Users Guide

Wyse® Winterm™ 3 series,
Based on Microsoft® Windows® CE 5.0

Issue: 030509
PN: 883630-07 Rev. D2

NRI Notes:

WinTerm BIOS Setup:
Boot using <Delete> key
Password: Fireport

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FCC Statement

This equipment has been tested and found to comply with the limits for either Class A or Class B digital devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interconnect cables and shielded AC power cable must be employed with this equipment to insure compliance with the pertinent RF emission limits governing this device. Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

Caution

Modifications made to the product, unless expressly approved by Wyse Technology, could void the user’s authority to operate the equipment.

Regulatory Compliance for Thin Clients

EMC and Safety Requirements

Models x150SE, SX0, and VX0 thin clients are compliant with the regulatory requirements in the regions listed below.

U.S.A. - FCC Part 15 (class B), UL60950
Canada - ICES-003, CAN/CSA-C22 No. 60950
Europe - EN 55022 (class B), EN 61000-3-2 (class A), EN 61000-3-3, EN 55024, EN 90650-1:2000+ALL
Australia / New Zealand - AS/NZS CISPR 22
Japan - VCCI CISPR 22 (class B)
China - CCC GB9254-1998, GB17625.1-2003, GB 4943-2001
Korea - MIC

RF & EMC Requirements

Model VX0 thin clients with internal wireless option are compliant with the regulatory standards in the regions listed below.

U.S.A. - FCC Part 15 C, 15.401-15.407, FCC 1.1310 (RF exposure)
Canada - RSS-210
Europe - EN 55022 (class B), EN300.328, EN301.489-1, EN301.489-17
Australia / New Zealand - AS/NZS 4771
Japan - Telec (Equipment Radio Regulation, 2006)
China - SRRC (CMII)
Korea - MIC (RRL)

Canadian DOC Notices

Class A - This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.
Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Réglement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Class B - This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.
Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Réglement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Wireless Usage and Requirements

Radio transmitting type devices (RF module) are present in the Model VX0 as an option. These devices operate in the 2.4 GHz band (i.e. 802.11b/g WLAN & Bluetooth).

As a general guideline, a separation of 20 cm (8 inches) between the wireless device and the body, for use of a wireless device near the body (this does not include extremities) is typical. This device should be used more than 20 cm (8 inches) from the body when wireless devices are on and transmitting.

Some circumstances require restrictions on wireless devices. Examples of common restrictions include:

- When in environments where you are uncertain of the sanction to use wireless devices, ask the applicable authority for authorization prior to use or turning on the wireless device.
- Every country has different restrictions on the use of wireless devices. Since your system is equipped with a wireless device, when traveling between countries with your system, check with the local Radio Approval authorities prior to any move or trip for any restrictions on the use of a wireless device in the destination country.
- Wireless devices are not user-serviceable. Do not modify them in any way. Modification to a wireless device will void the authorization to use it. Please contact the manufacturer for service.

Noise Suppressor for Model x150SE

A noise suppressor (ferrite bead) must be installed on the network cable of your thin client. This installation is necessary to maintain compliance with U.S. FCC B limits and European CISPR B EN55022 Class B limits. The noise suppressor is supplied by the manufacturer and is packed in your thin client shipping carton.

Device Power Supply

For use with external power supply included in the shipping carton, or a certified equivalent model supplied by the manufacturer.

Model x150SE Thin Clients

For use with External Power Supply DVE Model DSA-0421S-12 3 30, or certified equivalent model supplied by the manufacturer, rated 12Vdc, 2.5A.

Model SX0 Thin Clients

For use with External Power Supply Model DSA-0421S-12 3 30, or certified equivalent model supplied by the manufacturer, output rated 12Vdc, 2.5A.

Model VX0 Thin Clients

For Use with External Power Supply Model LSE9802A1255, or certified equivalent model supplied by the manufacturer, output rated 12Vdc, 4.58A or minimum 4.0A.

Battery Information: The VX0 Thin Client contains an internal button cell battery replaceable by qualified service personnel only.

Warning

There is a risk of explosion if the battery is replaced by an incorrect type. Always dispose of used batteries according to the instructions accompanying the battery.

Contents

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1 Introduction

Wyse® Winterm™ 3 series Thin Clients use the Windows™ CE operating system. These thin clients provide a local browser and access to applications, files, and network resources made available on machines hosting Citrix™ ICA and Microsoft™ RDP session services. The thin clients contain the emulation software, Ericom – PowerTerm® TEC. Other locally installed software permits remote administration of the thin clients and provides local maintenance functions. Additional Add-ons are available that support a wide range of peripherals and features for environments needing a secure Windows user interface.

Session and network services available on enterprise networks may be accessed through a direct Intranet connection, a dial-up server, or an ISP which provides access to the Internet and thus permits the thin client to connect to an enterprise VPN (virtual private network) server.

Note

For information about each of the connection types available on the thin client, refer to "Using the Connection Manager."

About this Guide

This guide is intended for users of the Wyse® Winterm™ 3 series Thin Client. It provides detailed instructions on using the thin client to manage the connections and applications available to users from a network server.

Organization of this Guide

This guide is organized as follows:

Chapter 2, "Getting Started," provides information to help you quickly get started using your thin client. It describes basic thin client functions and provides instructions on using the Desktop and Connection Manger to manage the connections and applications available for you to use.

Chapter 3, "Setting-up the Thin Client," contains information to help you set up your thin client using the applications available in the Control Panel.

Wyse Technical Support

To access Wyse technical resources, visit http://support.wyse.com. If you still have questions, you can submit your questions using the Wyse Self Service Center, or call Customer Support at 1-800-800-WYSE (toll free in U.S. and Canada). Hours of operation are from 6:00 am to 5:00 pm PST, Monday through Friday.

To access international support, visit http://www.wyse.com/global.

Related Online Resources Available at Wyse

Wyse® Winterm™ 3 series Thin Client features can be found in the Datasheet for your specific thin client model. Datasheets are available on the Wyse Web site at: http://www.wyse.com/products.

If you need to upgrade your CE .NET operating system, contact Wyse Customer Support at: http://www.wyse.com/serviceandsupport.

The *Administrators Guide: Wyse® Winterm™ 3 series, Based on Microsoft® Windows® CE* is intended for administrators of the Wyse® Winterm™ 3 series Thin Client. It provides information and detailed system configurations to help administrators design and manage a Wyse® Winterm™ 3 series Thin Client environment. It is available at: http://www.wyse.com/manuals.

The *Add-on Administrators Guide: Wyse® Winterm™ 3 series, Based on Microsoft® Windows® CE* is intended for administrators of the Wyse® Winterm™ 3 series Thin Client. It provides instructions on preparing for installing the Add-ons as well as obtaining and verifying the Add-ons for the Wyse® Winterm™ 3 series Thin Client. It also provides detailed procedures for installing and removing the Add-ons. In addition, this guide provides the Add-ons for Wyse® Winterm™ 3 series Thin Client ReadMe documentation. It is available at: http://www.wyse.com/manuals.

The *Local Smart Card Administrators Guide: Wyse® Winterm™ 3 series, Based on Microsoft® Windows® CE* is intended for administrators of the Wyse® Winterm™ 3 series Thin Client. It provides instructions on preparing to install the Local Smart Card Add-on as well as instructions on obtaining and verifying the Add-on. It also provides detailed procedures for installing, removing, and using the Add-on. It is available at: http://www.wyse.com/manuals.

2 Getting Started

This chapter provides information to help you quickly get started using your thin client. It describes basic thin client functions and provides instructions on using the Desktop and Connection Manger to manage the connections and applications available for you to use.

What Happens When You Turn on Your Thin Client

What you see, initially, when you turn on or reboot your thin client, depends on your method of access to the enterprise intranet and how your network administrator has set up your account. With Wyse CE software, your thin client can also be turned on by the Wake-On-LAN feature. Using this feature, an administrator can turn on the thin client connection remotely.

A username and password may be required to log in to your thin client or the thin client may automatically log in when started. After logging on, you may see the Desktop, as described in "Using the Desktop," or the Connection Manager, as described in "Using the Connection Manager" (or if configured, an application or connection may be launched automatically).

Note

If the thin client is configured to obtain an IP address from a DHCP server (this is the default for a new or reset thin client), a message is displayed indicating that the thin client is waiting for network services. If the thin client is unable to obtain an IP address, a message is displayed suggesting that an IP address be statically assigned. In such a case, have your administrator perform this task.

The thin client can be configured so that the Terminal Login dialog box opens when the thin client is turned on or restarted (or after you log out). Use this dialog box to enter your Username and Password to log on (the Terminal Login security is configured by the administrator; if configured by the administrator, you can also use the Change Password check box to change you password).

Figure 1 Terminal Login

The Single Button Connect feature is an automatic login function that uses the Connect command button to login to the thin client (and if configured, automatically makes a connection upon log-in).

Figure 2 Single Button Connect

The AutoLogin feature is an automatic login function that uses a countdown to login to the thin client (for example, 5 seconds).

Figure 3 AutoLogin countdown

Accessing the Enterprise Servers Available

There are five basic methods of access to the enterprise server environment available to the thin client. Except for Ethernet Direct, all of the access methods require that some local settings be made on the thin client. For certain privileges, these local settings are retained and are available for the next thin client system start. Activating these local settings and the defined connections can also be automated at thin client system start.

Methods of access include:

- **Ethernet Direct** - This is a connection from the thin client Ethernet port directly to the enterprise intranet. No additional hardware is required. An account sign-on dialog box displays if required. In this configuration all network services may be used, including the enterprise DHCP server. A DHCP server on the network may provide not only the thin client IP address, but also the location of the file server containing the software updates.
- **Wireless Direct** - If a wireless network device is connected to and configured on the thin client, and a wireless a connection is established, the behavior is the same as for an Ethernet Direct connection.
- **PPPoE** - Point-to-Point Protocol over Ethernet (PPPoE) is available for use. The PPPoE Connection Wizard is available from the Connection Manager to configure and invoke a PPPoE connection to WAN. Once connected, all WAN packets go though a PPP connection over Ethernet to the modem.
- **Dialup Modem** - A dial-up modem can be used with the thin client to access a dial-up server. The dial-up server must be a Microsoft Remote Access Server or another server that supports industry-standard protocols. The dial-up server can provide either of the following methods of access to the enterprise intranet:
  - Direct access - An enterprise dial-up server directly connects to the enterprise intranet.
  - Indirect access - An Internet Service Provider (ISP) dial-up server simply provides access to the Internet, from which the thin client accesses an enterprise PPTP VPN server that connects to the enterprise intranet.
- **VPN (PPTP)** - Point-to-Point Tunneling Protocol (PPTP) is a network protocol that enables the secure transfer of data between a remote client (in this case the thin client) and an enterprise server environment by creating a Virtual Private Network (VPN) across TCP/IP-based data networks such as the Internet. It provides a password-protected path through the enterprise firewall to the enterprise server environment in which the network and session services required by thin clients reside. An Internet Service Provider (ISP) must be available to provide access to the Internet. Any of the standard means of connecting to the ISP may be used, such as a dial-up modem, cable modem, or DSL modem.

Note

The connection to the ISP must be established before contacting the enterprise VPN (PPTP) server (this includes dial-up access, as well as direct access through cable modem and DSL modem paths).

Logging-In

After a connection to the enterprise intranet is established, login to the network and/or session services may or may not be required (depending on configurations set by the network administrator, the session servers, or any other requirements). If login to the enterprise intranet is required, a Terminal Login dialog box opens when you turn on the thin client, when you restart the thin client, or after logging off from a user account.

Username and password are assigned initially by the administrator when the account is established, but the password can be changed by the user at a thin client (see "Changing Your Password"). To login to a standard account, enter the username for the account and password allocated to you by the network administrator. Account usernames are not case sensitive, however, passwords are case sensitive.

Note

If you cannot successfully login, ask your network administrator for help.

Changing Your Password

If you are required to log in, you can change your assigned password by selecting the **Check here to change password** check box in the Terminal Login dialog box and using the change password dialog box (type the new password in both the **New Password** and **Confirm** boxes, and click **OK**).

Knowing Your Assigned Privileges

As a thin client operator, you have a thin client account with certain privileges. Your thin client account is a set of application connection definitions and thin client configuration settings that are grouped under a privilege level and assigned to you by your administrator. Administrators create thin client accounts that possess specific connection capabilities, security, and various thin client functions. Assigned privileges allow you certain levels of access to thin client resources.

The three types of operator privilege levels are:

- **Administrator** - With an Administrator privilege level, you can use all of the functions of the thin client. For example, you can add, modify, and delete accounts, and configure or re-configure the connections available for any account.
- **User** - With a User privilege level, you can access and use a limited number of thin client functions (as determined by the administrator).
- **Guest** - With a Guest privilege level, you can access and use the fewest number of thin client functions (as configured by the administrator).

About the Session Services You Will Use

The Desktop connection icons and Connection Manager list entries allow you to initiate connections to servers providing ICA, RDP, Ericom – PowerTerm® TEC, and other services. These services are configured by the administrator for you to use. You can start connections by using the various Desktop or the Connection Manager options made available by the administrator.

The Multiple Sessions feature allows the thin client to have multiple active connections. The number of active connections you can have depends on the following:

- amount of RAM
- types of connections open
- number of connections configured

Note

If your administrator has enabled **Support launching multiple instances on new Desktop** with the New Desktop option, you can also open multiple instances of one ICA or RDP connection (supported for published applications configured as Seamless Windows Connection or PNAgent enabled sessions).

Logging-Out and Shutting Down

After using your thin client, you can sign off from your account (if you signed in initially) or you can shut down the thin client (if your privilege allows).

Clicking **Start | Shut Down** on the windows desktop or clicking **Shut Down** in the Connection Manager opens the Shutdown Window. Use this window to select the **Logout**, **Shutdown the terminal**, or **Shutdown and Restart** option you want. Logging out is available to all operator privilege levels (Guest, User, and Administrator), if local terminal security is enabled.

Note

If an automatic login function is enabled and you log out or restart, the thin client will automatically login.

Figure 4 Shutdown Window

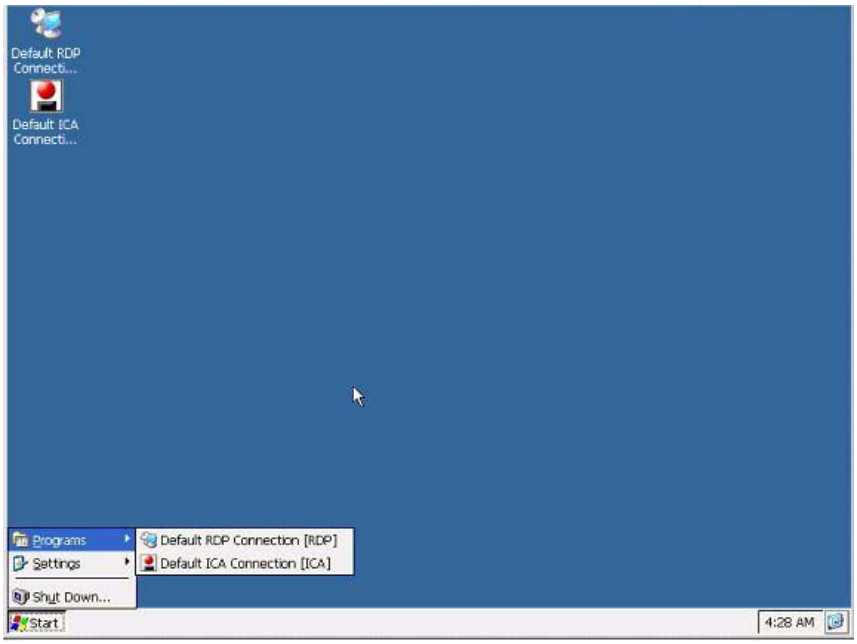
Note

Depending on how the servers and applications are configured, logging-off from or shutting down the thin client may not necessarily close the open server sessions. Generally, you should close sessions before logging-off from or shutting down the thin client.

Using the Desktop

A windows interface (New Desktop) is provided that includes connections, applications, icons, a taskbar, a Start menu, and several related features. It allows you to easily make connections and use the various applications and features made available to your account by your administrator.

Figure 5 Desktop - User example



Note

The Start menu allows quick and easy access to all programs and settings made available by your administrator, as well as shutting down the thin client.

Use the following guidelines:

- To start connections, double-click a desktop icon, right-click on a desktop icon and select **Open**, or use the Start menu (menu options depend on administrator configurations).
- To open the Control Panel, click **Start | Settings | Control Panel**. To start an application in the Control Panel, double-click the application icon.
- Desktop icons can easily be arranged by right-clicking on the desktop and using the menu provided.
- You can toggle between active connections using the taskbar (click on an open connection) or by using the **Alt+Tab** key combination (for details on these and other taskbar features, refer to "Understanding the Taskbar Features").
- Seamless integration of local and remote applications on the local desktop is supported. Within a single session, you can access multiple applications and switch between local and remote applications. In seamless windows mode, applications running on the server appear to the thin client as if they are running locally, and each application appears in its own re-sizable window. This feature is only available for published applications, and if configured by the administrator.

Understanding the Taskbar Features

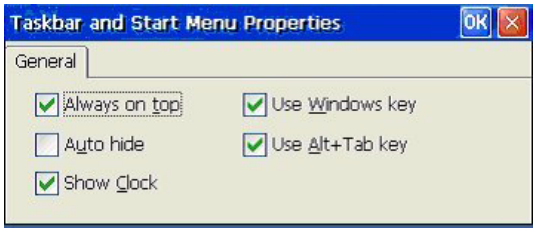
The taskbar provides several important features, including:

- **Taskbar Toggle support** - Allows you to easily toggle (switch) between active connections that are minimized on the taskbar by clicking the connection you want.
- **Task Manager** - Right-clicking on an open area of the taskbar and selecting **Task Manager** opens the Task Manager dialog box. This dialog box displays the active tasks available for you to toggle between (select a task and click **Switch to**) or end (select a task and click **End Task**).
- **Taskbar and Start Menu Properties** - Right-clicking on an open area of the taskbar and selecting **Properties** opens the Taskbar and Start Menu Properties dialog box (you can also click **Start | Taskbar and Start Menu**). Use this dialog box to customize the taskbar.

Note

Properties is not active (grayed) for Guest users.

Figure 6 Taskbar and Start Menu Properties



Use the following guidelines:

- **Always on Top** - Select to have the taskbar remain on top of all windows.
- **Auto Hide** - Select to automatically hide the taskbar when the mouse pointer is not over the taskbar area.
- **Show Clock** - Select to show the current time in the right-hand corner of the taskbar.
- **Use Windows key** - Select to use the Windows key locally with the thin client. For example, pressing the Windows key during an ICA or RDP connection will open the thin client Start menu (not the start menu of the connection).
- **Use Alt+Tab key** - Select to use the **Alt+Tab** key combination to toggle between active local connections (for example, using the **Alt+Tab** key during ICA or RDP connections will toggle between the thin client active local connections - not the open applications within one ICA or RDP connection). If you clear the **Use Alt+Tab key** option, using the **Alt+Tab** key combination will toggle between several open applications within one active ICA or RDP connection.

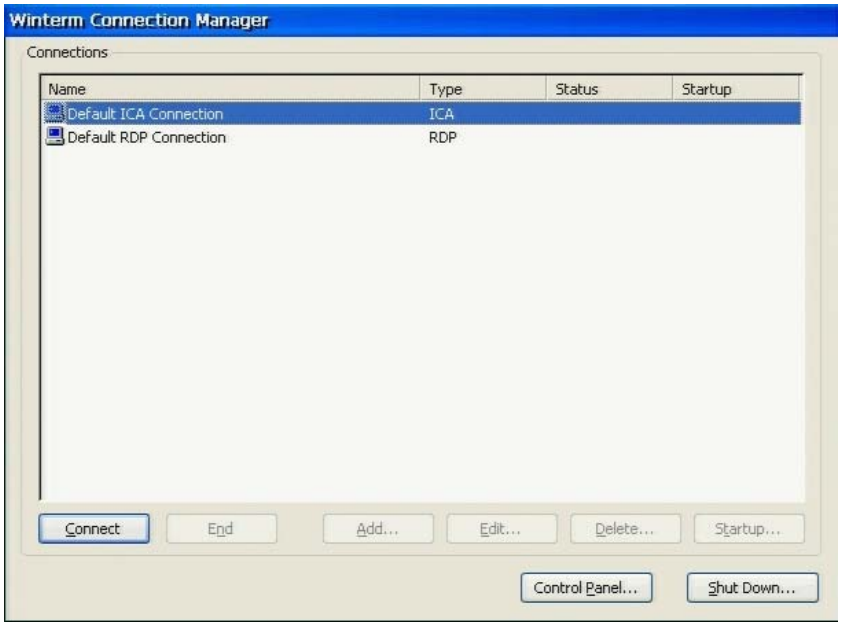
Using the Connection Manager

If you want to use the Connection Manager option, have your administrator configure the Standard Desktop UI (with Connection Manager) in the Desktop Configuration menu in the Control Panel desktop. The Connection Manager allows you to start connections to application servers, access the Control Panel, and open the Shutdown Window.

Note

Availability of features depends on administrator configurations.

Figure 7 Connection Manager example



Use the following guidelines:

- To start a connection, select a connection and click **Connect** (you can also double-click a connection in the list).
- To end a connection, select a connection and click **End** (**End** is enabled when one or more connections become active).
- To open the Control panel, click **Control Panel**. The Control Panel command button is available to User-level and Guest-level operators by default.
- Clicking **Shut Down** opens the Shutdown Window. Use this window to select the **Logout**, **Shutdown the terminal**, or **Shutdown and Restart** option you want.

Note

The **Add**, **Edit**, **Delete**, and **Startup** command buttons are available to administrators only.

The Connection Manager also provides important information about a connection, including:

- **Icon** - The icon preceding the listed name indicates the type of connection as follows:
  - **Computer terminal icon** - Represents a standard thin-client, Ericom – PowerTerm® TEC, or VPN connection.
  - **Telephone icon** - Represents a dial-up connection.
  - **Composite icon consisting of a computer terminal and a telephone** - Indicates that the standard connection will access the network through a dial-up server.
- **Name** - The name of the connection assigned by the administrator.
- **Type** - Supported connection types (the list that appears depends on the applications installed on the thin client), including:
  - Citrix ICA Client
  - Dial-up Client
  - Ericom – PowerTerm® TEC
  - Internet Explorer
  - Microsoft Remote Desktop Client
  - PPP over Ethernet (PPPoE)
  - VPN (PPTP) Client
- **Status** - The status of a connection can be either Active (if the connection is active) or blank (if the connection is not active).
- **Startup** - The startup of a connection can be either Autostart (if the connection is set to start at thin client startup) or blank (if the connection is not set to start at thin client startup).

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3 Setting-up the Thin Client

This chapter contains information to help you set up your thin client using the applications available in the Control Panel.

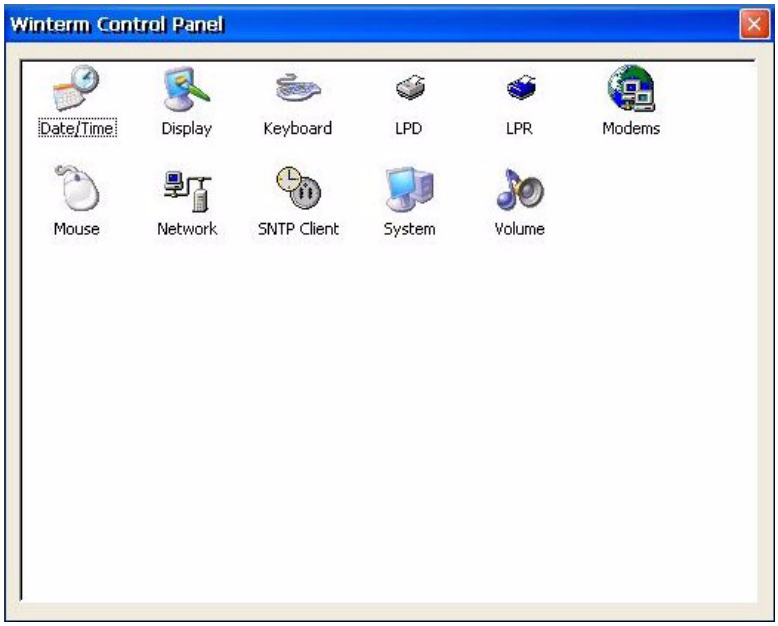
Using the Control Panel Applications

The Control Panel displays icons that open applications you can use to set up the thin client. The default settings of the applications are set by the administrator, however, you can reset some preferences depending on your privileges. You can open the Control Panel from the desktop (click **Start | Settings | Control Panel**) or from the Connection Manager (click **Control Panel**).

Note

The Control Panel may include different icons and features as discussed in this section. User instructions for an Add-on that has been installed can be obtained from your administrator.

Figure 8 Control Panel - User Account Privilege example



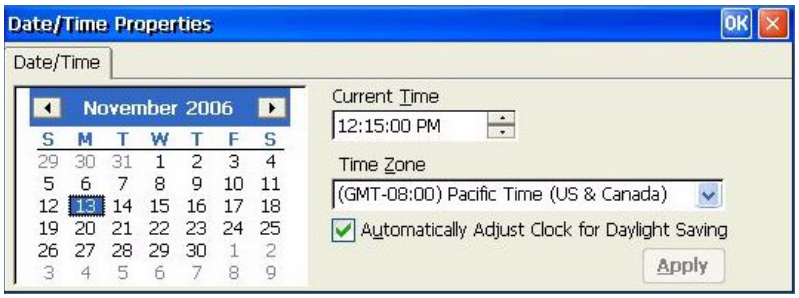
Setting the Date and Time

Double-clicking the **Date/Time** icon in the Control Panel opens the Date/Time Properties dialog box (this feature is not available to Guest-level users). Use this dialog box to set the date and time on the thin client.

Note

If a time server is available, the thin client may be set to automatically synchronize to the time provided by a server (see "Synchronizing Thin Client Time with SNTP Client").

Figure 9 Date/Time Properties



Use the following guidelines:

- Set the current date by using the forward and back buttons on the calendar (to find the current month) and then selecting the current date.
- To manually set the Current Time, enter or select a time slightly ahead of the actual time in **Current Time**, and then just as the actual time reaches your set time, click **Apply**.
- To manually set the Time Zone, select a time zone from the list.
- Depending on whether or not you want to have the time automatically adjusted for Daylight Saving, select or clear the Automatically Adjust Clock for Daylight Saving.

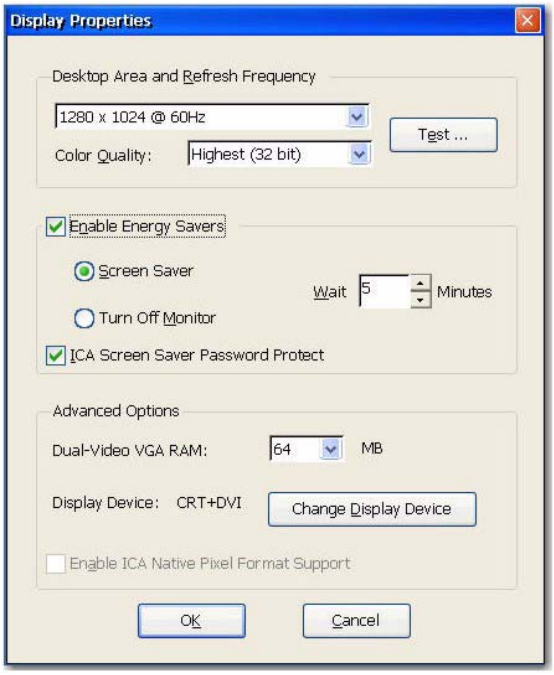
Selecting Display Settings

Double-clicking the **Display** icon in the Control Panel opens the Display Properties dialog box. Use this dialog box to select the monitor screen settings supported by your monitor and other display setting options.

Note

After selecting the display settings and clicking **OK**, you must restart the thin client for the new settings to take effect.

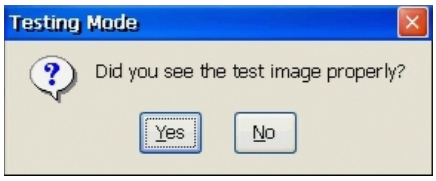
Figure 10 Display Properties



Use the following guidelines:

- Use the Desktop Area and Refresh Frequency lists to select the screen resolution and refresh rate option and Color Quality option supported by your monitor (to test these selections, click **Test** and follow the prompts).

Figure 11 Display - Testing Mode



Note

If you click **No**, you will return to the Display Properties dialog box. If you click **Yes**, you will be returned to Display Properties and then prompted to restart the thin client for the new settings to take effect (to restart, click **OK**).

- Select **Enable Energy Savers** to activate the options and then select the option you want (**Screen Saver** or **Turn Off Monitor**) when the **Wait** time you set expires.
- Select **ICA Screen Saver Password Protect** to use your ICA session logon username and password to access the desktop after the screensaver has been activated.

Note

This feature works only with published desktops because the ICA virtual channel for passwords is available only when the desktop is active. If you are using a published application, download the server side software from http://www.wyse.com/serviceandsupport/support/downloads.asp.

- (For dual-monitor capable thin clients only) Click **Change Display Device** to open the Display Device dialog box. Use this dialog box to select the display option you want from the list (either **CRT**, **DVI**, **CRT+DVI**, or **DVI+CRT**; be sure to select the correct primary and secondary display for **CRT+DVI** or **DVI+CRT**). You can also select or clear the **Extend my windows desktop** check box (*Extend my windows desktop* allows you to drag items across your screen onto alternate monitors, or to resize a window to stretch it across more than one monitor. It is supported in the New Desktop user interface mode only; it is not supported in the Connection Manager user interface mode). For complete Wyse Multi-Display Support and dual monitor support information, visit the Wyse Knowledge Base on the Wyse Web site.

Figure 12 Display Device

Note

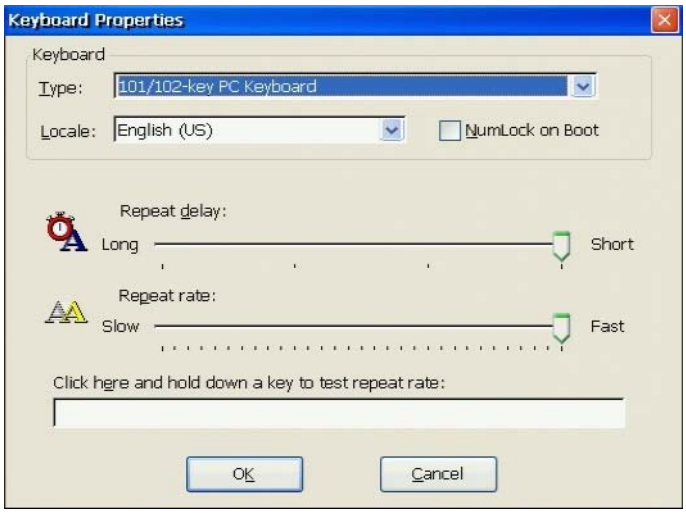
Note: Microsoft RDP 5.5 supports a maximum total resolution of 1600 x 1200 pixels for Windows CE clients: for example, either a single monitor set at 1600 x 1200 resolution or dual monitors each set to a maximum of 800 x 600 (with the desktop extended over both monitors). If the total resolution on the client monitor(s) exceeds 1600 x 1200, black bands appear on the remote desktop in the areas that exceed the limit. RDP 5.5 also only supports display resolution ratios of 4:3 (for example, 1024 x 768, 800 x 600, etc.). If a monitor setting is not a 4:3 ratio, RDP will adjust the display area to the nearest 4:3 ratio and fill any excess screen area with black bands.

- (For ICA only) Select **Enable ICA Native Pixel Format Support** to activate this support feature and increase ICA performance (this feature will reduce RDP performance).

Setting Keyboard Properties

Double-clicking the **Keyboard** icon in the Control Panel opens the Keyboard Properties dialog box. Use this dialog box to select the keyboard language.

Figure 13 Keyboard Properties



Use the following guidelines:

- Keyboard area:
  - **Type** - Select the keyboard type from the list of supported keyboards.
  - **Locale** - Select one of the supported keyboard languages shown in Table 1.

Table 1 Supported keyboard languages

Supported keyboard languages	
Arabic (101)	Hungarian
Arabic (102)	Italian
Arabic (102) AZERTY	Italian (142)
Belgian Dutch	Japanese
Belgian French	Korean
Brazilian (ABNT)	Latin American
Canadian French	Norwegian
Canadian French (Legacy)	Polish (214)
Canadian Multi Standard	Polish (Programmers)
Chinese Simplified - US Keyboard	Portuguese
Chinese Traditional - US Keyboard	Romanian
Croatian	Russian
Czech	Slovak
Danish	Slovenian
Dutch	Spanish
English (UK)	Spanish Variation
English (US)	Swedish
Finnish	Swiss French
French	Swiss German
German	Turkish F
Greek	Turkish Q
Hebrew	US International

Note

An IEPC keyboard is required for any language other than English (US). The keyboard layouts are different for each of the languages in the list.

- **NumLock on Boot** - Select if you want the numeric keyboard to be active when the thin client starts.
- Character Repeat area:
  - **Repeat delay** slider control - Adjusts the repeat delay of keyboard characters. Repeat delay determines how long the key must be held down before the character starts repeating.
  - **Repeat rate** slider control - Adjusts the repeat rate of a keyboard character. Repeat rate determines how quickly the same character will appear on screen when the associated key is held down.

Configuring Line Printer Daemon (LPD) Services

A thin client can be configured to provide Line Printer Daemon (LPD) services (making the thin client a printer server receiving print jobs from one or more clients and spooling these jobs to a designated physical port). The LPD server receives print jobs sent to a named line printer queue from the LPR client and prints them on the designated printer. For information on LPR, refer to "Configuring LPR Settings."

Note

LPD service itself does not rely on static IP address to function, however, it is recommended that the LPD server (the thin client) be assigned a static IP address to avoid the need to re-configure the LPR clients due to LPD server IP address changes. To specify a static IP address for the LPD server (thin client), use Settings dialog box as described in "Configuring Network Adapters."

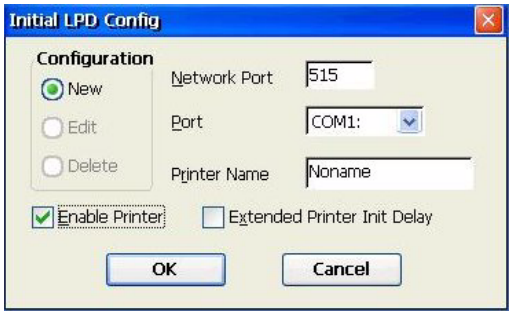
Double-clicking the **LPD** icon in the user or administrator Control Panel opens the LPD Config dialog box. Use this dialog box to select and configure an LPD server. Configuration allows a configuration to be created (**New** - see "Creating a New LPD Configuration"), edited (**Edit** - see "Editing an LPD Configuration"), or deleted (**Delete** - see "Deleting an LPD Configuration"). The remaining boxes and options define values common to all print queue configurations that the LPD Server manages.

Creating a New LPD Configuration

To create a new print queue configuration:

1. Double-click **LPD** in the Control Panel to open the LPD Config dialog box.

Figure 14 Initial LPD Config - New configuration



2. Select **New**.
3. Use the following guidelines (after configuring, be sure to click **OK**):

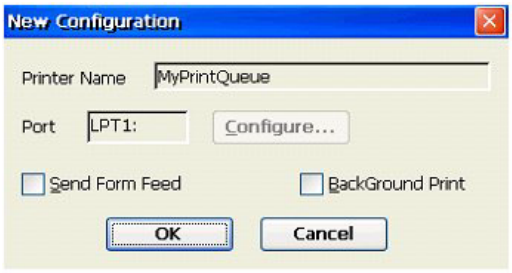
Note

Initially an LPD Server is disabled. All boxes and options are disabled except for **Enable Printer**, **OK**, and **Cancel**. To enable the LPD Server, select **Enable Printer**. A reboot is necessary after initially enabling the server. Similarly a reboot is necessary if the server is disabled by clearing **Enable Printer**.

- You must enter the name of the new print queue in **Printer Name** and select an output port in **Port**. In addition you can change the global settings **Network Port** and **Extended Printer Init Delay** to suit the needs of the current and any existing configurations.
- **Printer Name** actually refers to the print queue from which the server receives print jobs from an LPR client. The actual printer name may not match the print queue name. The name is case sensitive and is required. The LPD server can manage multiple print queues. Each queue is assigned a unique physical port specified by **Port**. This one-to-one correspondence between the queue name and physical port allows LPD to easily route print jobs to a designated printer. There are no fundamental limitations preventing the use of multiple physical ports for each named queue. However, no method is currently defined for this implementation that allows the identification of a specific port within a named queue.
- **Port** is the value of the physical port to which a printer is attached and the server sends the print job.
- **Network Port** is used to set a port value on which the LPD server listens for a print job from an LPR client. The LPD server listens on port 515 by default. You do not need to change this value unless the LPR client is sending a print job on a port other than the default port value.
- Selecting **Extended Printer Init Delay** gives the printer additional time to initialize. Enable this feature only if the printer requires additional time to initialize before printing. Otherwise, unnecessary delays may occur during printing.

The following figure shows an example of a new print queue configuration. Note that if there are no more physical ports available for printing the New option is disabled.

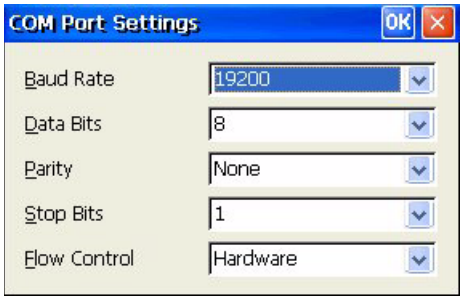
Figure 15 LPD - New Configuration



Use the following guidelines”

- Both **Printer Name** and **Port** are displayed as read only boxes.
- Click **Configure** to open and use the COM Port Settings dialog box if a COM port is selected in the **Port** box and you need to configure the serial port parameters (change any values of interest and press ENTER. Click the window close button X to cancel any changes).

Figure 16 COM Port Settings



- Select **Send Form Feed** to force a form feed or page eject at the end of each print job. You may need to select this if the print job you receive does not automatically send a form feed. But you may also receive an additional blank page if the print job you are receiving already has sent a form feed at the end of the print job.
- Selecting **BackGround Print** reduces the priority of the printing thread to a low level to reduce potential conflicts with priority foreground processes.

Editing an LPD Configuration

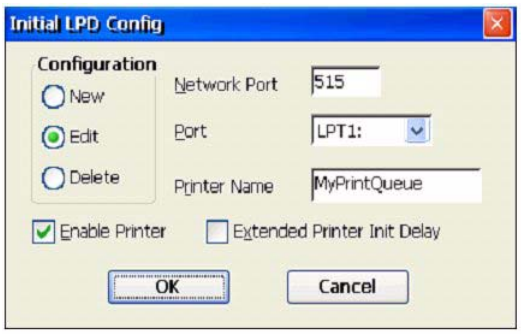
To edit a print queue configuration:

1. Double-click **LPD** in the Control Panel to open the LPD Config dialog box.

Note

You may change any combination of values, including **Printer Name**. The following figure shows an example of an edit print queue configuration. Note that if there are no existing print queue configurations the Edit button is disabled.

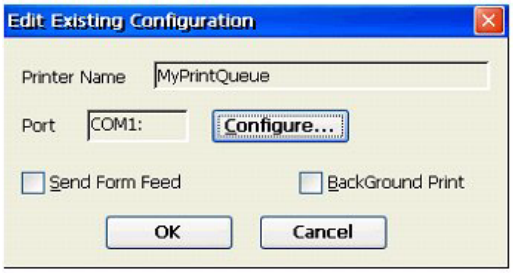
Figure 17 Initial LPD Config - Edit configuration



2. Select **Edit**.
3. Use the configuration guidelines in "Creating a New LPD Configuration" to change any combination of values (after configuring, be sure to click **OK**).

The following figure shows the edit configuration screen after **Port** has been changed to COM1.

Figure 18 LPD - Edit Existing Configuration



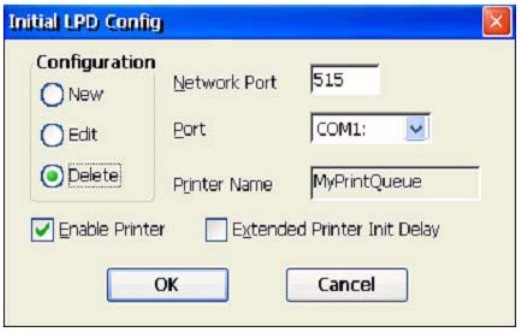
Deleting an LPD Configuration

To delete a print queue configuration:

1. Double-click **LPD** in the Control Panel to open the LPD Config dialog box.

Note
If there are no existing print queue configurations the Delete button is disabled.

Figure 19 Initial LPD Config - Edit configuration



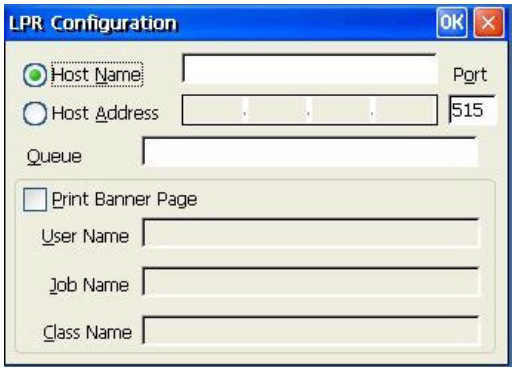
2. Select **Delete**.
3. Click **OK**.

Configuring LPR Settings

A thin client can also be configured as an LPR client. LPR is a component of the Line Printer Daemon Protocol. LPR works in conjunction with the line printer daemon (LPD) server. LPR is a client sending a print job to a server. LPD is a server receiving print tasks from one or more LPR clients and spooling these jobs to a physical port. The purpose of LPR is to assign a print job to a named line printer queue managed by the LPD server. LPR can be configured by double-clicking the **LPR** icon in the user or administrator Control Panel and using the LPR Configuration dialog box.

Note
LPR is supported for RDP connections, but not supported for ICA connections.

Figure 20 LPR Configuration



Use the following guidelines:

- **Host Name** and **Host Address** - You can enter either a symbolic name or a dotted decimal IP address for the LPD server. One or the other is required. The Host Name must resolve to a valid address. Using a Host Name is easier and more portable, since the IP address is dynamically determined, but it is not required.
- **Port** - The Port is used to set a port value of the LPD server to which the LPR client should send the print job. The LPD server listens to port 515 by default. You do not need to change this value unless the LPD server you are sending the print job to uses a port value other than the default.
- **Queue** - The Queue is the name of a specific queue managed by the LPD server to which the LPR client should send the print job. The behavior of the server is implementation dependent. Some servers will restrict printing to an explicitly specified queue, while others will dynamically create a queue name and then print the print job. The Queue name is case sensitive.
- **Print Banner Page** - Select Print Banner Page to enable printing an optional banner page that precedes the main print job. If this box is not selected the following boxes are disabled. Banner page printing is highly server dependent. Any of the following that should not be printed on the banner page should be left blank:
  - **User Name** - The User Name is optional and may be left blank. The maximum length is 31 characters.
  - **Job Name** - The Job Name is optional and may be left blank. The maximum length is 99 characters.
  - **Class Name** - The Class Name is optional and may be left blank. The maximum length is 31 characters.

Note

You can configure multiple thin clients with the same LPR settings, by pushing the desired registry settings to thin clients via a Wyse Device Manager script (for information on Wyse Device Manager, refer to the Wyse Device Manager documentation on the Wyse Web site.

After configuring the LPR client settings, you must configure the desired application to direct a print job to the LPR client. LPR client creates a logical port LPT8 on the thin client. You need to configure your application to send a print job to a printer attached to LPT8 Use the following guidelines when configuring an individual application.

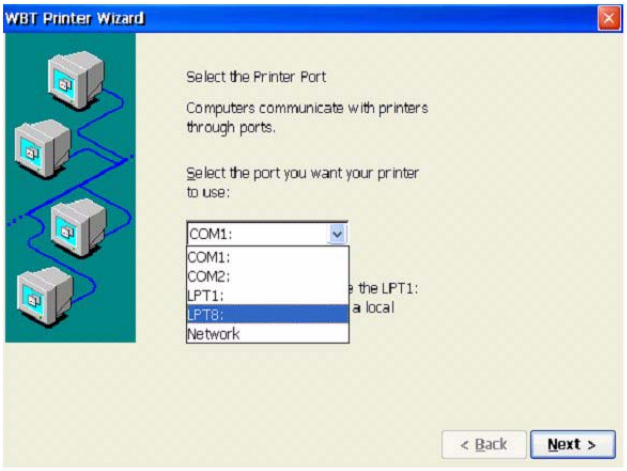
Note

Currently RDP is the only application confirmed to work with LPT8. However, any application that recognizes LPT8 as a printer port should be able to print to an LPD server using the LPR client.

To configure a client printer in order to use the LPR Client from a RDP session:

1. Double-click **Client Printers** in the Control Panel to open the Client Printers dialog box and click **Add**.

Figure 21 LPR Configuration - select port LPT8



2. Select **LPT8** for the port. This is the unique port name that identifies the LPR client logical port.
3. Click **Next** and add a printer that corresponds to the printer attached to your LPD server. If you simply want to print text, you can select **Generic/Text Only**. However, if you want to print graphics you must select an actual printer.
4. After selecting your printer, you will be asked to name it. The name you choose is arbitrary, since this name is not used by the LPR client. However, it is helpful to give it a meaningful name so that you can easily identify it when printing from a RDP session.
5. After connecting to an RDP session, you can then print to the LPD Server by selecting the printer you have configured to use the LPR client.

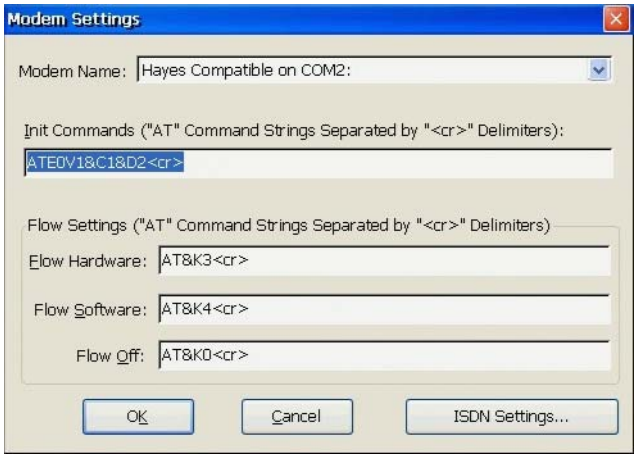
Configuring Modems

Double-clicking the **Modems** icon in the Control Panel opens the Modem Settings dialog box (this feature is not available to Guest-level users). Use this dialog box to enter or modify control commands required to operate the modem. If Integrated Services Digital Network (ISDN) is to be used, be sure to click **ISDN Settings** to open a dialog box for entering ISDN parameters.

Note

Refer to the modem device instructions for listings of modem AT commands available for the modem.

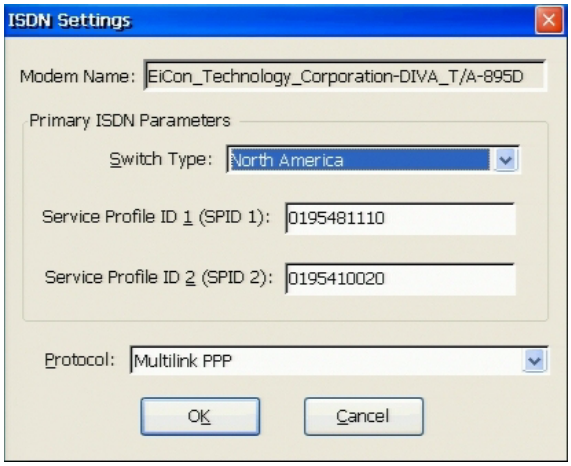
Figure 22 Modem Settings



Configuring ISDN Settings

Clicking **ISDN Settings** in the Modem Settings dialog box opens the ISDN Settings dialog box. Use this dialog box to enter the parameters and protocol information for an Integrated Services Digital Network (ISDN) modem.

Figure 23 Modems - ISDN Settings (example of EiCon-Tech modem defaults)



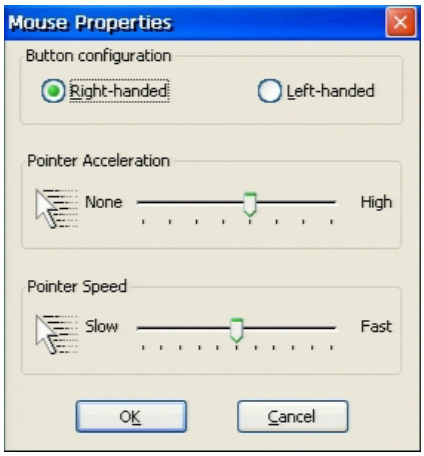
Use the following guidelines:

- **Modem Name** - Read-only display of the manufacturer and model of the modem selected in the Modem Settings dialog box.
- Primary ISDN Parameters area:
  - **Switch Type** - Select the switch type from the drop-down list.
  - **Service Profile ID 1** and **Service Profile ID 2** - Enter the SPID numbers provided by your telephone company.
- **Protocol** - Select the ISDN protocol required by the telephone company.

Setting Mouse Properties

Double-clicking the **Mouse** icon in the Control Panel opens the Mouse Properties dialog box. Use this dialog box to select your mouse properties.

Figure 24 Mouse Properties



Use the following guidelines:

- **Button configuration** - Select the button configuration option you will use on your mouse. The default is Right-handed (the mouse button on the left is used for primary functions such as selecting and dragging).
- **Pointer Acceleration** slider control - Select how long it takes for the pointer to get up to its top speed when the mouse is moved. When set to **None**, it takes the pointer a longer time to get up to top speed.
- **Pointer Speed** slider control - Select how fast the pointer moves on the screen. Move the slider to Slow to slow pointer motion or Fast to speed-up pointer motion.

Configuring Network Adapters

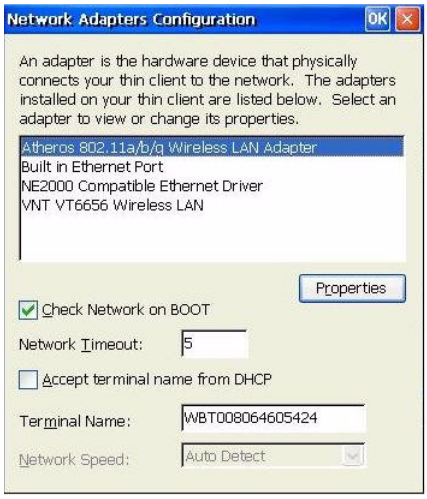
Double-clicking the **Network** icon in the Control Panel opens the Network Adapters Configuration dialog box (this feature is not available to Guest-level users). Use this dialog box to view the list of adapters installed on the thin client and to select the Network Adapters Configuration settings.

Note

For information on configuring thin clients containing the optional Internal Wireless feature, refer to "Configuring the Optional Internal Wireless Feature."

For information on configuring available wireless Add-ons, refer to the *Add-on Administrators Guide: Wyse® Winterm™ 3 series, Based on Microsoft® Windows® CE*.

Figure 25 Network Adapters Configuration - without Internal Wireless feature



Use the following guidelines:

- Select **Check Network on BOOT** if you want to have the thin client check the network upon thin client start-up.
- Select **Accept terminal name from DHCP** if you want to use terminal names assigned from the DHCP server.
- Enter the Terminal Name if you are not selecting **Accept terminal name from DHCP**.
- Select the supported **Network Speed** from the list.
- To change the configuration settings of an adapter, select it and click **Properties** to open and use the Settings dialog box.

Note

It is recommended that you modify default configuration settings according to instructions provided by your administrator.

Configuring the Optional Internal Wireless Feature

If your thin client contains the optional Internal Wireless feature, use the information in this section to configure it.

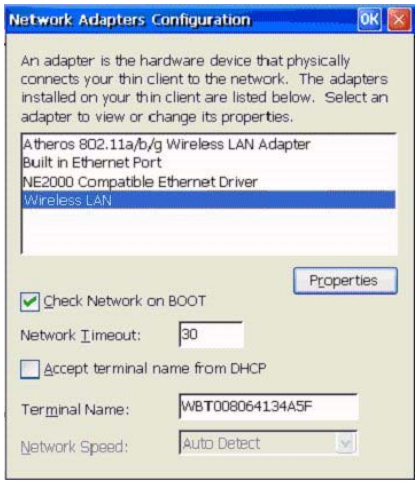
To configure the optional Internal Wireless feature:

1. Double-click the **Network** icon in the Control Panel to open the Network Adapters Configuration dialog box (this feature is not available to Guest-level users).

Note

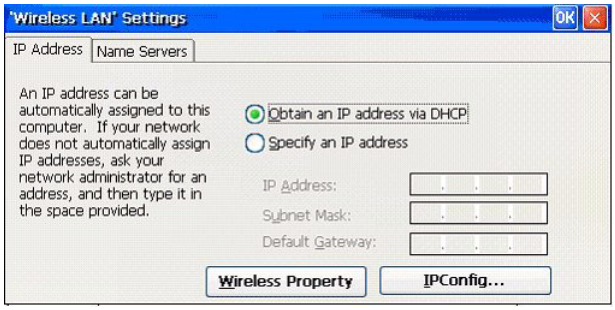
For the New Desktop option, you can also double-click the wireless icon in the right corner of the taskbar to open the Property dialog box and continue with step 4.

Figure 26 Network Adapters Configuration - with Internal Wireless feature



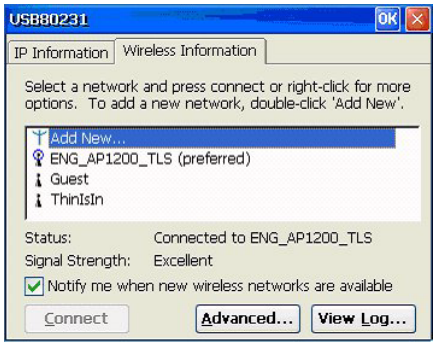
2. Select the Internal Wireless from the list and click **Properties** to open the Settings dialog box.

Figure 27 Settings - Internal Wireless



3. Click **Wireless Property** to open the Property dialog box.
4. Click the **Wireless Information** tab.

Figure 28 Property - Internal Wireless



From the Wireless Information tab you can configure settings for different wireless encryption and access control parameters. Depending on your wireless environment, continue with the set of procedures you need as described in "Without Wired Equivalent Privacy (WEP) Encryption," "With Wired Equivalent Privacy (WEP) Encryption," "With 802.1x Authentication - EAP-MD5 CHAP," "With 802.1x Authentication - PEAP-MSCHAPv2," "With 802.1x Authentication - EAP-TLS."

Without Wired Equivalent Privacy (WEP) Encryption

In this case, the wireless access point does not need encryption. Under this open system of authentication, any wireless station can request authentication. The station that needs to authenticate with another wireless station sends an authentication management frame that contains the identity of the sending station. The receiving station then returns a frame that indicates whether it recognizes the sending station.

1. Double-click **Add New** in the network list of the Wireless Information tab to open the Wireless Properties dialog box.

Figure 29 Wireless Properties without encryption

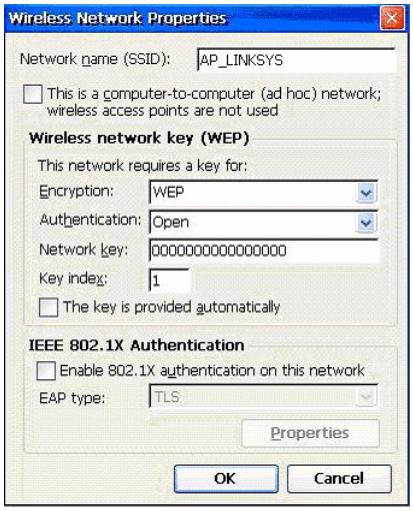
2. Enter the SSID of the wireless access point to which you want to connect and select **Disabled** for the Encryption type.
3. Click **OK**.

With Wired Equivalent Privacy (WEP) Encryption

In this case, the wireless access point uses encryption. Under this system of authentication, 64- bit or 128-bit encryption can be used.

1. Double-click **Add New** in the network list of the Wireless Information tab to open the Wireless Properties dialog box.

Figure 30 Wireless Properties with encryption



2. Enter the SSID of the wireless access point to which you want to connect and select **WEP** for the Encryption type.
3. Select **Open** for the Authentication type.
4. Enter the Network key (for 64-bit encryption, the key length must be 10 characters; for 128-bit encryption, the key length must be 26 characters).
5. Enter the Key Index.
6. Click **OK**.

With 802.1x Authentication - EAP-MD5 CHAP

In this case, you will configure the adapter to connect to the access point to which you want to connect using EAP-MD5 authentication.

1. Double-click **Add New** in the network list of the Wireless Information tab to open the Wireless Properties dialog box.

Figure 31 Wireless Properties example using EAP-MD5 CHAP

2. Enter the SSID of the wireless access point to which you want to connect.
3. Depending on your access point set-up, use the following guidelines:
   - If your access point is set up to use WEP, select **WEP** for the Encryption type.
   - If your access point is set up to use TKIP, select **TKIP** for the Encryption type.
   - If your access point is set up to use open authentication, select **Open** for the Authentication type.
   - If your access point is set up to use WPA authentication, select **WPA** for the Authentication type.
4. Select **The key is provided automatically** if your access point supports WEP key broadcasting. Otherwise, clear **The key is provided automatically** and manually enter a Network key that matches your access point WEP key settings.
5. Select **Enable 802.1X authentication on this network**, and then select **MD5-Challenge** for the EAP type.
6. Click **OK** (after the thin client is associated with the access point and the User Logon dialog box appears, enter your logon account credentials, and then click **OK**).

With 802.1x Authentication - PEAP-MSCHAPv2

In this case, you will configure the adapter to connect to the access point to which you want to connect using PEAP-MSCHAPv2 authentication.

1. Double-click **Add New** in the network list of the Wireless Information tab to open the Wireless Properties dialog box.

Figure 32 Wireless Properties example using PEAP-MSCHAPv2

2. Enter the SSID of the wireless access point to which you want to connect.
3. Depending on your access point set-up, use the following guidelines:
   - If your access point is set up to use WEP, select **WEP** for the Encryption type.
   - If your access point is set up to use TKIP, select **TKIP** for the Encryption type.
   - If your access point is set up to use open authentication, select **Open** for the Authentication type.
   - If your access point is set up to use WPA authentication, select **WPA** for the Authentication type.
4. Select **The key is provided automatically** if your access point supports WEP key broadcasting. Otherwise, clear **The key is provided automatically** and manually enter a Network key that matches your access point WEP key settings.
5. Select **Enable 802.1X authentication on this network**, and then select **PEAP** for the EAP type.
6. Click **Properties** to open the Authentication Settings dialog box, select or clear **Validate Server** (if you select the check box, select a client certificate), and then click **OK** (the client certificate must already be imported to the thin client).

Note

Unless you have imported a server certificate to your thin client, the **Validate Server** check box must be cleared. This is because the RADIUS server which authenticates your wireless connection is not registered as a trusted authority with your thin client until you have imported the server certificate. For information about importing a server certificate as a trusted root for your thin client, refer to the *Administrators Guide: Wyse® Winterm™ 3 series, Based on Microsoft® Windows® CE*.

7. Click **OK** (after the thin client is associated with the access point and the User Logon dialog box appears, enter your logon account credentials, and then click **OK**).

With 802.1x Authentication - EAP-TLS

In this case, you will configure the adapter to connect to the access point to which you want to connect using EAP-TLS authentication.

1. Double-click **Add New** in the network list of the Wireless Information tab to open the Wireless Properties dialog box.

Figure 33 Wireless Properties example using EAP-TLS

2. Enter the SSID of the wireless access point to which you want to connect.
3. Depending on your access point set-up, use the following guidelines:
   - If your access point is set up to use WEP, select **WEP** for the Encryption type.
   - If your access point is set up to use TKIP, select **TKIP** for the Encryption type.
   - If your access point is set up to use open authentication, select **Open** for the Authentication type.
   - If your access point is set up to use WPA authentication, select **WPA** for the Authentication type.
4. Select **The key is provided automatically** if your access point supports WEP key broadcasting. Otherwise, clear **The key is provided automatically** and manually enter a Network key that matches your access point WEP key settings.

5. Select **Enable 802.1X authentication on this network**, and then select **TLS** for the EAP type.
6. Click **Properties** to open the Authentication Settings dialog box, select or clear **Validate Server** (if you select the check box, select a client certificate), and then click **OK** (the client certificate must already be imported to the thin client).

Note

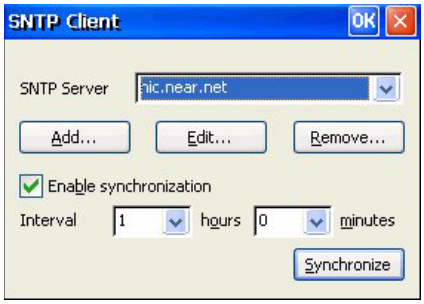
Unless you have imported a server certificate to your thin client, the **Validate Server** check box must be cleared. This is because the RADIUS server which authenticates your wireless connection is not registered as a trusted authority with your thin client until you have imported the server certificate. For information about importing a server certificate as a trusted root for your thin client, refer to the *Administrators Guide: Wyse® Winterm™ 3 series, Based on Microsoft® Windows® CE*.

7. Click **OK** (after the thin client is associated with the access point and the User Logon dialog box appears, enter your logon account credentials, and then click **OK**).

Synchronizing Thin Client Time with SNTP Client

Double-clicking the **SNTP Client** icon in the Control Panel opens the SNTP Client dialog box (this feature is not available to Guest-level users). Use this dialog box to synchronize the thin client clock to the time provided by a Simple Network Time Protocol (SNTP) server.

Figure 34 SNTP Client



SNTP Server lists servers that will be contacted to provide the time synchronization signal. The server list can be modified by using the Add, Edit, and Remove command buttons.

The synchronization can be set to occur upon intervals by using the Enable Synchronization check box (select the check box and enter the interval hours and minutes you want), or synchronization can be initiated immediately by clicking **Synchronize**. An error message appears if synchronization fails. This local synchronization feature can be used to test availability of listed SNTP servers.

To modify the server list, use the following guidelines:

- **Add** - To add a server to the list, click **Add** to open the Add SNTP Server dialog box, enter the SNTP server, and click **OK**.

Figure 35 SNTP - Add SNTP Server

- **Edit** - To edit a server in the list, select a server in the list, click **Edit** to open the Edit SNTP Server dialog box, clear the information, enter the SNTP server, and click **OK**.

Figure 36 SNTP - Edit SNTP Server

- **Remove** - To remove a server from the list, select it, click **Remove**, and click **Yes** to confirm.

Using the System Information Features

Double-clicking the **System** icon in the Control Panel opens the System Info dialog box. Use this dialog box to view information about the thin client, system, and thin client memory. You can also use this dialog box to allocate thin client memory.

General Tab

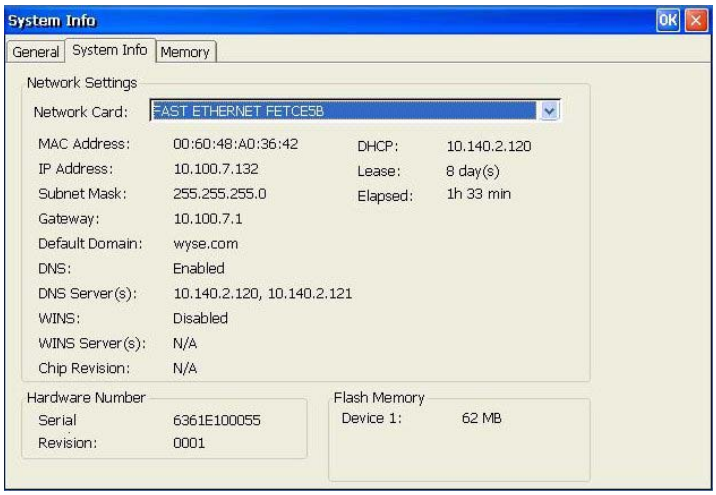
The General tab displays the manufacturer name, product information, installed memory, operating system version, copyright information, and so on. It also contains a check box (active for administrators only) that allows the administrator to reset the thin client to factory default settings.

Figure 37 System Info - General tab

System Info Tab

The System Info tab displays the system information (including, the Network Settings, Hardware Number, Flash Memory information, and so on).

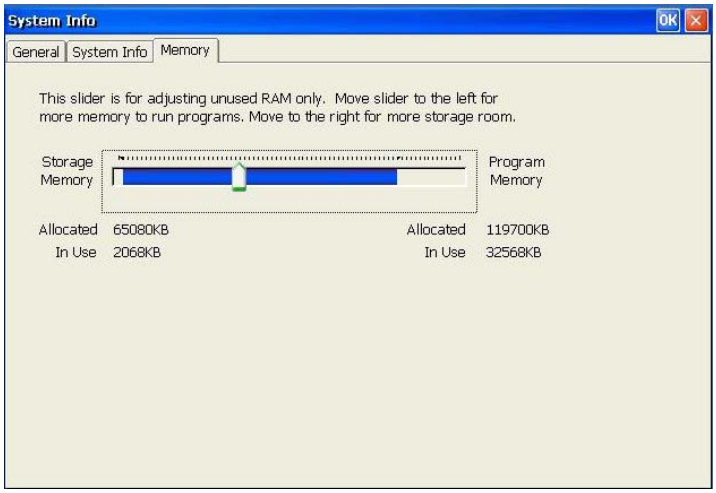
Figure 38 System Info - System Info tab



Memory Tab

The Memory tab displays the memory allocated to run programs and the memory allocated for storage room. Use the slider to allocate unused RAM to either Storage Memory or Program Memory, and click **OK**.

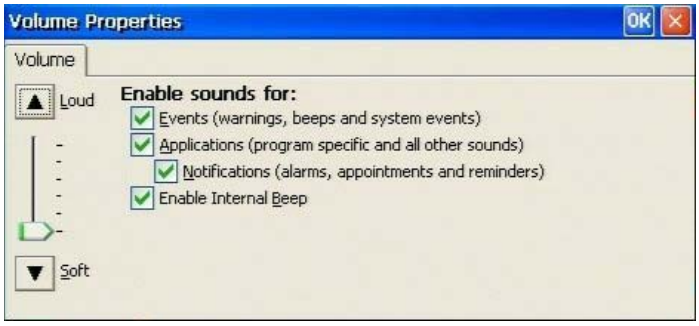
Figure 39 System Info - Memory tab



Setting Volume Properties

Double-clicking the **Volume** icon in the Control Panel opens the Volume Properties dialog box. Use this dialog box to set the volume and to enable sounds for various events and conditions.

Figure 40 Volume Properties



Modifying PNAgent Settings on the Thin Client

Depending on administrator configurations, you may be able to modify Program Neighborhood Agent (PNAgent) settings on the thin client through the Global ICA Client Settings icon in the Control Panel.

Enabling the Program Neighborhood Agent

To enable the PNAgent on the thin client:

1. Double-click the **Global ICA Client Settings** icon in the control panel (or right-click an exiting ICA connection and select **Edit Connection**) to open the Global ICA Client Settings dialog box, and select the **Options** tab.
2. Select the **Enable PNAgent** check box
3. Enter the Server URL in the PNAgent Configuration window and click **Update**.
4. Enter your logon credentials.

   Depending on how the PNAgent has been configured on the server by the administrator, you may be given the option to save your password. If you select this option, you will not be prompted for your password again until the next time you change it. If you do not select this option, you will be prompted for your password each time you connect or reboot the thin client.

Note

If the only logon mode available is Prompt User (which appears as a selected and dimmed out option on the Server tab), it means that you will be prompted to enter your logon credentials at the start of each session.

5. When you are finished configuring your settings, click **OK** to close the Global ICA Client Settings dialog box.

Changing the Server URL

The PNAgent requires the URL to a configuration file on the server running the Web Interface. This file contains the information the PNAgent needs for users to access remote applications on a local device.

After enabling the PNAgent, you can change the server URL on the thin client at any time by completing the following procedures:

1. Double-click the **Global ICA Client Settings** icon in the control panel (or right-click an exiting ICA connection and select **Edit Connection**) to open the Global ICA Client Settings dialog box, and select the **Preferences** tab.
2. Click **PNAgent Settings**.
3. Select the **Server** tab to display the currently selected URL.
4. Click **Change**, and enter the new server URL.
5. Click **Update** to apply the update and return to the Server tab.

Note

For more information on the Citrix PNAgent, refer to the Citrix ICA documentation.

Figures

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Tables

Users Guide

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