# **Administrators Guide**

Wyse<sup>®</sup> Winterm<sup>™</sup> 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE 5.0

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# **NRI Notes:**

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

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# **Ordering Information**

For availability, pricing, and ordering information in the United States and Canada, call 1-800-GET-WYSE (1-800-438-9973) or visit us at <a href="http://www.wyse.com">http://www.wyse.com</a>. In all other countries, contact your sales representative.

#### **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 and 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.

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# 1 Introduction

Wyse<sup>®</sup> Winterm™ 3 series Thin Clients use the Windows™ CE operating system. These thin clients provide 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<sup>®</sup> TEC. Other locally installed software permits remote administration of the thin clients and provides local maintenance functions.

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.

# **About this Guide**

This guide is intended for administrators of the Wyse<sup>®</sup> Winterm™ 3 series Thin Client. It provides information and detailed system configurations to help administrators design and manage a Wyse<sup>®</sup> Winterm™ 3 series Thin Client environment.

# **Organization of this Guide**

This guide is organized as follows:

Chapter 2, "Establishing a Server Environment," contains information on the network architecture and enterprise server environment needed to provide network and session services for Wyse<sup>®</sup> Winterm™ 3 series Thin Clients. It also includes information to help you to address important considerations when configuring access to the server environment and when configuring the services to be provided by the server environment.

Chapter 3, "Configuring Basic Thin Client Settings," contains information on setting up the basic functions for thin client use. It includes instructions for setting up a new thin client and resetting a thin client to factory defaults.

Chapter 4, "Managing Connections," describes important connection features available for you to use. It also provides instructions on using the administrator Desktop and Connection Manger to manage the connections and applications you make available to users.

Chapter 5, "Configuring Connections," contains information and detailed instructions on setting up connections for selection and use by a thin client user.

Chapter 6, "Using the Control Panel," provides guidelines on using the Control Panel to set-up thin client operating parameters and user accounts.

Chapter 7, "System Administration," contains information and detailed instructions to help you manage your thin client environment through Wyse Device Manager Software, DHCP, and FTP.

# **Wyse Technical Support**

To access Wyse technical resources, visit <a href="http://support.wyse.com">http://support.wyse.com</a>. If you still have questions, you can submit your questions using the <a href="https://wyse.com">Wyse Self Service Center</a>, 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 <a href="http://www.wyse.com/global">http://www.wyse.com/global</a>.

# Related Online Resources Available at Wyse

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

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

The Users Guide: Wyse<sup>®</sup> Winterm™ 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE is intended for users of the Wyse<sup>®</sup> 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. It is available at: http://www.wyse.com/manuals.

The Add-on Administrators Guide: Wyse<sup>®</sup> Winterm™ 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE is intended for administrators of the Wyse<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> Winterm™ 3 series Thin Client ReadMe documentation. It is available at: <a href="http://www.wyse.com/manuals">http://www.wyse.com/manuals</a>.

The Local Smart Card Administrators Guide: Wyse<sup>®</sup> Winterm™ 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE is intended for administrators of the Wyse<sup>®</sup> 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.

Wyse Thin Computing Software is available on the Wyse Web site at: <a href="http://www.wyse.com/products/software">http://www.wyse.com/products/software</a>.

# **2** Establishing a Server Environment

This chapter contains information on the network architecture and enterprise server environment needed to provide network and session services for Wyse<sup>®</sup> Winterm™ 3 series Thin Clients. It also includes information to help you to address important considerations when configuring access to the server environment and when configuring the services to be provided by the server environment.

# **Setting-Up Access to the Enterprise Servers**

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. 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. In this configuration all network
  services may be used, including the enterprise DHCP server. A DHCP server on the
  network can provide not only the thin client IP address, but also the location of the file
  server containing the software updates. For more information on DHCP, refer to "Using
  Dynamic Host Configuration Protocol (DHCP)" and "Configuring DHCP Options."
- Wireless Direct A supported wireless adapter can be used to access the enterprise intranet. A wireless adapter uses short-range wide-band radio to communicate with a wireless access point. Typically, wireless access points are located at several locations in the enterprise within range of the wireless adapters and directly connected to the enterprise intranet. For more information on available wireless network devices and wireless Add-on support available from Wyse, refer to the Add-on Administrators Guide: Wyse<sup>®</sup> Winterm™ 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE.
- PPPoE Thin client support for PPPoE is intended for devices which connect to the Internet directly from remote locations. The PPPoE Connection Wizard can be used and is available from the desktop or the Connection Manager to configure and invoke PPPoE connection to WAN. Once connected, all packets are through a PPP connection over Ethernet to the DSL modem. For more information on the PPPoE Connection Wizard, refer to "Creating and Configuring PPPoE Connections."
- Dial-up 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) PPTP (Point-to-Point Tunneling Protocol) 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, and DSL modem. The connection to the ISP must be established first, before contacting the enterprise PPTP VPN server. This includes dial-up access as well as direct access through the cable modem and DSL modem paths. For more information on the VPN Connection Wizard, refer to "Creating and Configuring VPN (PPTP) Client Connections."

# Understanding the Network Services Used and Provided by the Thin Client

Setting-up network services allows users to initiate connections to the enterprise servers providing ICA, RDP, and other services. Network services used by the thin client include DHCP and FTP file services, DNS, and LPD.



#### Note

The thin client can act as an LPR client and use the LPD services provided by other nodes on the network. In addition, the thin client can act as an LPD server and provide print services to other nodes on the network.

# **Using Dynamic Host Configuration Protocol (DHCP)**

A thin client is initially configured to obtain its IP address and network configurations from a DHCP server (new thin client or a thin client reset to default configurations). A DHCP server can also provide the IP address or DNS name of the FTP server and the FTP root-path location of the upgrade images for access through the DHCP upgrade process. Using DHCP to configure and upgrade thin clients saves you the time and effort needed to complete these processes locally on multiple thin clients.



# Note

If a particular thin client is to function as an LPD print server, it should be assigned a fixed IP address. However, you can also guarantee that an LPD server will get the same IP address every time by making a reservation for that thin client in the DHCP server. In that way, you can preserve the stateless nature of the thin client and still guarantee a fixed address for the server. In fact, you can assign a symbolic name to the reservation address so that other thin clients can reference the LPD server by name rather than by static IP address (the symbolic name must be registered with a DNS server before other thin clients will be able to locate this LPD server). The thin client does not dynamically register its name and the DNS registration must be manual.

The DHCP options listed in Table 1 are accepted by the thin clients. For more information on configuring the DHCP Options dialog box, refer to "Configuring DHCP Options."



# Note

Use of DHCP is recommended. If a DHCP server is not available, fixed IP addresses can be assigned (this does, however, reduce the stateless functionality of the thin clients) and must be entered locally for each device.

**Table 1 DHCP Options** 

Option	Description	Notes
1	Subnet Mask	Required.
3	Router	Optional but recommended. It is not required unless the thin client must interact with servers on a different subnet.
6	Domain Name Server (DNS)	Optional but recommended.
12	Hostname	Optional.
15	Domain Name	Optional but recommended.
43	Vendor Class Specific Information	Optional. The thin client will interpret this information only if the Interpret Vendor Class Info check box is selected in the DHCP Options dialog box.
50	Requested IP	Required.
51	Lease Time	Required.
52	Option Overload	Optional.
53	DHCP Message Type	Required.
54	DHCP Server IP Address	Recommended.
55	Parameter Request List	Sent by thin client.
57	Maximum DHCP Message Size	Optional (always sent by thin client).
58	T1 (renew) Time	Required.
59	T2 (rebind) Time	Required.
61	Client identifier	Always sent.
155	Remote Server IP Address or name	Optional.
156	Logon User Name used for a connection	Optional.

Table 1 DHCP Options, Continued

Option	Description	Notes
157	Domain name used for a connection	Optional.
158	Logon Password used for a connection	Optional.
159	Command Line for a connection	Optional.
160	Working Directory for a connection	Optional.
161	FTP server list	Optional string. Can be either the name or the IP address of the FTP server where the updated thin client image is stored. If a name is given, the name must be resolvable by the DNS server(s) specified in Option 6.
162	Root path to the FTP files	Optional string.
163	SNMP Trap server IP Address list	Optional.
164	SNMP Set Community	Optional.
165	RDP startup published applications	Optional.
166	Terminal Emulation Mode	Optional.
167	Terminal Emulation ID	Optional.
168	Name of the server for the virtual port	Optional.

# **Using FTP File Servers**

Upgrade images used by the DHCP upgrade and FTP Pull Firmware upgrade processes are stored on the FTP server in a directory in the FTP root path (this server name and root-path directory must be made available to the thin client).

If Automatic DHCP upgrades are used, these items must be entered in the server DHCP Options. The DHCP values to use are located in Table 1, "DHCP Options" and are configured in the DHCP Options dialog box (defaults are 161 and 162, respectively). The FTP server must provide anonymous log-on capability. For more information on the DHCP Options dialog box, refer to "Configuring DHCP Options."

If FTP Pull Firmware upgrades are used, these items must be entered in the Upgrade dialog box on the thin client, along with the Login name and password (the default name and password are both anonymous). For more information on the FTP Pull Firmware upgrade process, refer to "Performing FTP Pull Firmware Upgrades."



# Mote Note

Params.ini, Bootstrap212.exe, and the Bin file along with the update firmware must be present on your FTP server to upgrade the thin client. Upgrade software packages can be obtained through Wyse customer support.

When the thin client boots, it accesses the software update images from the FTP file server. The FTP file server and path to the update files are available through DHCP vendor options 161 and 162 (see "Using Dynamic Host Configuration Protocol (DHCP)").

# Using DNS

Thin clients accept valid DNS names registered on a DNS server available to the enterprise intranet. The thin client will query a DNS server on the network for name to IP resolution. In most cases DNS is not required but may be used to allow hosts to be accessed by their registered DNS names rather than their IP addresses. Every Windows DNS server in Windows 2000 and later includes Dynamic DNS (DDNS) and every server registers dynamically with the DNS server. However, the thin client does not do dynamic registration and therefore, requires a static or non-variant IP address and manual DNS registration in order to provide LPD support by name (for example, in the case where the thin client is used as an LPD printer server). For DHCP entry of DNS domain and server location information, refer to "Using Dynamic Host Configuration Protocol (DHCP)."

# Configuring and Providing 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 more information on LPD configuration, refer to the *Users Guide: Wyse<sup>®</sup> Winterm™* 3 series. Based on Microsoft® Windows® CE.

A thin client can also be configured as an LPR client. LPR is a component of the Line Printer Daemon Protocol. LPR is a client sending a print job to a server. LPR works in conjunction with the Line Printer Daemon (LPD) server by assigning a print job to a named line printer queue managed by the LPD server. The LPD is a server receiving print tasks from one or more clients and spooling these jobs to a physical port.

For more information on LPR configuration, refer to the *Users Guide: Wyse<sup>®</sup> Winterm™* 3 series, Based on Microsoft® Windows® CE.

# **Understanding Session Services**

Thin-client session services are made available by servers hosting Citrix ICA and Microsoft RDP software products.

Independent Computing Architecture (ICA) is a three-tier, server-based computing technology that separates the logic of an application from its user interface. The ICA client software installed on the thin client allows the user to interact with the application GUI, while all of the application processes are executed on the server. For information on configuring ICA, refer to "Configuring ICA Session Services."

Using the ICA Program Neighborhood Agent (PNAgent) in conjunction with NFuse Classic or the Web Interface, you can integrate published resources with user desktops. Users access remote applications, desktops, and content by clicking icons on their Windows desktop or in the Start menu.

The PNAgent includes the following functions:

- User authentication The thin client presents user credentials to the MetaFrame XP server when users try to connect and, if configured to do so by you the administrator, every time users launch published resources.
- **Application and content enumeration** The thin client presents users with their individual set of published resources.
- Application launching The thin client is the local engine used to launch published applications.
- **Desktop integration** The thin client integrates a user set of published resources with that user desktop.
- User preferences The thin client validates and implements local user preferences.

For more information on the configuring ICA session services, refer to "Configuring ICA Session Services."

For more information on the PNAgent, refer to "Configuring and Using the PNAgent."



## Note

The ICA server must be licensed from Citrix Systems, Inc. You must purchase enough client licenses to support the total concurrent thin client load placed on the Citrix server farm. A failure to connect when all client seats are occupied does not represent a failure of Wyse equipment. The ICA client software is installed on the thin client.

Remote Desktop Protocol (RDP) is a network protocol that allows a thin client to communicate with the Terminal Server or Windows 2000/2003 Server with Terminal Services over the network. This protocol is based on the T.120 protocol suite, an international standard multi-channel conferencing protocol. The thin client supports RDP version 5.x. For information on configuring RDP, refer to "Configuring RDP Session Services."

# **Configuring ICA Session Services**

ICA session services can be made available on the network using either of the following services:

- Windows 2000 or 2003 Server with Terminal Services and one of the following installed:
  - Citrix MetaFrame XP
  - Citrix Presentation Server

Use the instructions accompanying these products to install them and make sessions and applications available to the thin clients sharing the server environment.



## Note

If a Windows 2000 or 2003 Server is used, a Terminal Services Client Access License (TSCAL) server must also reside somewhere on the network. The server will grant a temporary (90-day) license on an individual device basis. Beyond the temporary (90-day) license, you must purchase TSCALs and install them on the TSCAL server (you will not be able to make a connection without a temporary or permanent license).

# **Configuring and Using the PNAgent**

The Program Neighborhood Agent (PNAgent) allows users to connect (without using a Web browser) to a server running the Web interface and access all published applications in the server farm. Users do not have to manually configure a connection to each application as they do with the Connection Manager. The PNAgent also provides single sign-on. That is, when users logon at the start of a session, they do not need to use logon credentials again during that session (even if they connect to different applications).

Use the following guidelines for configuring and using the PNAgent:

- Ensure that the configuration file on the server has suitable settings for users. Use the Program Neighborhood Agent Administration tool to check the default settings and change them if necessary. For procedures on configuring the settings on the server, refer to "Configuring PNAgent Settings on the Web Interface Server."
- Users who wish to connect using the PNAgent must then enable it on their thin client (users can also customize their settings). For procedures on enabling and customizing the PNAgent on the thin client, refer to the Users Guide: Wyse<sup>®</sup> Winterm™ 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE.

Once users have the settings they require, they connect to the server, are prompted to authenticate, and are presented with a list of the available applications.



# Note

Connections will be populated in the thin client Connection Manager (if the Standard Desktop UI option is selected) or to the user desktop (if the New Desktop option is selected). For information on selecting a desktop option, refer to "Selecting a Thin Client Desktop Option."

# Configuring PNAgent Settings on the Web Interface Server

The PNAgent configuration settings are stored on the server in a file called Config.xml. Administrators can edit this file using the Program Neighborhood Administration tool (Admin tool), which provides an easy-to-use interface to the file parameters.



#### Caution

The settings in the configuration file are global. Therefore, the settings and any changes you make to them affect all users connecting to the file.

You can modify the default settings for all users, and can allow or deny users the ability to do any of the following:

- Select their own options for an ICA connection.
- Change their connection to a different server URL.

When a user enables the PNAgent on the thin client and connects to the server URL, the thin client reads the configuration data from the server. The settings configured using the Admin tool affect all users of this configuration file. The options and their settings are displayed in the thin client.

To access the PNAgent Admin tool, connect to the following URL on the server running the Web interface:

http://servername/Citrix/PNAgentAdmin/

The PNAgent Admin tool enables you to specify:

- Which tabs users see in their Global ICA Client Settings dialog box Users can see a maximum of two tabs in the Global ICA Client Settings dialog box. The Options tab (to select the preferences for a session) and Server tab (to select the server URL to which they want to connect). To hide or display a tab, use the Client Tab Control option in the PNAgent Admin tool to make the configurations. Note that to hide or display the Options tab, administrators must use Session Options within the Client Tab Control option.
- Server connections To specify the URL to which users can connect, use the Server Settings option in the PNAdmin tool.

# **Configuring RDP Session Services**

RDP session services can be made available on the network to allow you to connect remotely to a desktop computer running Microsoft Windows NT®, Windows 2000, Windows 2003, and Windows XP Professional, or a server running Microsoft® Windows NT® Server 4.0, Terminal Server Edition. The Remote Desktop Protocol allows a thin client to execute Windows applications within a Windows graphical user interface (GUI) environment, even though they are actually being executed on the server

Use the instructions accompanying these products to install them and make sessions and applications available to the thin clients sharing the server environment.



If a Windows 2000 or 2003 Server is used, a Terminal Services Client Access License (TSCAL) server must also reside somewhere on the network. The server will grant a temporary (90-day) license on an individual device basis. Beyond the temporary (90-day) license, you must purchase TSCALs and install them on the TSCAL server (you will not be able to make a connection without a temporary or permanent license).

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# Configuring Basic Thin Client Settings

This chapter contains information on setting up the basic functions for thin client use. It includes instructions for setting up a new thin client and resetting a thin client to factory defaults.



#### Note

The password for the BIOS is Fireport.

# Setting Up the Thin Client for the First Time

The first time a new thin client (or a thin client reset to factory-defaults) starts, the thin client will log on automatically as an administrator (with no password required). You can use the Setup Wizard to configure the settings necessary for basic operation and access to the network resources needed for remote administration. For information on the Setup Wizard, refer to "Using the Setup Wizard."



#### Note

You must enable security for login requirements to be active, otherwise, the thin client automatically logs on as an administrator with no password required. For more information on enabling security, refer to "Configuring Security and Managing User Accounts."

After basic configurations, you can continue thin client configurations either locally or remotely:

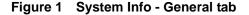
- Local Setup Manually (by you as an administrator) on each thin client. Depending on the number of thin clients, this method can be time consuming as there are many configurations available for each individual thin client on the network. For more information on local configurations, refer to "Using the Desktop and Connection Manager to Manage Connections" and "Using the Control Panel."
- Remote Setup By using Wyse Device Manager software (formerly Rapport Remote Administration Software) or SNMP tools you can configure and manage thin clients remotely. Typically, a single thin client would be configured locally, and then the remote software tools would be used to extract the settings into a database for broadcast as an upgrade to other thin clients on the network. For information on remote administration and software upgrades, refer to "System Administration." For information on SNMP, refer to "Managing Networks Using SNMP."

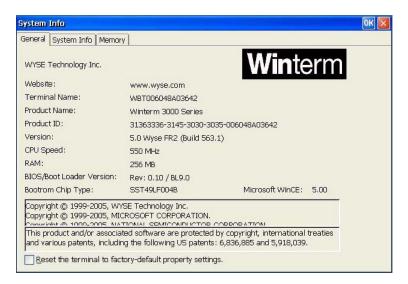
# **Using the Setup Wizard**

The Setup Wizard allows you to quickly configure basic thin client settings (so that the thin client is configured for network users and available for remote administration). Some wizard dialog boxes are informational and require no user input, while other dialog boxes prompt you for required information.

To reset the thin client to factory defaults and then use the Setup Wizard to configure basic thin client settings, begin at step 1; to use the Setup Wizard to configure basic thin client settings on a new thin client first boot, begin at step 5:

1. Double-click System in the Control Panel to open the System Info dialog box.





- 2. On the General tab, select the Reset the terminal to factory-default property settings check box to open the System Settings Change dialog box.
- 3. Click **Yes** to restart the thin client, and continue with the setup process.

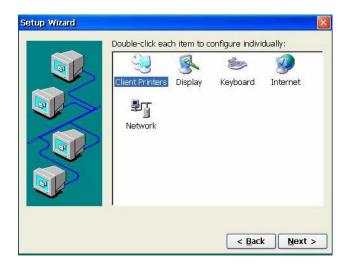


# Note

The Waiting for Network Services message appears while the thin client is starting and attempting to establish a network connection. If no network is connected or no DHCP server is available, the Setup Wizard cannot automatically configure the network configurations. In this case, you must manually configure the network and other properties.

4. After the countdown box appears, you can allow the countdown to continue to 0 (in which case the default settings are automatically selected for the thin client, the Setup Wizard completes, and the thin client restarts) or you can click **Next** before the countdown completes to open the Setup Wizard Desktop Area dialog box and begin making custom selections.

Figure 2 Setup Wizard - Desktop Area



- **5.** Double-click an item in the Desktop Area dialog box and configure that item using the following guidelines:
  - Client Printers Use the procedures in "Creating and Configuring Client Printers."
  - **Display** Use the procedures in the *Users Guide: Wyse*<sup>®</sup> *Winterm™* 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE.
  - **Keyboard** Use the procedures in the *Users Guide: Wyse*<sup>®</sup> *Winterm*<sup>™</sup> 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE.
  - Internet Use the procedures in "Configuring Internet Settings."
  - **Network** Use the procedures in the *Users Guide: Wyse*<sup>®</sup> *Winterm™* 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE.
- **6.** After configuring the items you want and then clicking **Next**, a success message displays.

Figure 3 Setup Wizard success message



7. Click **Finish** to apply the settings, close the Setup Wizard, and restart the thin client (the thin client will log on automatically with administrator privileges).

# 16

After completing the wizard and restarting the thin client, the initial setup is complete. As discussed in "Setting Up the Thin Client for the First Time." any future changes to settings that were made using the Setup Wizard can be made locally or remotely.

# 4 Managing Connections

This chapter describes important connection features available for you to use. It also provides instructions on using the administrator Desktop and Connection Manger to manage (add, edit, and delete) the connections and applications you make available to users.

# **Understanding the Connection Features**

How a user logs in and what they see after they log in, depends on your configurations. For example, a username and password may be required to log in to a thin client or the thin client may automatically log on when started. After logging in, a user may see the Connection Manager dialog box or the windows desktop (or if configured, an application or connection may be launched automatically).

This section discusses:

- "Using Multiple Sessions"
- "Enabling AutoLogin"
- "Enabling Single Button Connect for User Login"
- "Enabling Failover"
- "Starting Connections Automatically at Startup"

# **Using Multiple Sessions**

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

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

With the New Desktop (see "Selecting a Thin Client Desktop Option") you can also select **Support launching multiple instances on new Desktop** to enable support for opening multiple instances of one ICA or RDP connection (supported for published applications configured as a Seamless Windows Connection or PNAgent enabled sessions).

Figure 4 Desktop Configuration



# **Enabling AutoLogin**

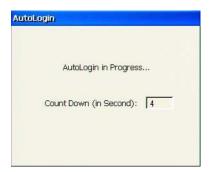
The AutoLogin feature is an automatic login function that uses a countdown to login to the thin client (for example, 5 seconds).



## Note

If you also want to automatically make a connection upon log-in, refer to "Enabling Single Button Connect for User Login."

Figure 5 AutoLogin countdown



To enable the AutoLogin feature, use the administrator Security dialog box as described in "Configuring Security and Managing User Accounts."



## Note

Since AutoLogin is a global function, it does not matter what other functions are enabled.

# **Enabling Single Button Connect for User Login**

The Single Button Connect feature is an automatic login function that uses the Connect command button to allow users to login to the thin client (and if configured, automatically makes a connection upon log-in). To enable Single Button Connect, use the administrator Security dialog box. as described in "Configuring Security and Managing User Accounts."

Figure 6 Single Button Connect



# Single Button Connect:

- Logs a user into their thin client using the account to which AutoLogin is associated.
- Connects to the first connection in the Connections Name list of the Connection Manager (unless another connection in the list has been made with Autostart).

# **Enabling Failover**

The Failover feature is a connection function that causes the thin client to ping the intended device (to determine whether or not the device is available) before making a connection to the device.



## Note

Failover does not support Serial and PNAgent connections.

Packet Internet Groper (Ping) is a network utility. It tests communication with nodes in a network by sending packets to each selected node. Ping then waits to receive the echo response from that selected node. If pinging the intended connection fails, the thin client pings each successive connection in the list.

#### For each connection:

- If a ping is successful, the connection is made.
- If a ping is not successful, the thin client pings the next connection.
- A ping does not work on a serial connection. Failover will not continue after encountering a serial connection, but will launch the serial connection.
- If failover pings all the connections in the list and a connection is not made, the function stops and an error message displays.



#### Note

Failover skips IE connections.

To enable the Failover feature, use the administrator Security dialog box as described in "Configuring Security and Managing User Accounts."



#### Note

If the **Verbose** check box is selected on the Security dialog box, the Failover Log Window displays when failover is finished. The Failover Log Window is a list of all the connections that were pinged. The list reports both successful and unsuccessful pings.

Figure 7 Failover Log Window





#### Note

Failover is global and wholly automatic to the thin client. It will work regardless of what connection you are trying to make, or what type of account under which you are logged in.

# **Starting Connections Automatically at Startup**

To start a connection automatically at thin client startup:

- 1. Complete one of the following:
  - (Desktop only) Right-click on a connection and select **Options**.
  - (Connection Manager only) Select a connection and click **Startup**.

The Startup Options dialog box appears.

Figure 8 Startup Options



- **2.** Select the Automatically start the selected connection at startup check box.
- 3. Click OK.

# **Using the Desktop and Connection Manager to Manage Connections**

Whether you are using the administrator Desktop (see "Using the Administrator Desktop") or the administrator Connection Manager (see "Using the Administrator Connection Manager"), only an administrator can add, edit, or delete connections.



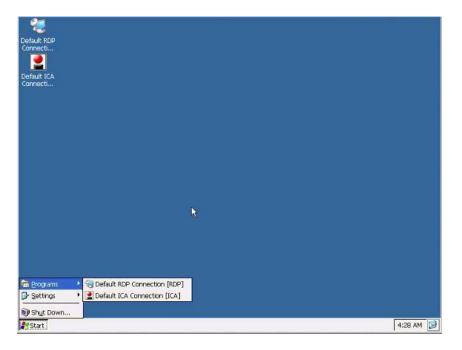
# Note

The Administrator Desktop (with icons and menus) can be used only if you selected the **New Desktop** option. If you selected the **Standard Desktop UI** option, the Administrator Connection Manager can be used. For information on selecting a desktop option, refer to "Selecting a Thin Client Desktop Option."

# **Using the Administrator Desktop**

Wyse<sup>®</sup> Winterm™ 3 series Thin Clients provide a windows interface option (New Desktop) in which you can open and manage multiple connections. The New Desktop option includes connections, applications, icons, a taskbar, a Start menu, and several related features. It allows you to easily create and manage connections and use the various applications and features available.





#### **/**

# Note

The Start menu allows quick and easy access to all programs and settings available, as well as shutting down the thin client. For example, to open the Control Panel window, click **Start | Settings | Control Panel**. For information about the administrator Control Panel, refer to "Using the Administrator Control Panel."

Use the following guidelines:

- To start connections you can double-click an icon, right-click an icon and select **Open**, or use the Start menu.
- To start a Control Panel application, double-click the application icon.

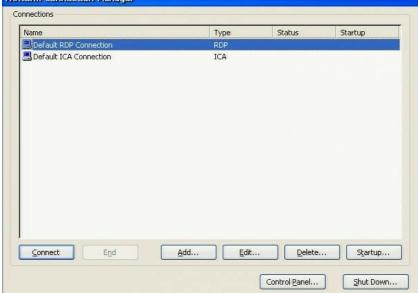
- Desktop icons can easily be arranged by name, type, and so on by right-clicking on the desktop and using the menu provided.
- You can toggle between active connections using the taskbar (click on an open connection) or by using the Alt+Tab key combination (for details on these and other taskbar features, refer to the Users Guide: Wyse<sup>®</sup> Winterm™ 3 series, Based on Microsoft® Windows® CE).
- To delete a connection, right-click on a connection, select **Delete Connection**, and confirm the deletion by clicking Yes.
- To add or edit a connection, refer to the following guidelines for the connection you want:
  - "Creating and Configuring Citrix ICA Client Connections"
  - "Creating and Configuring Dial-Up Client Connections"
  - "Creating and Configuring Ericom PowerTerm Terminal Emulator Connections"
  - "Creating and Configuring Internet Explorer Connections"
  - "Creating and Configuring Microsoft Remote Desktop Client Connections"
  - "Creating and Configuring PPPoE Connections"
  - "Creating and Configuring VPN (PPTP) Client Connections"

# **Using the Administrator Connection Manager**

The Connection Manager allows you to create and manage multiple connections, and use the various applications and features available.

Winterm Connection Manager Connections Туре Status Startup Default RDP Connection

Figure 10 Administrator 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 delete a connection, select a connection, click **Delete**, and confirm the deletion by clicking **Yes**.
- To open the Control panel, click **Control Panel**. For information about the administrator Control Panel, refer to "Using the Administrator Control Panel."
- Clicking **Shut Down** opens the Shutdown Window. Use this window to select the **Logout**, **Shutdown the terminal**, or **Shutdown and Restart** option you want.
- For information on adding and editing a connection, refer to the detailed procedures for the connection you want:
  - "Creating and Configuring Citrix ICA Client Connections"
  - "Creating and Configuring Dial-Up Client Connections"
  - "Creating and Configuring Ericom PowerTerm Terminal Emulator Connections"
  - "Creating and Configuring Internet Explorer Connections"
  - "Creating and Configuring Microsoft Remote Desktop Client Connections"
  - "Creating and Configuring PPPoE Connections"
  - "Creating and Configuring VPN (PPTP) Client Connections"

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# 5

# **Configuring Connections**

This chapter contains information and detailed instructions on setting up connections for selection and use by a thin client user.

## This section discusses:

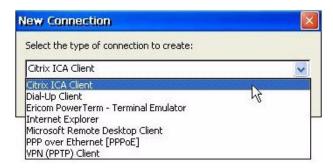
- "Creating and Configuring Citrix ICA Client Connections"
- "Creating and Configuring Dial-Up Client Connections"
- "Creating and Configuring Ericom PowerTerm Terminal Emulator Connections"
- "Creating and Configuring Internet Explorer Connections"
- "Creating and Configuring Microsoft Remote Desktop Client Connections"
- "Creating and Configuring PPPoE Connections"
- "Creating and Configuring VPN (PPTP) Client Connections"



## Note

Whether you are using the administrator Desktop (New Desktop option) or the administrator Connection Manager (Standard UI option), you will use the New Connection dialog box to add new connections.

Figure 11 New Connection dialog box



# **Creating and Configuring Citrix ICA Client Connections**

This section describes how you can create a new Citrix ICA Client connection definition (see "Adding a New ICA Connection"), edit an existing connection definition (see "Editing an Existing ICA Connection"), and delete a connection (right-click the connection, select **Delete Connection**, and confirm).

# **Adding a New ICA Connection**

To add a connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the desktop and select Add Connection.
  - (Connection Manager only) Click Add in the Connection Manager.
- 2. Select the Citrix ICA Client option from the drop-down list of the New Connection dialog box, and click OK to open the ICA Connection Wizard.



#### Note

Use Cancel, Next, Back, and Done as appropriate when navigating.

Figure 12 ICA Connection Wizard



3. Select either the Server or Published Application option.

The wizard prompts you to select a Citrix server from a list or to enter a server name. The server name entry can be an IP address or a valid DNS name. The list entries are created from browsing for servers on the network when the dialog box opens. The list can be updated by clicking on the **Refresh** command button.

**4.** Click **Server Location** to open the Server Location dialog box.

Figure 13 ICA - Server Location



**5.** Select and configure a server.



# Note

A message displays when you click **Default List**. Depending on whether or not you want to replace the list, click **Yes** or **No**.

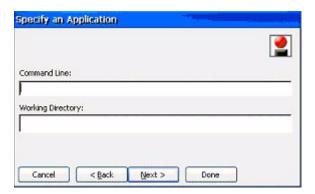
**6.** After configuring, click  $\mathbf{OK}$  to close the Server Location and then click  $\mathbf{Next}$ .

Figure 14 ICA - Connection title



7. Enter the title that is to appear for the connection and click Next.

Figure 15 ICA - Specify an Application



8. Specify an application (make the entries in the Command Line and Working Directory boxes required to launch an application when the server connection is made; leave the boxes empty if you want to view a server desktop) and click Next.

Figure 16 ICA - Specify Logon Information



9. Specify the logon information and click Next.

The information in this dialog box may be required by the server before access is granted.



#### Note

If you use a Smart Card, select the **Allow Smart Card logon** check box.

Figure 17 ICA - Select Window Options





## Note

You can configure a new published application connection for seamless windows by selecting **View in a separate window (Seamless Window)**.

Figure 18 ICA - Select Window Options with Seamless Windows



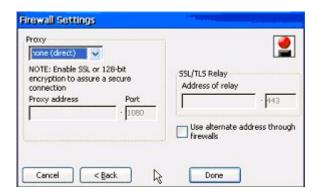
**10.**Select the Window Colors options (a smaller color option results in faster network speed at the expense of display quality) and click **Next**.

Figure 19 ICA - Options



11. Select the options desired, and then click **Next**.

Figure 20 ICA - Firewall Settings



**12.**Enter any necessary information in the Firewall Settings dialog box to go through an enterprise firewall or other security barrier, and then click **Done** to save the wizard entries and create the new connection.

## **Editing an Existing ICA Connection**

To edit the connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the connection and select Edit Connection.
  - (Connection Manager only) Select the connection and click Edit.
- **2.** Use the following guidelines to make your modifications in the Edit Connection Details dialog box (be sure to click **OK** after making your modifications):

#### **Server Tab**

Use the Server tab to modify the server configuration settings for the server or published application.

Figure 21 ICA Editing - Server tab



Use Server Location to open and configure the Server Location dialog box.

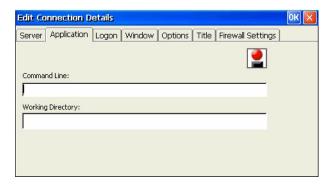
Figure 22 ICA Editing - Server Location



## **Application Tab**

Use the Application tab to modify server configuration settings for published applications.

Figure 23 ICA Editing - Application tab



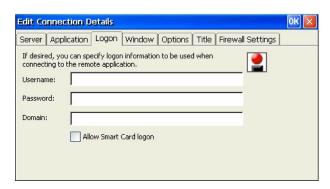
## **Logon Tab**

Use the Logon tab to modify the logon information for the server or published application.



If you use a Smart Card, select the **Allow Smart Card logon** check box.

Figure 24 ICA Editing - Logon tab



## **Window Tab**

Use the Window tab to modify the Window Colors option for the server or published application.

Figure 25 ICA Editing - Window tab





#### Note

You can configure an existing published application connection for seamless windows by selecting **View in a separate window (Seamless Window)**.

Figure 26 ICA Editing - Window tab with Seamless Windows



## **Options Tab**

Use the Options tab to modify the supported options for the server or published application.

Figure 27 ICA Editing - Options tab



#### **Title Tab**

Use the Title tab to modify the title entered for the server or published application.

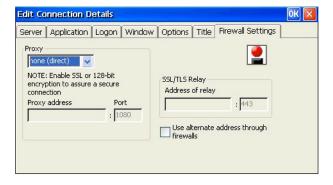
Figure 28 ICA Editing - Title tab



## **Firewall Settings Tab**

Use the Firewall Settings tab to modify the firewall settings for the server or published application.

Figure 29 ICA Editing - Firewall Settings tab



## **Creating and Configuring Dial-Up Client Connections**

This section describes how you can create a new Dial-up Client connection definition (see "Adding a New Dial-up Connection"), and edit an existing connection definition (see "Editing an Existing Dial-up Connection").

## Adding a New Dial-up Connection

To add a connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the desktop and select Add Connection.
  - (Connection Manager only) Click Add in the Connection Manager.
- 2. Select the **Dial-up Client** option from the drop-down list of the New Connection dialog box, and click **OK** to open the Dial-Up Configuration Wizard.



#### Note

Use Cancel, Next, Back, and Done as appropriate when navigating.

Figure 30 Dial-up description



3. Enter the name that is to appear for the connection and click **Next**.



#### Note

The Dial-up invalid massage is displayed if **Next** is clicked with an empty description box or invalid characters (<>()[]/\\.\*?:",|) entered in the description box.

Figure 31 Dial-up Settings

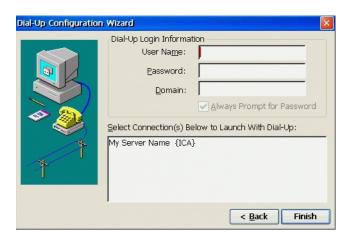


**4.** Enter the Dial-up settings by using the wizard command buttons to open and configure the various dialog boxes.

Use the following guidelines:

- Serial Port Use the list to select the access path to the dial-up server.
- Use Country Code and Area Code check box If selected, enables you to enter these codes for use when dialing.
- Enable RAS Script check box and Script command button Enables and configures Remote Access Services as discussed in "Configuring Remote Access Services for Dial-up Connections."
- **Dialing Properties** Opens the Dialing Properties dialog box, allowing you to configure the dialing properties as discussed in "Configuring Dialing Properties."
- **Configure** Opens the Device Properties dialog box, allowing you to configure the device properties as discussed in "Configuring Dial-up Device Properties."
- TCP/IP Settings Opens the TCP/IP Settings dialog box, allowing you to configure the TCP/IP settings as discussed in "Configuring Dial-up TCP/IP Settings."
- **Security** Opens the Security Settings dialog box, allowing you to configure the security settings as discussed in "Configuring Dial-up Security Settings."
- **5.** After completing configurations, click **Next**.

Figure 32 Dial-up Login



- **6.** Enter the dial-up login information required to access the dial-up server.
- **7.** Select Always Prompt for Password if you want to require a password from the user when using a dial-up connection.
- **8.** Select the connections that will automatically launch the dial-up connection settings you configured. The connection names are obtained from the list of available connections.
- 9. After completing the wizard click Finish.

## **Configuring Remote Access Services for Dial-up Connections**

Remote Access Services (RAS) facilitates PPP communications between the thin client and other network protocols. RAS scripts automate actions that otherwise would be performed in text mode after dialing.

Dial-up RAS scripts are enabled by selecting the Enable RAS Script check box in the Dial-up Wizard. To create and edit scripts, select the **Enable RAS Script** check box in the Dial-up Settings dialog box and click the **Script** command button to open the Script Name dialog box. The Script Name dialog box enables you to create a script under a new name, edit an existing script, or delete an existing script.

Figure 33 Dial-up RAS - Script Name





#### Note

To delete a script, select it and click **Delete**.

Clicking New opens the New Script Name dialog box.

Figure 34 Dial-up RAS - New Script Name



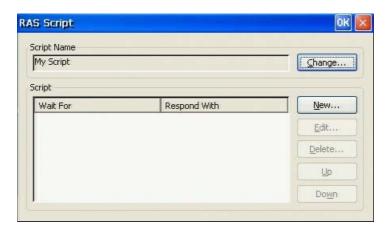
Enter the script name and click **OK** to open the RAS Script dialog box.



#### Note

You can also open and use the RAS Script dialog box to edit an existing script by selecting the script in the Script Name dialog box and clicking **Edit**.

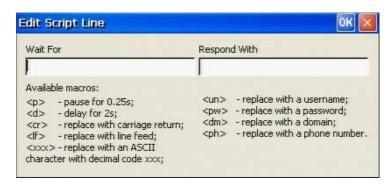
Figure 35 Dial-up RAS - RAS Script



Use the following guidelines to configure the dialog box:

- Script Name box and Change command button The Script Name box displays the
  name of the currently selected script. You can change the selection by clicking Change
  to open the Script Name dialog box, selecting another script, and clicking OK.
- Script area:
  - Script text area Lists the script input/output strings:
  - Wait For Displays strings received from the host.
  - Respond With Displays what the thin client sends in response to the Wait For string.
- New and Edit Open the Edit Script Line dialog box. Use this dialog box to create a
  new line in the script or edit an existing (selected) line. The specific scripts are unique
  to each target system.

Figure 36 Dial-up RAS - Edit Script Line



- Delete To delete a line, select it and click Delete. You will be prompted to confirm the
  deletion of the line.
- Up and Down Use these to move a selected line in the script up or down in the list.



After configuring, be sure to click **OK** to save your settings and return to the Dial-Up Configuration Wizard.

## **Configuring Dialing Properties**

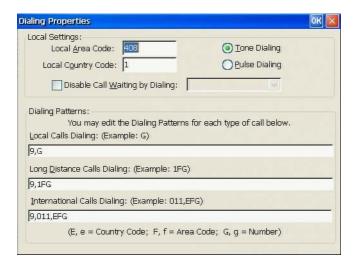
Clicking the **Dialing Properties** command button in the Dial-up Settings dialog box of the Dial-Up Configuration Wizard opens the Dialing Properties dialog box. Use this dialog box to configure the dialing settings indicated in the dialog box.



## Note

Refer to the modem instruction manual for information to configure the Dialing Patterns area.

Figure 37 Dial-up - Dialing Properties





#### Note

After configuring, be sure to click  $\mathbf{OK}$  to save your settings and return to the Dial-Up Configuration Wizard.

## **Configuring Dial-up Device Properties**

Clicking the **Configure** command button in the Dial-Up Configuration Wizard opens the Device Properties dialog box. Use this dialog box to configure the device properties for the Port Settings and Call Options tabs.



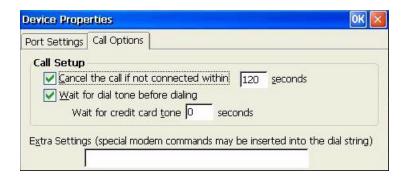
#### Note

After configuring, be sure to click  $\mathbf{OK}$  to save your settings and return to the Dial-Up Configuration Wizard.

Figure 38 Dial-up - Port Settings tab



Figure 39 Dial-up - Call Options tab



## Configuring Dial-up TCP/IP Settings

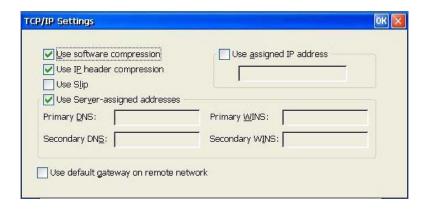
Clicking the **TCP/IP Settings** command button in the Dial-Up Configuration Wizard opens the TCP/IP Settings dialog box. Use this dialog box to configure the TCP/IP settings.



#### Note

After configuring, be sure to click **OK** to save your settings and return to the Dial-Up Configuration Wizard.

Figure 40 Dial-up - TCP/IP Settings



## **Configuring Dial-up Security Settings**

Clicking the **Security** command button in the Dial-Up Configuration Wizard opens the Security Settings dialog box. Use this dialog box to configure the security settings. Select the Authentication and encryption policy option you want. You can click **Unsave password** to ensure that a user password is not stored locally for this connection.



#### Note

After configuring, be sure to click  ${\bf OK}$  to save your settings and return to the Dial-Up Configuration Wizard.

Figure 41 Dial-up - Security Settings



## **Editing an Existing Dial-up Connection**

To edit the connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the connection and select Edit Connection.
  - (Connection Manager only) Select the connection and click Edit.
- 2. Use the Dial-Up Configuration Wizard to make your modifications (use the guidelines in "Adding a New Dial-up Connection").
- 3. Click **OK** to apply and save your settings.

## **Creating and Configuring Ericom PowerTerm Terminal Emulator Connections**

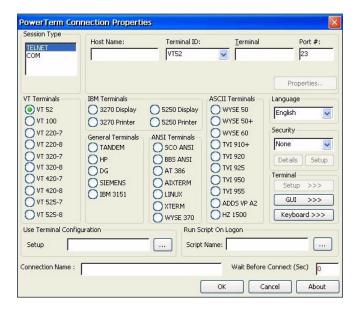
PowerTerm WBT Terminal Emulator is used by the thin client for running legacy character-based applications on remote computers. You can set up a wide variety of connections that a user can open. The host computers are accessed through TCP/IP network, dial-up modem, or serial port. This section describes how you can create a new Ericom PowerTerm Terminal Emulator connection definition (see "Adding an Ericom PowerTerm Terminal Emulation Connection"), and edit an existing connection definition (see "Editing an Existing Ericom PowerTerm Terminal Emulation Connection").

## Adding an Ericom PowerTerm Terminal Emulation Connection

To add a connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the desktop and select **Add Connection**.
  - (Connection Manager only) Click Add in the Connection Manager.
- Select the Ericom PowerTerm Terminal Emulator option from the list in the New Connection dialog box, and click OK to open the PowerTerm Connection Properties dialog box.

Figure 42 PowerTerm Connection Properties



3. Use the PowerTerm Connections Properties dialog box to set up a wide variety of connections that a user can open. Note that availability of the boxes and options change according to your connection configuration selections.



#### Note

For complete information on configuring the dialog box, refer to the PowerTerm online documentation at: <a href="http://www.wyse.com/manuals">http://www.wyse.com/manuals</a>.

## **Editing an Existing Ericom PowerTerm Terminal Emulation Connection**

To edit the connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the connection and select Edit Connection.
  - · (Connection Manager only) Select the connection and click Edit.
- 2. Use the PowerTerm Connections Properties dialog box to make your modifications.
- 3. Click **OK** to apply and save your settings.

## **Creating and Configuring Internet Explorer Connections**

This section describes how you can create a new Internet Explorer (IE) connection definition (see "Adding a New Internet Explorer Connection"), and edit an existing connection definition (see "Editing an Existing Internet Explorer Connection").

## **Adding a New Internet Explorer Connection**

To add a connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the desktop and select **Add Connection**.
  - (Connection Manager only) Click Add in the Connection Manager.
- 2. Select the **Internet Explorer** option from the drop-down list of the New Connection dialog box, and click **OK** to open the Internet Explorer Setup dialog box.



#### Note

Internet Explorer requires a minimum of 32 MB of flash memory installed on the thin client. The application may not be factory-installed on some models because of competition for available memory by other installed applications. Contact Wyse for availability of Internet Explorer as an add-on.

Figure 43 Internet Explorer Setup





#### Note

If the connection is to an NFuse server that provides ICA links within a Web page to allow ICA sessions to be launched from within a browser window, refer to "Understanding Session Services" for information concerning the NFuse server application setup for use with the thin clients.

- **3.** Use the following guidelines to configure the Internet Explorer Setup dialog box:
  - Title Enter the title for the connection.
  - **Start Page** Enter the URL of the page that will open when Internet Explorer is launched.
  - **Search Page** Enter the URL of the page that contains the search engine that will be used when **Search** is clicked.
  - Allow to ping Start site If the server on which the start page is located is to be included in Failover, select the Allow to ping Start site check box. To help you decide if you should check this box, refer to "Enabling Failover."
  - **Kiosk** Select this box if the thin client is to be used as a kiosk with Internet Explorer as the application.
  - **Show Toolbar** Typically, you would use the IE toolbar for maintenance purposes, and then clear this check box to hide the toolbar for users and guests.

## **Editing an Existing Internet Explorer Connection**

To edit the connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the connection and select Edit Connection.
  - · (Connection Manager only) Select the connection and click Edit.
- 2. Use the Internet Explorer Setup dialog box to make your modifications (use the guidelines in "Adding a New Internet Explorer Connection").
- 3. Click **OK** to apply and save your settings.

## **Creating and Configuring Microsoft Remote Desktop Client Connections**

This section describes how you can create a new Microsoft RDP Client connection definition (see "Adding a New RDP Connection"), and edit an existing connection definition (see "Editing an Existing RDP Connection").

## Adding a New RDP Connection

To add a connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the desktop and select Add Connection.
  - (Connection Manager only) Click Add in the Connection Manager.
- Select the Microsoft Remote Desktop Client option from the drop-down list of the New Connection dialog box, and click OK to open the Remote Desktop Connection Wizard.



Use Cancel, Next, Back, and Done as appropriate when navigating.

Figure 44 RDP Connection wizard



- **3.** Enter the name (31 characters maximum) and server (75 characters maximum) for the connection (the Server entry can be an IP address or a valid DNS name).
- 4. Select or clear Remember Server Name and click Next.



#### Note

If you want to be prompted for an RDP server name when the connection is launched (this is useful if you need to connect to different RDP servers and do not want to pre-configure multiple RDP connections) be sure to clear the **Remember Server Name** check box.

Figure 45 RDP - Logon information



5. Select **Automatic Logon** box to enable the auto logon user authentication to the server, enter the Username (31 characters maximum), Password (16 characters maximum), and Domain (129 characters maximum), and then click **Next**.



#### Note

If you want users to enter the logon information when the connection is selected, leave this information blank and click **Next**.

Figure 46 RDP - Program information



**6.** By default the Terminal Services connection opens at the Windows desktop. To automatically start a program, select **Start the following program on connection**, enter the Program path and file name, enter the folder in which to start when the RDP connection is established, and then click **Next**.



#### Note

If you want the connection to open at the Windows desktop and not automatically start a program, leave this information blank and click **Next**.

Figure 47 RDP - Display information



- **7.** Use the Remote Desktop Size slider to select the size of your remote desktop. Drag the slider all the way to the right to go full screen.
- **8.** Select the color settings you want (settings on the remote computer might override this setting).
- **9.** Select **Display the connection bar when in full screen** if you want the connection bar to show when in full screen mode (the Display the connection bar feature enables a user to easily minimize and maximize an RDP session), and then click **Next**.

Figure 48 RDP - Local resources information



- 10. Select the local resource features you want (during a remote session) using the following guidelines:
  - Audio redirection Allows server applications to redirect audio to the location you select.
  - Apply Windows key combinations Select one of the following options:
     In full screen desktops only Selecting this option applies keyboard shortcuts to the remote desktop rather than the local desktop when the remote session is running in full screen mode. If the session is running in any other window size mode, keyboard shortcuts are applied to the local desktop rather than the remote desktop.

On the remote desktop - Selecting this option applies keyboard shortcuts to the remote session rather than the local desktop. For example, pressing ALT+TAB switches between all the windows currently open on the remote desktop, excluding any windows open on the local desktop.

**On the local desktop** - Selecting this option applies keyboard shortcuts to the local desktop rather than the remote desktop. For example, pressing ALT+TAB switches between all the windows currently open on the local desktop, including both local and remote windows.

- Printers Local-printer redirection to allow server applications to print locally from the thin client while logged on to the remote computer.
- Serial ports Local-port redirection so server applications can use parallel and COM ports of the thin client while logged on to the remote computer.
- Disk Drives Local file redirection so server applications can use the file system of the thin client while logged on to the remote computer.

#### 11. Click Next.

Figure 49 RDP - Performance information



**12.**Select all of the performance features you want as described in the wizard, and then click **Next**.



#### Note

Select the type of network connection speed to optimize performance for your environment. Variable bandwidth allocation through client-side bitmap caching and optional compression for low-bandwidth connections, significantly improves performance over low-bandwidth connections.

Figure 50 RDP - Success window



**13.**Click **Finish** to save the settings and exit the wizard.

## **Editing an Existing RDP Connection**

To edit the connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the connection and select Edit Connection.
  - · (Connection Manager only) Select the connection and click Edit.
- **2.** Use the Remote Desktop Connection dialog box to make your modifications (use the guidelines in "Guidelines for Editing RDP Connections").
- 3. Click **OK** to apply and save your settings.

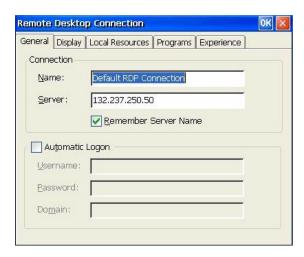
## **Guidelines for Editing RDP Connections**

Use the guidelines in this section and in "Adding a New RDP Connection" to configure the Remote Desktop Connection dialog box.

#### **General Tab**

Use the General tab to modify Connection and Automatic Logon configuration settings.

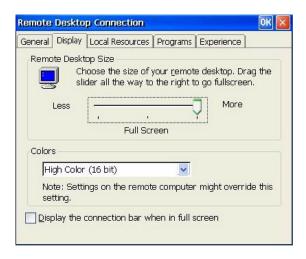
Figure 51 RDP Editing - General tab



## **Display Tab**

Use the Display tab to modify the Colors and Connection Bar feature configuration settings for the connection.

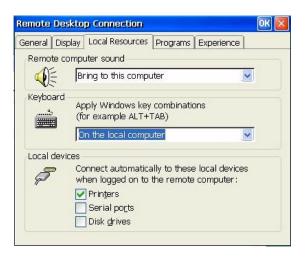
Figure 52 RDP Editing - Display tab



#### **Local Resources Tab**

Use the Local Resources tab to modify the sound, keyboard, and local device configuration settings for the connection.

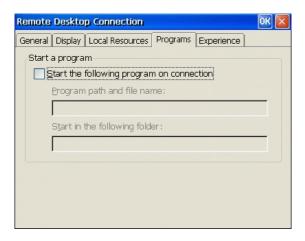
Figure 53 RDP Editing - Local Resources tab



## **Programs Tab**

Use the Programs tab to modify the Start a program configuration settings for the connection.

Figure 54 RDP Editing - Programs tab



## **Experience Tab**

Use the Experience tab to modify the performance configuration settings for the connection.

Figure 55 RDP Editing - Experience tab



## **Creating and Configuring PPPoE Connections**

This section describes how you can create a new PPP over Ethernet (PPPoE) connection definition (see "Adding a New PPPoE Connection"), and edit an existing connection definition (see "Editing an Existing PPPoE Connection").

## **Adding a New PPPoE Connection**

To add a connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the desktop and select **Add Connection**.
  - (Connection Manager only) Click Add in the Connection Manager.
- 2. Select the PPP over Ethernet (PPPoE) option from the drop-down list of the New Connection dialog box, and click OK to open the PPPoE Connection Wizard.



#### Note

Use Cancel, Next, Back, and Done as appropriate when navigating.

Figure 56 PPPoE Connection Wizard



3. Enter a description for the PPPoE connection and click Next.

Figure 57 PPPoE - Service Name



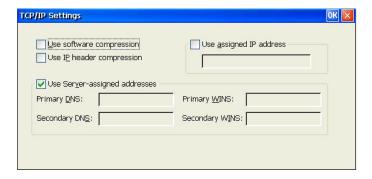
4. Enter a PPPoE Service Name or leave the box blank.



#### Note

You can use the TCP/IP Settings command button to open the TCP/IP Settings dialog box to further configure the settings required for PPPoE communications on this connection. Be sure to click **OK** after you complete this dialog box to return to the Service Name dialog box.

Figure 58 PPPoE - TCP/IP Settings





#### Note

You can use the Security Settings command button to open the Advanced Security Settings dialog box to further configure the settings. Be sure to click **OK** after you complete this dialog box to return to the Service Name dialog box.

Figure 59 PPPoE - Advanced Security Settings



5. After you complete the Service Name dialog box, click **Next**.

Figure 60 PPPoE - Login information



- **6.** Enter the Login Information (User Name, Password, and Domain), select or clear the Always Prompt for Password check box to enable or disable password prompting for the connection, and click **Next**.
- 7. Click Finish to save the wizard entries and create the new connection.



## Note

When this connection is opened by a user, all WAN packets go though a PPP connection over Ethernet to the modem.

## **Editing an Existing PPPoE Connection**

To edit the connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the connection and select **Edit Connection**.
  - · (Connection Manager only) Select the connection and click Edit.
- **2.** Use the PPPoE Connection Wizard to make your modifications (use the guidelines in "Adding a New PPPoE Connection").
- 3. Click **OK** to apply and save your settings.

## **Creating and Configuring VPN (PPTP) Client Connections**

This section describes how you can create a new VPN (PPTP) Client connection definition (see "Adding a New VPN (PPTP) Client Connection"), and edit an existing connection definition (see "Editing an Existing VPN (PPTP) Client Connection").

## Adding a New VPN (PPTP) Client Connection

To add a connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the desktop and select **Add Connection**.
  - (Connection Manager only) Click Add in the Connection Manager.
- 2. Select the VPN (PPTP) Client option from the drop-down list of the New Connection dialog box, and click OK to open the VPN Connection Wizard.



#### Note

Use Cancel, Next, Back, and Done as appropriate when navigating.

Figure 61 VPN Connection Wizard



3. Enter a description for the VPN connection and click Next.

Figure 62 VPN - Host name or IP address



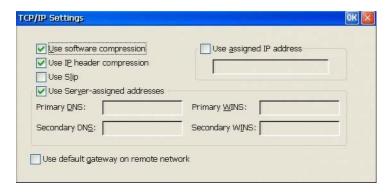
**4.** Enter the Host name or IP address needed for communications with the enterprise PPTP server providing VPN services.



#### Note

You can use the TCP/IP Settings command button to open the TCP/IP Settings dialog box to further configure the settings required for VPN communications on this connection. Be sure to click **OK** after you complete this dialog box to return to the Host name or IP address dialog box.

Figure 63 VPN - TCP/IP Settings





#### Note

You can use the Security Settings command button to open the Advanced Security Settings dialog box to further configure the settings required for VPN communications on this connection. Be sure to click **OK** after you complete this dialog box to return to the Host name or IP address dialog box.

Use the following guidelines:

- Select the desired authentication and encryption policy in the Security Settings dialog box.
- Click Unsave Password in the Security Settings dialog box if a password has been saved for automatic login and you want to require the user to enter the password each time.

Figure 64 VPN - Security Settings



 Click Settings to open the Advanced Security Settings dialog box, which allows further configuration of the security parameters.

Figure 65 VPN - Advanced Security Settings



5. After you complete the Host name or IP address dialog box, click Next.

Figure 66 VPN - Login information



**6.** Enter the login information required by the enterprise PPTP server (User Name, Password, and Domain), select or clear the Always Prompt for Password check box to enable or disable password prompting, and click **Finish** to save the settings.

## **Editing an Existing VPN (PPTP) Client Connection**

To edit the connection:

- 1. Complete one of the following:
  - (Desktop only) Right-click on the connection and select **Edit Connection**.
  - (Connection Manager only) Select the connection and click Edit.
- **2.** Use the VPN Connection Wizard to make your modifications (use the guidelines in "Adding a New VPN (PPTP) Client Connection").
- 3. Click **OK** to apply and save your settings.

# 6 Using the Control Panel

This chapter provides guidelines on using the Control Panel to set-up thin client operating parameters and user accounts.

## **Using the Administrator Control Panel**

The administrator Control Panel contains tools for configuring the Add-ons and applications for use with the thin client. The Control Panel icons provide access to a complete set of thin client configuration utilities that extend beyond the initial thin client setup as described in "Setting Up the Thin Client for the First Time." These configuration utilities are used for local configuration or remote administration of settings and user preferences (thin client defaults for users).



## Note

Depending on configuration, your Control Panel may include different icons than those shown in the example figure.

Figure 67 Administrator Control Panel



## **/**

#### Note

The following icon sections include information that is available only to administrators. For other Control Panel icon information available to qualified users and administrators, refer to the *Users Guide: Wyse* Winterm  $^{TM}$  3 series, Based on Microsoft Windows CE.

This section includes information on the following:

- "Managing Add-ons"
- "Managing Certificates"
- "Creating and Configuring Client Printers"
- "Selecting a Thin Client Desktop Option"
- "Configuring DHCP Options"
- "Using Edgeport for Port Expansion"
- "Configuring Global ICA Settings"
- "Configuring ICA Performance"
- "Configuring Internet Settings"
- "Configuring JETCET PRINT Settings"
- "Setting the Language Option"
- "Configuring Port Settings"
- "Configuring the Rapport Agent"
- "Configuring Remote Shadow"
- "Configuring Security and Managing User Accounts"
- "Managing Networks Using SNMP"
- "Using the System Information Features"
- "Using Administrator Tools"
- "Managing TSC Licenses"
- "Upgrading Thin Client Software"
- "Managing USB Storage Devices Using USB Access"

## **Managing Add-ons**

Double-clicking the **Add-on** icon in the administrator Control Panel opens the Add-on dialog box. Use this dialog box to determine if there is sufficient flash memory to install Add-ons or remove Add-ons.



#### Note

The thin client comes from the factory with a number of Add-ons (applications and peripheral drives) already installed. Add-ons may be installed and removed as needed. Add-ons are available from Wyse for free or for a licensing fee. After obtaining an Add-on be sure to store it on an FTP server that is accessible by the thin client as discussed in "Using FTP File Servers." For more information on Add-ons, refer to the *Add-on Administrators Guide: Wyse*® *Winterm™* 3 series, Based on Microsoft® Windows® CE.

#### Using the Add-on Add/Remove Tab

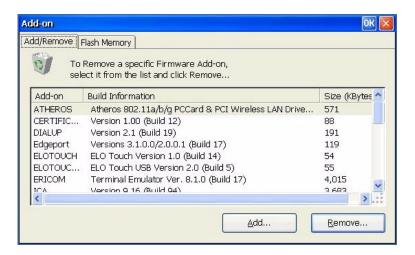
The Add/Remove tab lists the currently installed Add-ons, and allows you to add or remove Add-ons. Instructions for installing an Add-on accompanies the individual Add-on from Wyse. To remove an Add-on, select an Add-on, click **Remove**, and follow the instructions in the dialog box.



#### Note

You can upgrade several Add-ons consecutively from the Upgrade dialog box without the need to reboot after each Add-on installation. Rebooting is instead prompted upon closing of the Upgrade dialog box (back-to-back upgrading is not supported for Primer or Padded images).

Figure 68 Add/Remove tab

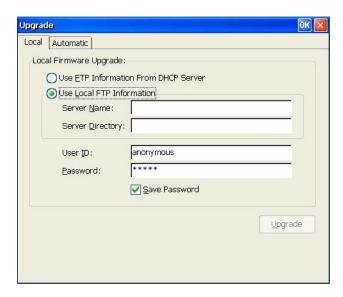




#### Note

Clicking Add opens the Upgrade dialog box.

Figure 69 Add-on - Upgrade dialog box

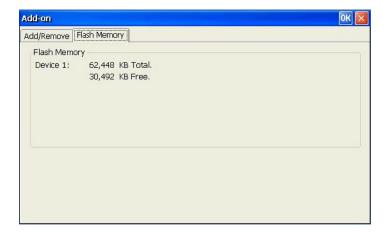


For information on configuring the Upgrade dialog box, refer to "Upgrading Thin Client Software."

## Flash Memory Tab

The Flash Memory tab displays information about available flash memory to determine if sufficient flash memory is available to install an Add-on.

Figure 70 Add-on - Flash Memory tab



## **Managing Certificates**

You can manually download new custom digital certificates through FTP into the thin client using the Wyse Certificates Add-on. Double-clicking the **Certificates** icon in the administrator Control Panel opens the Certificates dialog box. Use this dialog box to import and remove digital certificates, as well as view the details of installed digital certificates. The Wyse Certificates Add-on supports X.509 certificate structure and standard ASN.1 encoding.



#### Note

The digital certificates are installed in the thin client using Microsoft standard certificate APIs. As the digital certificate is installed, a copy is saved in the registry, and a copy is saved as a file on Flash to ensure functionality. With proper registry settings, certificates that reside in Flash can be imported into the certificate store automatically during boot up. In addition, the digital certificates can be used through the virtual channels of both ICA and RDP sessions.

You can obtain digital certificates from a third-party Certificate Authority (CA) or create your own certificates using Microsoft Certificate Services on your server, and then ready the certificate for thin client import:

- **1.** Verify which format of the certificate you require:
  - DER encoded binary
  - · Base-64 encoded
  - Cryptographic Message Syntax
- 2. Double-click on the Lock icon (located in the lower right hand corner of the taskbar).
- 3. Select the **Details** tab and select **Copy to File**.
- **4.** Complete the wizard (be sure to select the proper format of the certificate you require).
- 5. Name the file and save it to your local desktop (the file should have a .cer extension).
- Place the certificate into the FTP server directly under the root directory.

To import a certificate into the thin client:

- 1. Log-in to the thin client.
- Double-click the Certificates icon in the Control Panel to open the Certificates dialog box.

Figure 71 Certificates



3. Click Import and enter the information required (for Server Directory use / for root).

After you have successfully imported the certificate, the certificate displays in the Certificates dialog box pane (for example: http://www.valicert.com/).

## **Creating and Configuring Client Printers**

Double-clicking the **Client Printers** icon in the administrator Control Panel (or in the Setup Wizard) opens the Client Printers dialog box. This dialog box allows you to configure and edit local printers. The Client Printers dialog box contains an **Add Printer** icon and an icon for each (if any) configured printer.

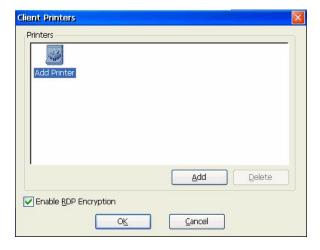


## Note

The thin client supports printing from an RDP server to a local printer.

This section describes how you can create a new client printer for users (see "Adding a Printer Using the WBT Printer Wizard"), and edit an existing client printer (see "Editing Printer Properties").

Figure 72 Client Printers



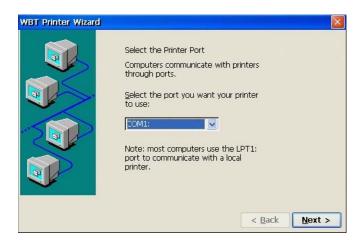
## Adding a Printer Using the WBT Printer Wizard

Configured printers can be added to the Client Printers utility by using the WBT Printer Wizard.

To add a printer:

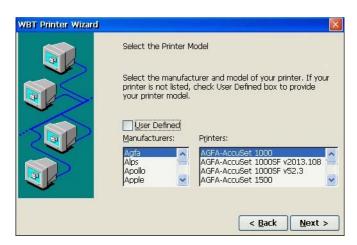
 Double-click the Add Printer icon or select (highlight) the Add Printer icon and click Add to open the WBT Printer Wizard.

Figure 73 Printer port



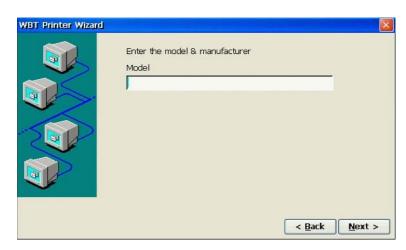
2. Select the port to which you want the printer connected and click Next.

Figure 74 Printer model



Select the printer model (if the printer is not listed, select the User Defined check box), and click Next.

Figure 75 Printer manufacturer



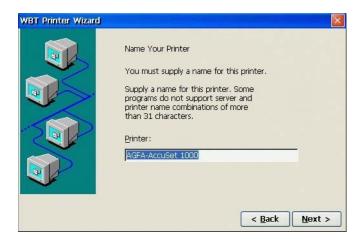
If the printer is not listed and you selected the **User Defined** check box, you can enter the model and click **Next**.



#### Note

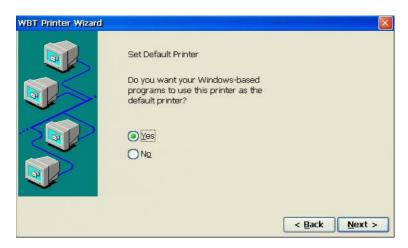
The model name must match the printer driver name shown on the server after installing the printer driver on the server. Otherwise, the RDP printer redirection to the thin client will fail.

Figure 76 Printer name



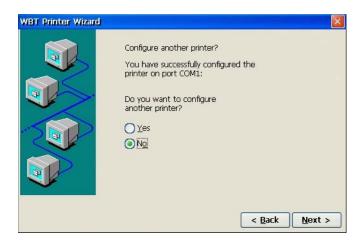
**4.** Confirm the name for the printer (the box is populated with the name of the printer, however, as this is a friendly name you can change the name) and click **Next**.

Figure 77 Printer default



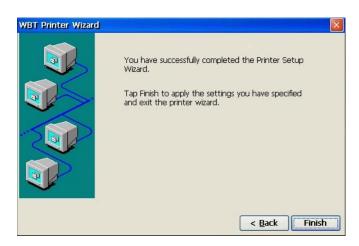
**5.** If this is not the first printer you have configured, select whether or not to set this printer as the default printer, and click **Next**.

Figure 78 Printer success window



**6.** Select whether or not to configure another printer, and click **Next** (if you select **Yes** and click **Next**, configure the printer using the guidelines in this section).

Figure 79 Printer finish window



**7.** After you have completed the wizard, click **Finish** to apply the settings and exit the wizard.

An icon appears in the Client Printers dialog box representing the configured printer.

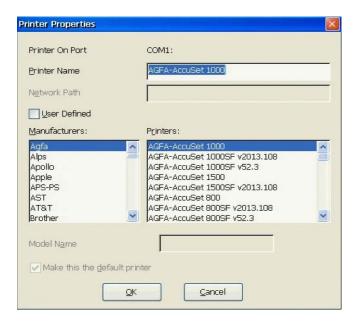
# **Editing Printer Properties**

Configured printers can be edited by using the Printer Properties dialog box.

To edit a printer:

- 1. Double-click the printer icon in the Client Printers dialog box (or right-click the icon and select **Properties**) to open the Printer Properties dialog box.
- 2. Modify the printer properties you want.
- 3. Click OK.

Figure 80 Editing Printer Properties



# **Selecting a Thin Client Desktop Option**

Double-clicking the **Desktop** icon in the administrator Control Panel opens the Desktop Configuration dialog box. Use this dialog box to select the desired desktop user interface.



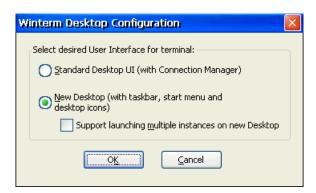
#### Note

With the New Desktop option you can also select **Support launching multiple instances on new Desktop** to enable support for opening multiple instances of one ICA or RDP connection (supported for published applications configured as Seamless Windows Connection or PNAgent enabled sessions).

For information on the Standard Desktop UI, refer to "Using the Administrator Connection Manager."

For information on the New Desktop, refer to "Using the Administrator Desktop."

Figure 81 Desktop Configuration



# **Configuring DHCP Options**

A DHCP connection is a connection that will use most of the DHCP option data obtained from the DHCP server. A connection can be either ICA, RDP, or terminal emulation. The option data is the DHCP option IDs populated as discussed in "Using Dynamic Host Configuration Protocol (DHCP)." This option data are the Common Option IDs, RDP Option IDs, and Terminal Emulation Option IDs groups which provide information such as Server address, user login name and password, command line, working directory, terminal ID, and so on. The local vs. DHCP rule still applies here when a connection is DHCP enabled. That is, DHCP information for this designated connection will always override the local settings as discussed in "Configuring Security and Managing User Accounts."

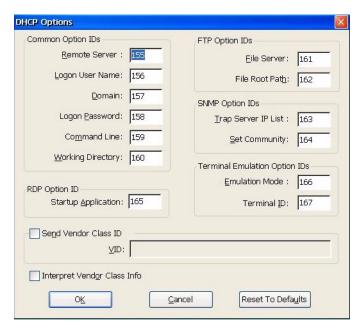
Double-clicking the **DHCP Options** icon in the administrator Control Panel opens the DHCP Options dialog box. Use this dialog box to select the desired DHCP options. To change an option ID, type over the current number in the ID box you want. Specific numbers must match those set on the DHCP server.



#### Note

The values shown in the figure are the thin client default values. For DHCP option values, descriptions and notes, refer to Table 1, "DHCP Options."

Figure 82 DHCP Options



- The Common Option IDs area is used to set the DHCP values of the Remote Server, Logon user Name, Domain, Logon Password, Command Line, and Working Directory.
- The RDP Option ID area is used to set DHCP option value identifying the RDP startup published applications.
- The FTP Option IDs area is used to set the DHCP option values identifying the FTP location of the firmware upgrade image (for more information on firmware upgrades, refer to "System Administration").

- The SNMP Option IDs area is used to set the DHCP option values identifying SNMP trap servers and set community name. (for more information on SNMP, refer to "Managing Networks Using SNMP").
- The Terminal Emulation Option IDs area is used to set DHCP option values identifying the terminal emulation mode and terminal ID presented to the terminal server when a terminal emulation connection is established.
- Select the Send Vendor Class ID check box to enable sending DHCP Vendor Class Identifier. Enter your Vendor Class Identifier in the VID box. It should be a string with a maximum length of 50 characters. When Send Vendor Class ID is enabled and a VID string is specified, the DHCP client will send the VID string in DHCP option 60 in all DHCP discover and request packets upon subsequent reboots.
- Select the Interpret Vendor Class Info check box to enable interpreting DHCP Vendor Class information (once enabled, the DHCP client in the thin client will interpret the DHCP option values embedded in Option 43 sent by the DHCP server).
- Clicking Reset to Defaults, resets all supported option IDs to the default values.

# **Using Edgeport for Port Expansion**

The Wyse Edgeport Add-on is provided with the thin client to provide driver support for Edgeport USB-to-serial and USB-to-parallel converters. Edgeport USB-to-serial and USB-to-parallel converters offer an easy Plug and Play solution for COM port expansion. An alternative to PCI cards, Edgeport connects through USB to a thin client or server, eliminating the need to open the chassis, reconfigure, and reboot.

Double-clicking the **Edgeport** icon in the administrator Control Panel opens the Edgeport dialog box. The Edgeport dialog box lists the additional COM/Parallel ports made available by the connected Edgeport device. Use this dialog box to make your configurations.

For more information on Edgeport, refer to the Edgeport documentation on the Inside Out Networks Web site at: http://www.ionetworks.com.





# **Configuring Global ICA Settings**

Double-clicking the **ICA** icon in the administrator Control Panel opens the Global ICA Client Settings dialog box. Use this dialog box to configure Global ICA client settings.

# **Keyboard Shortcuts Tab**

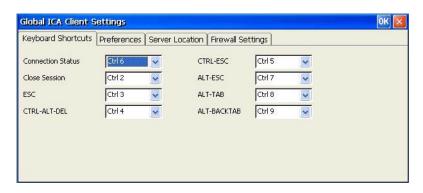
Hotkeys can be used during ICA sessions to invoke various functions. Some hotkeys control the behavior of ICA windows, while others emulate standard Windows hotkeys. Use the lists to select key combinations (defaults are shown) for the associated functions.



#### Note

An ICA session must be running for these hotkeys to function.

Figure 84 Global ICA Settings - Keyboard Shortcuts tab

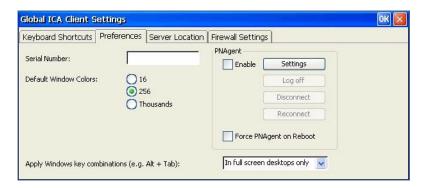


- Connection Status Displays an ICA connection status message.
- Close Session Disconnects an ICA client from a server and closes the client window on the local desktop. When you use this hotkey, the open session continues to run on the server. If you do not want to leave the session running in a disconnected state, log off
- ESC Functions as the Esc (escape) key.
- CTRL-ALT-DEL Opens the thin client Security dialog box.
- CTRL-ESC -
  - On WinFrame servers, using this key sequence displays the Remote Task List.
  - On MetaFrame servers, using this key sequence displays the Windows Start menu.
- ALT-ESC Cycles the focus through the minimized icons.
- ALT-TAB Cycles sequentially through applications that are open in a session. A
  window appears to display the applications as you cycle through them.
- ALT-BACKTAB Cycles sequentially through applications that are open in a session, but in the opposite direction.

#### **ICA Preferences Tab**

Use the Preferences tab to configure various ICA preference settings.

Figure 85 Global ICA Settings - Preferences tab



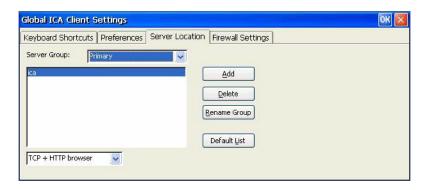
- Serial Number This is the serial number of your ICA Client software. This entry is only necessary when you are using the ICA Windows CE Client with a product such as WinFrame Host/Terminal, which requires each client to have a Citrix PC Client Pack serial number in order to connect to the server. If a serial number is required, you must enter it exactly as it appears on the Serial Number card. The Serial Number entry is not used by MetaFrame servers.
- Default Windows Colors If the thin client Color Palette (located in the Display dialog box opened from the Control Panel) is 256 colors, options for 16 or 256 colors are displayed. If 65536 is selected for the Color Quality, Thousands and Millions are displayed after restarting the thin client. The ICA server must be capable of supporting 16-bit color for the Thousands option to work properly or 24-bit color for the Millions option to work properly. If not, the thin client will display only 256 (8-bit) colors when Thousands or Millions options are selected. When using a PPTP or PPPoE connection, 16 color mode may provide faster performance. If the window options specified exceed the capabilities of the client hardware, the maximum size and color depth supported by the operating system are used.
- PNAgent The PNAgent Enable check box allows you to enable the PNAgent and the PNAgent Settings command button. The PNAgent Settings command button opens the PNAgent Configuration dialog box to allow you to enter the Server URL (for more information on the PNAgent, refer to "Configuring and Using the PNAgent").
- The Force PNAgent on Reboot check box allows you to always enable the PNAgent on reboot of the thin client.
- Apply Windows key combinations Select one of the following options:
  - In full screen desktops only Selecting this option applies keyboard shortcuts to the remote desktop rather than the local desktop when the remote session is running in full screen mode. If the session is running in any other window size mode, keyboard shortcuts are applied to the local desktop rather than the remote desktop.
  - On the remote desktop Selecting this option applies keyboard shortcuts to the remote session rather than the local desktop. For example, pressing ALT+TAB switches between all the windows currently open on the remote desktop, excluding any windows open on the local desktop.

 On the local desktop - Selecting this option applies keyboard shortcuts to the local desktop rather than the remote desktop. For example, pressing ALT+TAB switches between all the windows currently open on the local desktop, including both local and remote windows.

#### **ICA Server Location Tab**

Server location (also called server browsing) provides a method for a user to view a list of all Citrix servers on the network that have ICA connections configured, and a list of all published applications. The way in which server location works depends on which network protocol has been configured.

Figure 86 Global ICA Settings - Server Location tab



- **Server Group** Select whether the servers entered in the Address List belong to your Primary, first backup (Backup 1), or second backup (Backup 2) group.
- Add Opens the Add Server Address dialog box. The new server is added to the selected server group. If you check Use HTTP server location, you must enter the server address and port to use.
- **Delete** Deletes the name or IP address of a server from the selected group.
- Rename Group Opens the Rename Server Location Group dialog box.
- · Default List Use this command button to recall the server list.

# **ICA Firewall Settings Tab**

Use the Firewall Settings tab to set up a Socket Secure (SOCKS) firewall. SOCKS is a protocol that sets up a proxy server between a thin client and a server. This proxy server then acts as a channel for communication between the thin client and the server.

Figure 87 Global ICA Settings - Firewall Settings tab



Use the following guidelines:

- Proxy Select connection through direct (default), SOCKS, or Secure (HTTPS) proxy.
- Proxy Address and Port Enter the address and port of the direct (default), SOCKS, or Secure (HTTPS) proxy server, if used.
- SSL/TLS Relay Enter the address and port of the secure sockets layer (SSL) relay, if used.
- Use alternate address through firewalls Select this check box to enable the use of an alternate IP address returned from an ICA master browser to go through firewalls.

# **Configuring ICA Performance**

ICA Performance allows users to optimize the performance of ICA for a user specific environment. Double-clicking the **ICA Performance** icon in the administrator Control Panel opens the ICA Client Performance Settings dialog box. Use this dialog box to configure ICA client cache and delay performance values.

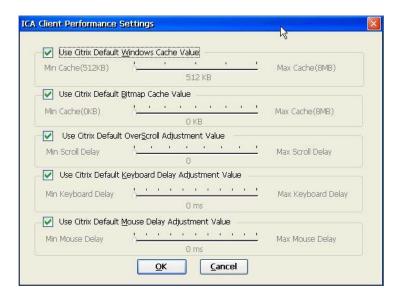


Figure 88 ICA Client Performance Settings

By default the settings that are enabled for an ICA user are the default settings provided by Citrix. You can clear the use default check box for an ICA setting you want to modify. The following set of registry settings can be modified using the ICA Client Performance Settings dialog box (be sure to clear the check box you want and use the following guidelines to set the sliders to the values you want):

- Use Citrix Default Windows Cache Value The Windows Cache Value setting sets
  up the amount of cache taken up by an ICA connection. There is a speed benefit to
  larger cache sizes, depending heavily on what application/benchmark you run, but, in
  general, diminishing returns apply. This setting is controlled by the Windows Cache
  Slider.
- Use Citrix Default Bitmap Cache Value The Bitmap Cache Value setting is used to set the size for Disk Cache. It sets the maximum disk space in bytes allowed or caching bitmaps. This setting is controlled by the Bitmap Cache Value Slider.
- Use Citrix Default Overscroll Adjustment Value There are several situations in which the thin client can continue scrolling much longer than needed, such as when the user holds down the mouse button on the Microsoft Excel scroll bar. This over-scrolling effect can be reduced by setting the Overscroll Adjustment Value to values higher than 1. Higher settings reduce over scrolling more, but also slow scrolling in general, which is particularly noticeable in DOS windows. Depending on hardware speeds and the user requirements, values from 10 to 35 may be suitable. This setting is controlled by the Overscroll Adjustment Slider.
- Use Citrix Default Keyboard Delay Adjustment Value Specifies a time interval, in milliseconds, during which keyboard input is collected before being sent to the Citrix server. Using too low a value in a LAN environment may cause a large number of small packets to be generated, which may affect network performance. This setting is controlled by the Keyboard Delay Adjustment Slider.
- Use Citrix Default Mouse Delay Adjustment Value Specifies a time interval, in milliseconds, during which mouse input will be collected before being sent to the Citrix server. This setting is controlled by the Mouse Delay Adjustment Slider.

# **Configuring Internet Settings**

Double-clicking the **Internet** icon in the administrator Control Panel opens the Internet Settings dialog box. Use this dialog box to configure browser parameter settings.

#### **General Tab**

The General tab allows you to configure general browser preferences.

Figure 89 Internet - General tab



Use the following guidelines:

- Start Page Enter the URL of the Web page you want to automatically open when the browser is started.
- Search Page Enter the URL of the page containing the search engine that you will be using.
- Cache Size (in KB) Shows the amount of temporary storage set and available to the browser.
- Clear Cache and Clear History Click these command buttons to clear these temporary storage areas.
- Font Size Select a font size (Small, Normal, Large, or Very Large).

# **Connection Tab**

The browser may access the Internet through a proxy server. The proxy server typically improves security by providing a firewall to filter and cache Web content. Use the Connection tab to enter the proxy server location, port used, and whether or not to by-pass the proxy server for local addresses (you can use the Advanced command button to enter the exceptions for **Do not use proxy server for addresses beginning with**).

Figure 90 Internet - Connection tab



# **Security Tab**

The Security tab allows you to select Internet security settings. To configure Sites and security Settings, select an icon, click **Sites** or **Settings**, and follow the prompts.

Figure 91 Internet - Security tab



# **Privacy Tab**

The Privacy tab allows you to configure browser cookie preferences (use the Default command button to restore the default privacy level; use the Advanced command button to configure the Advanced Privacy Settings; use the Sites command button to configure Per Site Privacy Actions).

Figure 92 Internet - Privacy tab



#### **Advanced Tab**

The Advanced tab allows you to select various browser operating preferences.

Figure 93 Internet - Advanced tab



#### Popups Tab

The Popups tab allows you to configure browser Popup Windows preferences (if you select Block popups, you can use the Exceptions and Advanced command buttons to further configure popup exceptions and filtering).

Figure 94 Internet - Popups tab



# Configuring JETCET PRINT Settings

Double-clicking the JETCET PRINT icon in the administrator Control Panel opens the JETCET PRINT Professional dialog box. Use this dialog box to configure JETCET utility settings that support local printing from a thin client.



JETCET supports IE 4.0, IE 5.5, IE 6.0, ICA, and RDP.

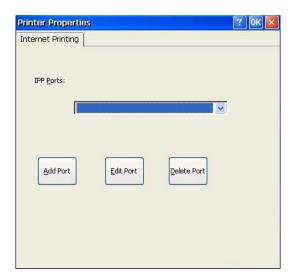
Figure 95 JETCET Print Professional



- **Default Printer** Displays a list of supported printers for selection as default.
- Manufacturer Model Displays a list of models of the currently selected default printer.
- Serial Handshaking Allows selection of Software or Hardware handshaking between the thin client and the printer (default is **Software**).
- Spooler area Controls in this area are used to select print spooler options. Selecting Use Spooler (default is checked) enables the Hold Jobs check box and the spooler memory selection options. If you select **Hold Jobs**, the print jobs will be held in main memory until the check box is cleared.

- Display this Dialog While Printing Select this check box if you want this dialog box to automatically open when printing.
- Properties Opens the Printer Properties dialog box. Use this dialog box to configure IPP ports for the selected printer.

Figure 96 JETCET - Printer Properties



# **/**

#### Note

Internet Printing Protocol (IPP) is a protocol that supports remote printing in distributed environments. For example, IPP allows a user to print a document on a printer at another geographic location by choosing print options from a Web browser or by specifying an Internet URL. IPP provides users with the same printing controls and concepts that they use to print locally or to LAN-attached printers. IPP printing services can show the location of available printers, or allow users to inquire about printer capabilities and printer status. You can also choose printers interactively. The protocol supports installation, configuration, print job submission, and other management features, with appropriate security.

#### Use the following guidelines:

- Enter the of the IP of IPP enabled printer and click Add Port to view the IPP Printer Port Added message.
- If the message is *Invalid IPP Server*, then the Printer is not IPP compatible and printing will not work.
- Be sure to click **OK** to save settings and close JETCET.



#### Note

If the thin client has two built-in COM ports, double-click **Port** in the Control Panel to open the Port Configuration dialog box and clear the Enable Port check box for COM2 (IPP uses dummy COM2 ports to communicate with clients like ICA or RDP). Double-click **Client Printer** in the Control Panel and configure the printer for COM2 (do not configure for network).

# **Setting the Language Option**

Double-clicking the **Languages** icon in the administrator Control Panel opens the Language Options dialog box. Use this dialog box to select a User Interface Language option.

Figure 97 Languages Options

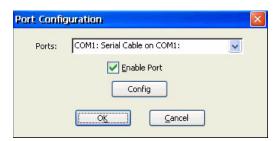


# **Configuring Port Settings**

Most applications that use COM ports provide a UI for port configuration. However, for cases without such a UI (for example, setting up a thin client printer connected to a serial port), the Port Configuration dialog box can be used.

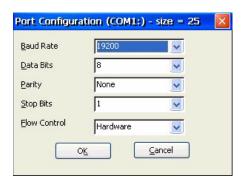
Double-clicking the **Port** icon in the administrator Control Panel opens the Port Configuration dialog box. Use this dialog box to enable and disable I/O ports currently present on the thin client. You can also configure COM ports to the desired settings.

Figure 98 Port Configuration



Click **Config** to open and use the Port Configuration COM dialog box if a COM port is selected in the **Ports** list and you need to configure the serial port parameters (including Baud Rate, Data Bits, Parity, Stop Bits, and Flow Control).

Figure 99 Port Configuration COM



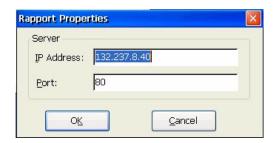
# **Configuring the Rapport Agent**

Wyse Device Manager (formerly known as Rapport) software is a full-featured remote administration tool set available from Wyse Technology. The software accesses your thin client through the factory-installed Rapport Agent and Preboot Execution Environment (PXE) client utilities. For more information on Wyse Device Manager, refer to "Using Wyse Device Manager Software for Remote Administration and Upgrades."

The Rapport Agent is a Wyse Device Manager component that resides in the thin client and interfaces with the Wyse Device Manager system to perform specific remote management tasks such as discovering devices, performing firmware and Add-on upgrades, and cloning registries from one device to another. For example, the Rapport Agent for a device periodically checks-in with Wyse Device Manager, and at check-in time, Wyse Device Manager re-discovers the device and its basic information. If there are pending updates for the device, Wyse Device Manager distributes the update when the device checks-in.

Double-clicking the **Rapport** icon in the administrator Control Panel opens the Rapport Properties dialog box, Use this dialog box to configure the Rapport Agent residing on the thin client.

Figure 100 Rapport Properties



- IP Address Enter the IP Address of the Wyse Device Manager server. If this is not
  entered the Rapport Agent will search for available Wyse Device Manager servers on
  the same subnet. If there are multiple Wyse Device Manager servers or the Wyse
  Device Manager server is on a different subnet than the thin client, you should enter
  the IP address of the desired Wyse Device Manager server.
- Port Enter the TCP port number that the Wyse Device Manager server listens to.



# Note

For information on obtaining Wyse Device Manager (formerly Rapport), refer to "Using Wyse Device Manager Software for Remote Administration and Upgrades."

# **Configuring Remote Shadow**

Wyse VNC (Remote Shadow) allows the remote system running the VNC Viewer to shadow a thin client and remotely interact with the user interface of the thin client.

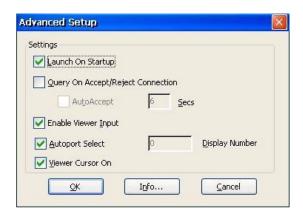
Double-clicking the **Remote Shadow** icon in the administrator Control Panel opens the Remote Shadow Setup dialog box. Use this dialog box to configure the Remote Shadow settings.

Figure 101 Remote Shadow Setup



- Password Enable Select to enable password functionality where a user will need to
  enter a password before remotely shadowing a thin client.
- Password boxes Enter the password in each password box. The Remote Shadow Server requires a password to permit Viewer connections. The password is encrypted for security and stored in the registry.
- Stop VNC or Start VNC Start or Stop the Remote Shadow Server using the Stop VNC or Start VNC command button (the title of the command button changes depending on whether or not the Remote Shadow Server is running).
- Advanced Click Advanced and configure the settings using the Advanced Setup dialog box.

Figure 102 Remote Shadow - Advanced Setup



Use the following guidelines:

- Launch On Startup Select to have the Remote Shadow Server launch on Windows CE startup.
- Query On Accept/Reject Connection Select to cause the server to display a dialog box giving the user a choice of whether or not to allow a Viewer connection. If this dialog box times out, the connection is allowed. Select the AutoAccept check box to allow an automatic connection within the time shown (in seconds).
- **Enable Viewer Input** Select to allow the client VNC Viewer to use their keyboard and mouse on the remote thin client.
- **Autoport Select** Select to allow for negotiation of the communication port automatically. When selected, Display Number is disabled.
- Viewer Cursor On Select to allow the VNC Viewer to show the shape and position of the server cursor. When off (not checked) it will only show the local cursor position on the Viewer. Clear Viewer Cursor On to improve VNC performance.
- Display Number Typically zero, this requires the VNC Viewer to view at a specific port offset.
- Info Click Info to display the license information.



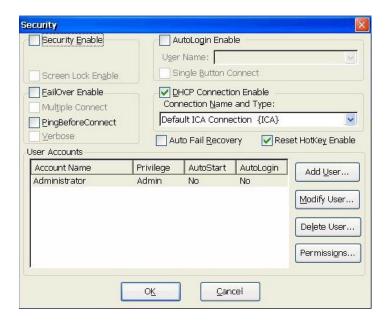
#### Note

The Remote Shadow icon does not expose the various polling configurations as you would see on the traditional Windows WinVNC server. These can be configured in the registry. The settings persist in the registry and are read by the Remote Shadow Server.

# **Configuring Security and Managing User Accounts**

Double-clicking the **Security** icon in the administrator Control Panel opens the Security dialog box. Use this dialog box to control various thin client functions related to security and manage (create, modify, and delete) thin client user accounts.

Figure 103 Security



- Security Enable When selected, requires users to log in before using a thin client.
- Screen Lock Enable When selected, requires users to log in to the thin client again
  after using CTRL+ALT+DEL to lock the thin client or the screen lock is activated by the
  screen saver (for information on enabling the screen saver using the Display icon, refer
  to the Users Guide: Wyse<sup>®</sup> Winterm™ 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE).
- Failover Enable Select to enable the Failover function. Failover allows the thin client
  to try the next connection in a list if a current connection attempt (ping) is unsuccessful.
  Enabling this function activates the Multiple Connect and Verbose check boxes. By
  default this function is disabled. For more information about Failover, refer to "Enabling
  Failover."
- Multiple Connect Failover must be enabled before you can access this function. If Multiple Connect is selected, the thin client will attempt a connection to all servers listed starting from where the first connection is launched.
- **PingBeforeConnect** When selected, the server is pinged before a connection is attempted to avoid wasting time waiting for failure responses.
- Verbose When selected, a Failover Log Window is displayed reporting details about the connection process.
- AutoLogin Enable When selected, enables the automatic login function that uses a
  countdown to login to the thin client (see "Enabling AutoLogin"). Selecting AutoLogin
  Enable enables Security automatically.
- User Name Enabled when AutoLogin Enable is checked. Enter the User Name for automatic login.
- Single Button Connect When selected, enables the automatic login function that uses the Connect command button to login to the thin client (see "Enabling Single Button Connect for User Login").

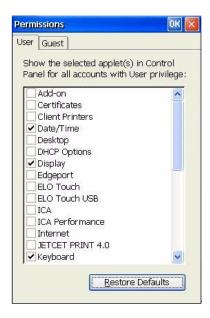
• DHCP Connection Enable and Connection Name and Type - As discussed earlier, a DHCP connection is a connection that will use most of the DHCP option data obtained from the DHCP server. A connection can be either ICA, RDP, or terminal emulation. The option data is the DHCP option IDs populated as discussed in "Using Dynamic Host Configuration Protocol (DHCP)." This option data are the Common Option IDs, RDP Option IDs, and Terminal Emulation Option IDs groups which provide information such as Server address, user login name and password, command line, working directory, terminal ID, and so on as discussed in "Configuring DHCP Options." The local vs. DHCP rule still applies here when a connection is DHCP enabled (select DHCP Connection Enable). That is, DHCP information for this designated connection (selected from the Connection Name and Type list) will always override the local settings as described in "Configuring DHCP Options."

When **DHCP Connection Enable** is disabled (default), the **Connection Name and Type** list is inaccessible (grayed out). This means that no connection in the system exists that uses the DHCP supplied information such as remote server IP address, remote user login name and password, remote application, working directory, and so on. Instead, each connection uses whatever static information that has been created locally on the thin client.

However, when **DHCP Connection Enable** is enabled, the list shows all connections on the system that can be selected to use the DHCP supplied information instead of local static information when making a connection. The list displays the unique connection name along with its connection type. After a connection is associated, that connection will use the DHCP information on the next reboot. Note that only one connection in the system can be selected to use the DHCP information.

- Auto Fail Recovery Select to enable an automatic re-connection attempt to this same connection in the case of a failed connection.
- Reset Hotkey Enable Select to allow users to reset the thin client to factory defaults using the G-Key Reset feature. To reset the thin client to factory default settings, restart the thin client and continuously tap the G key during the restart process. G-key reset impacts all configuration items, including but not limited to both network configuration and connections defined locally on the thin client. Be aware that if you do not select and enable Reset Hotkey Enable the only method to reset the thin client to factory default settings will be to use the Reset the terminal to factory-default property settings check box in the System Info General tab. However, this check box is only accessible if the operating system can boot up successfully. Therefore, if there is an operating system boot up failure due to invalid settings, the thin client may require factory attention to recover it.
- **User Accounts** area Lists all the operator accounts. Each listing includes the name, security privilege level, and whether or not auto start and auto login are enabled.
- Add User, Modify User and Delete User Opens a User Account dialog box for adding, modifying or deleting a user account. For More information on user accounts, refer to "Adding a User Account", "Modifying a User Account", and "Deleting a User Account."
- Permissions Opens the Permissions dialog box allowing you to configure the Control Panel for User-level and Guest-level operators (use the Restore Defaults command button to reset permissions to defaults.

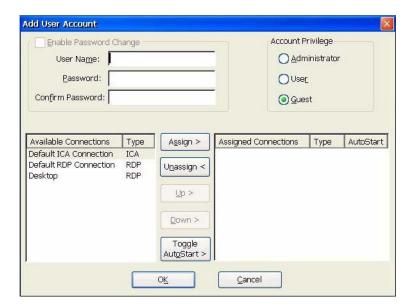
Figure 104 Security - Permissions



# **Adding a User Account**

To add a user account, click **Add User** in the Security dialog box to open the Add User Account dialog box and configure the settings.

Figure 105 Add User Account



- Enable Password Change area:
  - Select Enable Password Change to allow the operator to change the password by selecting this option at log on.
  - Enter the User Name, Password, and Confirm Password.

- Account Privilege area:
  - Administrator, User, and Guest Select the privilege level of the operator user account. For information about privilege levels, refer to the Users Guide: Wyse<sup>®</sup> Winterm™ 3 series, Based on Microsoft<sup>®</sup> Windows<sup>®</sup> CE.
- **Connections** area This group includes two lists and five associated command buttons:
  - All available connections (which are created by you) appear in the left list by name and connection type.
    - Use **Assign** to copy selected connections from the left list to the right list. These connections are then available for a user (for example, these connections appear in the Connection Manager list of connections when the operator logs on). Use **Unassign** to remove connections from the right list.
  - Use Up and Down to arrange the order of the list. Ordering may be required if the Failover feature is operational and an attempted connection fails (for information on Failover, refer to "Enabling Failover."
  - **Toggle Autostart** may be used to enable and disable the connection for automatic startup when the operator logs on.

# **Modifying a User Account**

To modify a user account:

- Select a user from the User Accounts list in the Security dialog box and click Modify User.
- 2. Use the Modify User Account dialog box to make your modifications (use the guidelines in "Adding a User Account").
- 3. Click **OK** to apply and save your settings.

# **Deleting a User Account**

To delete a user account:

- 1. Select a user from the User Accounts list in the Security dialog box.
- 2. Click **Delete User** to open the Delete User Account Confirmation dialog box.
- 3. Click **Yes** to confirm the deletion.

# **Managing Networks Using SNMP**

The thin client can be managed through standard third-party Simple Network Management Protocol (SNMP) tools. SNMP, is a set of protocols for managing complex networks. SNMP works by sending messages, called Protocol Data Units (PDUs), to different parts of a network. SNMP-compliant devices (called agents) store data about themselves in Management Information Bases (MIBs) and return this data to the SNMP requesters. Double-clicking the **SNMP** icon in the administrator Control Panel opens the SNMP Network Administration dialog box. Use this dialog box to enter the parameters required for SNMP management.

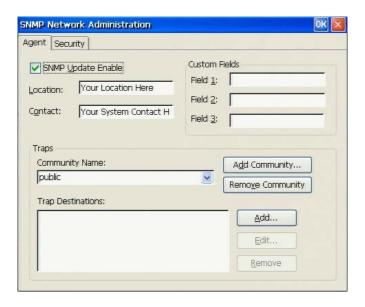


#### Note

For information on remote administration and upgrading, refer to "System Administration."

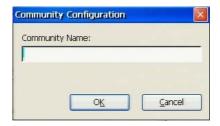
The Agent tab allows you to configure Agent preferences.

Figure 106 SNMP - Agent tab



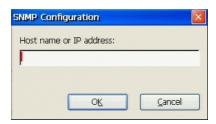
- SNMP Upgrade Enable area These controls contains a check box for enabling firmware update through SNMP, and boxes to enter the physical location of the thin client and the name of the contact person responsible for the thin client.
- **Custom Fields** area Use these boxes to supply any supplemental information required by the SNMP manager.
- Traps area:
  - Community Name An SNMP community is a logical relationship between an SNMP agent and one or more SNMP managers. The community has a name, and all members of that community have the same access privileges. Select the Community Name that the thin client will participate in for SNMP management (the default community is public).
  - Add Community To add a community name to the Community Name list, click
     Add Community, enter the Community Name, and click OK.

Figure 107 SNMP - Community name



- Remove Community To remove a community name from the Community Name list, select a community, click Remove Community, and click OK.
- Trap Destinations area (Agents send unsolicited reports, called traps, back to the NMS when certain network activity occurs. These traps can spawn various types of events):
  - Add To add an NMS trap server to the Trap Destinations list, click Add, enter the IP address or Host name of the server to which the thin client will send traps, and click OK.

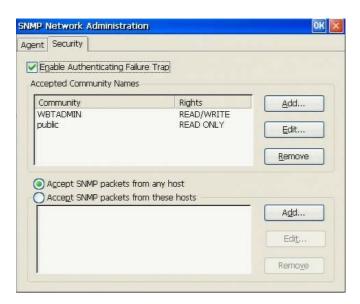
Figure 108 SNMP - Host name or IP address



- Edit To edit an NMS trap server in the Trap Destinations list, select an NMS trap server, click Edit, configure the settings, and click OK.
- Remove To remove an NMS trap server from the Trap Destinations list, select an NMS trap server, click Remove, and click OK.

The Security tab allows you to configure security preferences.

Figure 109 SNMP - Security tab



- Enable Authentication Failure Trap area allows the authentication failure trap to be enabled, and allows the configuration of rights to Accepted Community Names:
  - Add To add an Accepted Community Name to the Accepted Community Names list, click Add, type the Accepted Community Name, select a right from the Rights list, and click OK.

Figure 110 SNMP - Community name and rights



- Edit To edit an Accepted Community Name in the Accepted Community Names list, select an Accepted Community Name, click Edit, configure the settings, and click OK.
- Remove To remove an Accepted Community Name from the Accepted Community Names list, select an Accepted Community Name, click Remove, and click OK.
- The SNMP packets options area allows selection of hosts from which SNMP packets
  can be accepted. You can globally authorize all hosts by selection Accept SNMP
  packets from any host or you can authorize only specific hosts appearing in the list by
  selecting Accept SNMP packets from these hosts. You can add, edit, and remove
  hosts from the list using the following guidelines:
  - Add To add a host to the Accept SNMP packets from these hosts list, click Add, type the host, and click OK.

Figure 111 SNMP - Host name or IP address



- Edit To edit a host in the Accept SNMP packets from these hosts list, select a
  host, click Edit, configure the settings, and click OK.
- **Remove** To remove a host from the Accept SNMP packets from these hosts list, select a host, click **Remove**, and click **OK**.

# **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 and reset the thin client to factory defaults.



#### Note

This feature is not available to guest-level users.

#### **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 that allows you to reset the thin client to factory defaults (the check box is active for administrators only).

Figure 112 System Info - General tab



You can reset the thin client to factory default settings by selecting the **Reset the terminal to factory-default property settings** check box (the System Settings Change message displays and you can confirm and follow the instructions provided to reset the thin client).



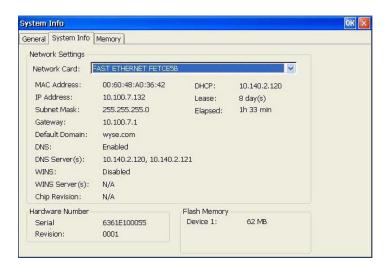
#### Caution

All prior changes to the factory default settings will be lost. Be prepared to restore settings either manually or through remote administration.

# **System Info Tab**

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

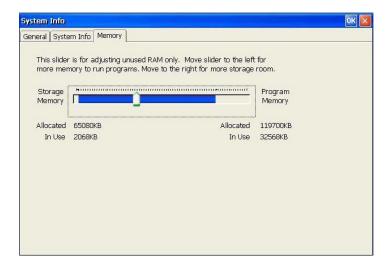
Figure 113 System Info - System Info tab



# **Memory Tab**

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

Figure 114 System Info - Memory tab



# **Using Administrator Tools**

Double-clicking the **Tools** icon in the administrator Control Panel opens the Tools window. This window contains the available administrator tools include Ping, Trace Route, and IP Config.

Figure 115 Administrator Tools



The network test tools Ping and Trace Route can be used for checking the integrity of the network connection. These tools can be accessed from the Tools window by double-clicking either the **Ping** or the **TraceRt** icon. The Ping dialog box executes the ping command and displays response messages. The Trace Route dialog box executes the tracert command and displays response messages.

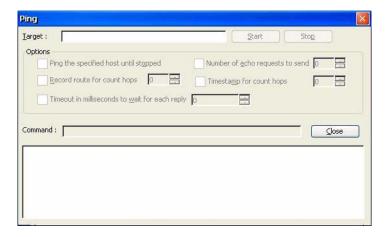
# **Ping**

The ping dialog box executes the Packet InterNet Groper (ping) diagnostic utility. Ping is a diagnostic tool that sends an echo request to a network host. The host parameter is either a valid host name or an IP address. If the host is operational and on the network, it responds to the echo request. By default, echo requests are sent four times. The ping utility sends one echo request per second and calculates round trip times and packet loss statistics. It also displays a brief summary upon completion of the calculation in the message area.

Use the ping utility to:

- Determine the status of the network and various foreign hosts.
- Track and isolate hardware and software problems.
- Test and measure network latency.
- Determine the IP address of a host if only the hostname is known.

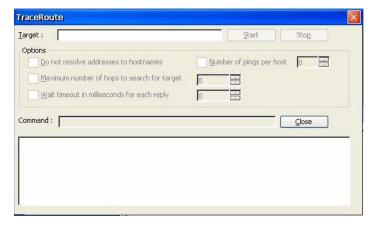
Figure 116 Ping



# **Trace Route**

The Trace Route dialog box executes the tracert diagnostic utility. The tracert utility traces the path from your thin client to a network host. The host parameter is either a valid host name or an IP address.

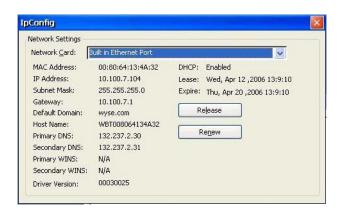
Figure 117 Trace Route



# **IP Config**

Double-clicking the **IpConfig** icon in the Tools window opens the IpConfig dialog box. Use this dialog box to view and select your network card (when needed, you can use the **Release** command button to release the DHCP IP Address, and then use the **Renew** command button to renew the DHCP IP Address).

Figure 118 IP Config



# **Managing TSC Licenses**

If a Windows 2000 or 2003 Server is used, a Terminal Services Client Access License (TSCAL) server must also reside somewhere on the network. The server will grant a temporary (90-day) license on an individual device basis. Beyond the temporary (90-day) license, you must purchase TSCALs and install them on the TSCAL server (you will not be able to make a connection without a temporary or permanent license).

Double-clicking the **TSC Licenses** icon in the administrator Control Panel opens the Terminal Server Client Licenses dialog box. Use this dialog box to manage and view the information of licenses you have available (you can delete a selected license by clicking **Delete**).

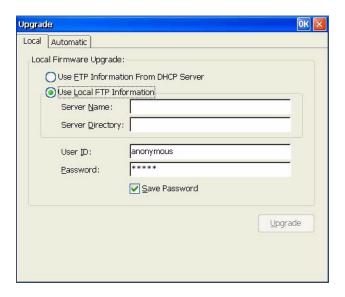
Figure 119 TSC Licenses



# **Upgrading Thin Client Software**

Double-clicking the **Upgrade** icon in the administrator Control Panel opens the Upgrade dialog box. Use this dialog box to enter information required for Automatic DHCP and FTP Pull Upgrade methods. You can configure to have the DHCP server provide the location of the file server on which the upgrade image files are located or use the local entry of this location (for information on performing upgrades, refer to "About Updating Software").

Figure 120 Upgrading



# Managing USB Storage Devices Using USB Access

Double-clicking the **USB Access** icon in the administrator Control Panel opens the USB Mass Storage Access dialog box. Use this dialog box to access supported USB Storage Devices (described as Mass Storage Devices) for use with the thin client.

Figure 121 USB Mass Storage Access



Wyse Mass Storage support includes the following features:

- **USB device support** Supports USB devices (with supported file systems) which conform to the USB Mass Storage Specification.
- FAT and FAT32 File System support File system support includes FAT and FAT32 file systems (devices with an NTFS file system are not supported).



#### Note

Devices must be pre-formatted to FAT32 or FAT.

 ICA server support - An attached device is presented on an ICA server as a local drive which can be used to store documents. For example, a user can use an attached Mass Storage Device within the ICA connection through Client drive A: in Windows Explorer as a drive.



ICA Drive Mapping must be enabled.

• USB Floppy Drive, USB Pen Drive, USB Flash Key, USB CD-ROM, and USB Zip Drive support - Supports writing and reading operations on USB Floppy Drive, USB Pen Drive, USB Flash Key, and USB Zip Drive devices. Supports reading operations on USB CD-ROM.

# 7

# **System Administration**

This chapter contains information and detailed instructions to help you manage your thin client environment through Wyse Device Manager Software, DHCP, and FTP.

# **About Updating Software**

Updating thin client software can be done remotely using Wyse Device Manager Software (see "Using Wyse Device Manager Software for Remote Administration and Upgrades") or by using DHCP and FTP upgrade methods.

Upgrade images used by the DHCP and FTP Pull upgrade processes are stored on the FTP server in a directory in the FTP path (this server name and path directory must be made available to the thin client).



#### Note

Double-clicking the **Upgrade** icon in the administrator Control Panel opens the Upgrade dialog box. You can use this dialog box to enter information required for Automatic DHCP (see "Configuring the Thin Client for Automatic DHCP Firmware Upgrades") and FTP Pull Upgrade methods ("Performing FTP Pull Firmware Upgrades").

If DHCP upgrading is used, the location of the upgrade images must be entered in the server DHCP options identified in the DHCP Options dialog box on the thin client (defaults are 161 and 162, respectively). The FTP server must provide anonymous log-on capability. For more information on DHCP Options, refer to "Configuring DHCP Options." For more information on DHCP upgrading, refer to "Configuring the Thin Client for Automatic DHCP Firmware Upgrades."

If FTP Pull upgrading is used, items must be entered in the Upgrade dialog box on the thin client, along with the Login name and password (the default name and password are both anonymous). For more information on FTP Pull upgrading, refer to "Performing FTP Pull Firmware Upgrades."



#### Note

To update the Citrix ICA Client and the Microsoft RDP Client installed on the thin client, you must use the Wyse update procedures and mechanisms.



#### Caution

Upgrades to newer software versions preserve the thin client settings through the upgrade process. However, downgrades to older versions of software boot the thin client to the Setup Wizard, which requires that initial settings be re-established (for information on the Setup Wizard, refer to "Using the Setup Wizard").

# Using Wyse Device Manager Software for Remote Administration and Upgrades

Wyse Device Manager (formerly known as Rapport) software is a full-featured remote administration tool set available from Wyse Technology. The software accesses your thin client through the factory-installed WDM Agent and Preboot Execution Environment (PXE) client utilities. PXE upgrade services and a Virtual Network Computing (VNC) Viewer are built into Wyse Device Manager software. Wyse Device Manager software allows the thin client administration functions (for example, Shutdown, Reboot, Wake-On-LAN, and firmware upgrades) to be performed without requiring an administrator to visit the individual thin client sites.

For information on installing Wyse Device Manager software and configuring the server environment, refer to the Wyse Device Manager software documentation.

For local custom fields that can be accessed by Wyse Device Manager, refer to "Managing Networks Using SNMP."



#### Note

Ordering information for Wyse Device Manager software is available on the Wyse Web site at: <a href="http://www.wyse.com/products/software/rapport/">http://www.wyse.com/products/software/rapport/</a>.

# **Configuring the Thin Client for Automatic DHCP Firmware Upgrades**

The software version is embedded in both the RAM and flash memory images. This version information is used to compare the images on the FTP server to the currently-loaded flash image on the thin client.

After obtaining software updates from Wyse, you must place the software images on the FTP Server to allow the thin clients to automatically detect and self-install the new software (upon thin client system start). The server address and exact path to these files can be specified in DHCP Options 161 and 162 (if DHCP is not used, the path can be specified in the Upgrade dialog box).

Each time a thin client boots, it checks the software images on the FTP file server, and if configured, automatically performs an update if a newer version is detected. The build number determines whether or not the update is different than the version currently installed on the thin client.



#### Note

The upgrade image and params.ini files must be available on the FTP file server for an upgrade to be performed.



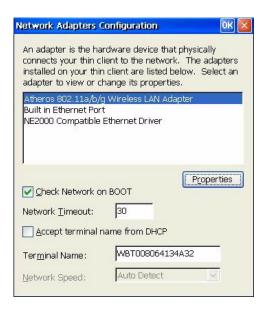
#### Caution

Interrupting power during the update process can corrupt the FLASH on the thin client. Thin clients with corrupted FLASH must be shipped to Wyse for service.

To configure the thin client for automatic DHCP firmware upgrades:

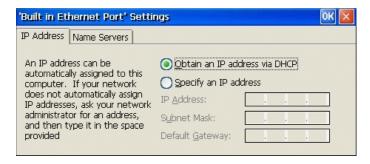
 Open the Network Adapters Configuration dialog box by double-clicking the Network icon in the administrator Control Panel.

Figure 122 Network Adapters Configuration



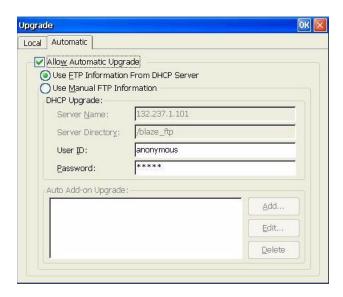
- Select the applicable network adapter from the list, and select the Check Network on BOOT check box.
- **3.** Click **Properties** to open the Settings dialog box for the selected adapter.

Figure 123 IP Address tab



- 4. Select the Obtain an IP address via DHCP option on the IP Address tab and click OK.
- **5.** Click **OK** to close the Network Adapters Configuration dialog box and return to the Control Panel.
- **6.** Open the Upgrade dialog box by double-clicking the **Upgrade** icon in the administrator Control Panel.
- 7. Click the Automatic tab.

Figure 124 Upgrade - Automatic tab



- Select Allow Automatic Upgrade and select the Use FTP Information from DHCP Server option.
- **9.** Close the Upgrade dialog box and the Control Panel, and then restart the thin client. The thin client will automatically upgrade the firmware during restart.

# **Performing FTP Pull Firmware Upgrades**

FTP pull is an upgrade initiated from the thin client by the user. The location of the upgrade image on an FTP file server is entered locally at the thin client or obtained from the DHCP server. The thin client upgrades to this image as long as the image is compatible with the thin client.



#### Note

Params.ini, Bootstrap212.exe, and the Bin file along with the upgrade image must be present on your FTP server to upgrade the thin client.



#### Note

If the location of the upgrade image is supplied by the DHCP server, the thin client must be configured to use DHCP before performing an FTP Pull Upgrade. DHCP can be set up through the Network Adapters Configuration dialog box (for more information on setting up DHCP, refer to "Configuring the Thin Client for Automatic DHCP Firmware Upgrades."

#### $\times$

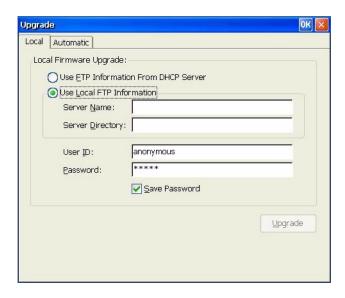
#### Caution

Interrupting power during the update process can corrupt the FLASH on the thin client. Thin clients with corrupted FLASH must be shipped to Wyse for service.

To perform an FTP pull upgrade:

- Obtain the firmware or Add-on binary image (.bin) and associated parameters
  initialization file (params.ini) from Wyse and place them in a directory under your FTP
  home directory on a FTP server to which you have anonymous access permission
  enabled.
- Log on to the thin client as administrator (this is done by default if no security has been set up), open the Upgrade dialog box by double-clicking on the Upgrade icon in the administrator Control Panel, and then click the Local tab.

Figure 125 Upgrade - Local tab



- 3. Complete one of the following:
  - If the DHCP server is to supply the location of the upgrade file, select the Use FTP Information From DHCP Server option.
  - If the DHCP server is not supplying the location of the upgrade file, select the Use Local FTP Information option, enter the location of the upgrade files in Server Name (IP address or valid DNS name of the FTP file server) and Server Directory (FTP path to the upgrade files). Then enter the required FTP server login information in User ID (anonymous by default) and Password (anonymous by default).
- Depending on whether or not you want to save the password information, select or clear Save Password.
- 5. Click Upgrade to start the transfer of the firmware or Add-on files to the thin client. Informative messages are displayed in the Status box during the transfer. When the process completes, a message appears prompting you to restart the thin client (you can also continue to add other Add-ons before you restart the thin client).

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# **Administrators Guide**

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