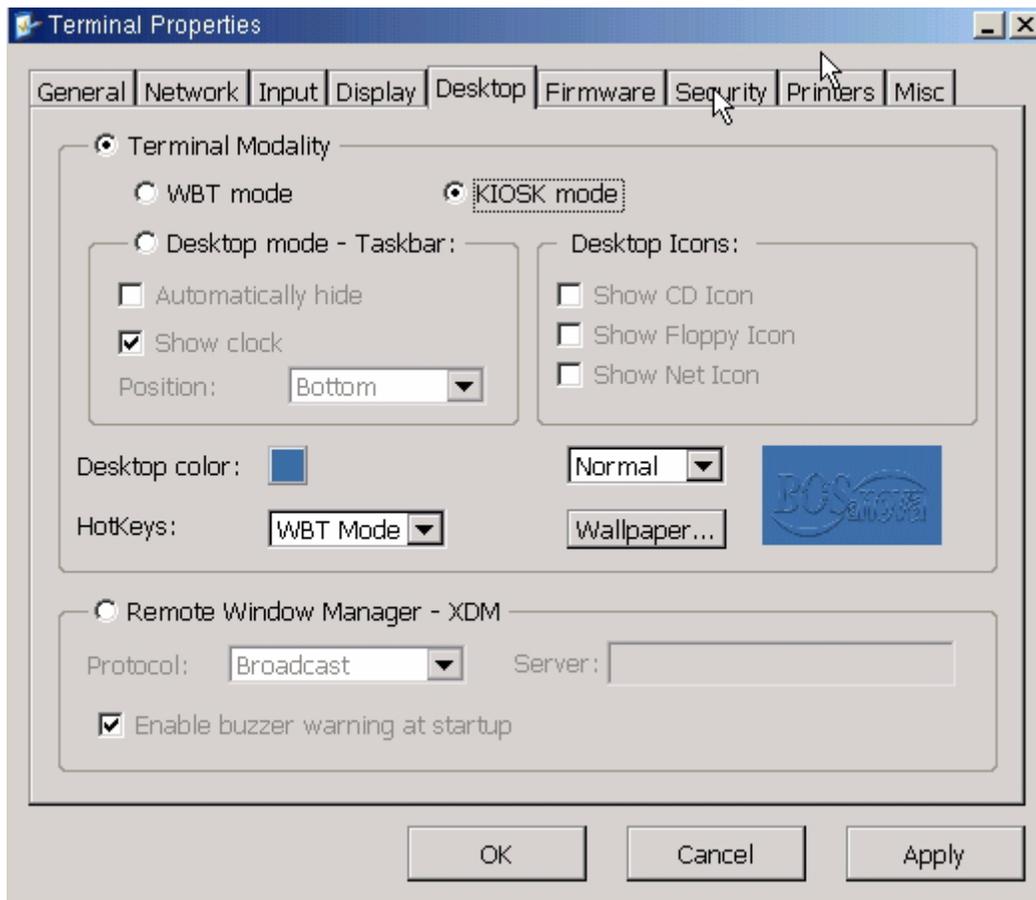
Check **Enable this connection as the Default connection** and check **Enable connection autostart**. You can also check **Enable Automatic Reconnection** which will automatically reconnect the browser session if for any reason it should disconnect.



In the Terminal Properties Security Tab, check to **Hide the Connections Configuration Tab**, check to **Require Password to Modify Configuration**.

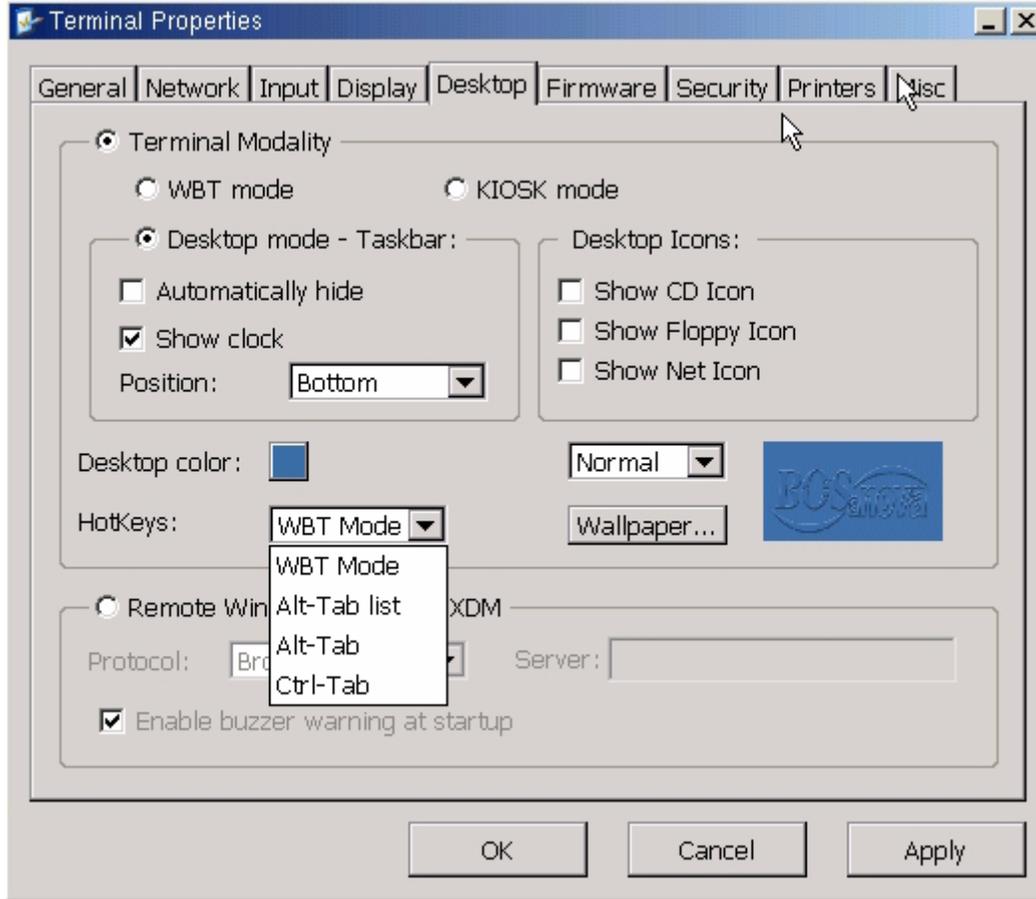


From the Terminal Properties Desktop Tab, check KIOSK mode.



Terminal will reboot and immediate execute the RDP session.

Hotkeys filter through opened sessions.



For example with the HotKeys set to Alt-Tab list and running a 5250 display session, a 5250 printer session and a Firefox session - pressing Alt-Tab would present the following:

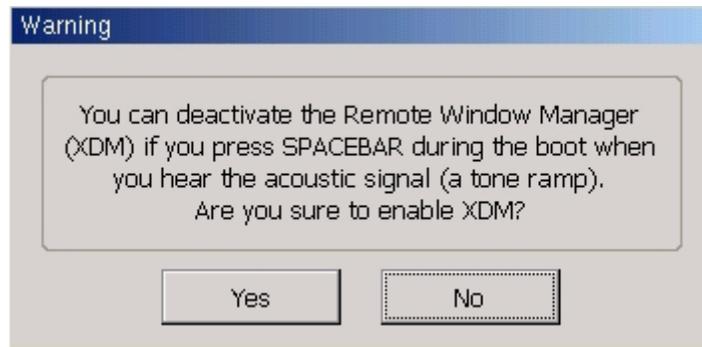


The **Remote Window Manager-XDM** allows the terminal to obtain the desktop remotely from another Unix or Linux system. This mode is essentially the Unix equivalent of RDP or ICA. The IP address of the remote Unix system must be entered.

XDM would typically run on an application server, to permit users to logon and run applications from that server. An XDM terminal is a machine with a network connection, keyboard, mouse and monitor, configured to run the X Windows System to connect to an application server somewhere on the network.

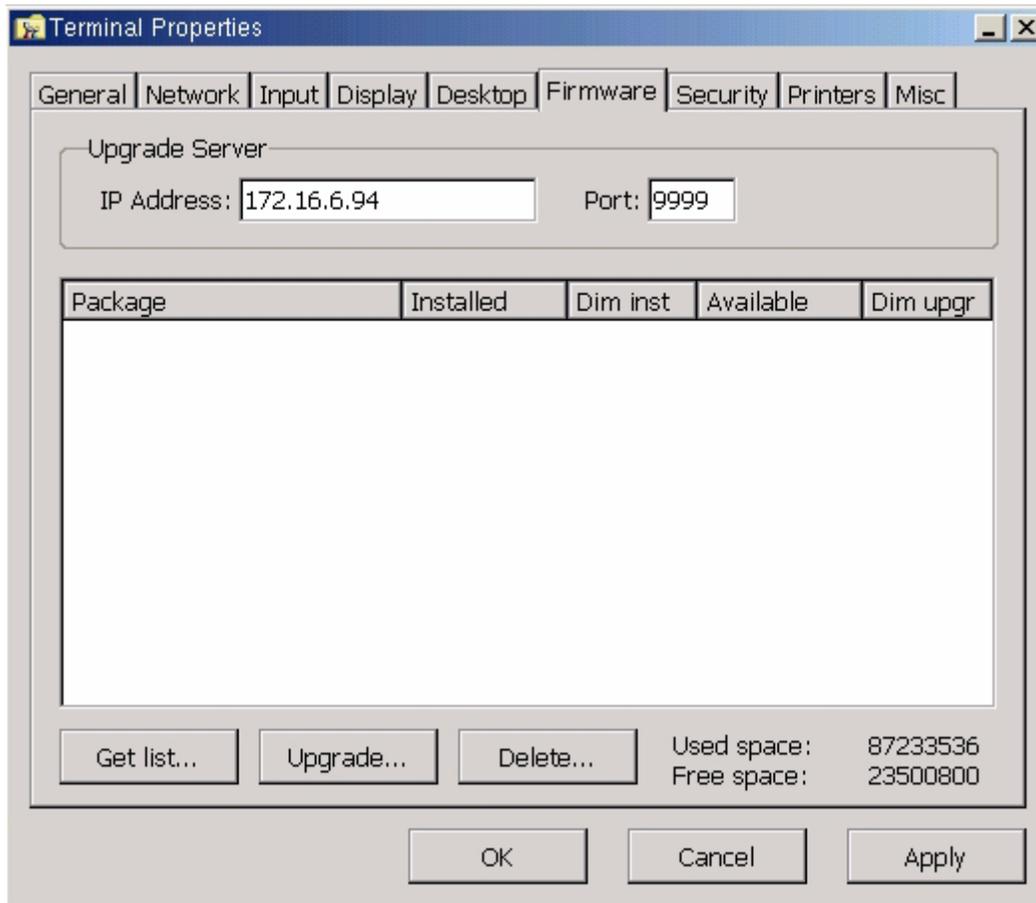
To use the XDM client, check **Remote Window Manager - XDM** - select the protocol and enter the IP of the XDM server

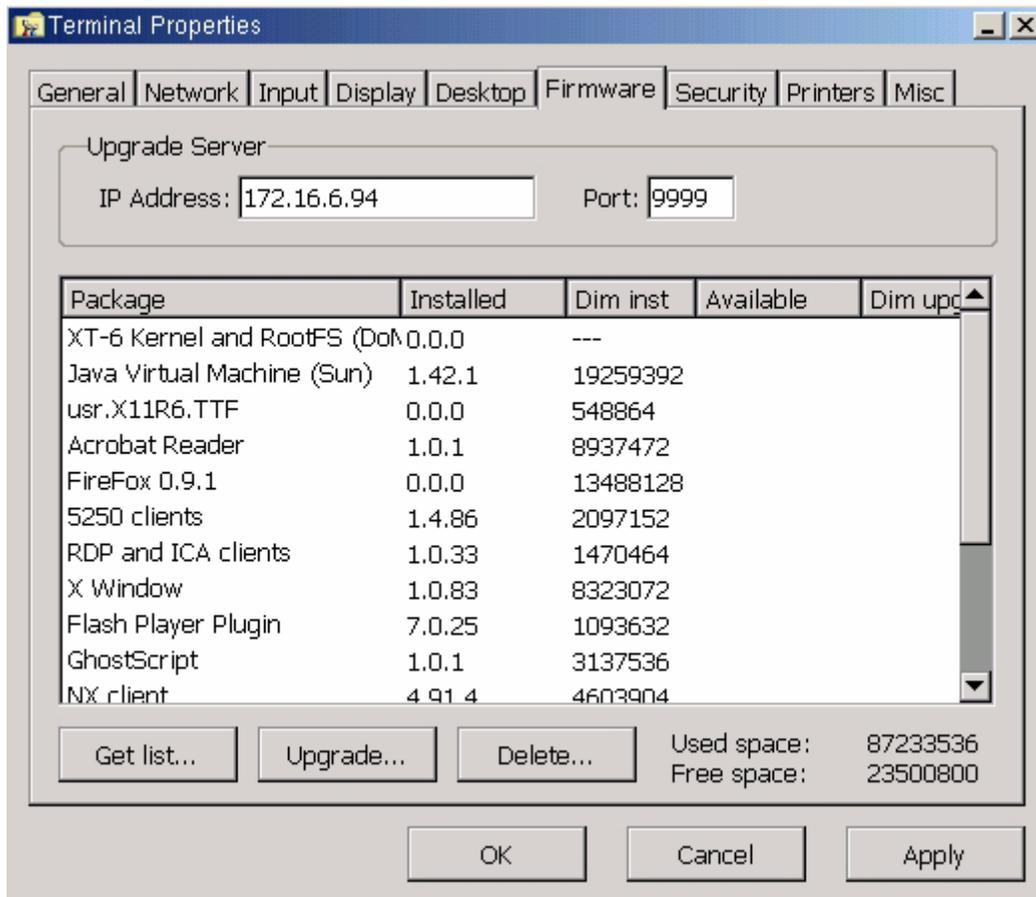
When you select the Remote Window Manager - XDM a warning is presented:

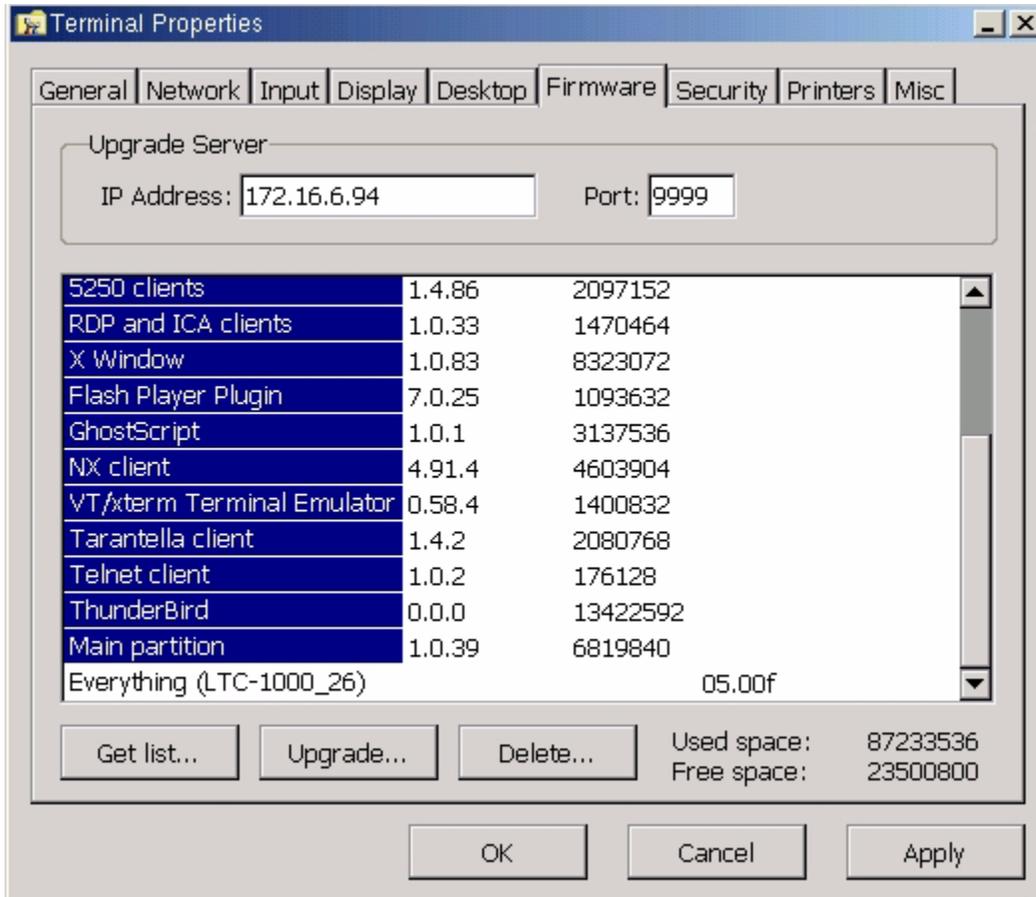


# Terminal Properties - Firmware Tab

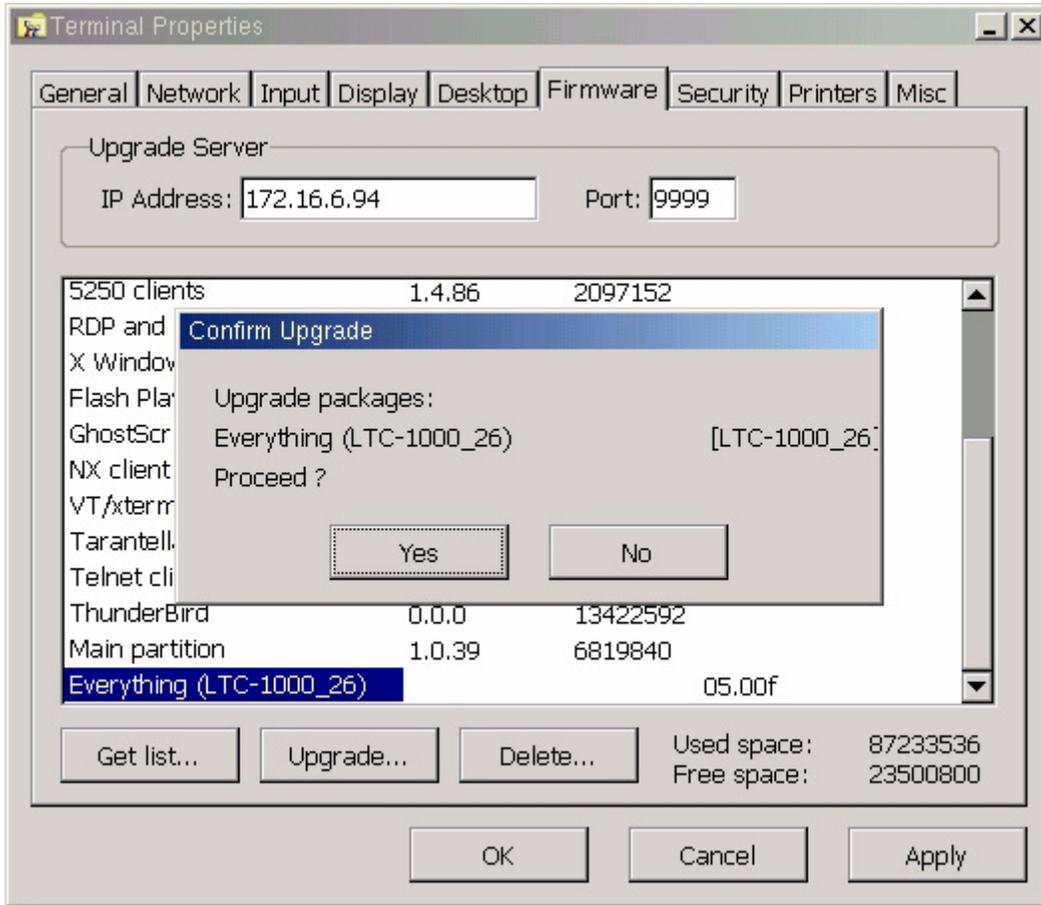
The Firmware configuration allows the user to upgrade the Thin Client firmware from a Windows machine on the LAN running the remote administrator, BOSmanager. The IP address field should contain the IP address of the Windows machine on the LAN running BOSmanager. The Port number should be 9999. To list the available firmware packages for upgrade, click the Get List button. If the terminal can contact the Windows machine running the BOSmanager, a list of packages will appear in the list box. You may upgrade a single package by selecting the package in the list box and clicking the Upgrade button. Selecting the **Everything** option in the list box will upgrade all packages.







Note: Unless information is displayed in the **Available** column, it is not available to install.



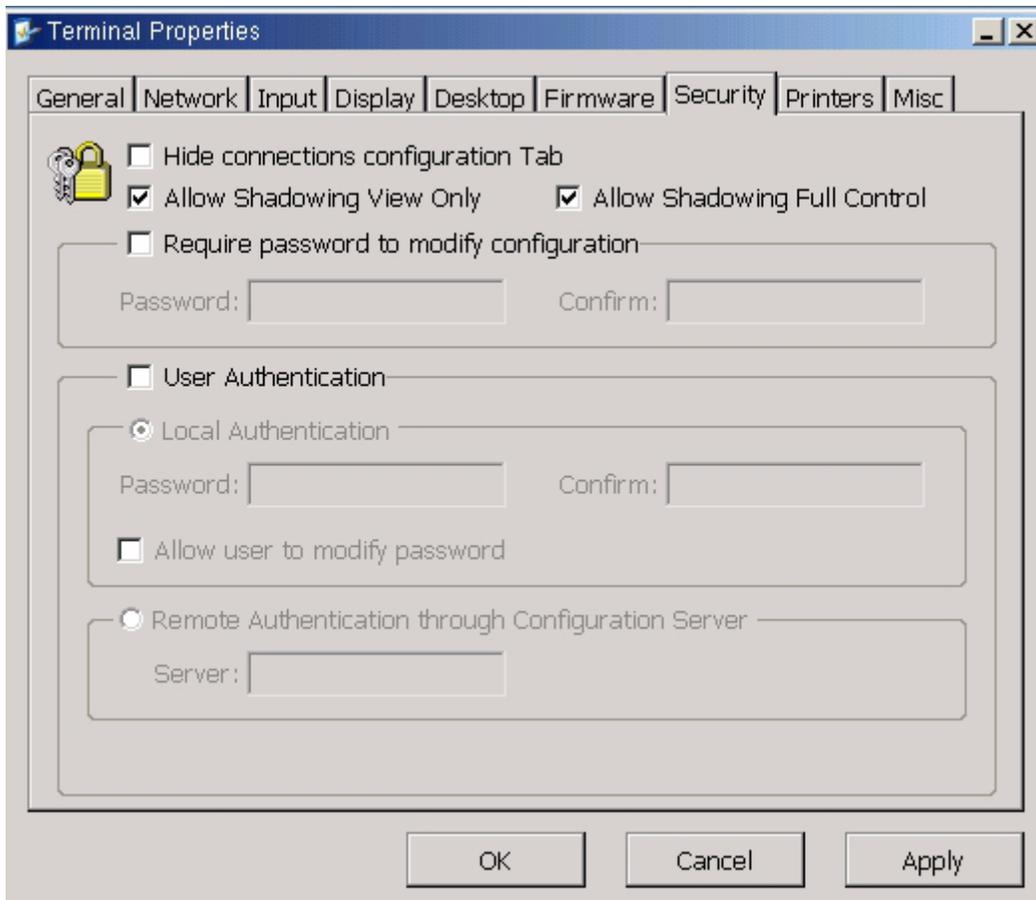
# Terminal Properties - Security Tab

The Security configuration allows the administrator to control access to the various terminal functions and configurations.

Selecting the **Hide connections configuration Tab** will hide the Terminal Connection Configuration utility from the user.

The **Allow Shadowing View Only** and **Allow Shadowing Full Control** allows the administrator to enable shadowing from the remote administrator – BOSmanager - running on another Windows machine on the LAN. Shadowing uses VNC client from the BOSmanager to view or control the terminal. This is useful if the administrator needs to remotely monitor the terminal activity, or take full control of the terminal from a remote location.

The **Require password to modify configuration** allows the administrator to specify a password in order to reconfigure the terminal. If this password has been set and then lost, a factory default reset using **SHIFT-CTL-ALT and F** is the only option to clear it



User Authentication is used to force a user to logon to the thin client locally with a password - the option also allows for the user to modify the local password if selected. Remote Authentication through Configuration Server is used for LDAP Windows domain login.

# Terminal Properties - Printers Tab

The Printer configuration allows you to configure the printing functions of the Thin Client terminal.

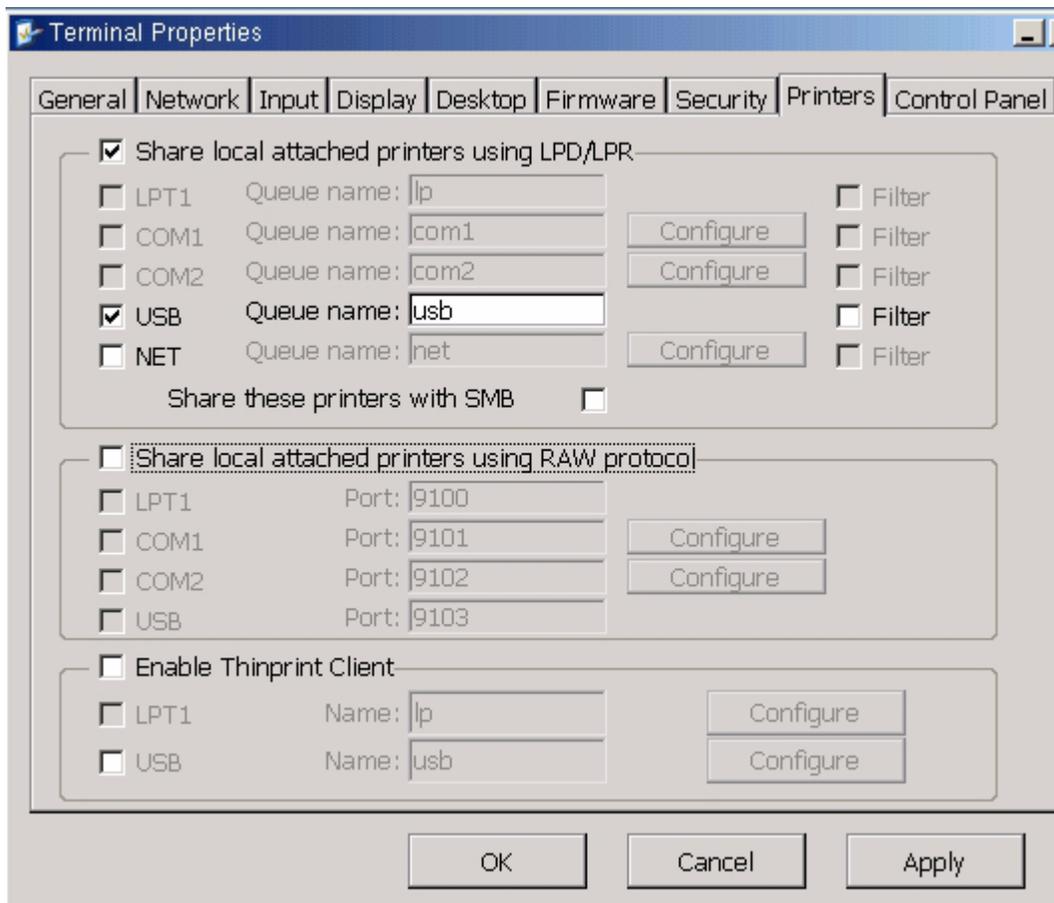
The Enable LPD printing option enables Unix LPD printing for the terminal on the specified device. This allows the terminal to function as a print server. LPD/LPR is required for Linux/Unix to connect to the RBT's printer(s) and for the RBT to print to an attached printer. By selecting the **Share local attached printers using LPD/LPR** the RBT becomes a Linux/Unix printer server.

The Enable Raw Printing option enables raw printing on the specified ports.

The Enable Thin Print Client option enables the Thin Print Client printing on the specified device. Parallel Attached Printer:

## USB Printer

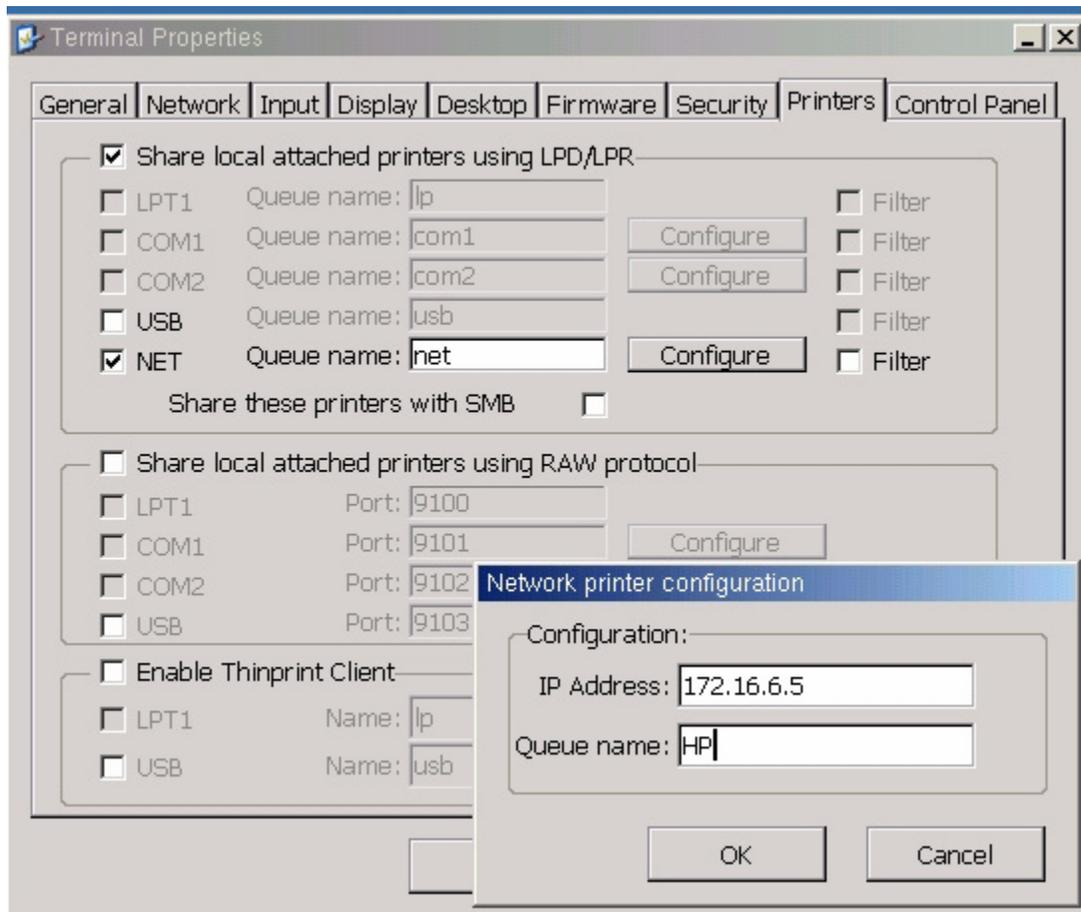
To configure a USB printer, check Share local attached printers using LPD/LPR and check the USB box and enter a queue name. Although the unit may have multiple USB ports, only one USB printer connection can be defined.



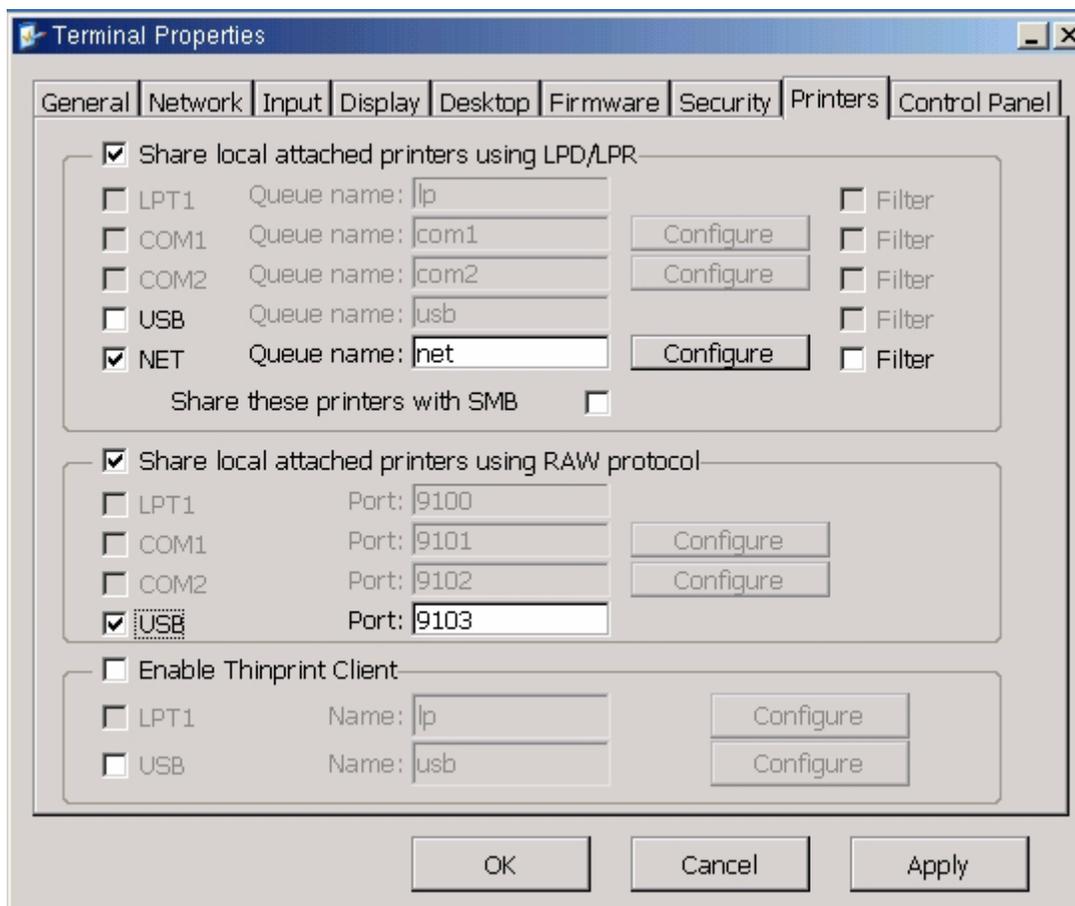
## Network Printer:

To configure a network printer uncheck USB and check the Net box and enter a queue name. Select configure and enter the IP address of the network printer and the queue name assigned to it.

Queue name must be the same on the Printers tab and in the Network printer configuration.



To share a local attached printer using RAW, check the share box and the associated connection type.

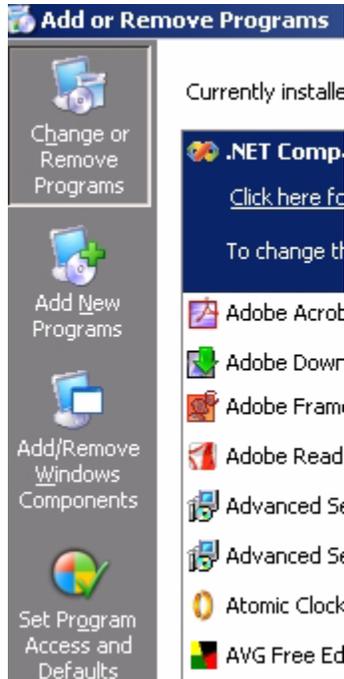


NOTE: 5250 and 3270 Printer sessions are configured totally separate from the printer configuration in Terminal Properties.

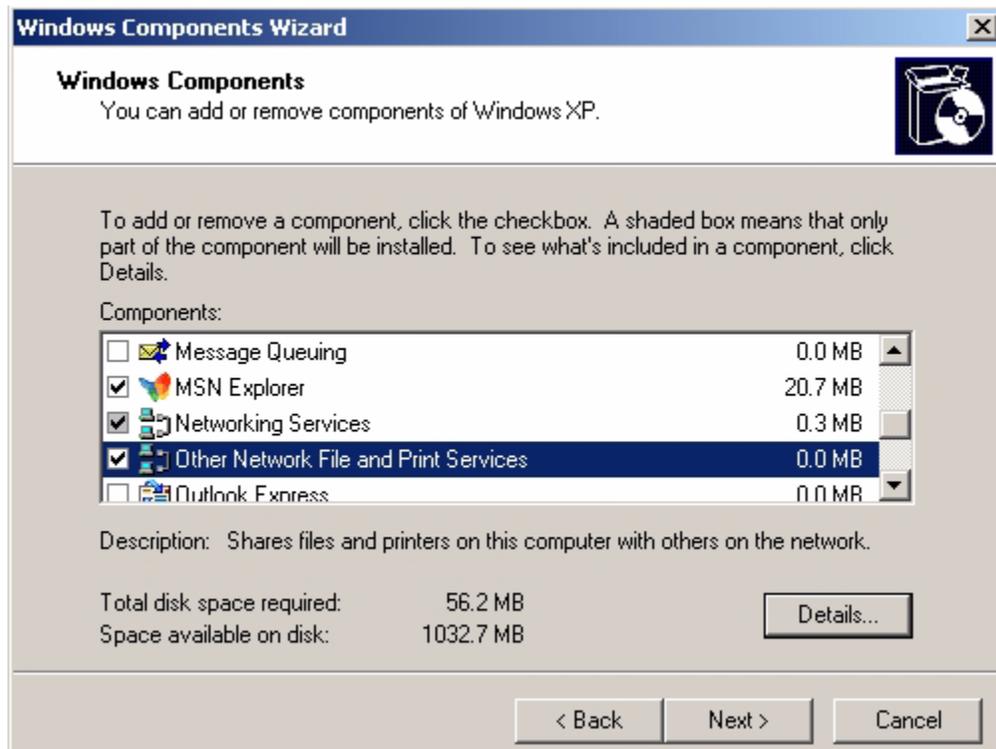
**NOTE:**

To print from a Windows PC to a printer attached to a Linux Thin Client proper steps must be taken on the Windows PC to take advantage of printing through Linux. The steps below explain the process to install a Linux Printing Client on a Windows PC.

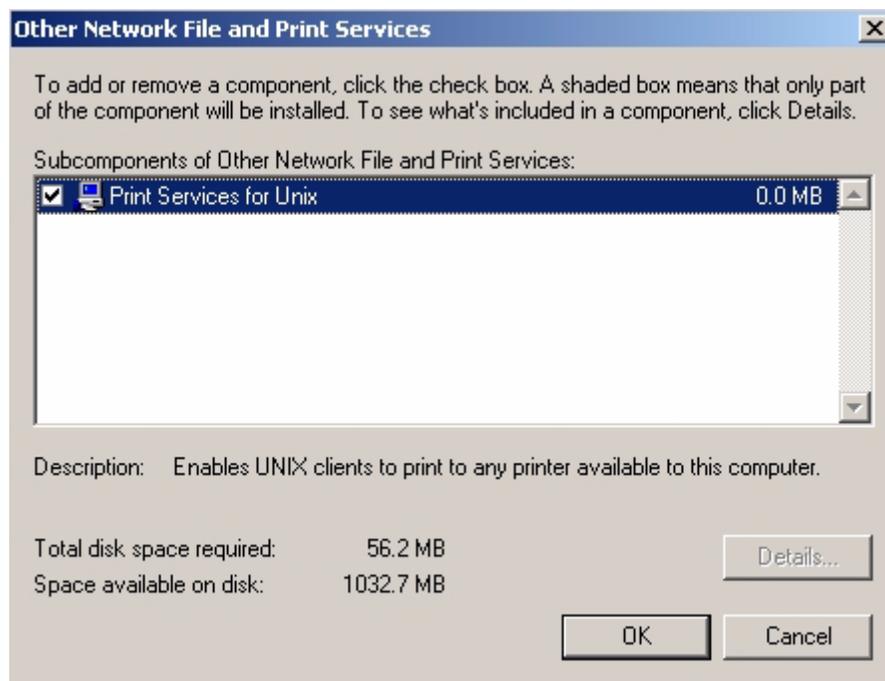
Select add/remove programs in the Windows control panel and then select Add/Remove Windows Components.



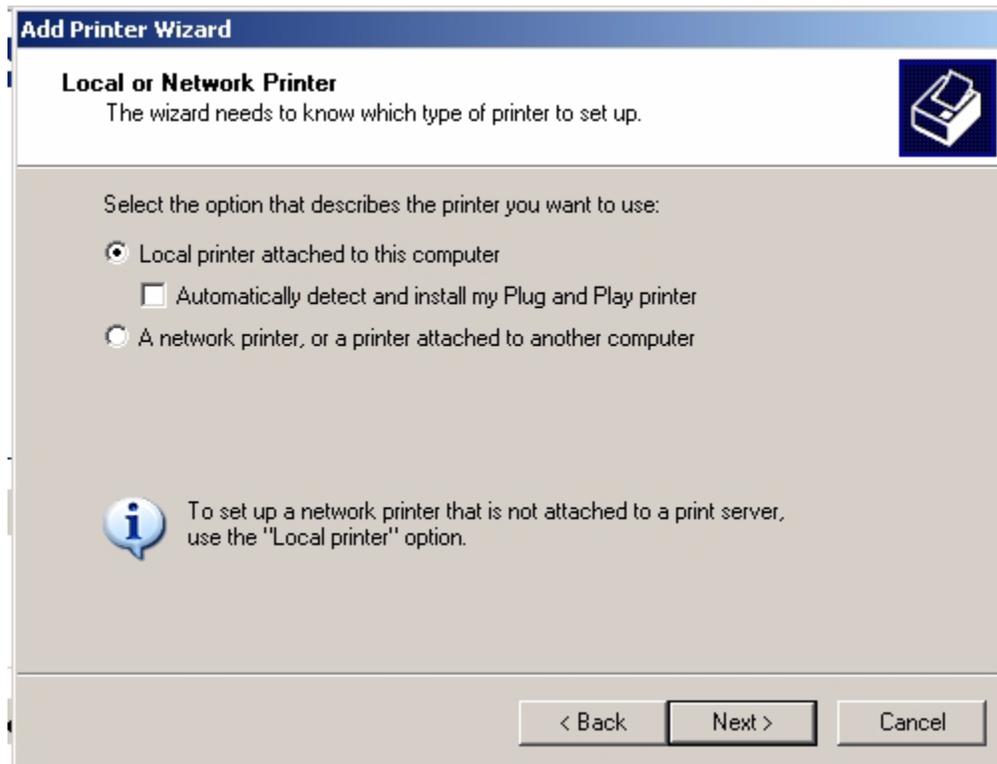
Highlight Other Network File and Print Services and select Details.



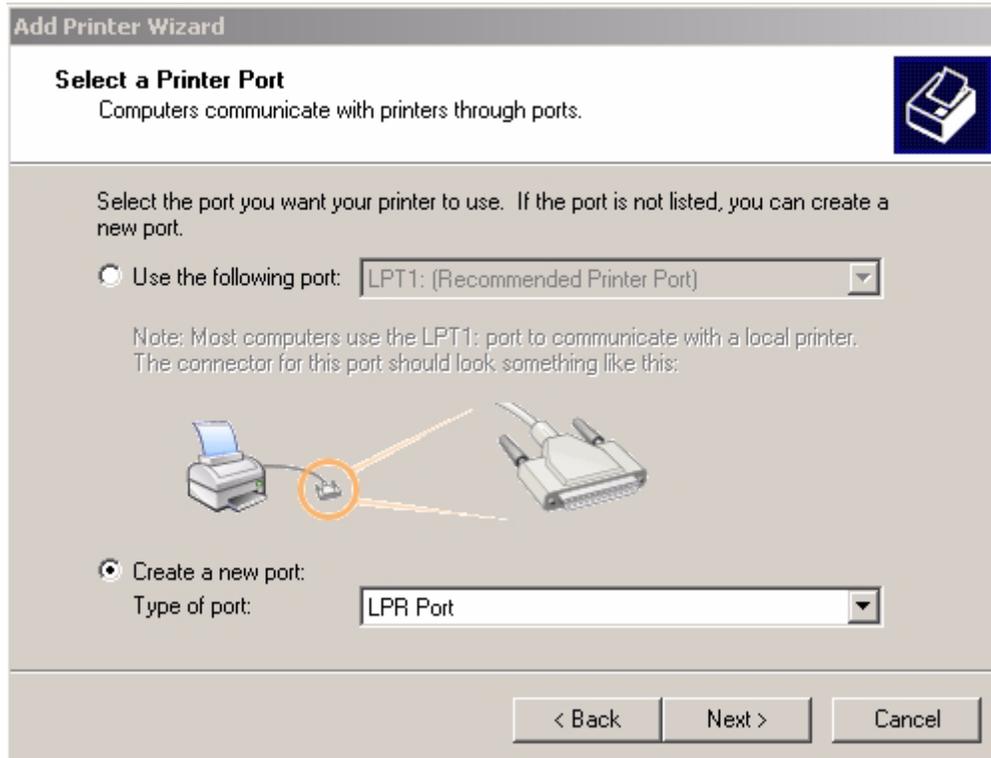
Check Print Services for Unix and select OK



On the Windows PC add a Printer. Select Local printer attached to this computer.



Select Create a new Port with type of port LPR Port.



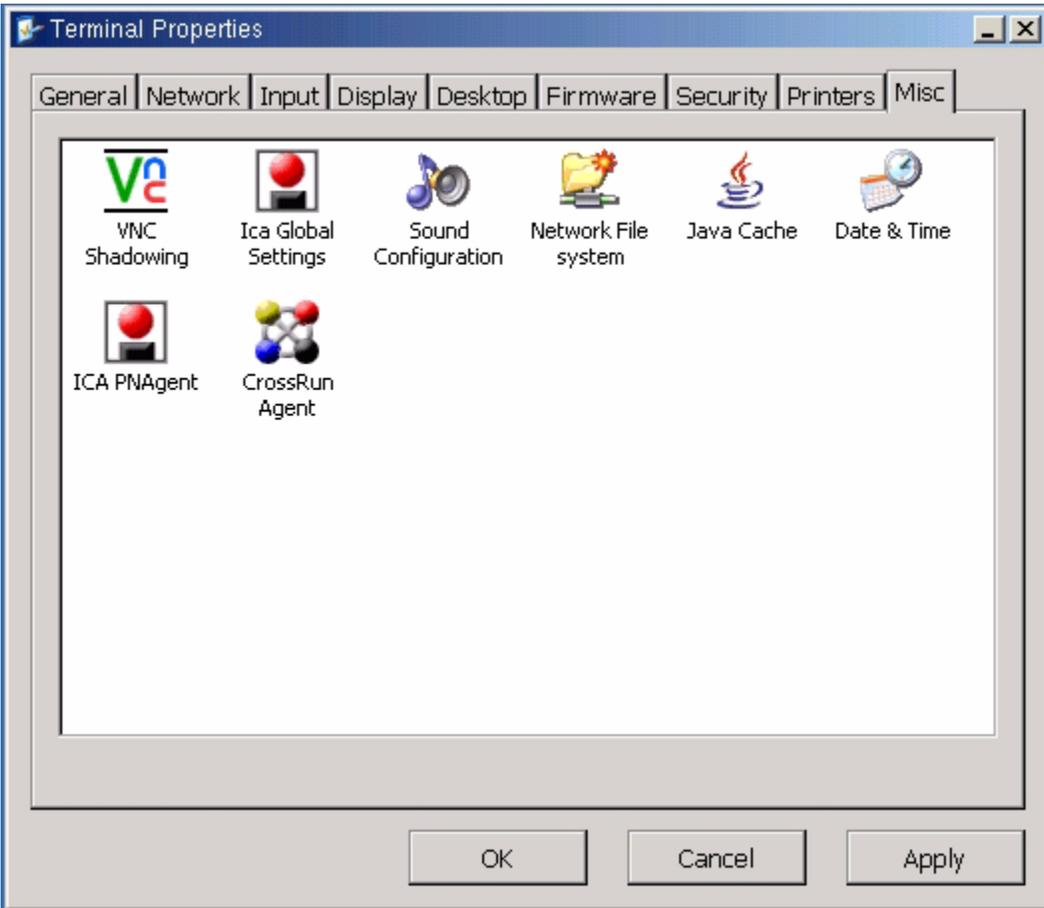
Enter the DNS name or IP of the Thin Client with the printer attached. Enter Queue name entered under the printer tab in terminal properties of the Thin Client.



Share local attached printers using LPD/LPR must be checked on the Thin client in terminal properties under the printer tab for the printer to be shared from the Thin Client.

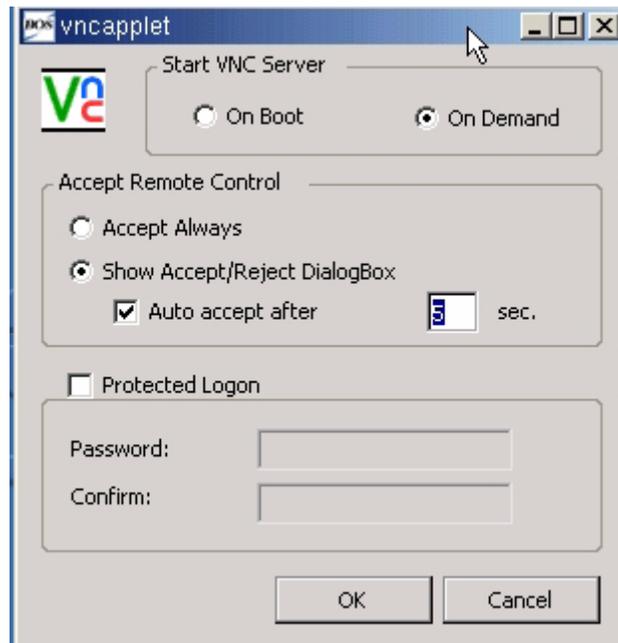
# Terminal Properties - Misc Tab

The Misc configuration page allows the configuration of VNC Shadowing, ICA Global Settings, Sound Configuration, Network File System, Java Cache, Date & Time, ICA PNAgent, and CrossRun Agent Configuration.

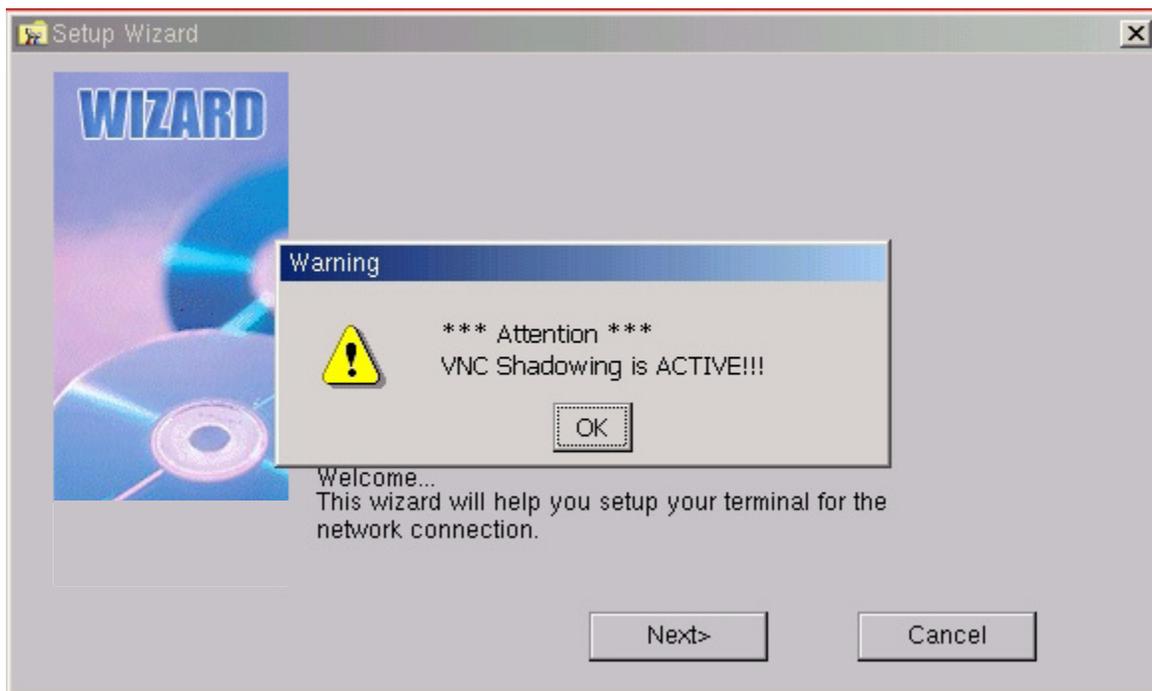


## VNC Shadowing Configuration:

The default setting is to Show Accept/Reject DialogBox but with Auto Accept after 5 seconds. To accept always and show no warning messages on the unit, select Accept Always.



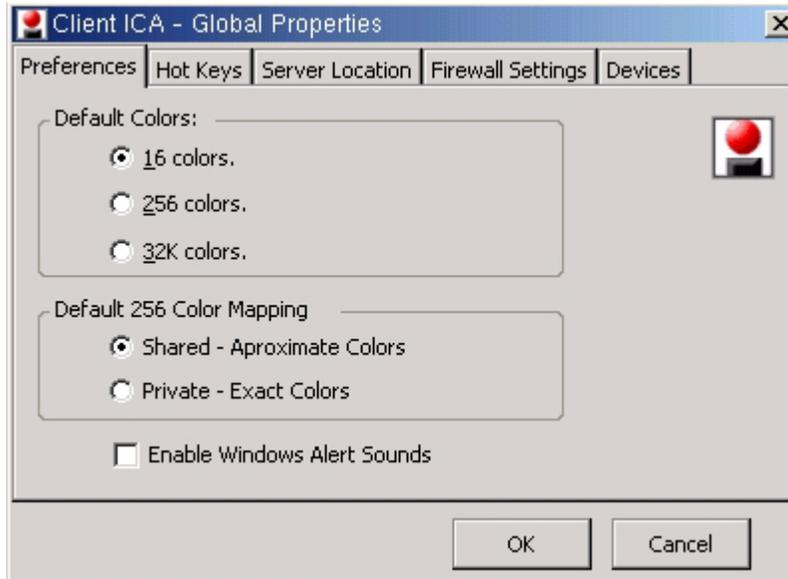
A password can be assigned to the unit by selecting Protected Logon and completing the password information.



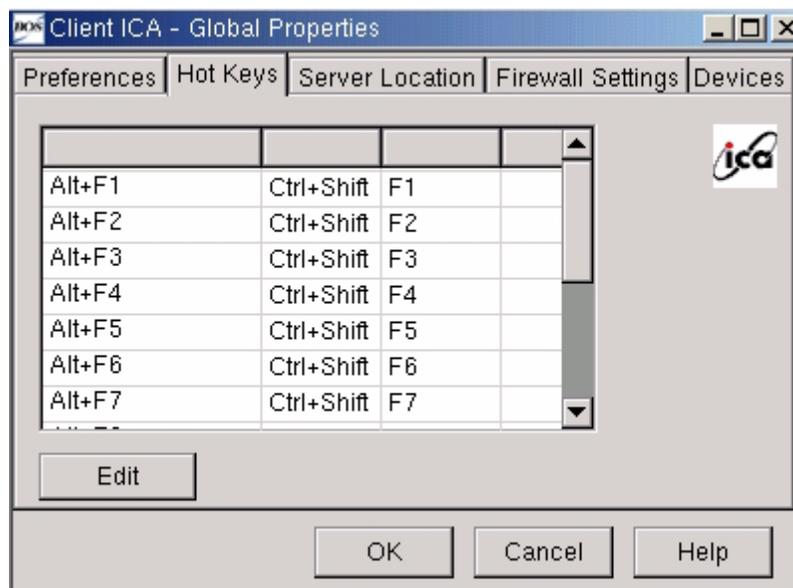
## Client ICA - Global Settings

This area controls global settings for ICA sessions. This assists in setting some of the standard settings for ICA clients to enable the same display settings, server settings, and/or firewall settings.

### Preferences

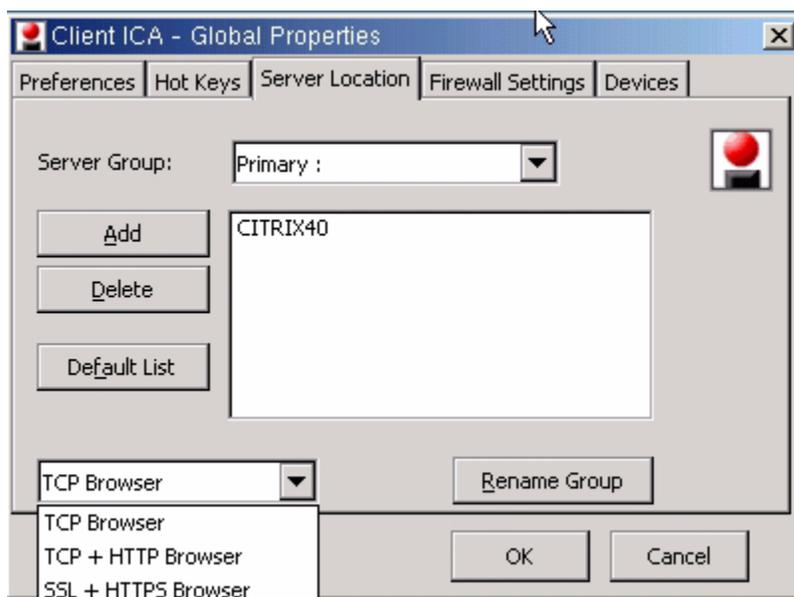
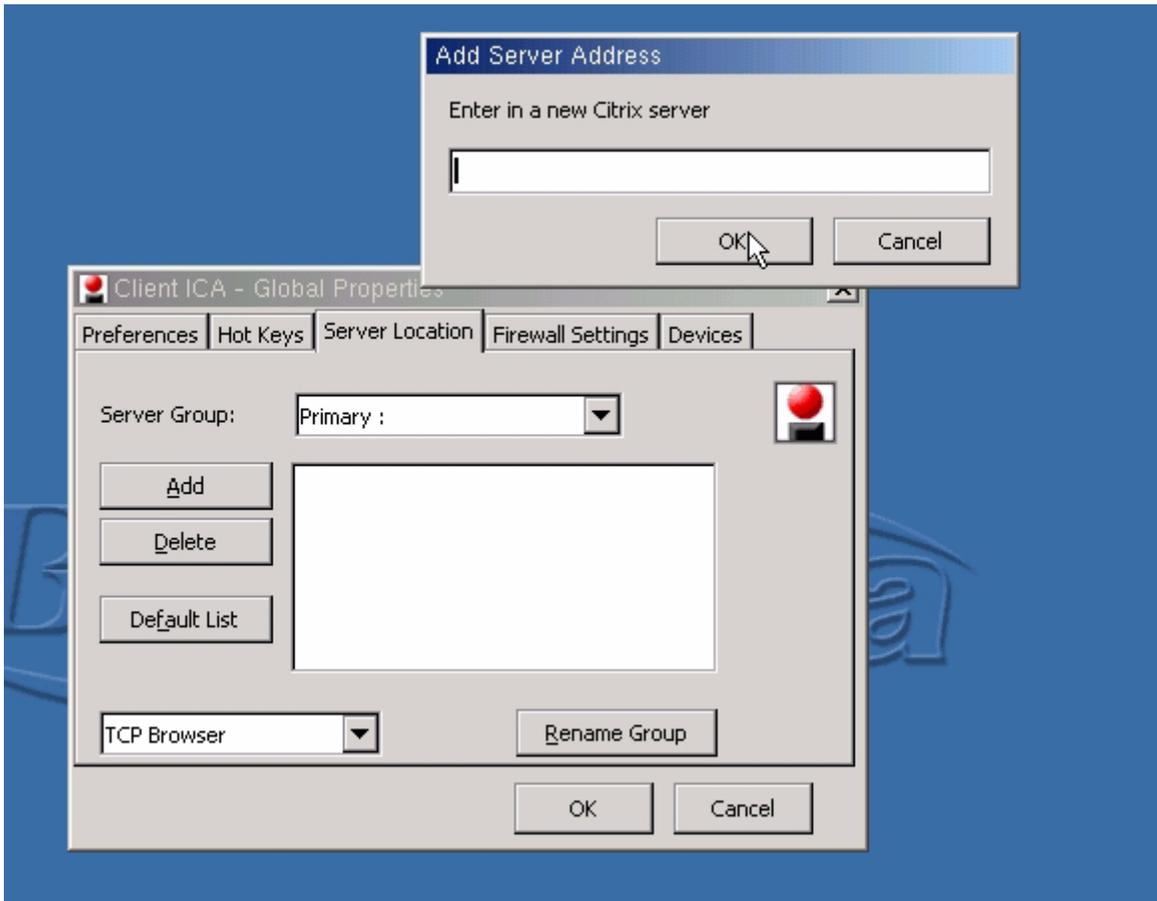


### Hot Keys

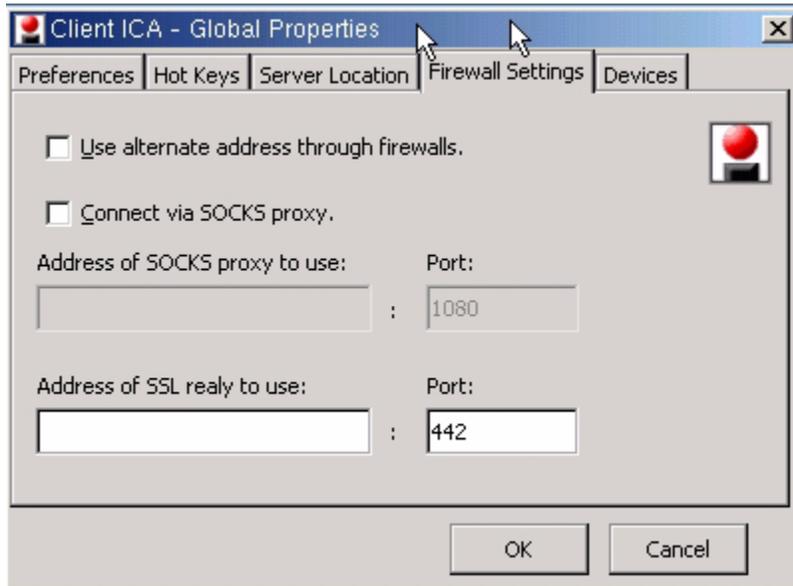


## ICA Server Location

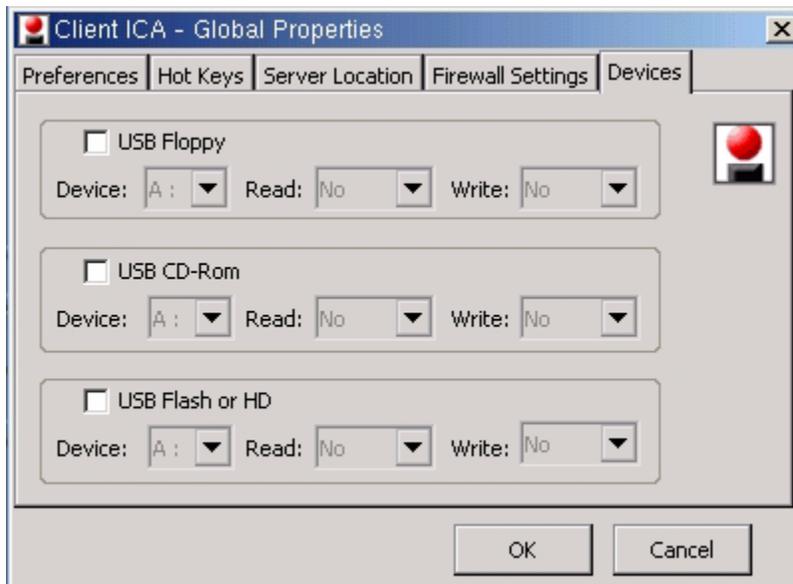
To add a Citrix server select add and enter the server name or IP.



## Firewall Settings



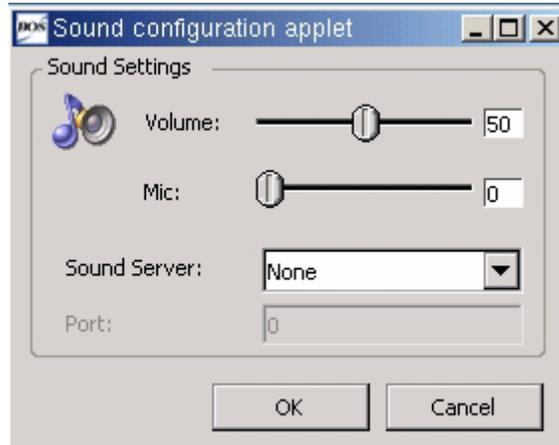
## Devices



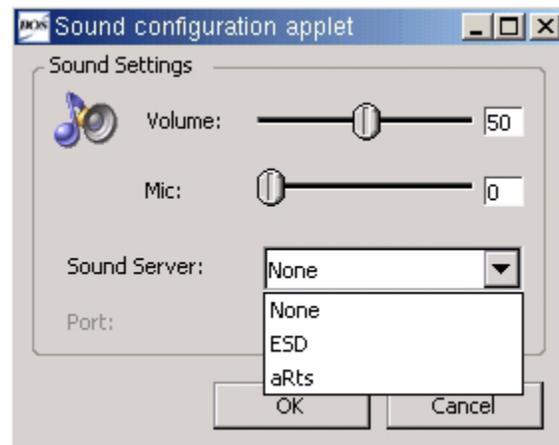
NOTE: USB Floppy and USB Flash are by default set to READ NO and Write NO, this will need to be changed to YES to access this from CITRIX.

## Sound Configuration

The sound server is a daemon which runs on the terminal and receives and plays sound data from a server on the network. We support 2 protocols and allow the user to specify a port.



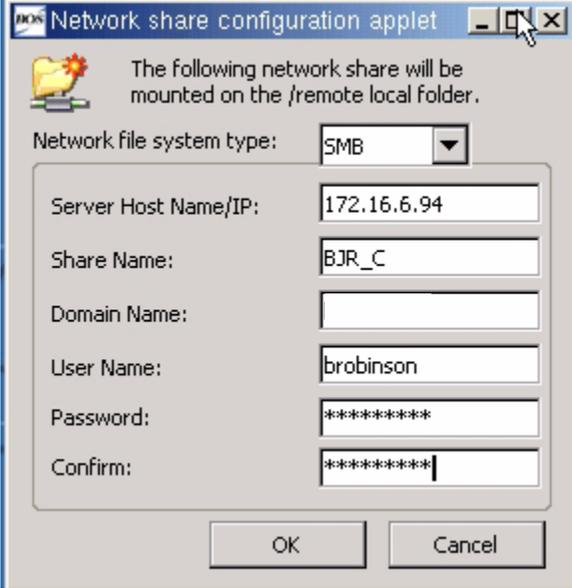
This can be used with SGD or NXclient to have sound with the desktop.



## Network File System

NFS file systems are typically exported by other Linux/Unix servers and SMB file systems are typically exported by Windows based machines. To automatically mount NFS or SMB network file systems select the Network File System type. For NFS file system (Linux File Systems), the User and Password fields are blank. For SMB (Windows File Systems), these fields must be specified. The Server field could contain the IP address of the remote system, while the Share field should contain the share name on that system.

For an SMB share, select the file system type SMB and complete the required host name or IP, share name, domain name, user name and password.

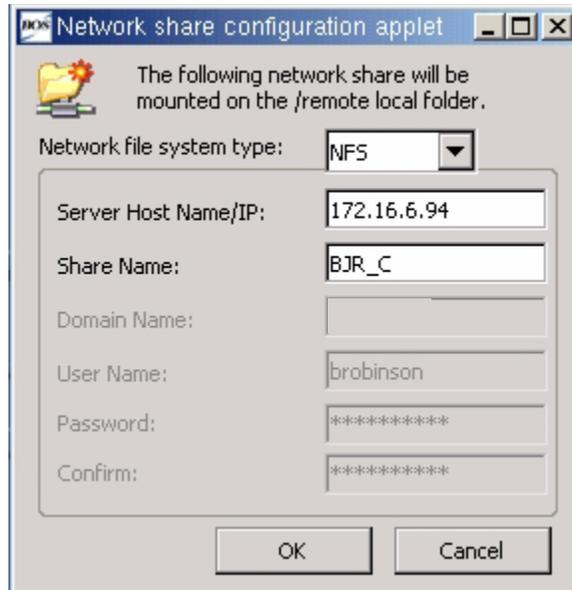


The screenshot shows a window titled "Network share configuration applet" with a DOS icon in the title bar. The window contains a folder icon and the text: "The following network share will be mounted on the /remote local folder." Below this, there are several input fields:

- Network file system type: A dropdown menu set to "SMB".
- Server Host Name/IP: A text box containing "172.16.6.94".
- Share Name: A text box containing "BJR\_C".
- Domain Name: An empty text box.
- User Name: A text box containing "brobinson".
- Password: A text box containing "\*\*\*\*\*".
- Confirm: A text box containing "\*\*\*\*\*".

At the bottom of the window are two buttons: "OK" and "Cancel".

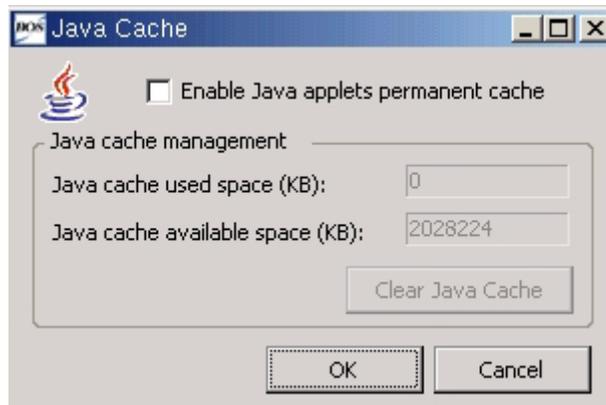
For an NFS share, select the file system type NFS and complete the required host name or IP and share name.



## Java Cache

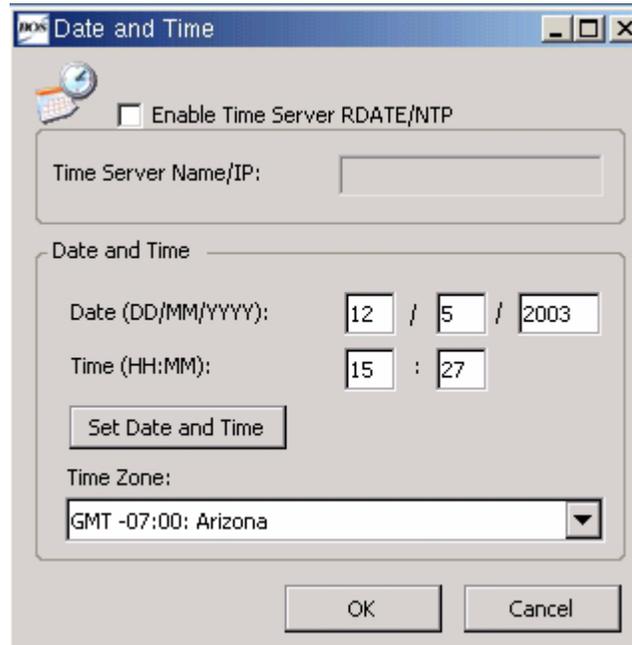
Check Enable Java applets permanent cache to enable Java cache management. To clear the Java Cache, select the Clear Java Cache button.

NOTE: This feature is not supported on all models.

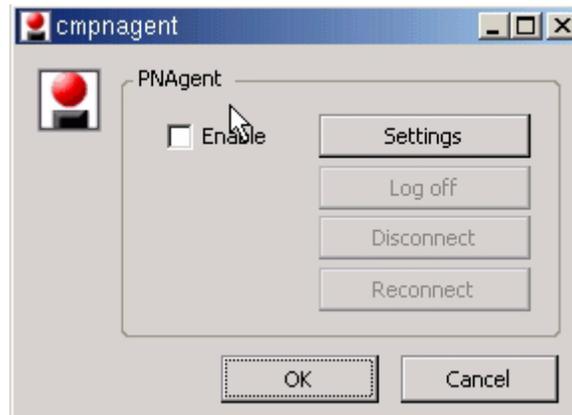


## Date & Time

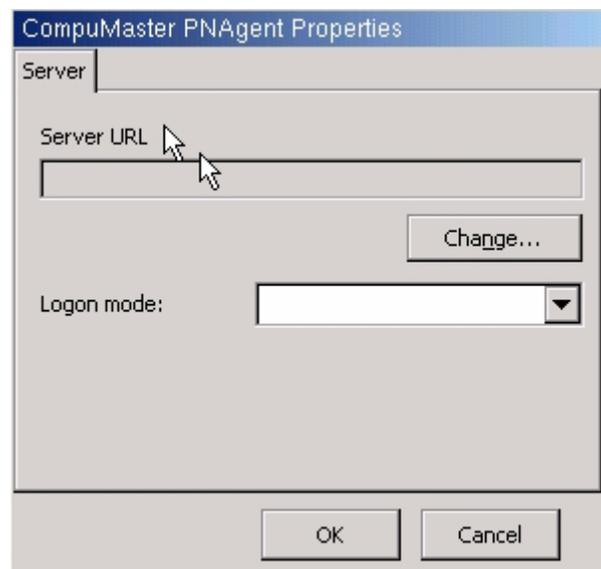
Check Enable Time Server RDATE/NTP and enter the time server full qualified domain name or IP to use the time server or set the date and time manually.



## ICA PNAgent: - Citrix Program Neighborhood Agent

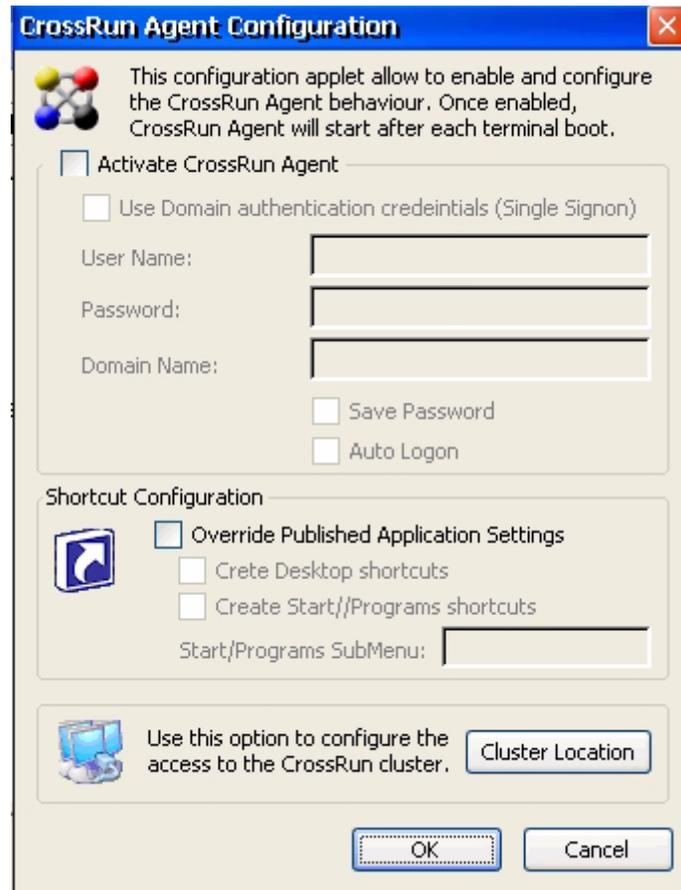


### Settings



## CrossRun Agent Configuration

CrossRun is a server product that requires a small client component installed on each device in order to access the Terminal Server.



The screenshot shows a Windows-style dialog box titled "CrossRun Agent Configuration". It contains the following elements:

- Title Bar:** "CrossRun Agent Configuration" with a close button (X) on the right.
- Introduction:** A small icon of a molecule and a text block: "This configuration applet allow to enable and configure the CrossRun Agent behaviour. Once enabled, CrossRun Agent will start after each terminal boot."
- Activation Section:**
  - Activate CrossRun Agent
  - Use Domain authentication credentials (Single Signon)
  - User Name: [Text Input Field]
  - Password: [Text Input Field]
  - Domain Name: [Text Input Field]
  - Save Password
  - Auto Logon
- Shortcut Configuration Section:**
  - Override Published Application Settings
  - Create Desktop shortcuts
  - Create Start//Programs shortcuts
  - Start/Programs SubMenu: [Text Input Field]
- Cluster Location Section:**
  - Icon of a computer monitor and mouse.
  - Text: "Use this option to configure the access to the CrossRun cluster."
  - Button: "Cluster Location"
- Buttons:** "OK" and "Cancel" buttons at the bottom.

### CrossRun Logon Parameters

This section controls the Logon to the CrossRun Server.

#### Option Description

**User Name** - The user name for accessing the CrossRun Server.

**Password** - The password for accessing the CrossRun Server.

**Save Password** - When checked, this option saves the password such that the user need not enter it again.

**Auto Logon** - When checked, the logon will occur automatically when the CrossRun Agent is started (this option is only valid when the Save Password option is enabled).

## Shortcut Configuration

This section controls how the published applications will be presented to your Desktop and/or Program Menu.

### Option Description

**Create Desktop Shortcuts** - When this option is selected, shortcuts will be created to the published applications on your Desktop. The icons used will be the ones configured for the applications on the CrossRun Server.

**Create Start\Programs Shortcuts** - When this option is selected, shortcuts will be created on the Start menu to the CrossRun published applications in groups as configured on the CrossRun Server.

## CrossRun Server Access Profile

Cluster access configuration

CrossRun Server Access Profile.

Profile Name: [ ]

Access protocol: TCP [Configure...]

Access to CrossRun Single Server

Server Name/IP: [ ]

Access to CrossRun Cluster

Cluster Name: CrossRun

CrossRun Cluster access points:

- crossrun

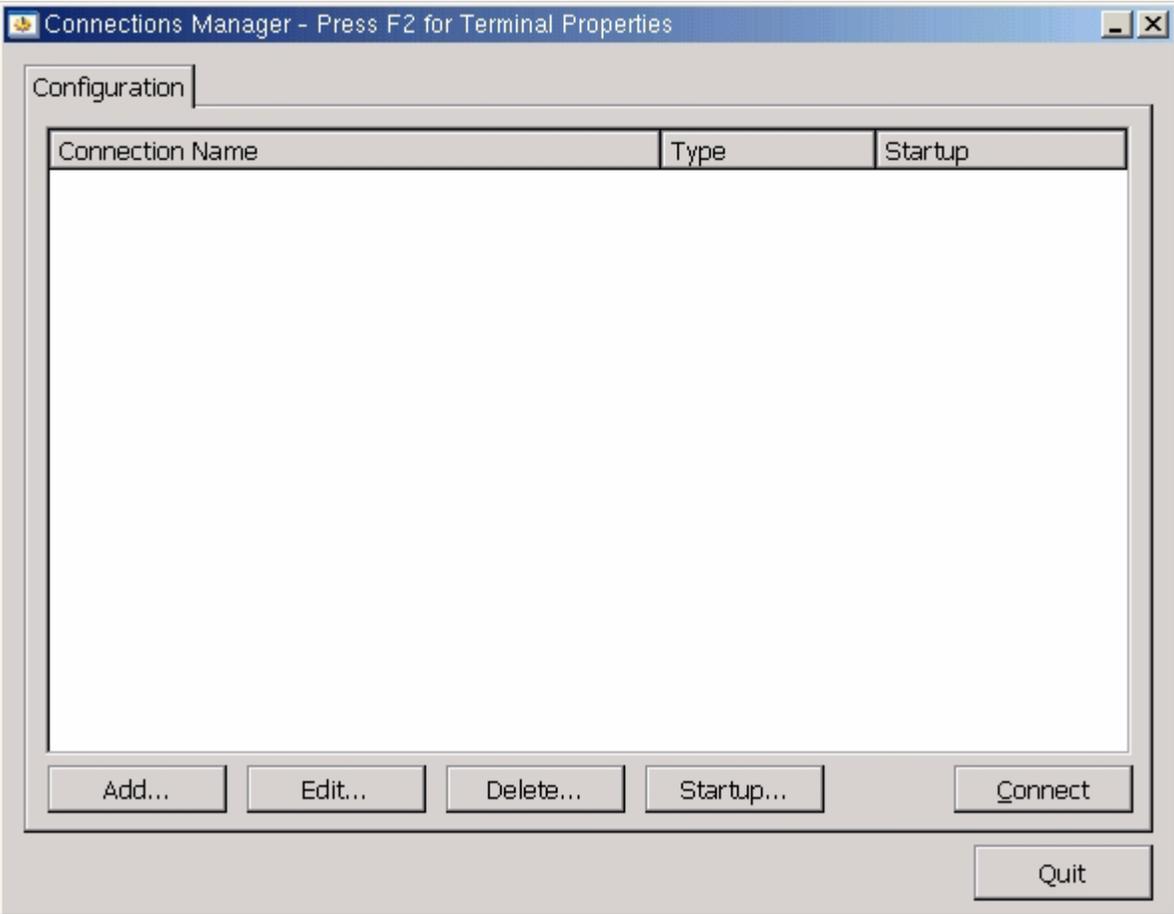
[Add] [Edit] [Delete] [Move Up] [Move Down]

[Save Profile] [Delete Profile] [OK] [Cancel]

The Access Profiles section allows you to define a profile for accessing a CrossRun Server. To Access to CrossRun Server enter the Server Name/IP.

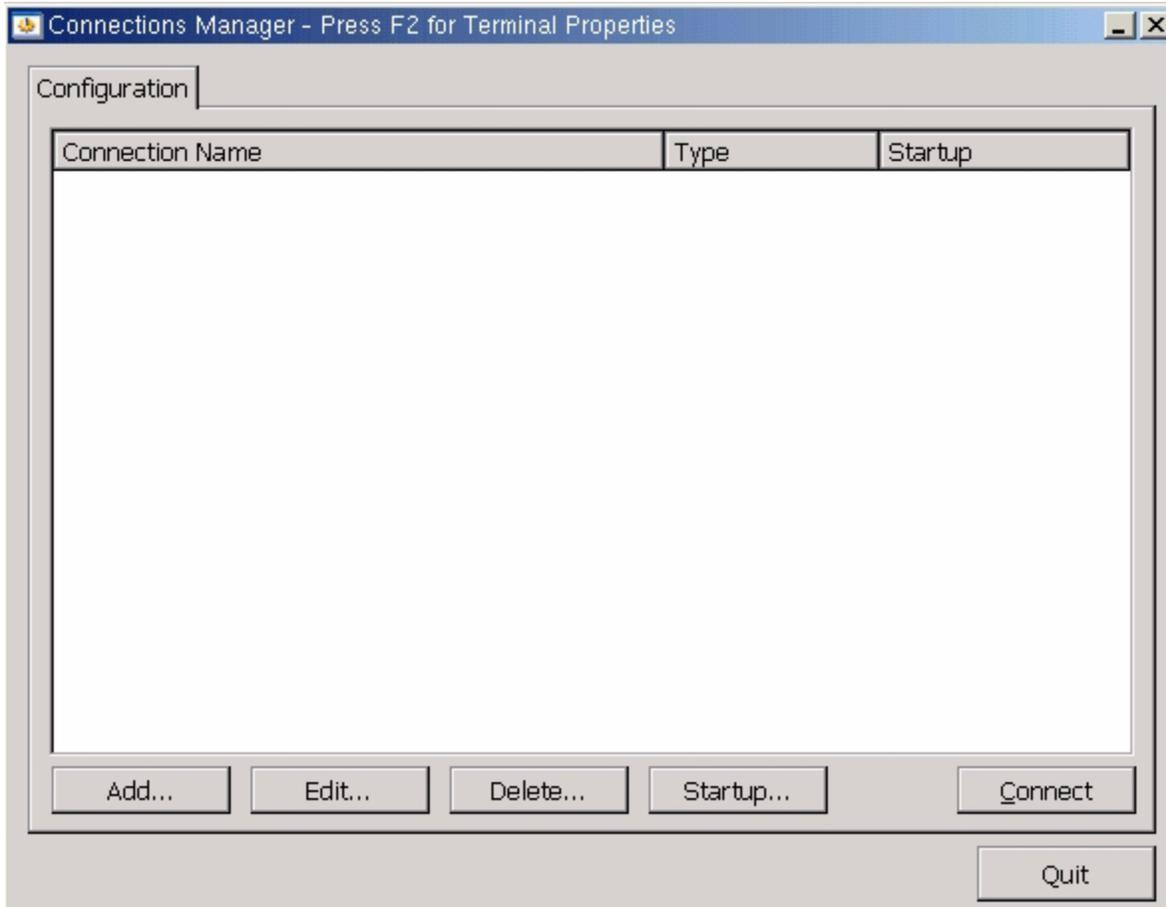
# CONNECTIONS MANAGER

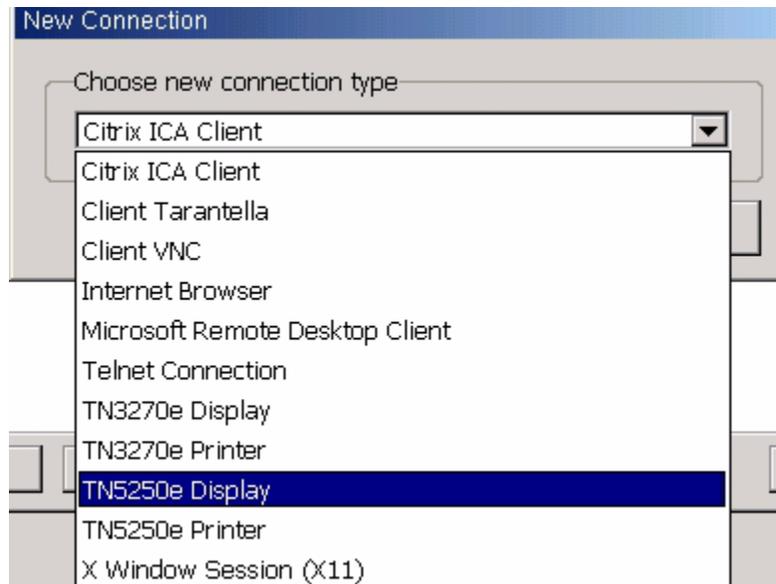
To access the connections manager select Start -> Settings -> Connection Manager.



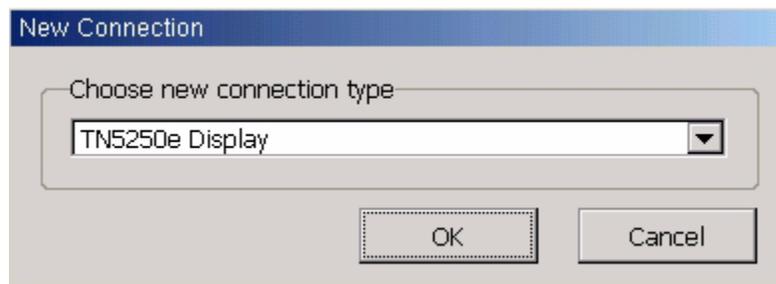
# TN5250e Display

Select Add and then scroll down to select TN5250e Display

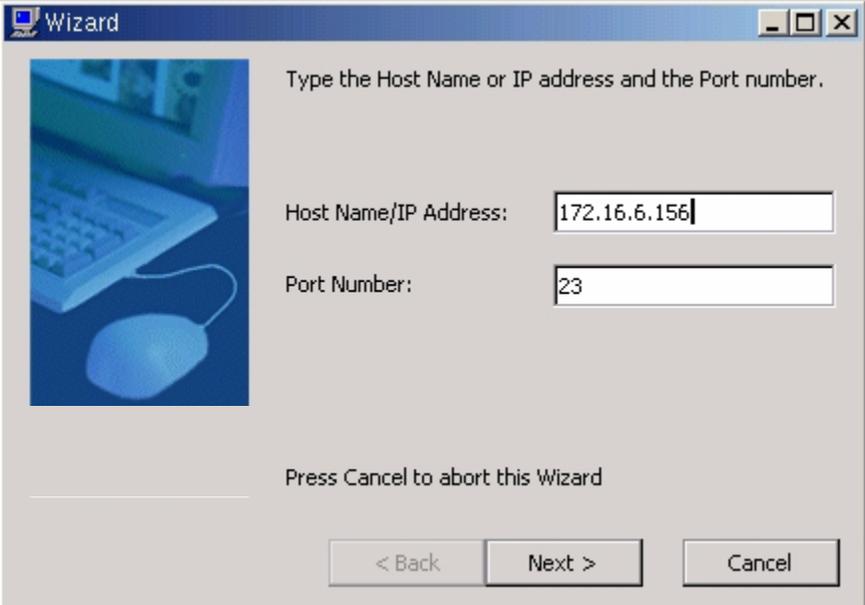




There are several options for the connection type in the drop down list - for the 5250 display session select TN5250e Display.



Enter the Host Name or IP address of the AS/400. Port Number is the default port for telnet. If this is changed, the AS/400 must be configured to accept connections on the non-standard telnet port.



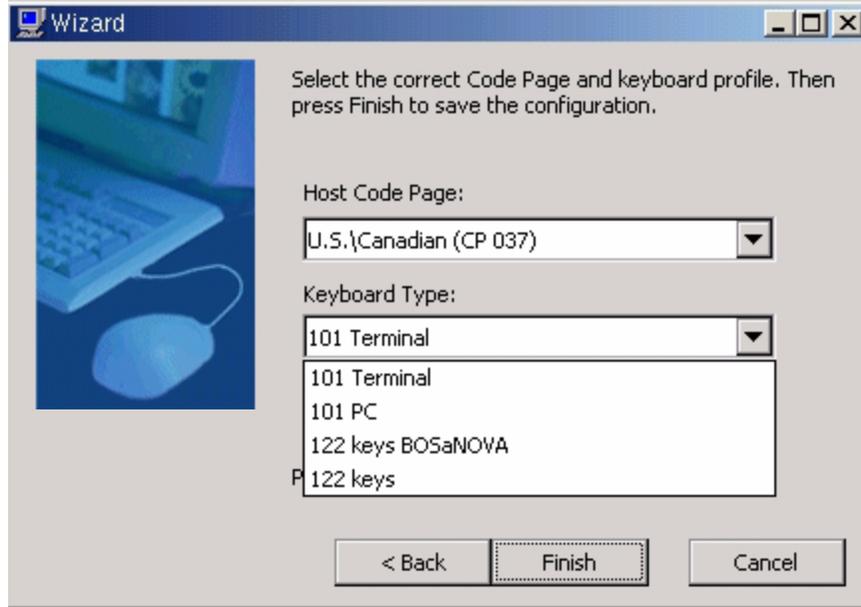
The screenshot shows a Windows-style dialog box titled "Wizard". On the left is a small image of a computer keyboard and mouse. The main text reads: "Type the Host Name or IP address and the Port number." Below this are two input fields: "Host Name/IP Address:" with the value "172.16.6.156" and "Port Number:" with the value "23". At the bottom, there is a line of text: "Press Cancel to abort this Wizard" and three buttons: "< Back", "Next >", and "Cancel".

The connection name is the name of the session on the thin client and the device name is the name of the device description on the AS/400

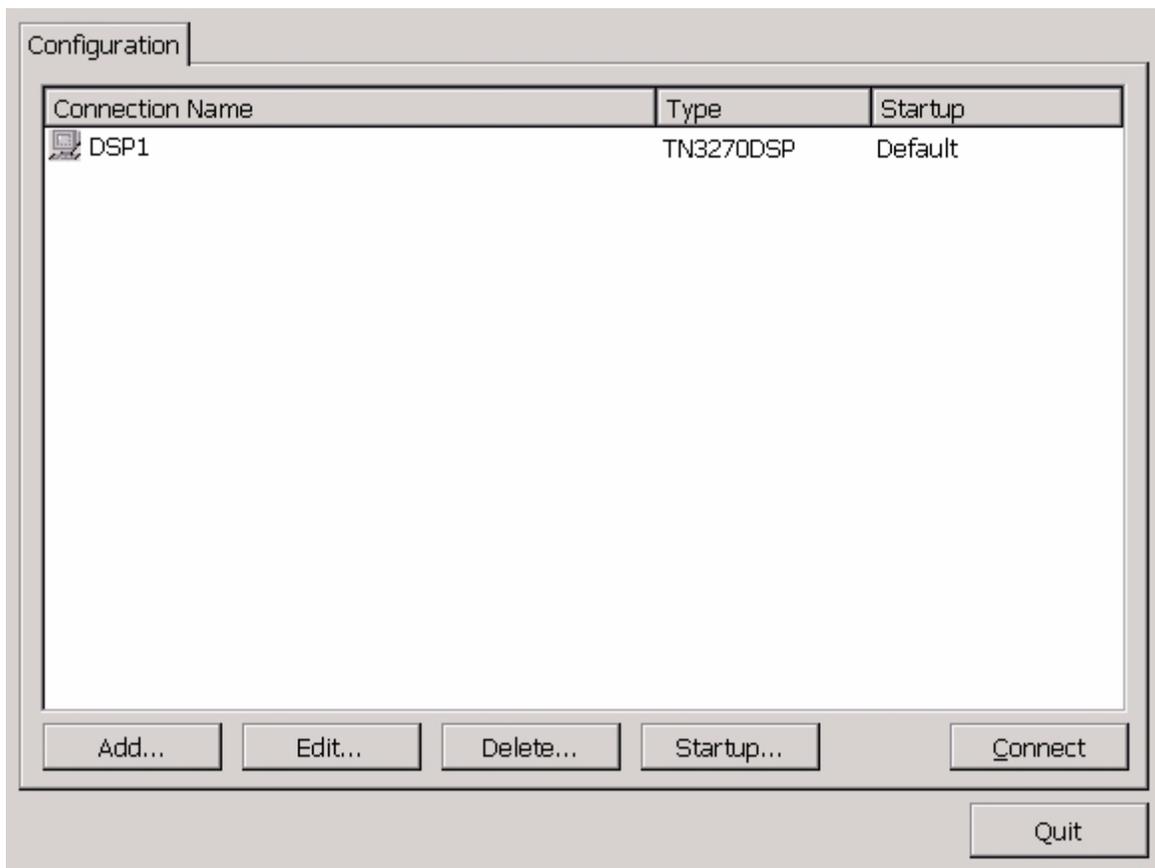


The screenshot shows a second "Wizard" dialog box. It features the same keyboard and mouse icon on the left. The main text reads: "Type the Session description name, type and name of the device. Then press Next." Below this are three input fields: "Connection Name:" with the value "DSP1", "Device Type:" with a dropdown menu showing "3278(9-2 (24x80))", and "Device Name:" with an empty text box. At the bottom, there is a line of text: "Press Cancel to abort this Wizard" and three buttons: "< Back", "Next >", and "Cancel".

The wizard will auto detect the attached keyboard. If a 10ZiG 122 keyboard is attached, it will default to 122 keys BOSaNOVA. If a standard 101/102 keyboard is attached it will default to 101 Terminal (right control = enter). For the enter key to be enter using a 101/102 keyboard, select 101 PC.



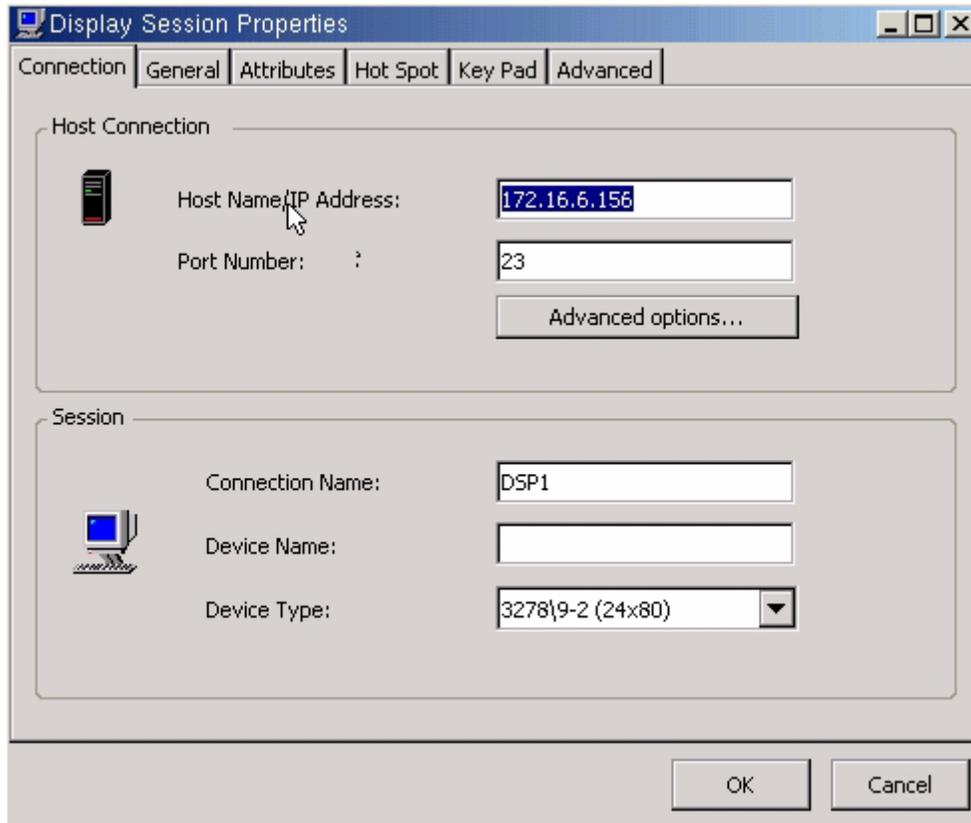
The connection will appear in the connection manager and an ICON will be placed on the desktop for the session



To modify the connection, highlight the connection name and select edit.

## Display Session Properties - Connection Tab

Connection tab allows for changes to the host name/IP address and the port number. Also allows for session changes such as connection name, device name and device type. For advanced options, select Advanced options....



The screenshot shows a Windows-style dialog box titled "Display Session Properties". It has a tabbed interface with the following tabs: "Connection" (selected), "General", "Attributes", "Hot Spot", "Key Pad", and "Advanced".

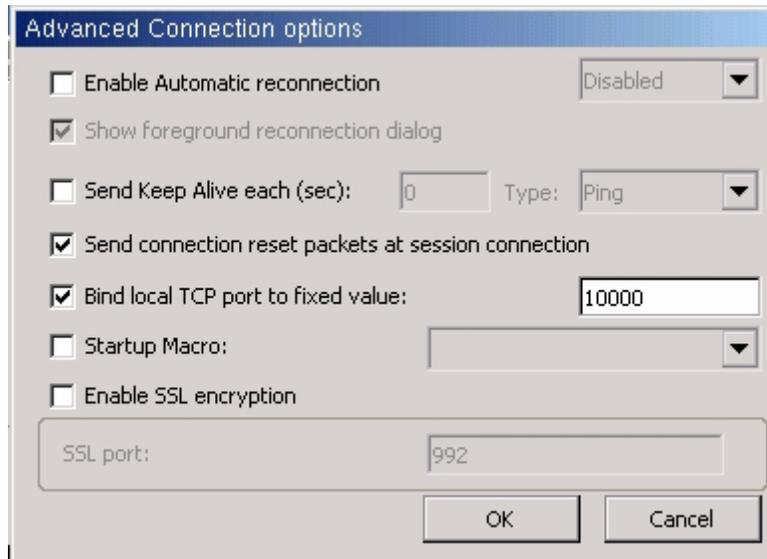
The "Connection" tab is divided into two main sections:

- Host Connection:** This section is represented by a mobile phone icon. It contains:
  - "Host Name/IP Address:" with a text box containing "172.16.6.156".
  - "Port Number:" with a text box containing "23".
  - An "Advanced options..." button.
- Session:** This section is represented by a desktop computer icon. It contains:
  - "Connection Name:" with a text box containing "DSP1".
  - "Device Name:" with an empty text box.
  - "Device Type:" with a dropdown menu showing "3278\9-2 (24x80)".

At the bottom right of the dialog box are "OK" and "Cancel" buttons.

Enable Automatic reconnection - when enabled and the network connection is lost the unit attempts to reconnect the session - this works best when the connection between the unit and the host is local and does not go through a router.

Enabling Keep Alive each (sec) causes the unit to send a ping periodically to the AS/400 thus keeping the connection alive even when the unit is idle. Depending on the router type you may need to change the type to Telnet NOP. The AS/400 only supports Telnet NOP.



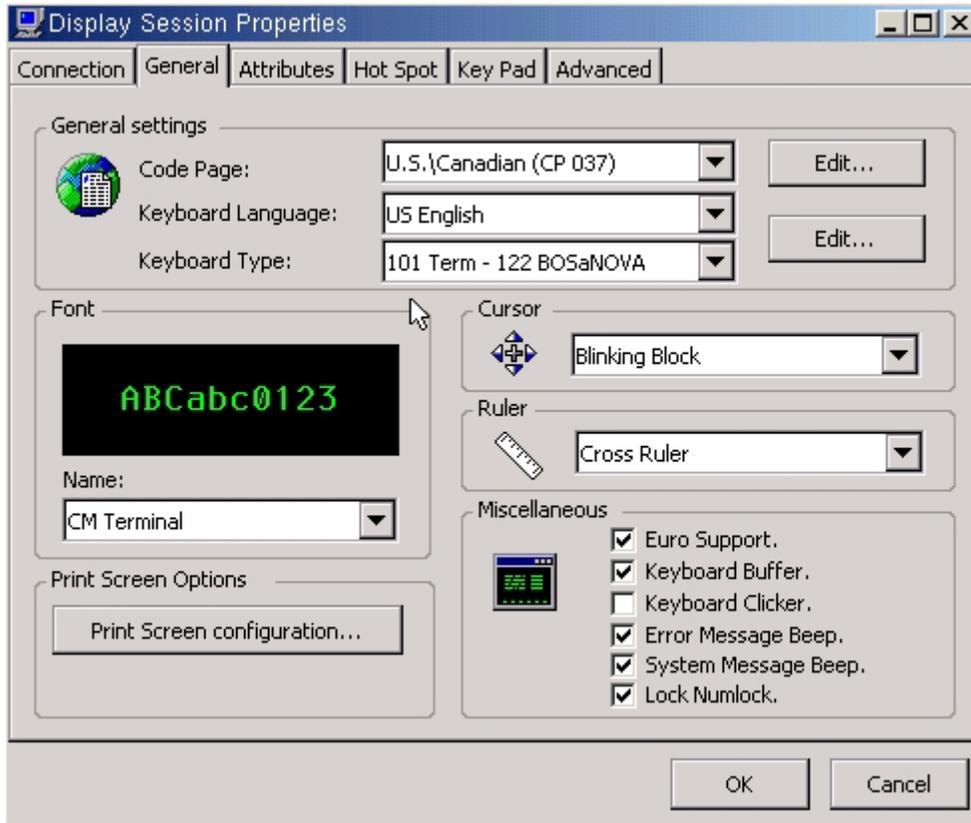
Bind local TCP port to fixed value is the port the telnet session communicates back to the unit. All 5250 session will by default communicate to the AS/400 on port 23.

Startup Macro: Do no check unless directed to do so by technical support.

Enable SSL encryption: Must be configured on the host system.

## Display Session Properties - General Tab

Allows for changes to Code Page, Keyboard Language, Keyboard Type, Cursor options, Ruler options, Print Screen Configuration and other Miscellaneous options.



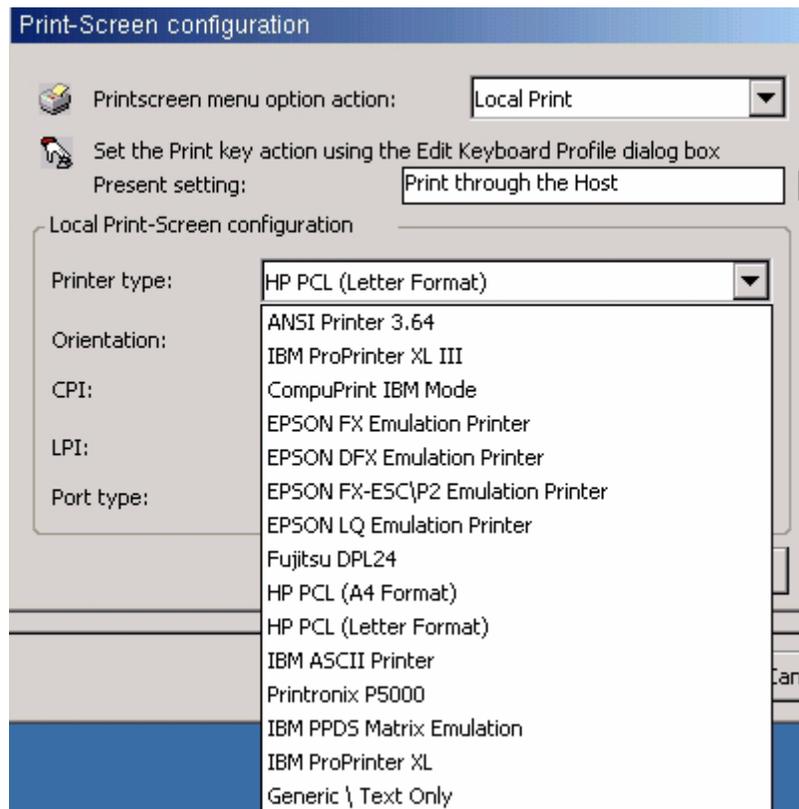
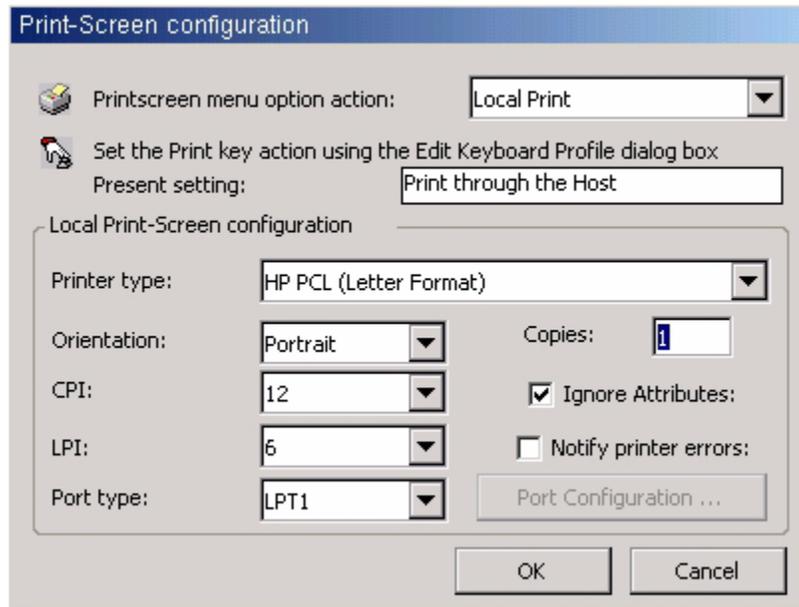
Font options are CM Terminal or Courier New

Cursor options are Blinking Block, Blinking Line, Non-Blinking Block, or Non-Blinking Underline.

Ruler options are Cross Ruler, Horizontal Ruler or Vertical Ruler.

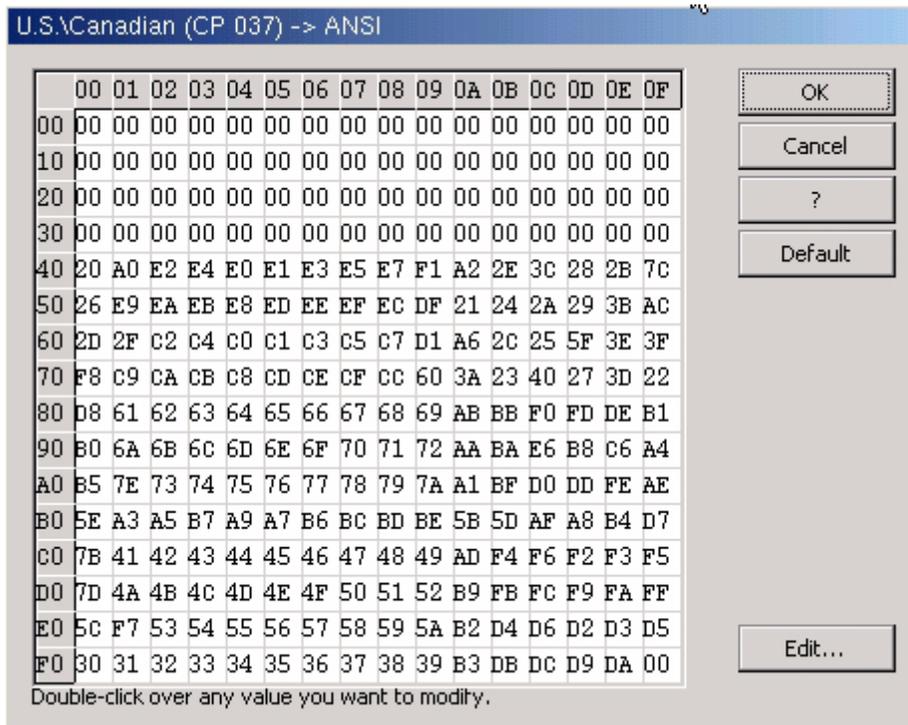
Miscellaneous options can be turned on and off by checking or unchecking associated boxes.

Printscreen menu option action determines if the print screen key can be set to Local Print, Print through the Host or Function Disabled.



Printer type is limited to built in drivers, select the closest match. If in doubt, try Generic/Text Only or use Host Print Transform.

To edit the code page select edit to the right of Code Page.



Code page is the traditional IBM term used for a specific character encoding table: a mapping in which a sequence of bits, usually a single octet representing integer values 0 through 255, is associated with a specific character.

5250/3270 communication is encoded using EBCDIC. The code page is a lookup table which converts EBCDIC to ASCII to display and/or print the data.

For printer sessions, sometimes the AS400 applications will send special EBCDIC characters to control the printer. (i.e. - specifically for barcodes). In this case it may be necessary to modify the transcode table to select the proper ASCII code required by the printer.

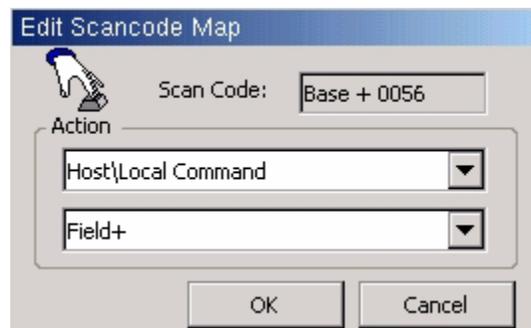
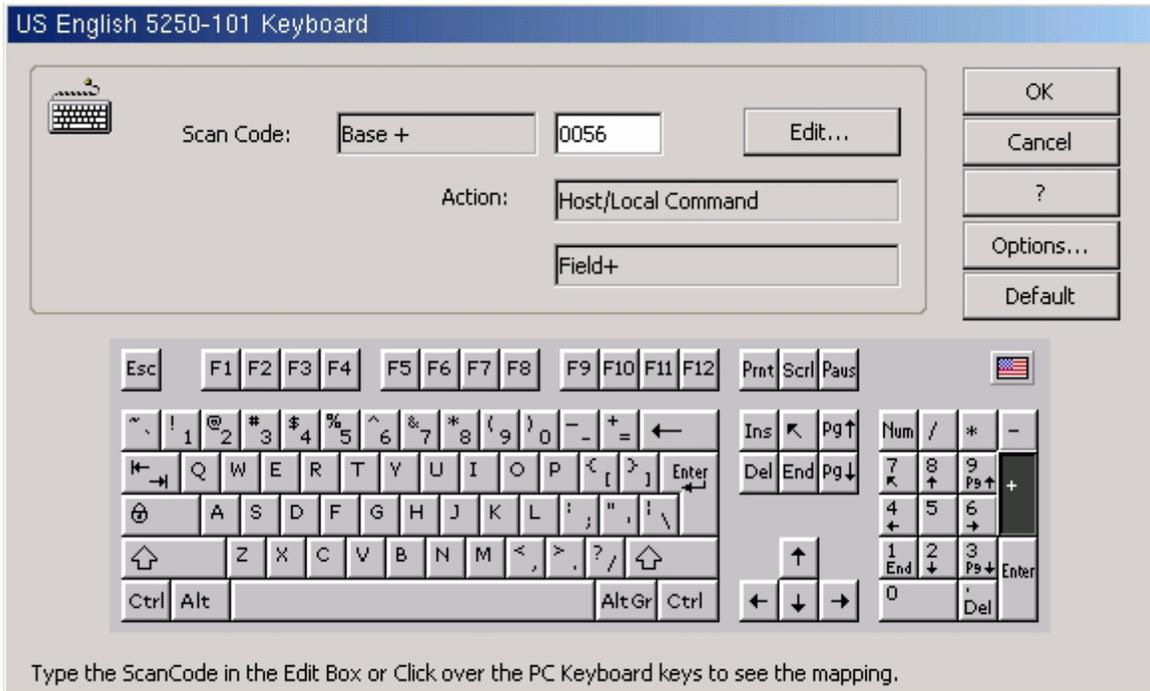
For instance an application may send an EBCDIC 'B0' as the start barcode command. By default this is mapped to an ASCII 0x5e - '^'. Sometimes the barcode printer will require an ASCII 0x24 - '\$'. In this case you can edit the transcode table entry for EBCDIC 'B0' and change it from 0x5e to 0x24.

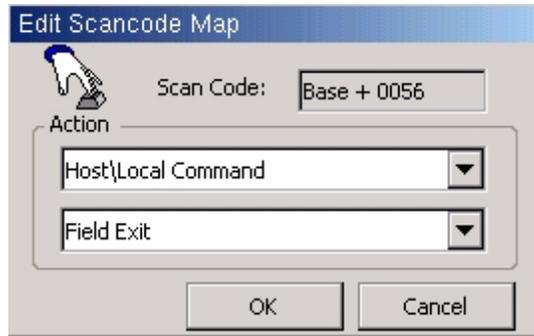
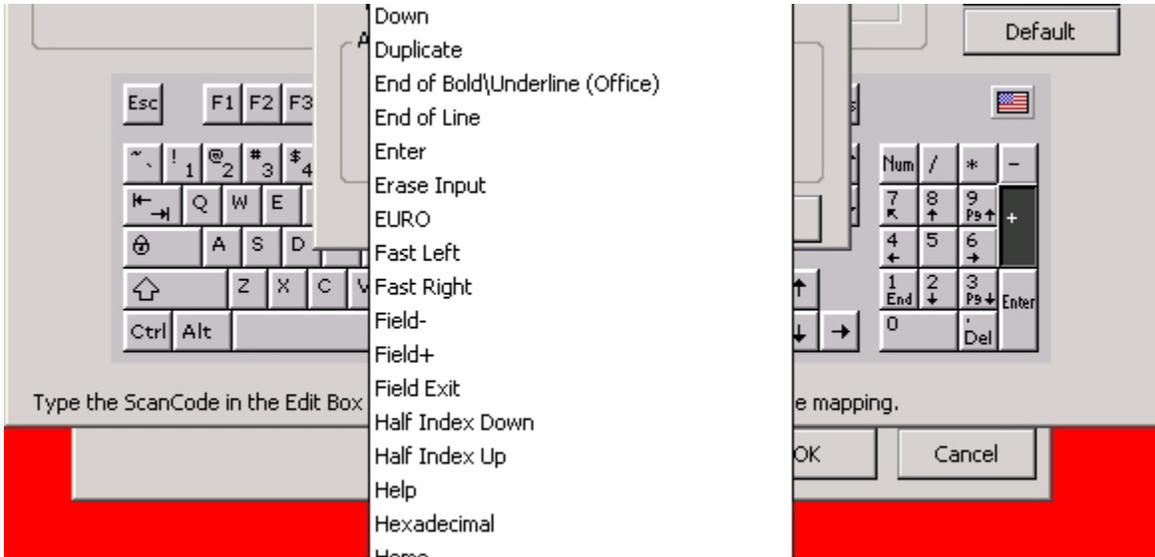
When editing the transcode table the vertical rows are the MSB of the EBCDIC code, while the horizontal cols are the LSB of the EBCDIC code. So for EBCDIC 0xB0, go to the B0 row and the 00 column.

## Remapping the Keyboard

Select Edit to the right of the keyboard type to edit the keyboard.

To modify a key, select the key with the mouse. Action will change accordingly. Select Edit and then change the action to the desired command.





US English 5250-101 Keyboard

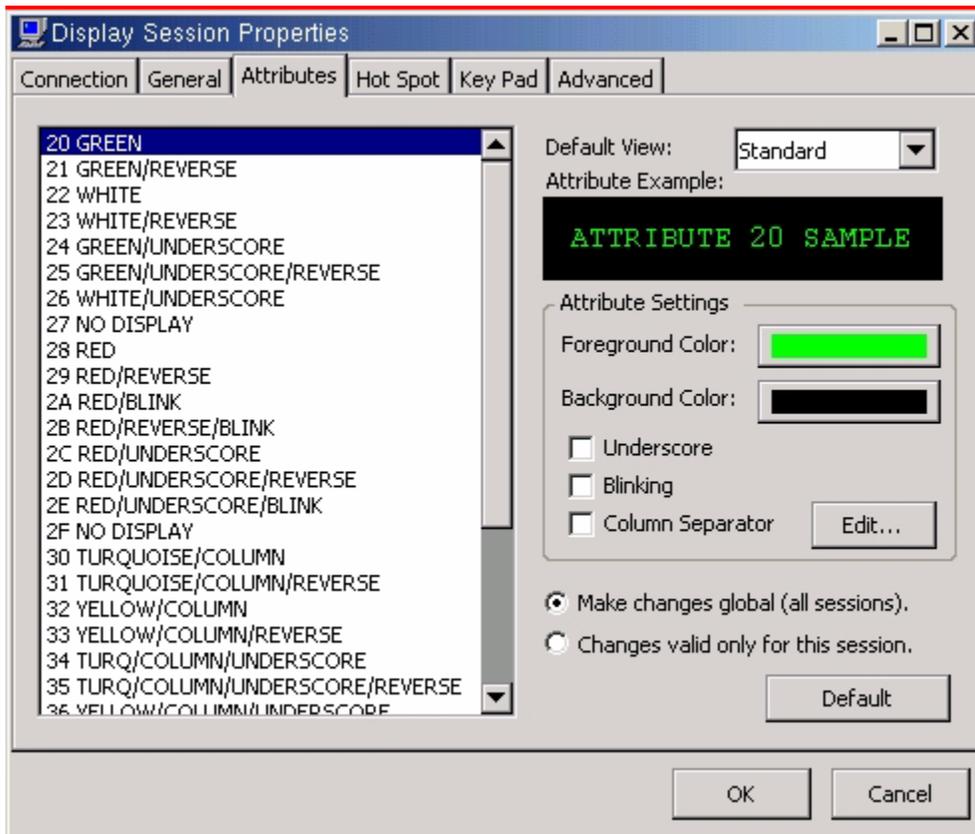
 Scan Code:

Action:

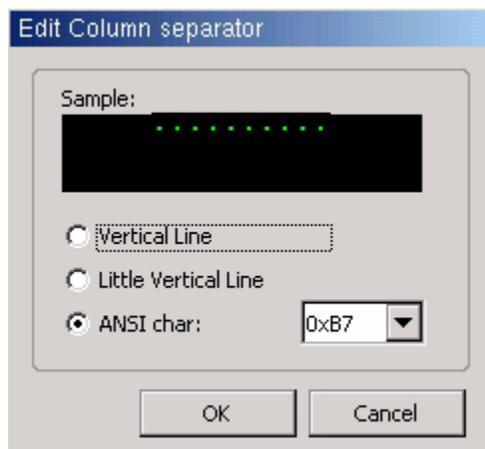


Type the ScanCode in the Edit Box or Click over the PC Keyboard keys to see the mapping.

## Display Session Properties - Attributes Tab

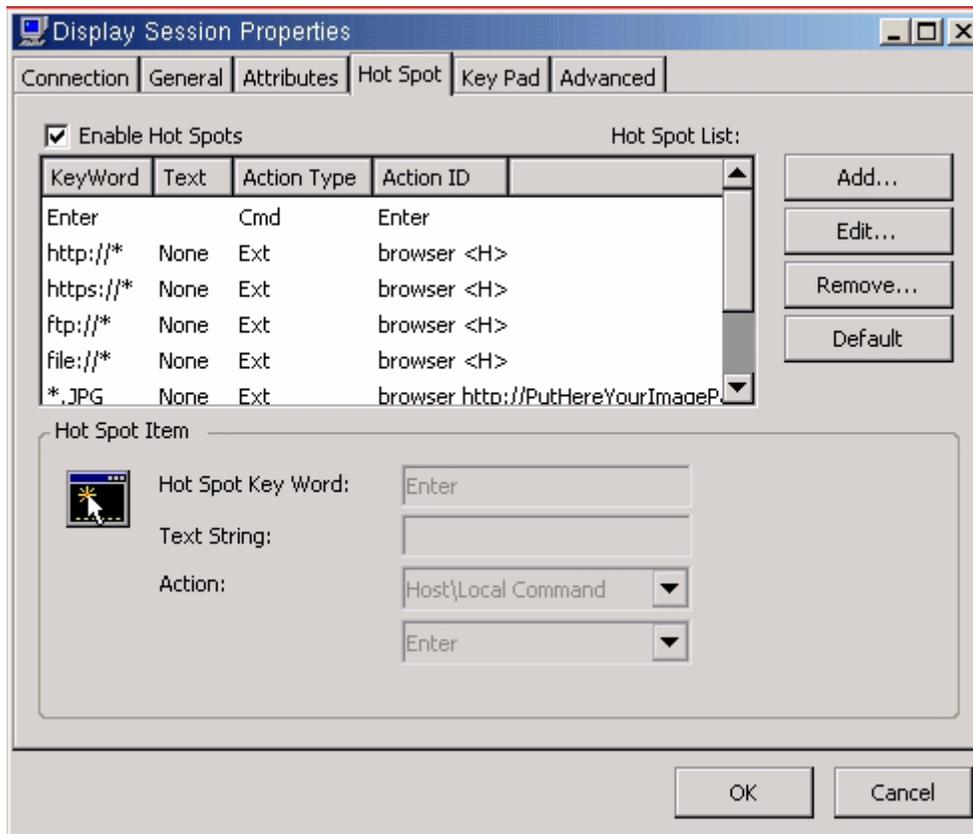


To change the column separator character select the Edit option to the right of the Column Separator.



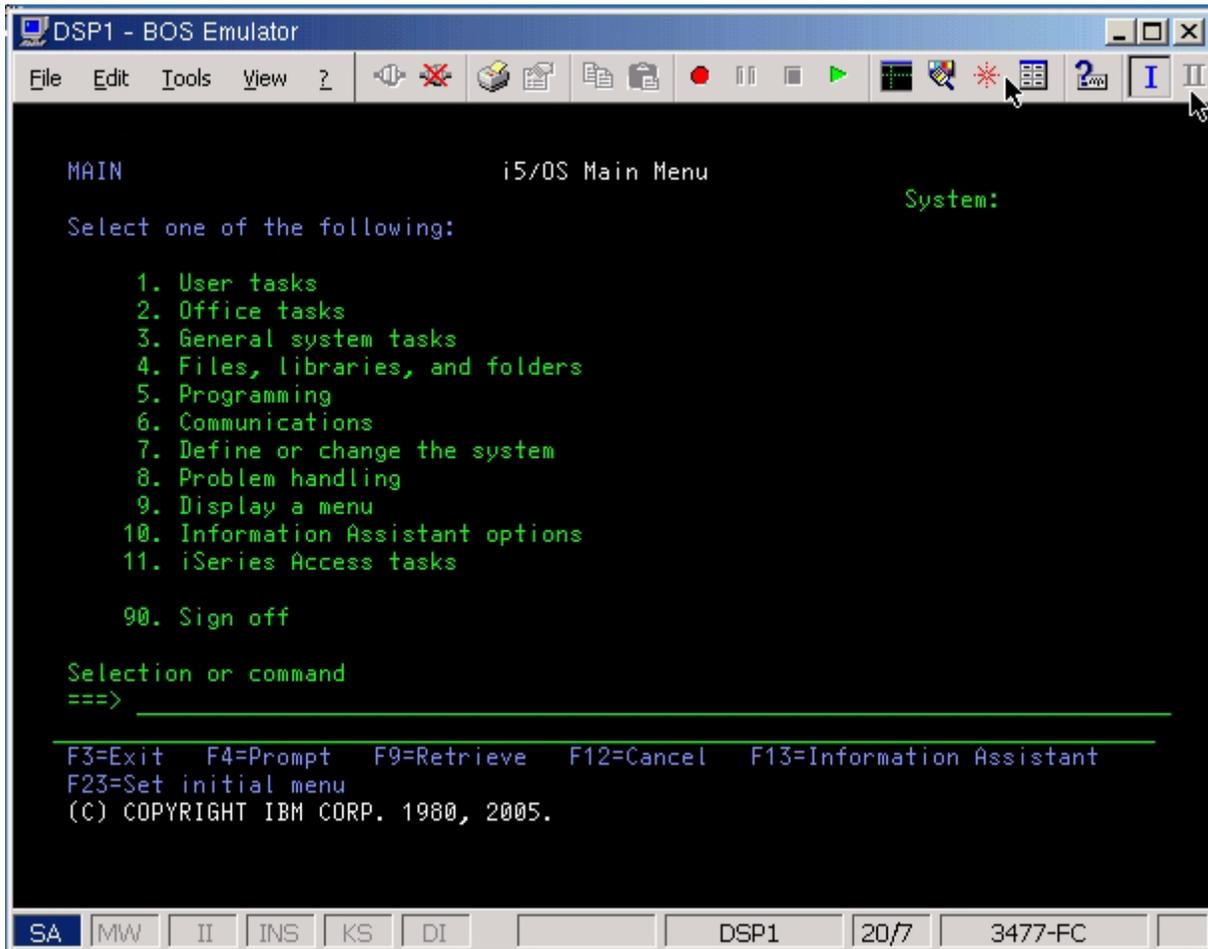
## Display Session Properties - Hot Spot Tab

This option allows you to Add, Edit or Remove Hot spots.



**Example** of hot spot designed to run a macro that signs the user off of the host:

Record a macro by selecting the red circular ICON. Type the commands for the macro and save it. For this example a macro is recorded that types signoff and selects enter. Macro name is saved as signoff.

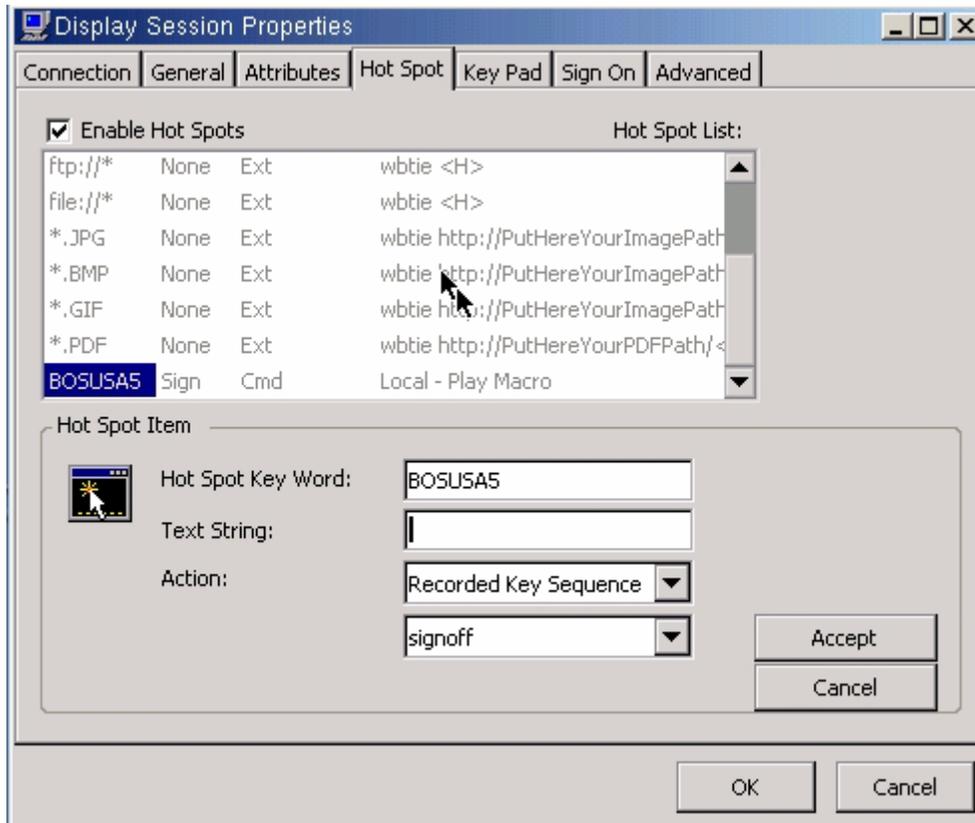


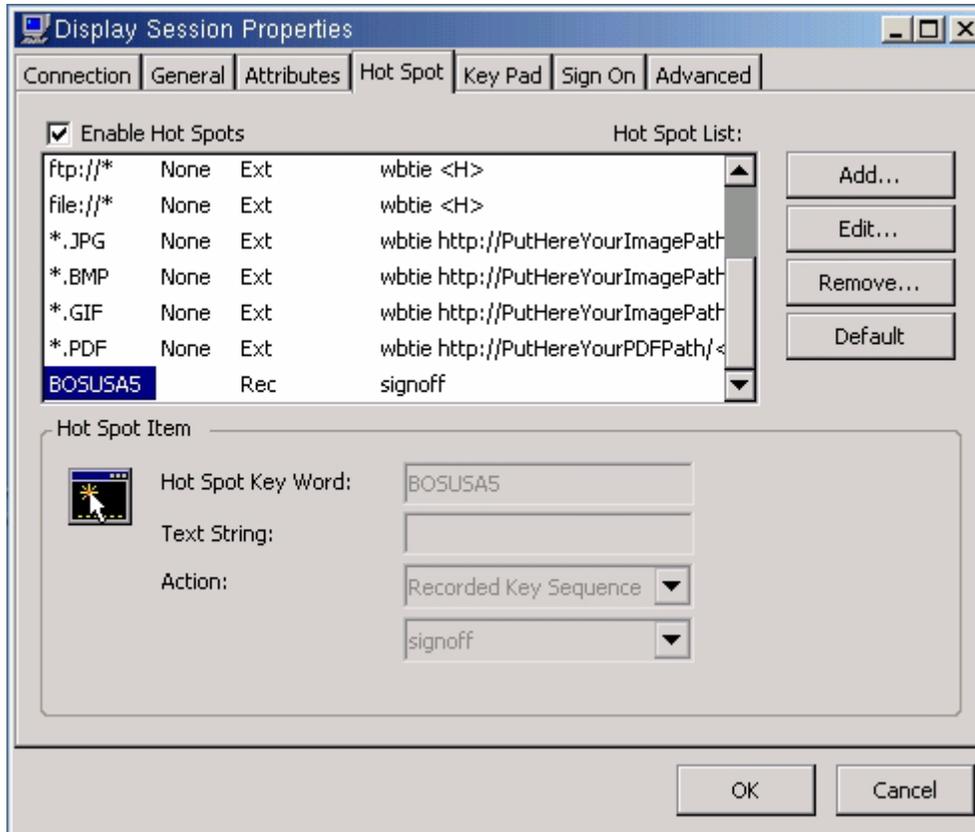
Hot Spot Key Word is BOSUSA5 - the system name that is displayed in the upper right corner of the display.

Text String is left blank.

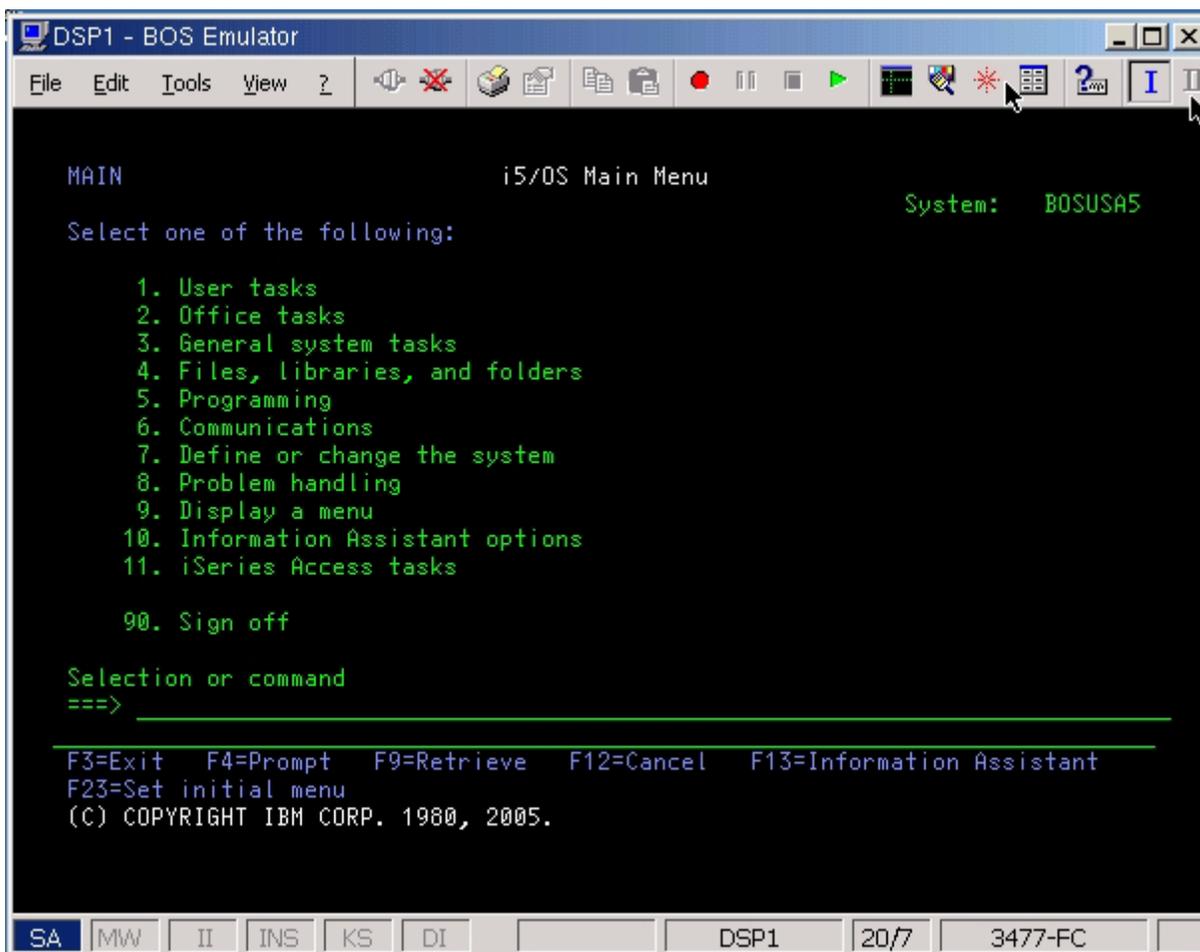
Selected Action is Recorded Key Sequence.

Action is the name of the created Macro



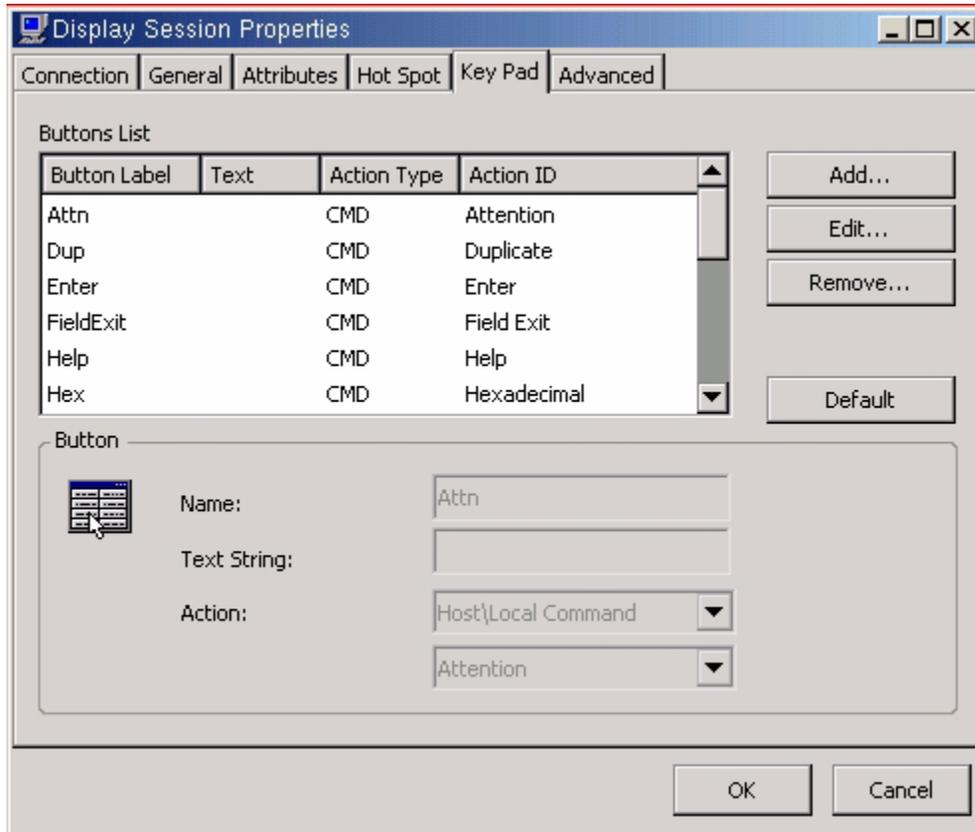


When signed on to the host, double click on BOSUSA5 in the upper right hand of the screen and the macro named signoff will run.

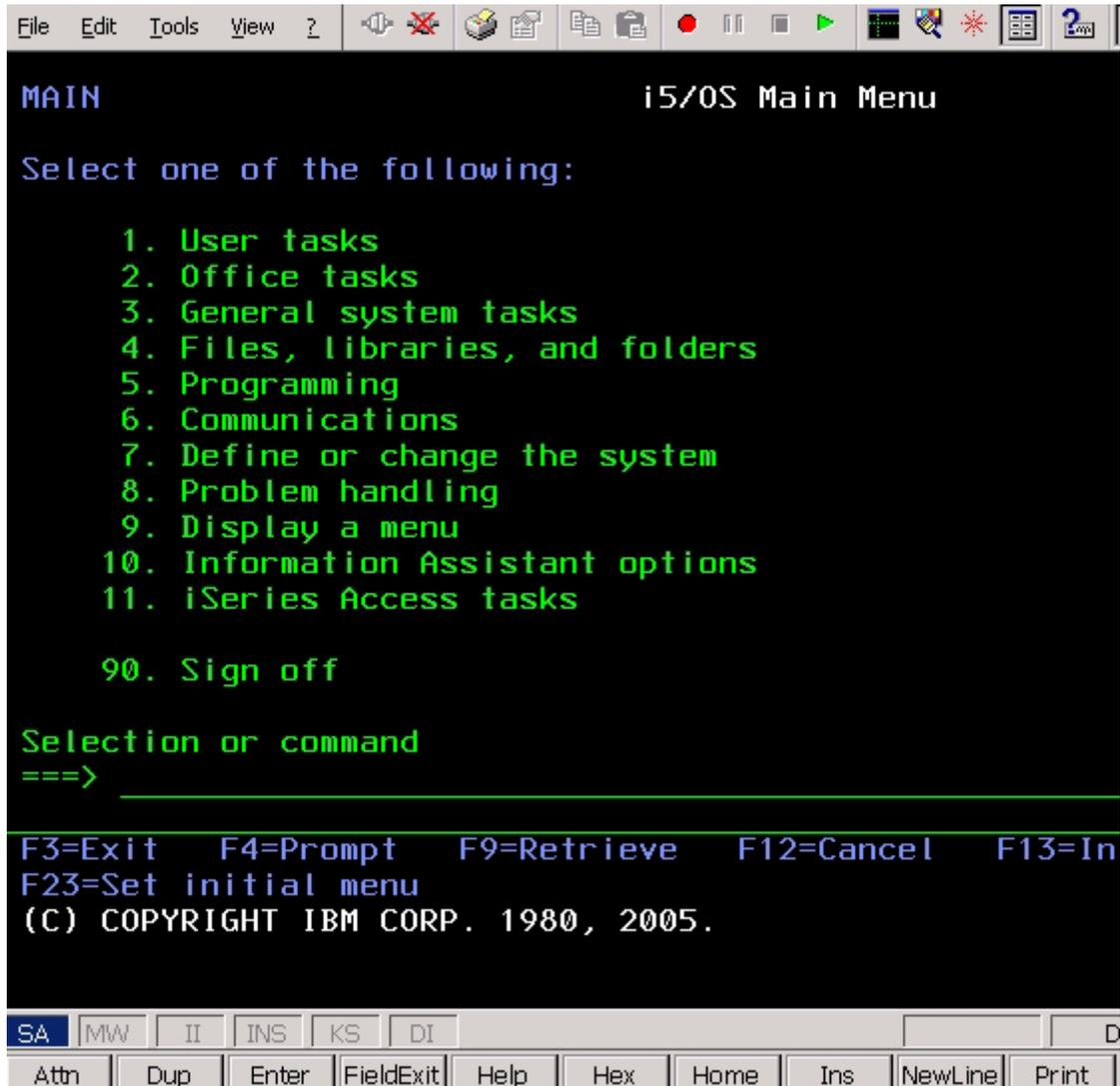


## Display Session Properties - Keypad Tab

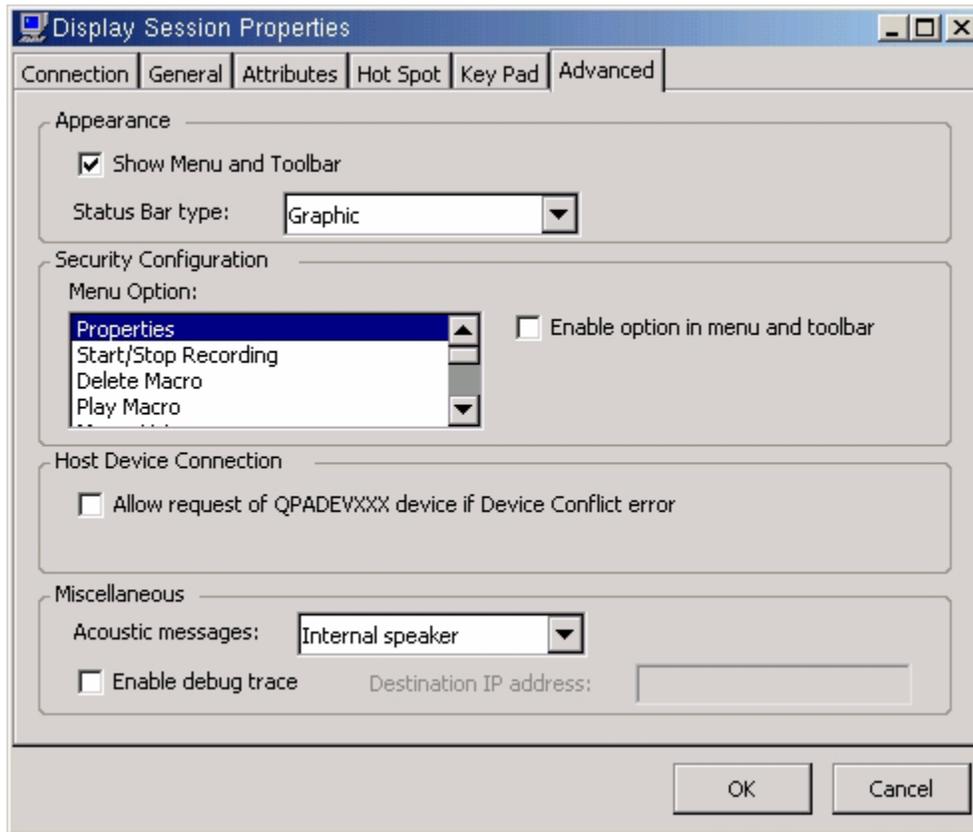
This option allows to change the options on the keypad that can be displayed in a 5250 session. You can Add, Edit or Remove commands on the keypad buttons.



Display Keyboard Pad displays at the bottom of the 5250 screen:



## Display Session Properties - Advanced Tab



Appearance - option allows to show menu and toolbar or hide it. Use the drop down Status Bar type: to change the status bar.

For a 5250 session that looks more like a terminal session, uncheck "Show Menu and Toolbar" and select "Classic" as the Status Bar type.

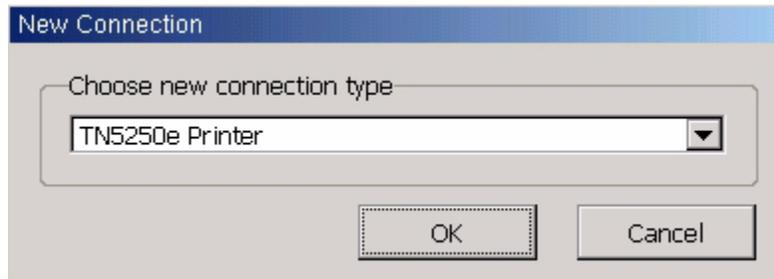
Security Configuration - option allows to enable or disable specific functions on the toolbar.

Host Device Connection - check to allow the use of a default host name if there is a device conflict error.

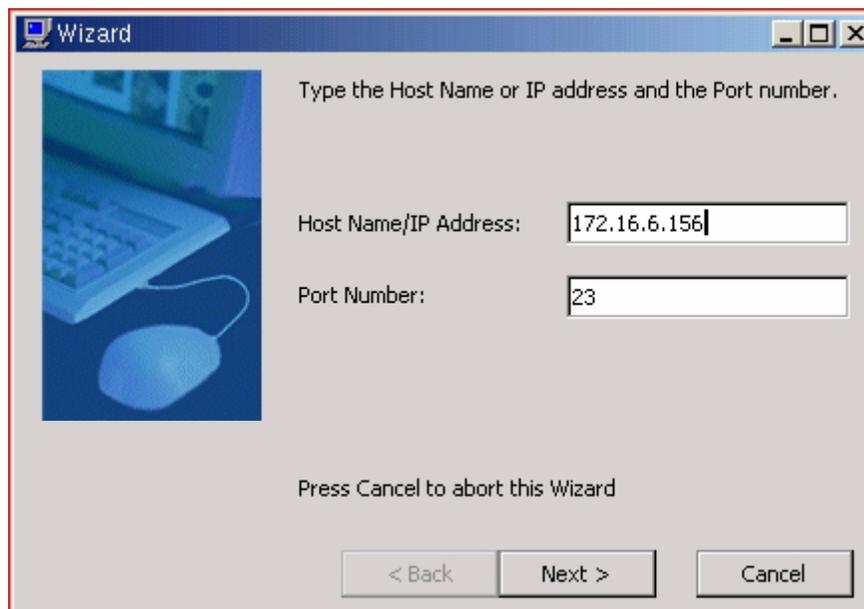
Miscellaneous - do not change any of these options unless instructed to do so by a BOSaNOVA technical support engineer.

# TN5250e Printer

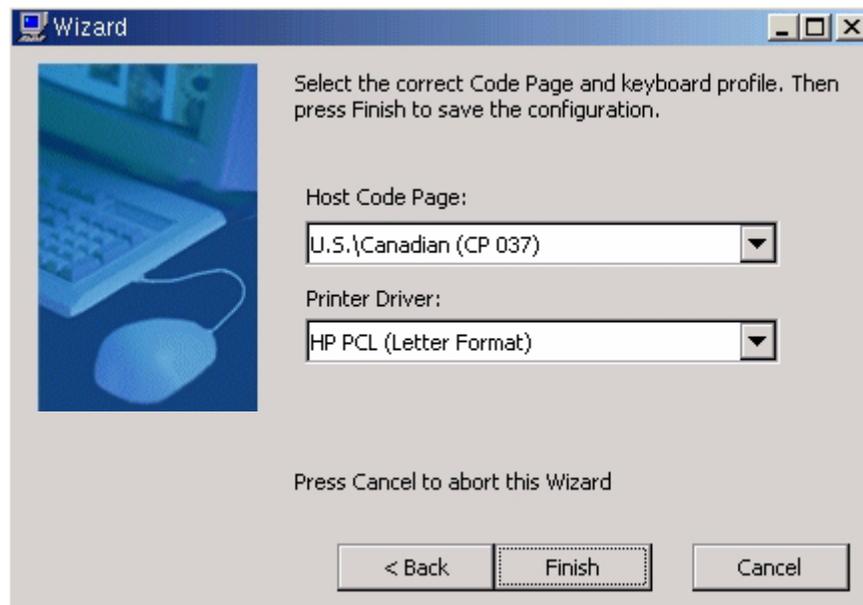
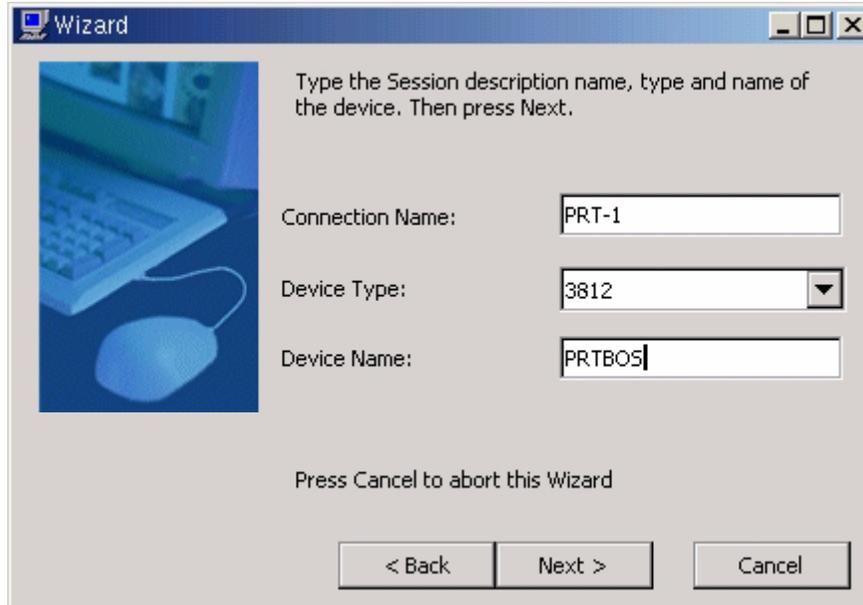
To create a TN5250e printer session select add TN5250e printer and run through the wizard.



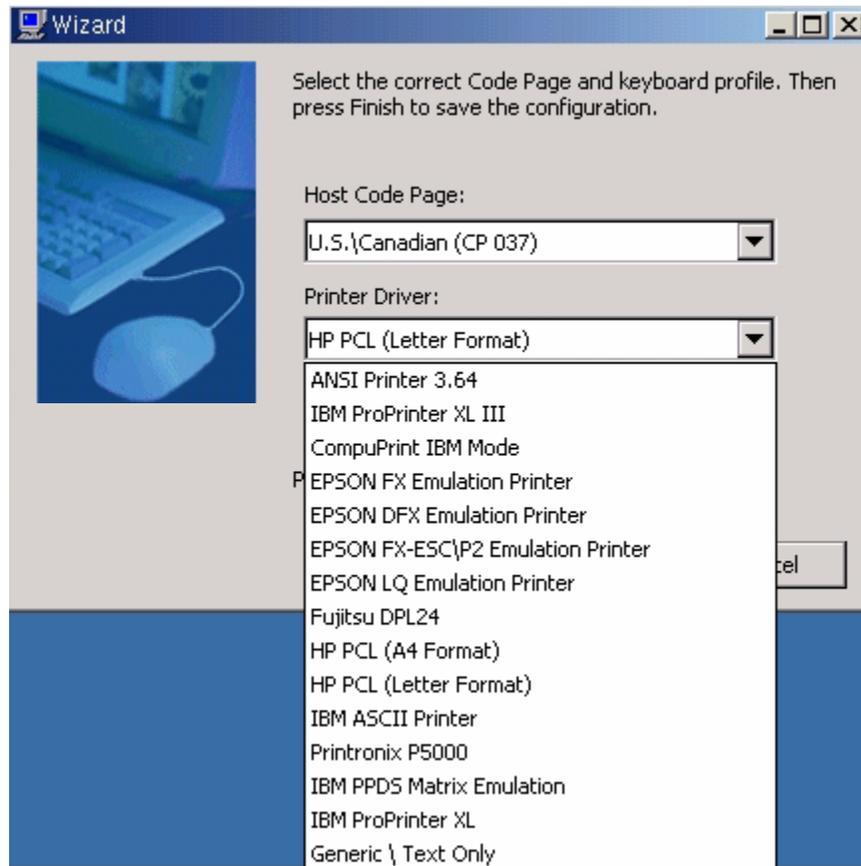
Enter the Host Name or IP of the host and the default port should be left at 23.



Enter the connection name - the name to be associated with the printer session ICON and the name displayed in the connection manager. Enter the Device Name which will be the printer name on the host when created.

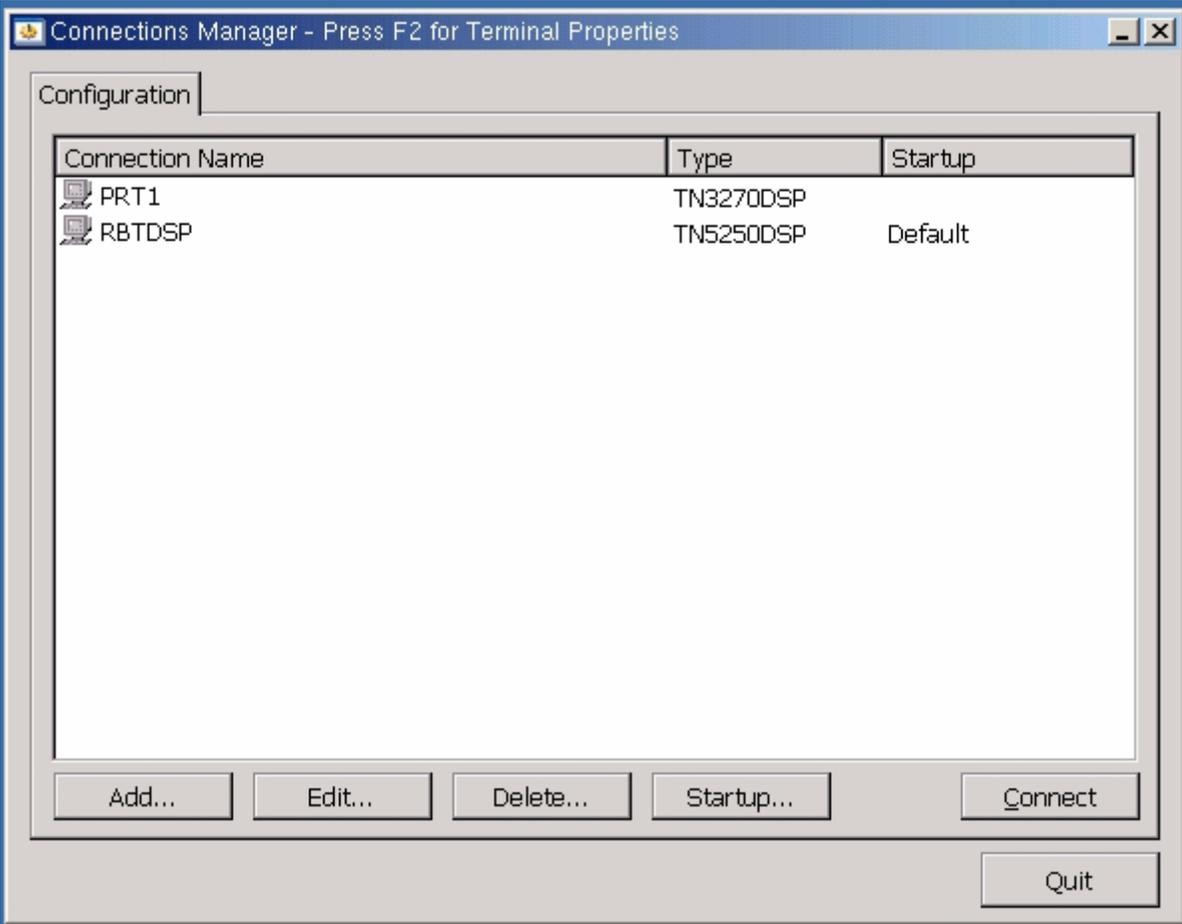


Select the printer driver closest related to the attached printer.

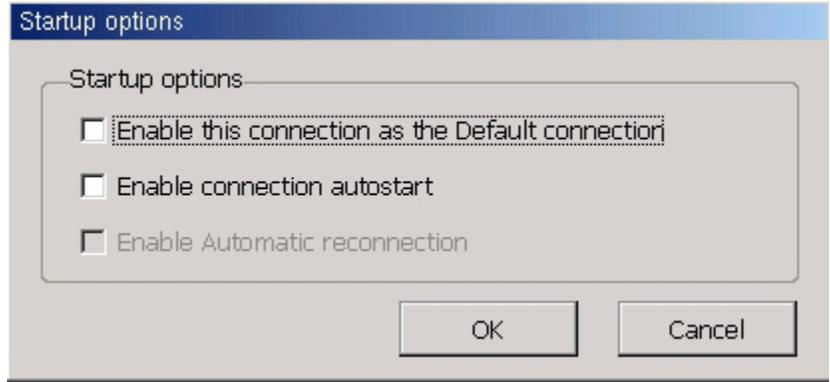


If unsure of the printer driver, try Generic\Text Only and/or use Host Print Transform in the Advanced tab.

Upon completion of the wizard an ICON will be placed on the desktop and the printer session can now be found in the Connections Manager window.



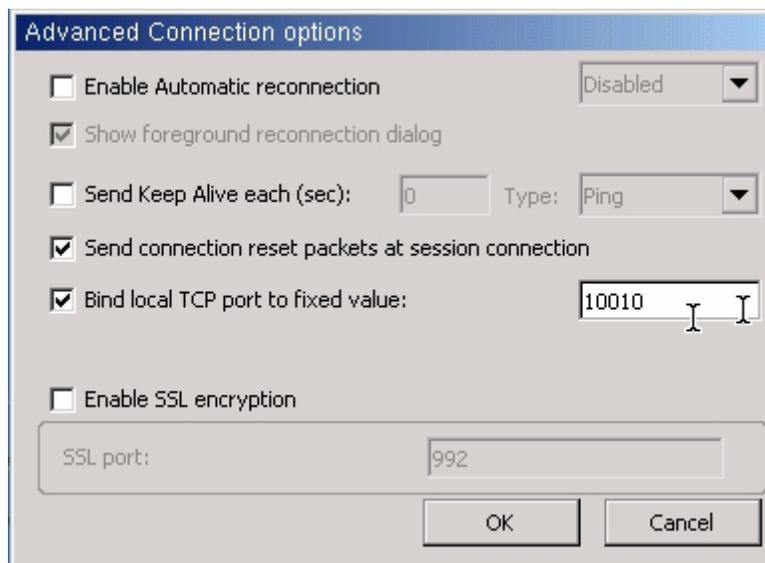
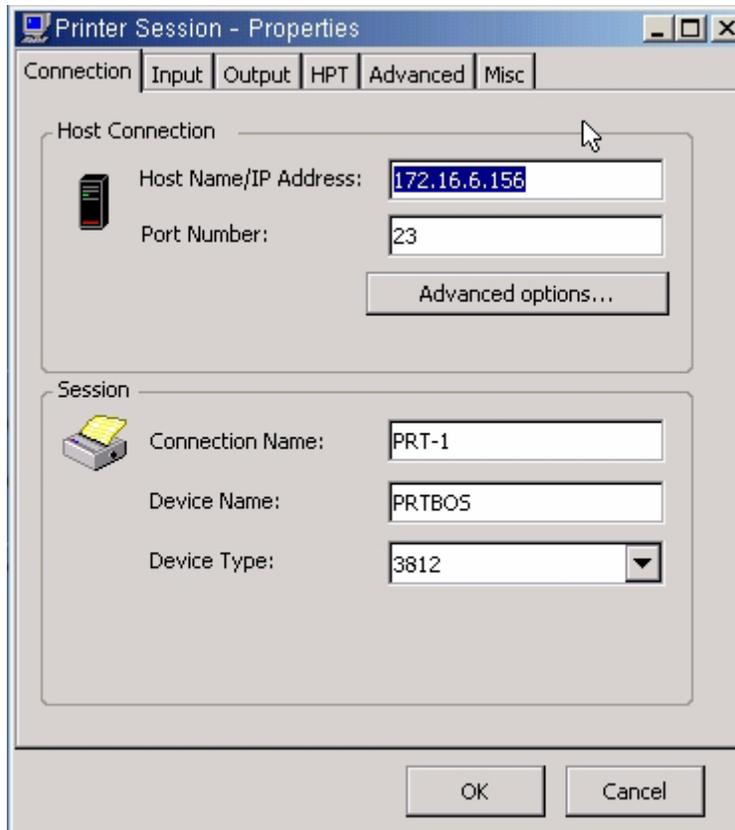
To start a session on startup, highlight the session in the connection manager and select the startup option at the bottom of the screen.



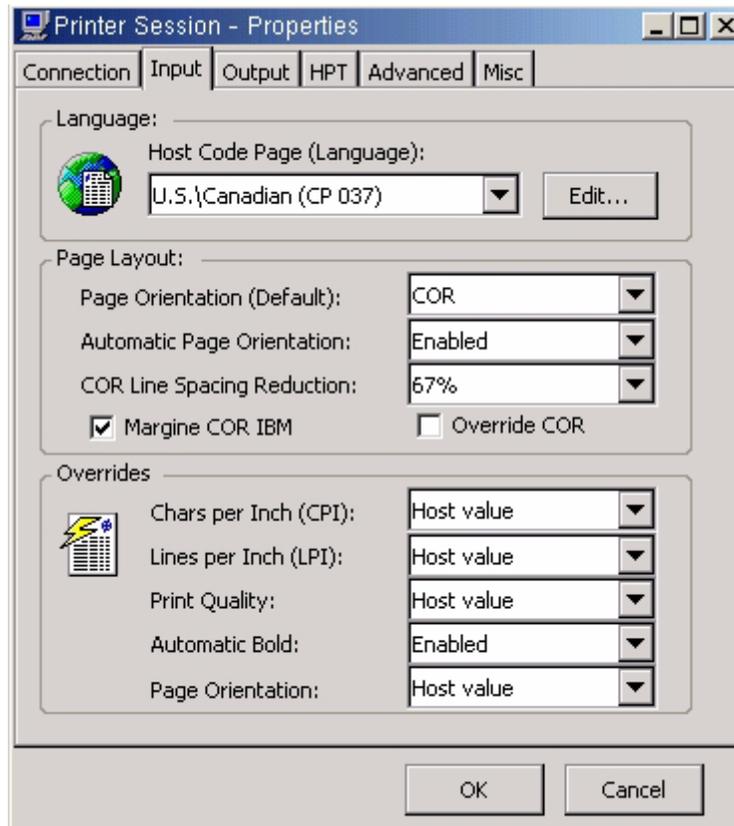
Enable this connection as the Default connection along with Enable connection autostart will enable primary session when autostarting sessions.

To make changes to the printer session, highlight the session and select Edit or right click on the desktop ICON and select Properties. To delete a session highlight the session and select Delete.

### Printer Session - Properties - Connection Tab



## Printer Session - Properties - Input Tab



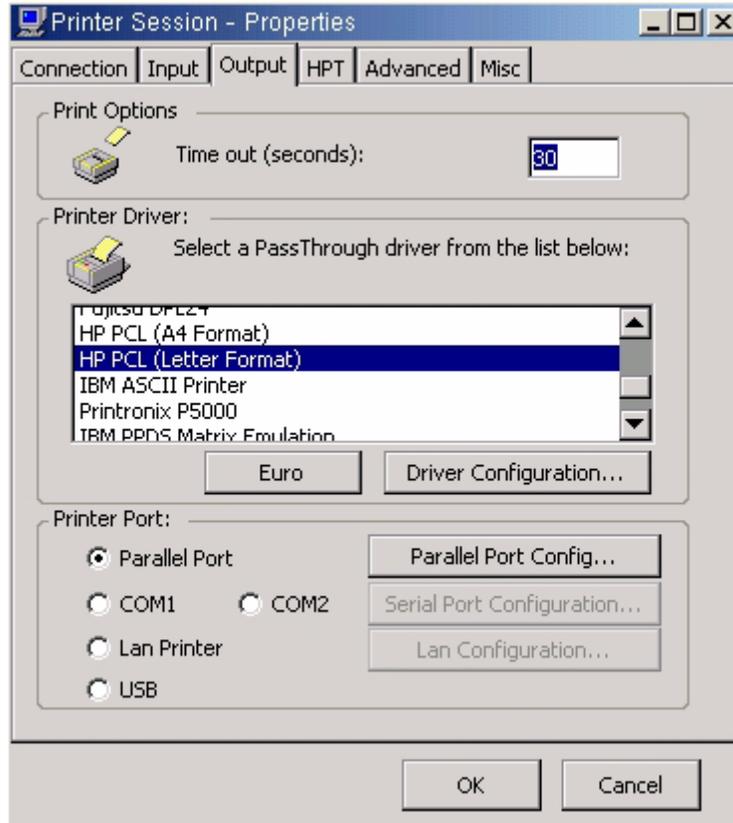
Computer output reduction (COR) automatically takes standard reports on computer paper and reduces them to fit on 8-1/2 by 11 inch paper. COR is designed to handle reports created at 66 lines per page and 132 print positions per line.

Changes the default page orientation to specify how to print a document on the workstation printer. If the orientation is explicitly set by the eServer i5 or iSeries page setup code, the explicit orientation is used.

Specify the compression percentage of the vertical line spacing to fit all the lines into the page. The default value is 67%.

## Printer Session - Properties - Output Tab

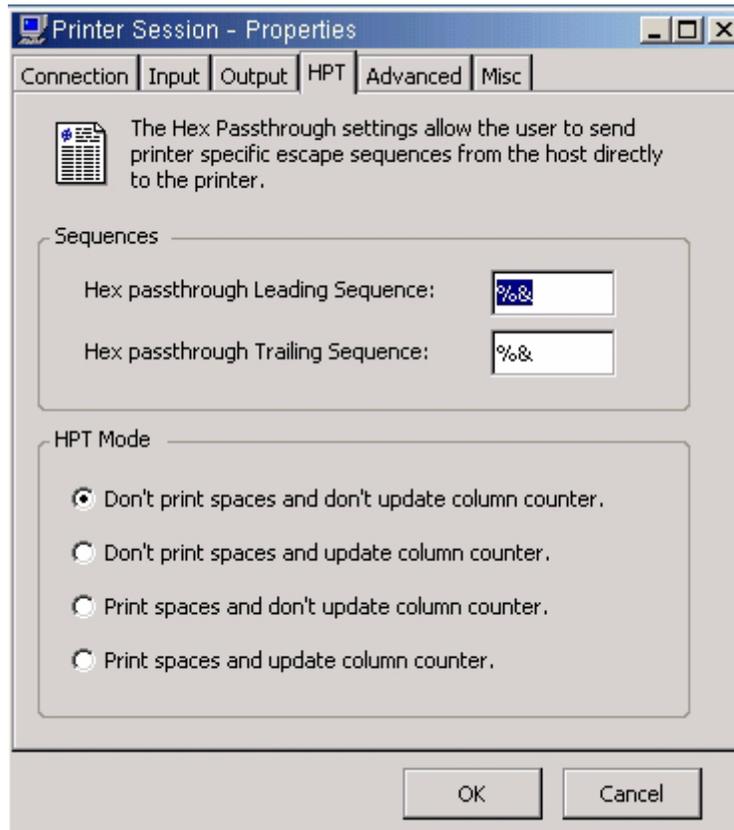
The printer driver seen here will be the printer driver selected when the printer session wizard was run.



The time-out is the time that is elapsed before we notify the host that the printer is offline and/or unreachable.

For a locally attached printer, normally you want a smaller time-out. For a network printer, you want something that allows for network delays, etc.

## Printer Session - Properties - HPT Tab



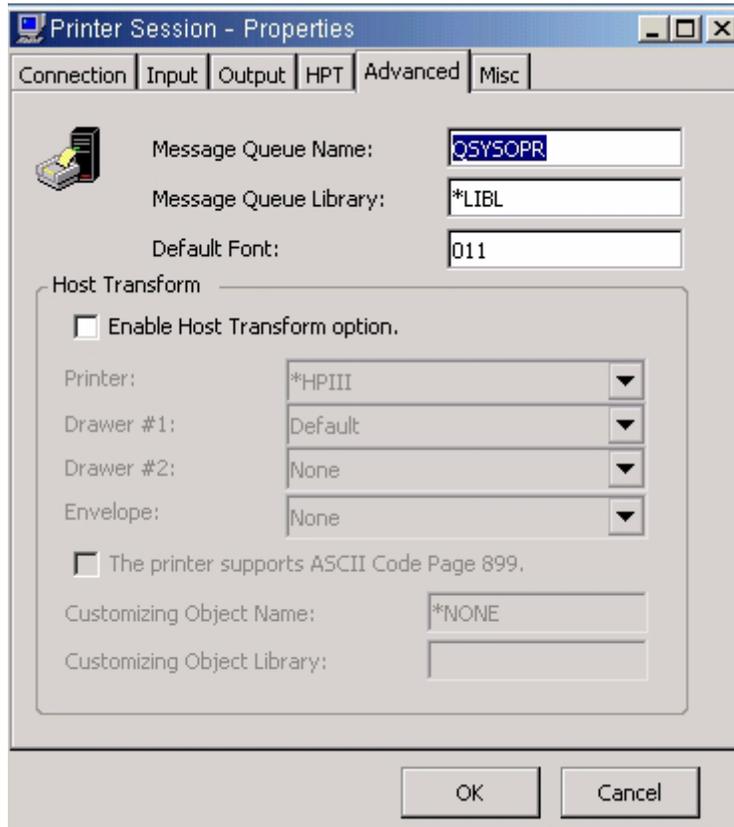
Some AS400 applications send "raw" sequences of commands to the printer - for instance to create custom overlays when using PCL. These commands should not be interpreted by the printer engine and are called hex passthru sequences. They are usually delimited by special characters so the printer engine can pass the data directly to the printer.

The "special" delimiting sequences depend on the application and may / are different.

The other options are used to allow correct alignment when using passthru - again this varies from application to application.

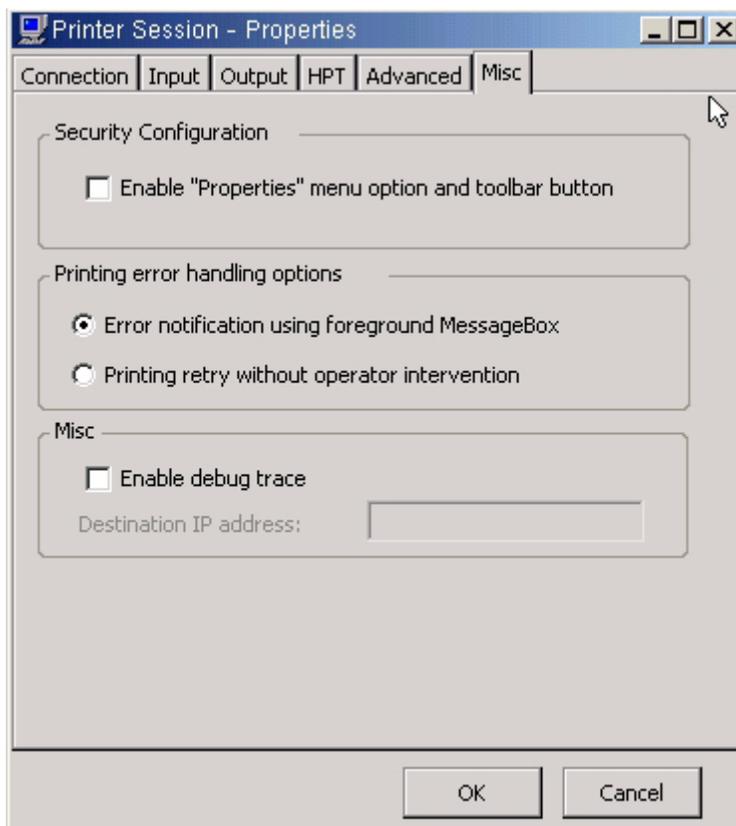
## Printer Session - Properties - Advanced Tab

To use **Host Print Transform**, set the printer driver in the **Output Tab** to Generic/Text Only. Check the **Enable Host Transform Option** and set the printer type or to use a customized object, set the printer to **\*WSCST** and enter the **Customizing Object Name** and **Customizing Object Library** in the area below.



NOTE: For best results try to use one of the included printer drivers and avoid using HPT.

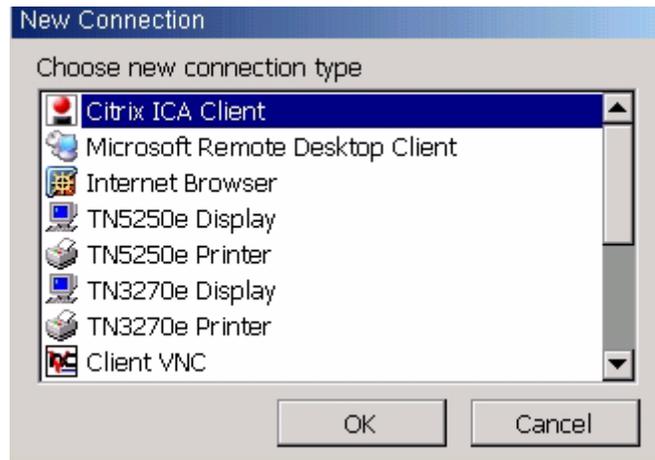
## Printer Session - Properties - Misc Tab



# CITRIX ICA CLIENT

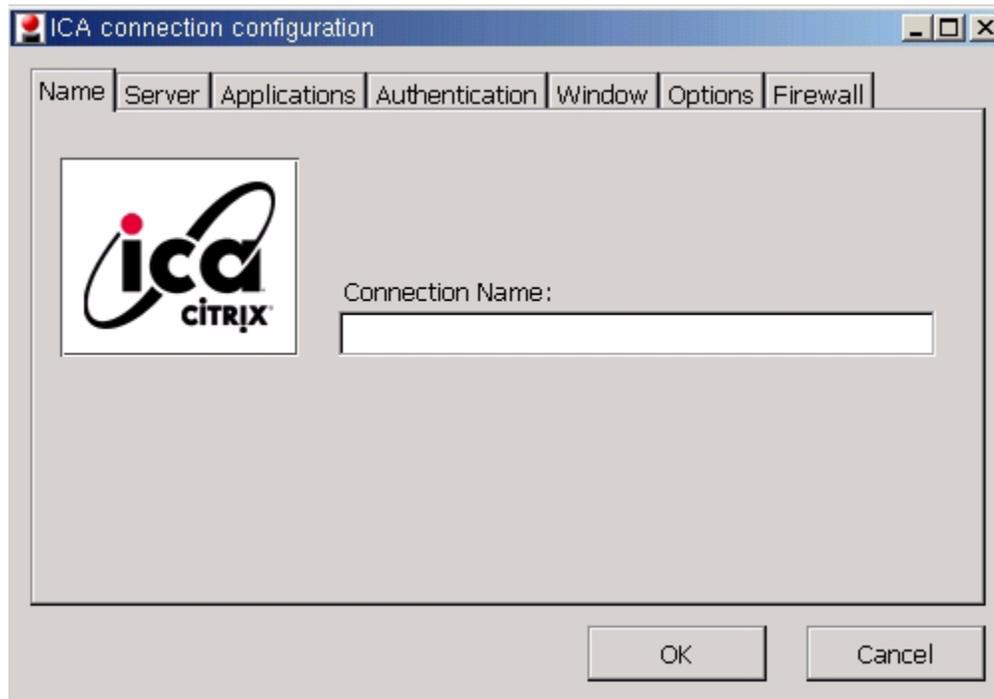
From the connections manager select add and choose Citrix ICA Client from the drop down list.

NOTE: Global ICA configuration and resources can be set prior to creating the ICA connection. Global settings can be found in the Terminal Properties Misc Tab.



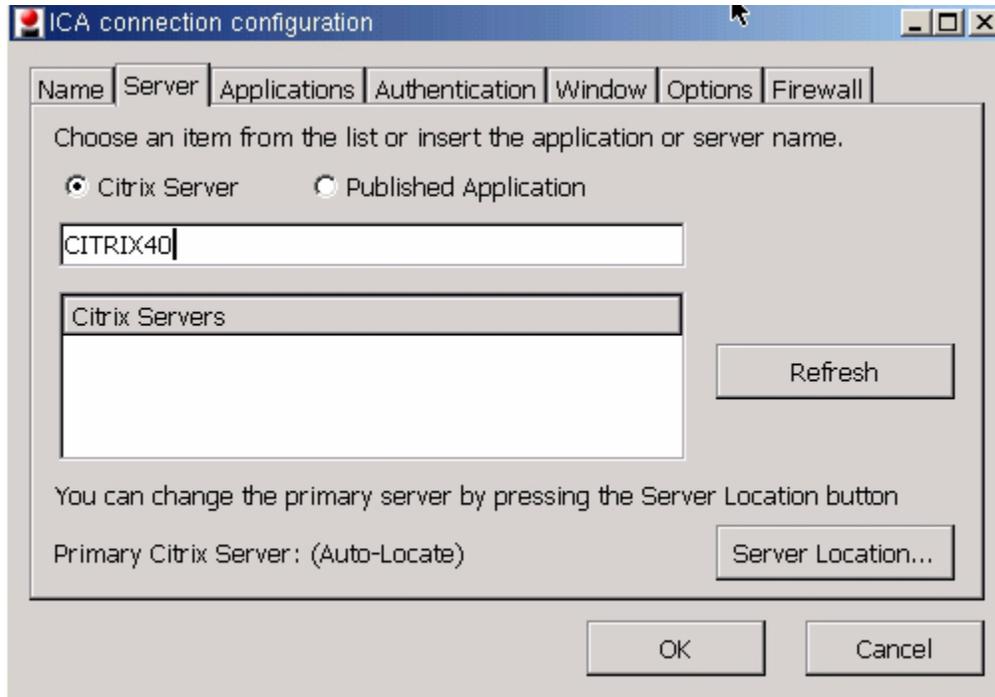
## ICA Connection Configuration Name Tab

Enter the connection name - name that will be displayed with the desktop ICON and in the connections manager.



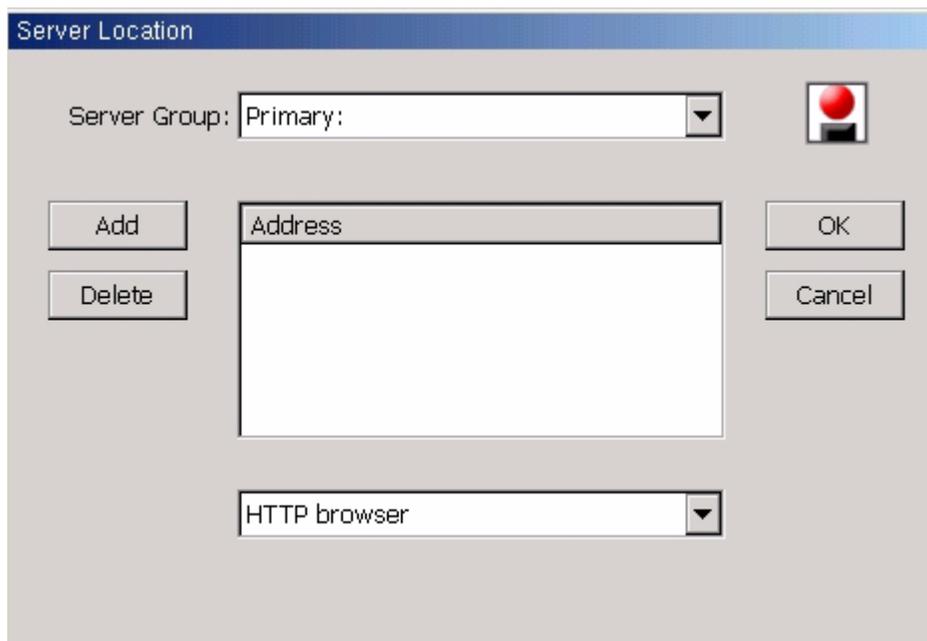
## ICA Connection Configuration Server Tab

Enter the Citrix Server Name or enter the Published Application.

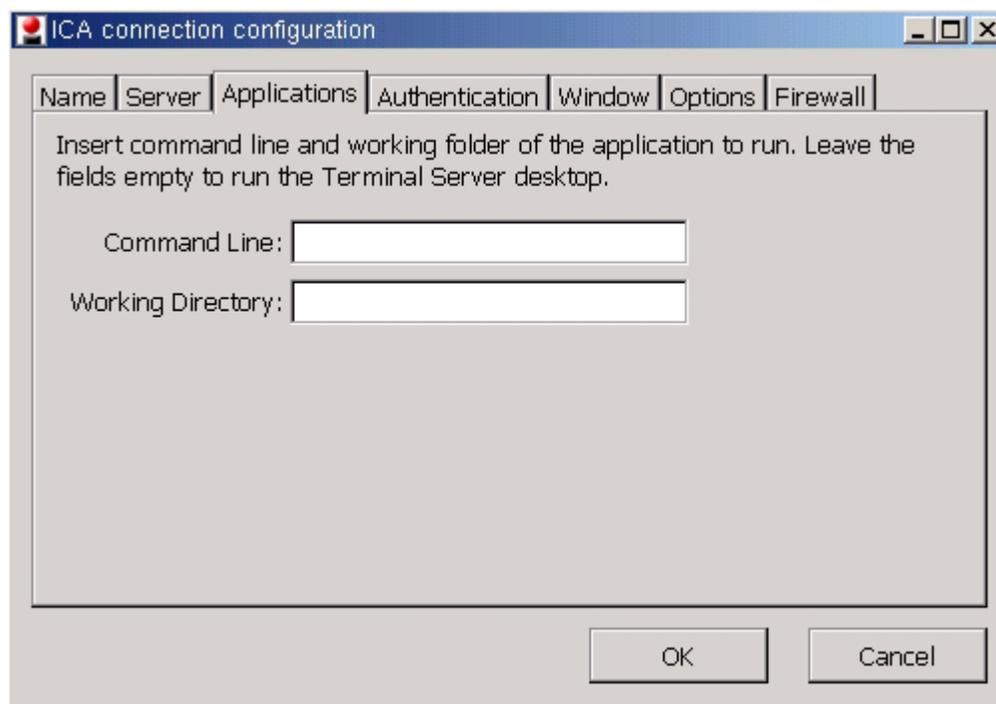


Select Server Location to set multiple locations of Citrix servers.

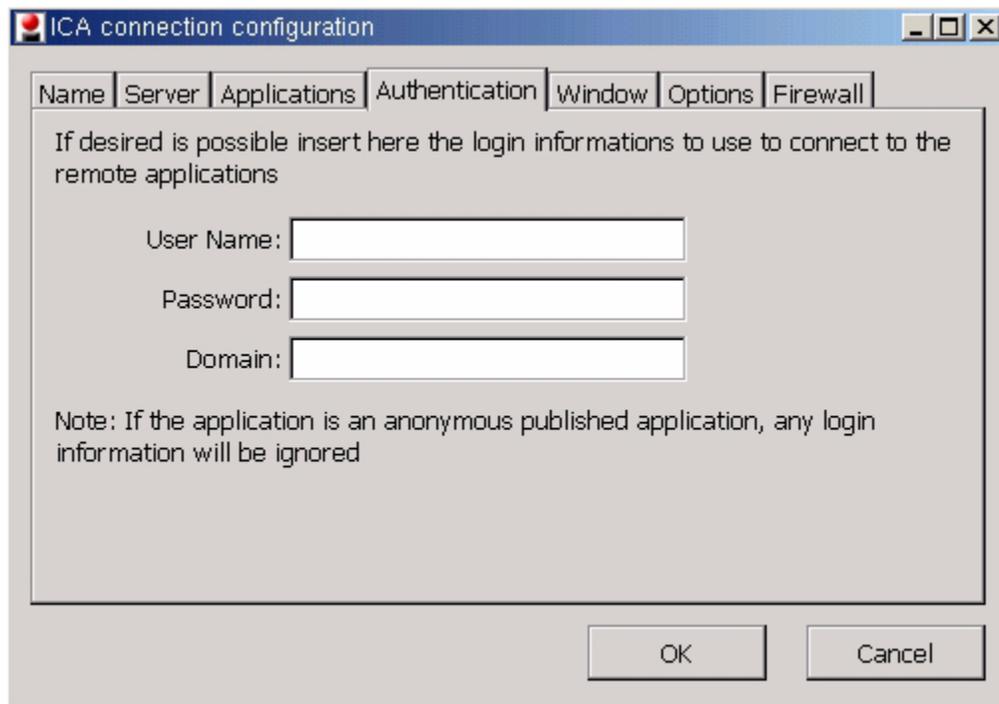
Add or Delete server information.



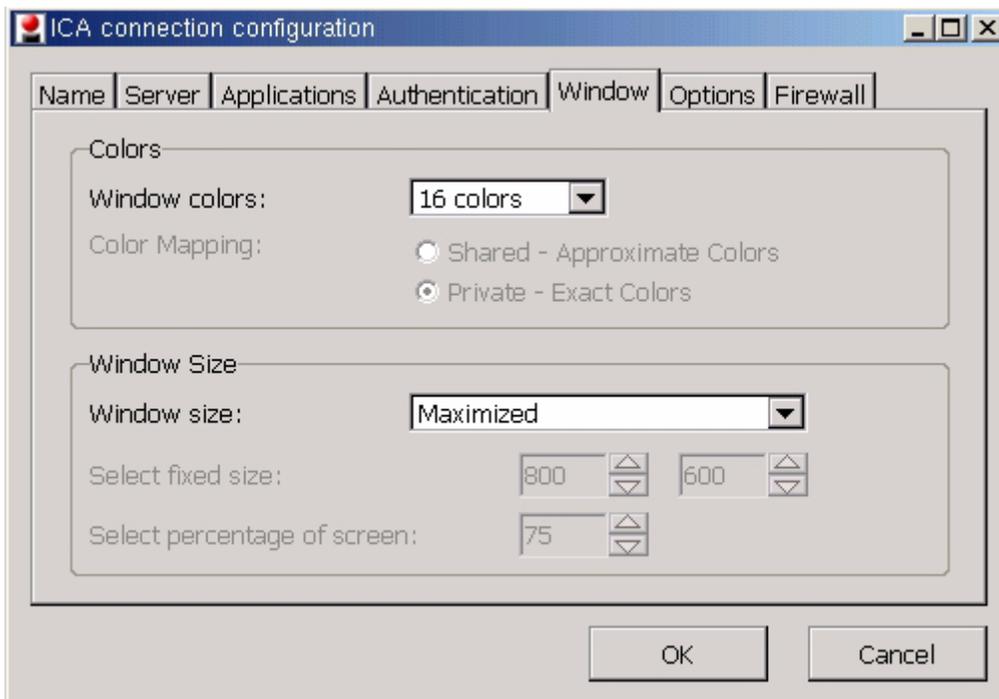
### ICA Connection Configuration Applications Tab



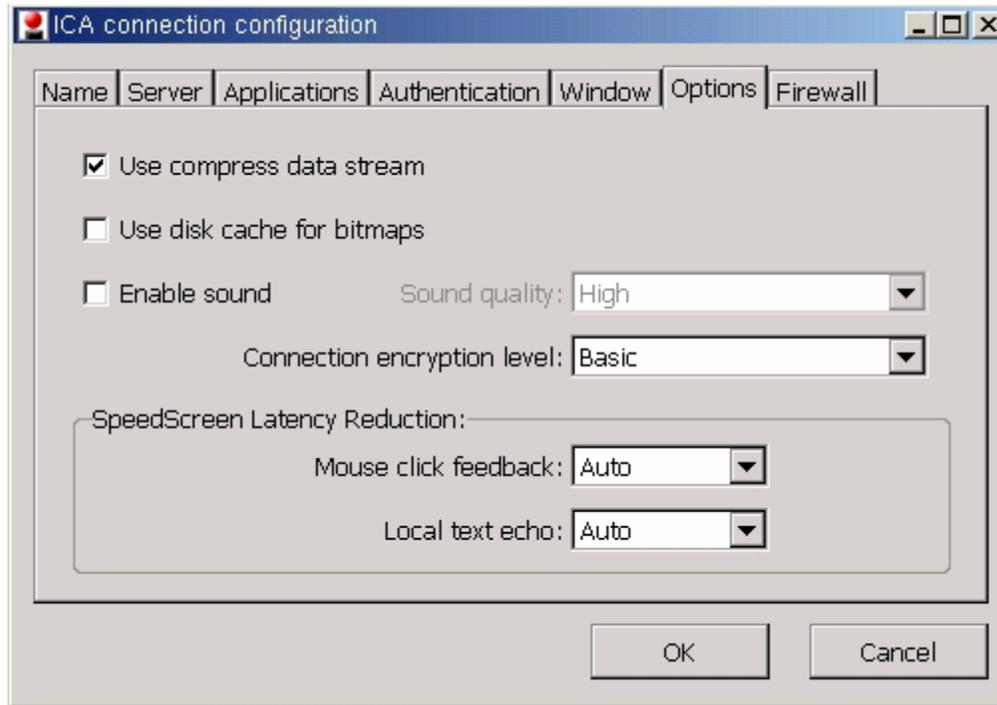
## ICA Connection Configuration Authentication Tab



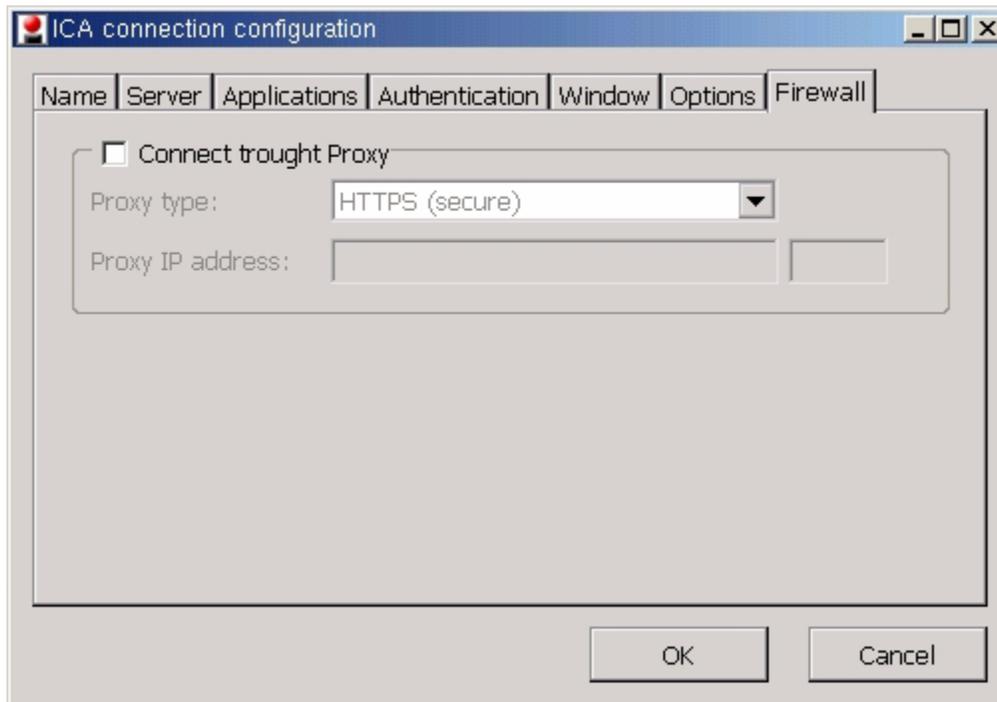
## ICA Connection Configuration Window Tab



## ICA Connection Configuration Options Tab



## ICA Connection Configuration Firewall Tab



An ICON will be created on the desktop.



Double click ICON to start CITRIX session or from the connection manager highlight the session and select connect.

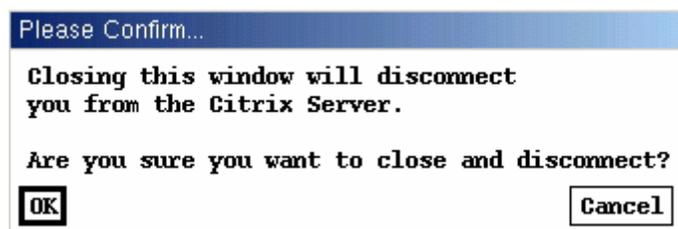
The citrix server will present a log on screen unless valid information was supplied prior in the authentication tab.



Credentials will be verified and if passed successfully, the Citrix Session will be presented.



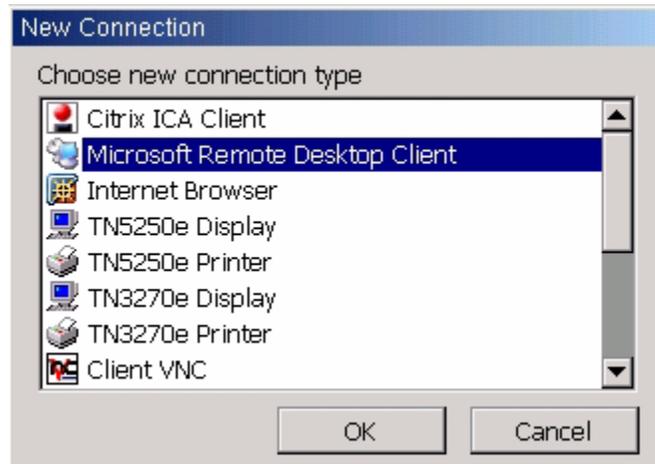
To close the session when minimized, right click on session in taskbar and select close. A message confirming the close will be presented.



To close the session from the start button on the Citrix Desktop, take the option to Disconnect/ Logoff.

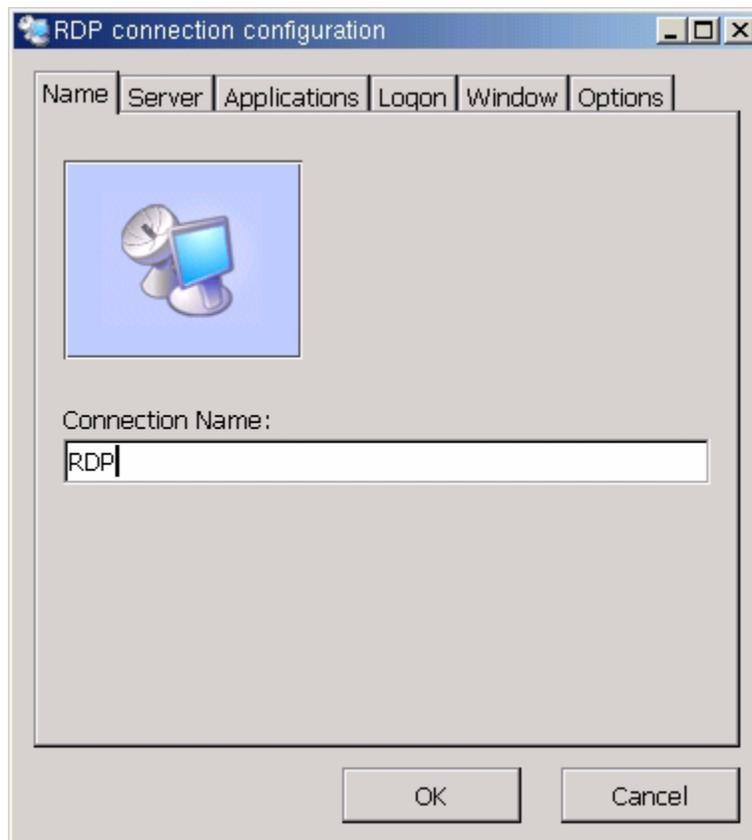
# Microsoft Remote Desktop Client

Select to add a new connection type.



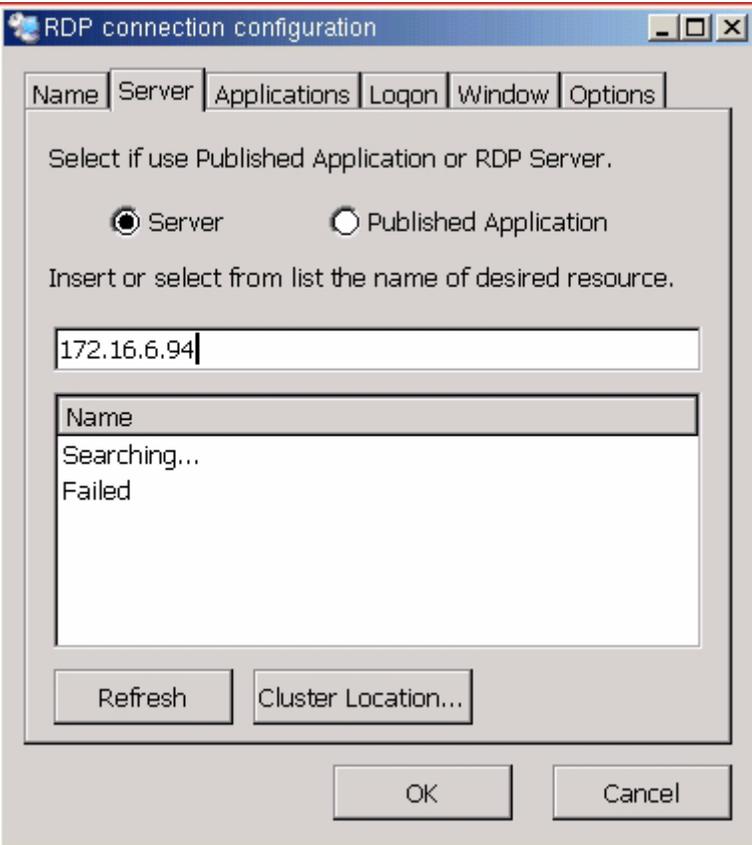
## RDP Connection Configuration - Name Tab

Enter the connection Name - name associated with ICON and displayed in connection manager and the server name or IP.



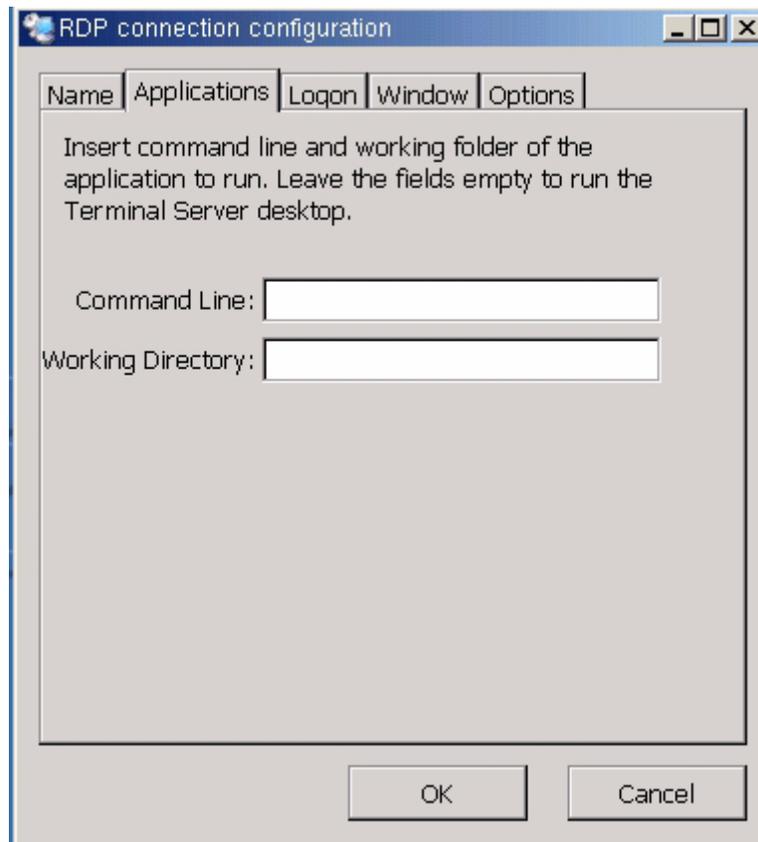
# RDP Connection Configuration - Server Tab

Enter the server or published application name or IP.



## RDP Connection Configuration - Application Tab

Insert the command line and working directory of the application to run. Leave the fields empty to run the Terminal Server desktop.

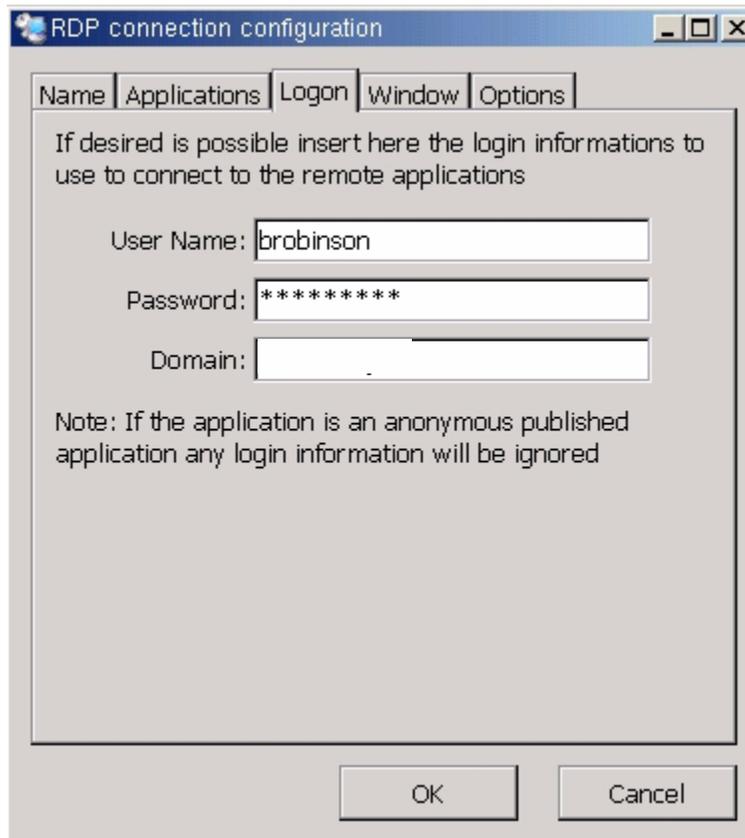


The image shows a screenshot of the 'RDP connection configuration' dialog box, specifically the 'Applications' tab. The dialog box has a title bar with the text 'RDP connection configuration' and standard window control buttons (minimize, maximize, close). Below the title bar, there are five tabs: 'Name', 'Applications', 'Logon', 'Window', and 'Options'. The 'Applications' tab is currently selected. Inside the dialog box, there is a text area containing the instruction: 'Insert command line and working folder of the application to run. Leave the fields empty to run the Terminal Server desktop.' Below this text, there are two input fields: 'Command Line:' and 'Working Directory:'. Both fields are currently empty. At the bottom of the dialog box, there are two buttons: 'OK' and 'Cancel'.

## RDP Connection Configuration - Logon Tab

Enter Logon information for user

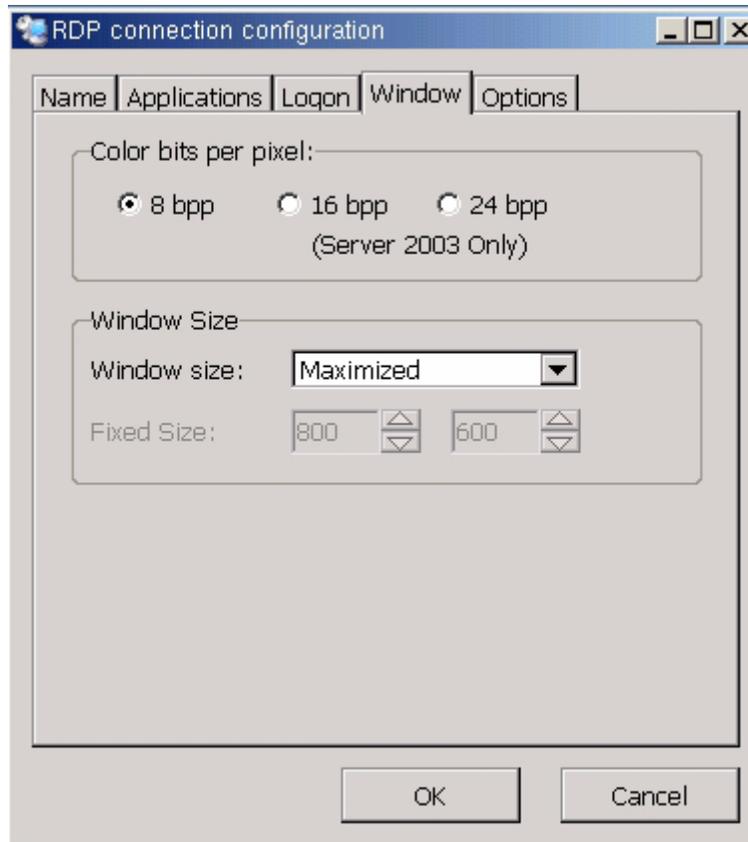
To be prompted for Logon information when the connection is started leave this area blank.



The image shows a screenshot of the 'RDP connection configuration' dialog box, specifically the 'Logon' tab. The dialog box has a title bar with the text 'RDP connection configuration' and standard window controls (minimize, maximize, close). Below the title bar are five tabs: 'Name', 'Applications', 'Logon', 'Window', and 'Options'. The 'Logon' tab is selected and active. Inside the dialog box, there is a text area with the following text: 'If desired is possible insert here the login informations to use to connect to the remote applications'. Below this text are three input fields: 'User Name:' with the text 'brobinson', 'Password:' with the text '\*\*\*\*\*', and 'Domain:' with a single period '.'. Below these fields is a note: 'Note: If the application is an anonymous published application any login information will be ignored'. At the bottom of the dialog box are two buttons: 'OK' and 'Cancel'.

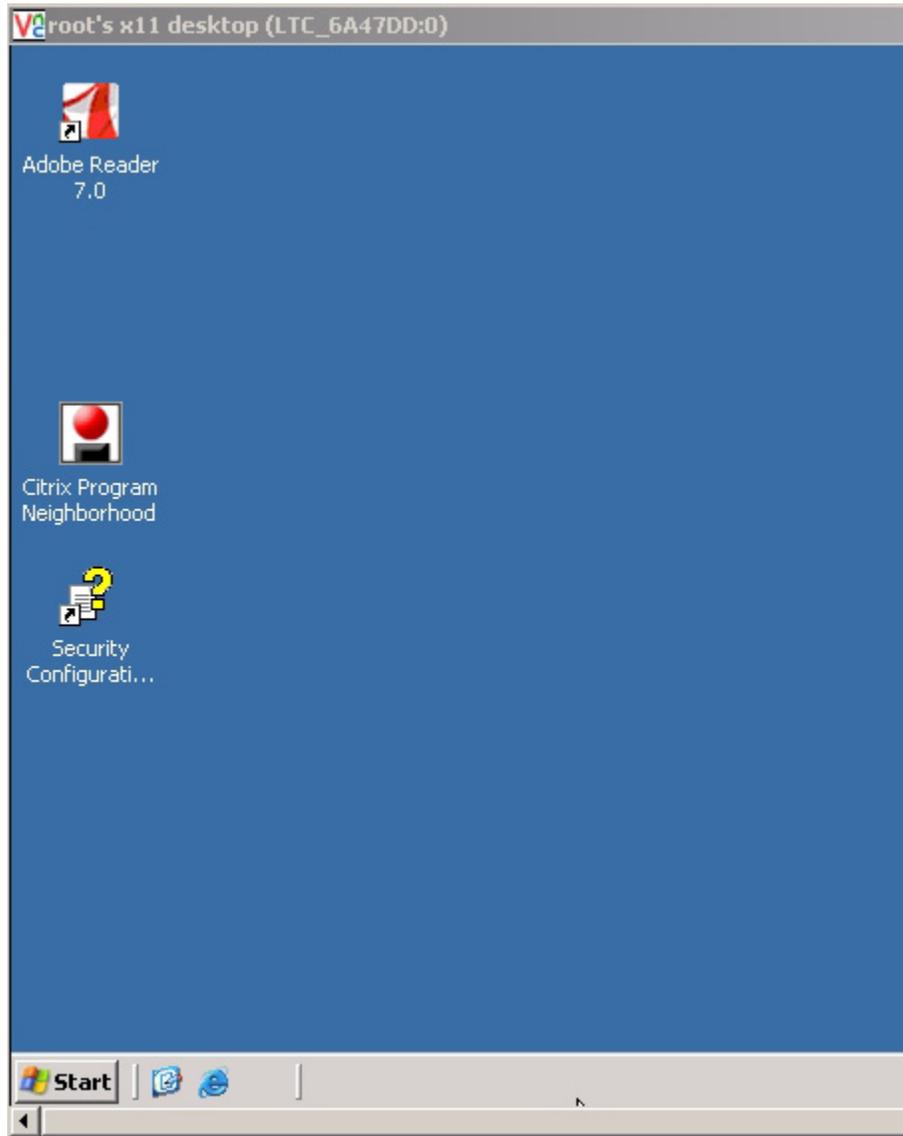
## RDP Connection Configuration - Window Tab

Enter the RDP session desktop settings.

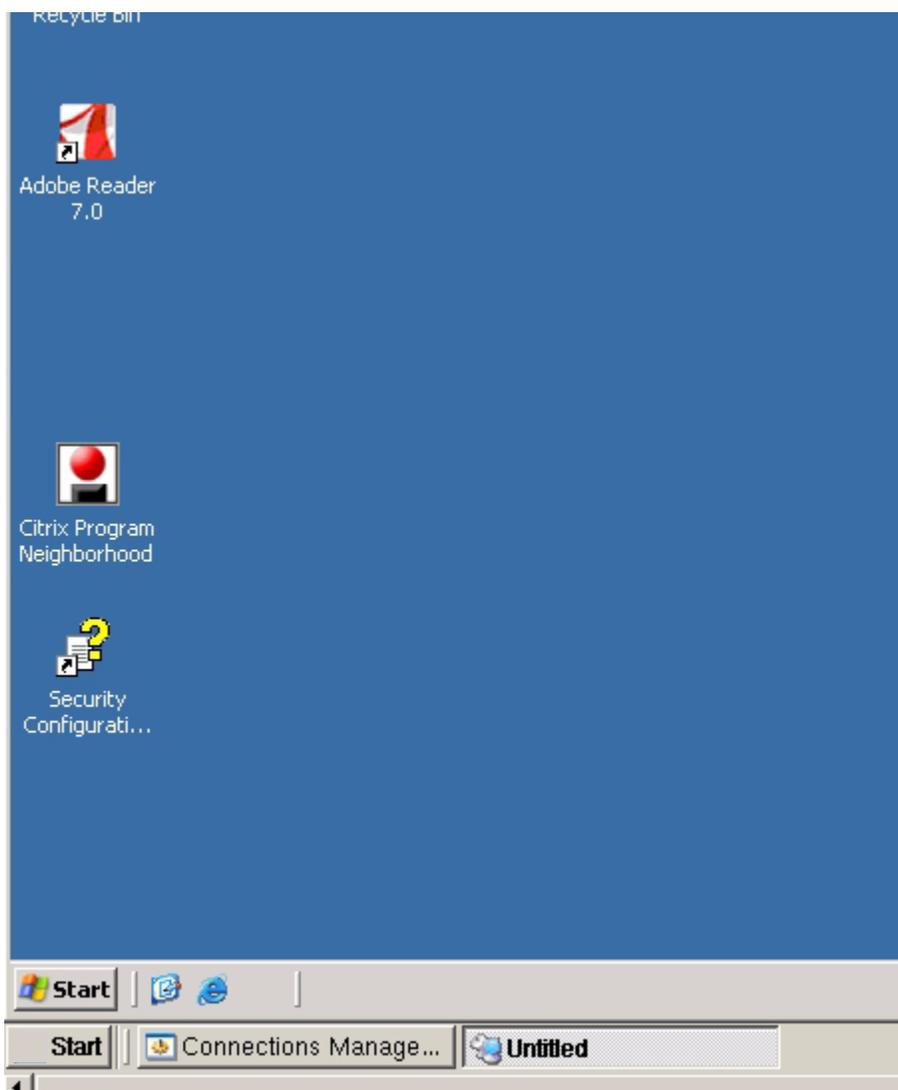


## Window Size:

Full Screen mode takes up the entire screen. The look and feel is that the RDP session is your desktop with no task bar from the thin client itself.



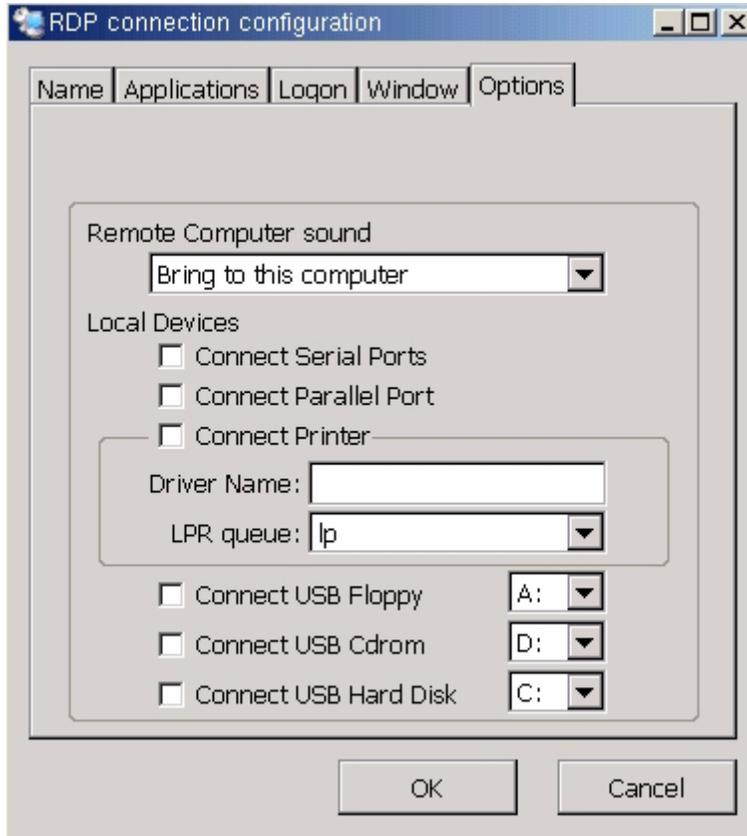
Maximized mode maximizes the RDP desktop but leaves the thin client toolbar visible underneath it.



**NOTE:** The greater the color depth, the more bandwidth the connection will use.

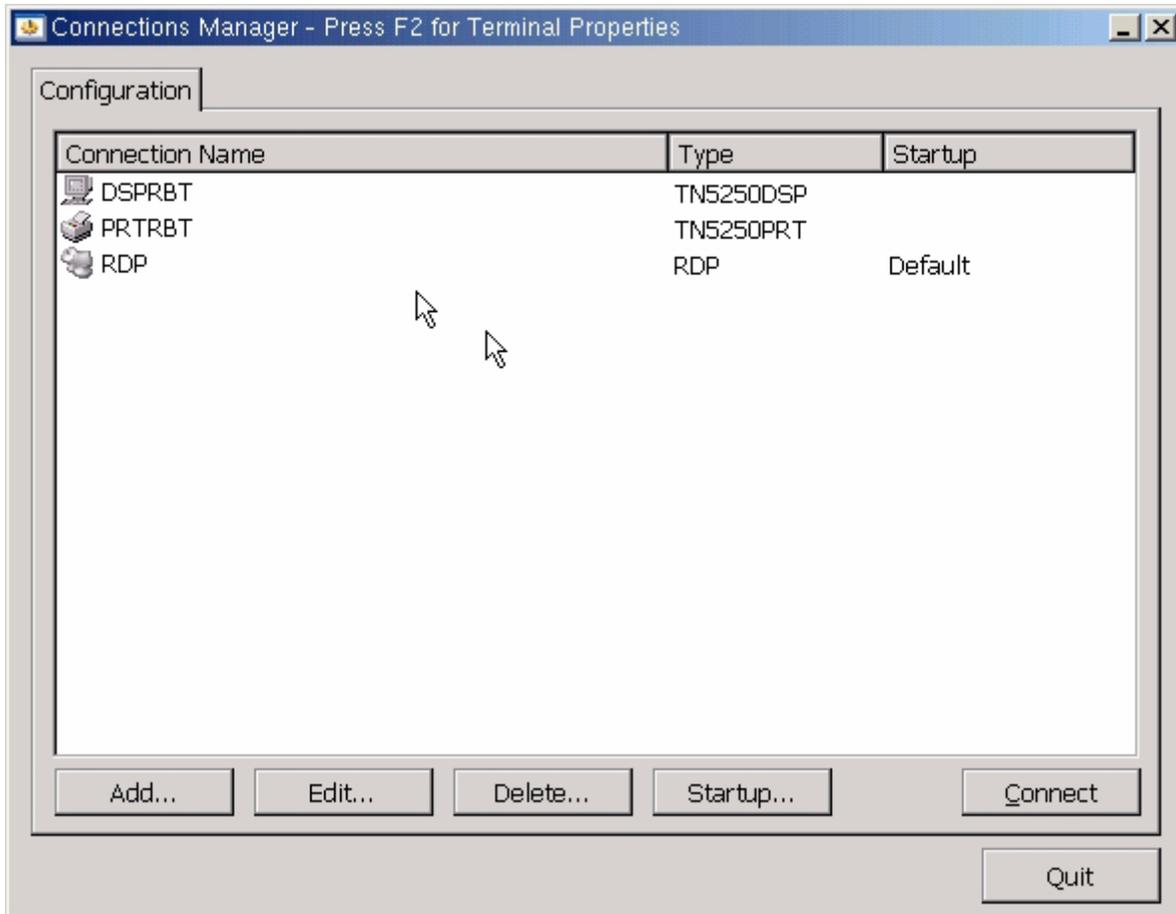
# RDP Connection Configuration - Options Tab

Use this area to connect local devices to the RDP session.



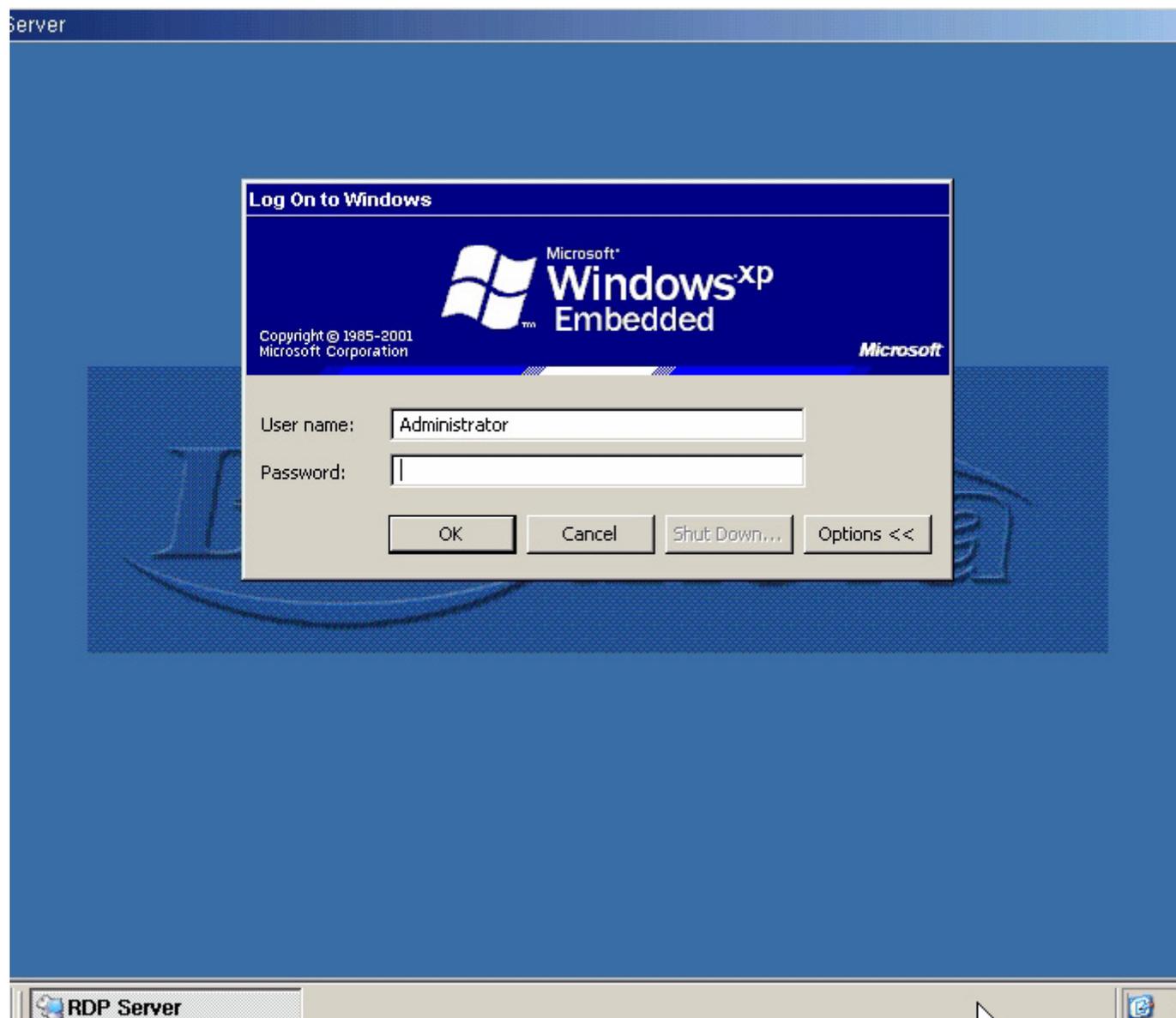
An ICON will be created on the desktop and a connection will be added to the connection manager.





Double click the ICON to start the RDP session or select the session in the connection manager and select connect.

Log On to Windows with proper credentials to get the RDP desktop.



## Hot Key Combinations

| Function                             | Hot Key Combination | Function                                | Hot Key Combination      |
|--------------------------------------|---------------------|---|--------------------------|
| About                                | Alt+V               | Session Disconnect                      | Ctrl+F4                  |
| Attributes Display                   | Ctrl+A              | Setup                                   | Ctrl+F2                  |
| Close All                            | Ctrl+F6             | Split Screen: activate                  | Alt+Ctrl+<br>Insert      |
| Copy                                 | Ctrl+C              |   |                          |
| Copy All                             | Ctrl+5              | Split Screen: switch<br>between screens | Alt+Ctrl+<br>Cursor Up * |
| Exit                                 | Ctrl+F5             |   |                          |
| Keyboard Help                        | Ctrl+F1             | Switch to next 5250 session             | Alt+PgUp *               |
| Launch Connect'n<br>Manager          | Ctrl+Alt+End        | Switch to next open<br>application      | Ctrl+Alt+Up Arrow        |
| Next Session                         | Ctrl+S              | Switch to previous open<br>application  | Ctrl+Alt+<br>Down Arrow  |
| Paste                                | Ctrl+V              |   |                          |
| Pause Macro                          | Alt+F3              | Terminal Properties                     | Shift+F2                 |
| Play Macro                           | Alt+F5              | View Hotspot                            | Ctrl+H                   |
| Quit                                 | Ctrl+Alt            | View Keypad                             | Ctrl+K                   |
| Record Macro                         | Alt+F4              | View Ruler                              | Ctrl+Home                |
| Session Connect                      | Ctrl+F3             |   |                          |
| * On 122-key keyboards, use Alt+Jump |                     |   |                          |

| <b>Client Side Software</b> |   |
|-----------------------------|---|
|                             | <b>RBT-366</b>  |
| OS                          | Linux Kernel 2.6.   |
| Terminal Emulation          | TN5250e and TN3270e Emulator, with GUI and hot spots; Telnet with SSH, VT100, Wyse 60 |
| Embedded Applications       | N/A   |
| Connectivity                | Remote Desktop Protocol (RDP) and Citrix Independent Computing Architecture (ICA)     |
| Local Config.               | Terminal/Session Config.  |

| <b>Server Side Software</b> |  |
|-----------------------------|--|
|                             | <b>RBT-366</b>   |
| Operating System            | Microsoft Windows 2000 server<br><br>Microsoft Windows 2003 server<br><br>Microsoft Windows NT Terminal Server Edition<br><br>Citrix MetaFrame<br><br>Citrix Winframe. |
| Management Tools            | Remote Administrator<br><br>Wake on LAN  |

# Index

## A

Advanced Display Parameters 25  
Advanced Tab - Display 83  
Advanced Tab - Printer 93  
Attributes Tab - Display 75  
Automatic Reconnection 68

## B

Bind local TCP Port 68

## C

Citrix ICA Client 95  
Client ICA - Global Settings 51  
Code Page 69, 71  
Column Separator 75  
Connection Tab - Display 67  
Connection Tab - Printer 89  
CrossRun 59  
Cursor Options 69  
Custom Wallpaper 29

## D

Date & Time 57  
Default Connection 32  
Default Gateway 7  
Default Keyboard 21  
Delete Background Image 29  
Desktop Color 27, 29  
Desktop Mode 27  
Device Conflict Error 83  
Device Name 64  
Device Name - Printer 85  
Device Name Prefix 7  
DHCP 6

## E

Enable Automatic Reconnection 32  
Enable LPD Printing 41

## F

Factory Defaults 11  
Firmware 36  
Font Server 26

## G

General Tab - Display 69

## H

Hide Connections Configuration Tab 40  
Hide Menu 83  
Host Name/IP 7  
Host Print Transform - HPT 92  
Host Table 15  
Hot Key 113

Hot Spot Tab - Display 76  
Hotkeys Filter 34  
I  
ICA Connection Configuration Applications Tab 97  
ICA Connection Configuration Authentication Tab 98  
ICA Connection Configuration Firewall Tab 99  
ICA Connection Configuration Name Tab 95  
ICA Connection Configuration Options Tab 99  
ICA Connection Configuration Window Tab 98  
ICA Connection Server Tab 96  
ICA PNAgent 58  
Input Tab - Printer 90  
IP Address 6  
J  
Java Cache 56  
K  
Keep Alive 68  
Keyboard Language 7, 69  
Keyboard Type 7, 65, 69  
Keypad Tab - Display 81  
KIOSK Mode 27, 31, 33  
M  
Maximized Mode - RDP 109  
Microsoft Remote Desktop Client 103  
Misc Configuration 48  
Misc Tab - Printer 94  
Miscellaneous options 69  
Modify Configuration 40  
Modify Connection 66  
Mouse 23  
Mouse Type 23  
N  
Network FileSystem 55  
Network Printer 42  
NFS 55  
NFS Font Server 26  
Numlock 22  
O  
Output Tab - Printer 91  
P  
Ping Function 15  
Power Saving Modes 26  
Primary DNS Server IP Address 7  
Print Screen Configuration 69  
Printer Configuration 41  
Printing Through Linux 44  
Print-Screen Configuration 70  
Q  
Quick Setup 5

## R

RDP Connection Configuration - Application Tab 105  
RDP Connection Configuration - Logon Tab 106  
RDP Connection Configuration - Name Tab 103  
RDP Connection Configuration - Options Tab 110  
RDP Connection Configuration - Server Tab 104  
RDP Connection Configuration - Window Tab 107  
Remapping the Keyboard 72  
Remote Window Manager-XDM 35  
Ruler Options 69

## S

Screen Saver 25  
Security 40  
Security Configuration - Display 83  
Sessions 7  
Setup Wizard 8  
Shadowing 40  
Share Local Attached Printers 41  
Show Clock 28  
Show ICONs 28  
Show Menu 83  
Show Net ICON 27  
SMB 55  
Sound Configuration 54  
SSID 19  
SSL Encryption 68  
Startup Macro 68  
Startup Options 32, 88  
Static IP 14  
Subnet Mask 6  
System Language 24

## T

Taskbar 28  
TBT Mode 27  
Terminal Configuration Utility 10  
Terminal Name 12  
Terminal Properties - Desktop Tab 27  
Terminal Properties - DisplayTab 25  
Terminal Properties - General Tab 11  
Terminal Properties - Input Tab 21  
Terminal Properties - NetworkTab 12  
Text Based Mode 5  
Timeout - Printer 91  
TN5250e Display 62  
TN5250e Printer 84

## U

USB Printer 41  
User Authentication 40

V

Video Resolution 25

Video Resolution Out Of Range 25

VNC Shadowing Configuration 49

W

WBT Mode 27

WEP 19

Window Size - RDP 108

Wireless NIC 17