

Getting Started Guide

Wyse ThinOS™

Issue: 061709

PN: 883923-01 Rev. A

WYSE
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Getting Started with Wyse ThinOS

Introduction

Wyse® thin clients using Wyse ThinOS™ (WTOS) are highly optimized thin clients that provide ultra-fast access to applications, files, and network resources made available on machines hosting Citrix™ ICA and Microsoft™ RDP session services. 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 virtual private network (VPN) server.

WTOS Initialization (INI) files are plain-text files that you can construct to contain the configuration information you want for your thin clients running WTOS (both on a global level and on an individual user level). For example, these INI files can be used by the WTOS applications to save information about a user's preferences and operating environment.

WTOS notable features include:

- **Unique Thin Computing Experience** - While designed to deliver the maximum return-on-investment for an IT department (with its highly optimized design for ICA and RDP connections and near-zero computing architecture), thin clients running WTOS also provide a rich user-desktop experience with features such as Dual Monitor, video playback, USB virtualization, and more. With automatic connections to a virtualized server environment (Citrix, Microsoft TS, or VMWare) immediately after device booting, and “easy” shut-down (thin-client shut-down automatically with a user's last session shut-down—no need for remote and local OS shut-downs), WTOS provides a true “local” computing experience.
- **Near-Zero Computing Architecture** - Through an enhanced combination of DHCP option tags and FTP services, thin clients running WTOS are updated and configured automatically. Although no management application needs to be installed for the basic services (making it the quickest and easiest thin client to manage in the industry), Wyse does provide a management application (Wyse Device Manager™) to allow you complete user-desktop control (with features such as remote shadow, reboot, shutdown, boot, rename, automatic device check-in support, and so on).
- **Boot Time in Less than 10 Seconds** - The fastest Thin Computing OS in the industry! Fast boot time and graphic display provides an overall impressive usability experience.
- **Operating System Upgrades in Less than 20 Seconds** - WTOS requires an incredibly small operating system (only 2 MB for the S10) that transfers quickly and easily (reducing downtime and the possibility of failures). After OS upgrades, WTOS automatically uses the same configuration files used for the previous OS version (no need to reconfigure!).
- **Virus-free Operating System** - Using ICA and RDP sessions, WTOS is virus-free. No anti-virus software is needed and no viruses can be distributed.

**Note**

Wyse recommends that you start evaluating WTOS in a separated test environment. After you become familiar with setting up and configuring WTOS and learn how your WTOS environment works, you will be ready to use WTOS in your production network.

About this Guide

This guide is intended for administrators of the WTOS system. It provides a setup and configuration overview of the entire WTOS system to help you get your WTOS environment up and running quickly and easily.

Wyse Technical Support

To access Wyse technical resources, visit <http://www.wyse.com/support>. If you still have questions, you can submit your questions using the [Wyse Self-Service Center](#) (on the Wyse.com home page, go to **Support | Knowledge Base | Home** tab) or call Customer Support at 1-800-800-WYSE (toll free in U.S. and Canada). Hours of operation are from 6:00 A.M. to 5:00 P.M. Pacific Time, Monday through Friday.

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

Related Documentation and Services

Wyse thin client features can be found in the datasheet for your specific thin client model. Datasheets are available on the Wyse Web site. Go to <http://www.wyse.com/products>, click the *Wyse Thin Clients* link, click the link for your thin client, and then click the *Download Datasheet* link.

Sample User INI files are intended for administrators of Wyse thin clients running WTOS. These files are available from the Wyse Web site (go to <http://www.wyse.com/manuals>, search for *sample.ini*, click the reference guide link, and then click the *sample ini* link to open and use the file download dialog box to save the compressed file to a folder you want). These sample files are annotated to allow you to use them as a “starter set” (that you can modify for your users needs) to quickly get your file server up and running. For information on using the sample files, refer to the *Reference Guide: Wyse ThinOS™ INI Files*.

Reference Guide: Wyse ThinOS™ INI Files is intended for administrators of Wyse thin clients running WTOS. It provides the detailed information you need to help you understand and use the WTOS INI files. It contains information on the different WTOS INI files you can use and the rules for constructing the files. It also provides the parameter details you need (with working examples) to get the most out of your WTOS INI files. In addition, this guide also includes an appendix that contains all of the supported connect parameters you can use for ICA and RDP connections. It is available at: <http://www.wyse.com/manuals>.

Getting Started Guide: Wyse ThinOS™ is intended for administrators of the WTOS system. It provides a setup and configuration overview of the entire WTOS system to help you get your WTOS environment up and running quickly and easily. It is available at: <http://www.wyse.com/manuals>.

Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™ is intended for users of the Wyse 1 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>.

Administrators Guide: Wyse® 1 Series, Based on Wyse ThinOS™ is intended for administrators of Wyse thin clients running WTOS. It provides information and detailed system configurations to help you design and manage a WTOS environment. It is available at: <http://www.wyse.com/manuals>.

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

Wyse Online Community

Wyse maintains an online community where users of our products can seek and exchange information on user forums. Visit the Wyse Online Community forums at: <http://community.wyse.com/forums/>.

Overview - Start Here

This guide provides you with an easy-to-follow workflow to get your WTOS environment up and running quickly and easily.



Note

It is assumed that any desired Citrix ICA and Microsoft RDP sessions and applications are ready and available (use the instructions accompanying these products) to the thin clients sharing the server environment. For information on configuring ICA and RDP connections, refer to the *Administrators Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.

Simply complete each phase and you will:

- Install Wyse Device Manager™ to easily manage all of your network devices (Phase 1)
- Configure an FTP Server to provide necessary information and data to your thin clients (Phase 2)
- Configure a DHCP Server to provide all thin clients on the network with their IP addresses and related network information when the thin clients boot (Phase 3)
- Configure other supported services for your WTOS environment (Phase 4)
- Review important thin client details before you get them up and running (Phase 5)
- Get your thin clients up and running (Phase 6)

Phase 1 - Installing Wyse Device Manager

You can skip this phase if you want to use the basic services of WTOS (no management application needs to be installed for basic services).

If you want more than the basic services of WTOS and desire complete user-desktop control (with features such as remote shadow, reboot, shutdown, boot, rename, automatic device check-in support, Wake-On-LAN, change device properties, and so on), then you must install Wyse Device Manager™ (WDM).

WDM software uses industry standard communication protocols and a component-based architecture to efficiently manage your network devices. Its intuitive, simple and powerful user interface is built to operate as a standard snap-in to the Microsoft Management Console (MMC). WDM includes a simple to use console to manage all of your network devices.

The *Installation Guide: Wyse Device Manager™* provides details on how to install WDM for Windows servers and clients. The guide provides the step-by-step instructions you need to install and configure a WDM environment. It also includes the requirements you must address before you begin the installation procedures.



Caution

It is highly recommended that you DO NOT install WDM software on any server which is currently dedicated to other tasks (such as a Domain Controller, Backup Controller, Mail Server, Production Web Server, DHCP Server, MSMQ Server, Application Server, and so on). It is highly recommended that WDM software be installed on a server that is dedicated to WDM services.

After installing WDM, you can use the *Administrators Guide: Wyse Device Manager™* for all of the information (including detailed system command and parameter configurations) you need to manage your WDM environment.

Phase 2 - Configuring an FTP Server for WTOS

In this phase, you must configure an FTP server to provide necessary information and data to your thin clients. For example, when a thin client boots, it accesses the software update images and user configuration profile files from the FTP server. The FTP server and path to the update files are available through DHCP vendor options 161 and 162 (see "Phase 3 - Configuring a DHCP Server for WTOS"). If these options are not specified, the default FTP server is the DHCP server from which the thin client receives its IP address and the default directory (\wyse\wnos for Windows FTP servers).



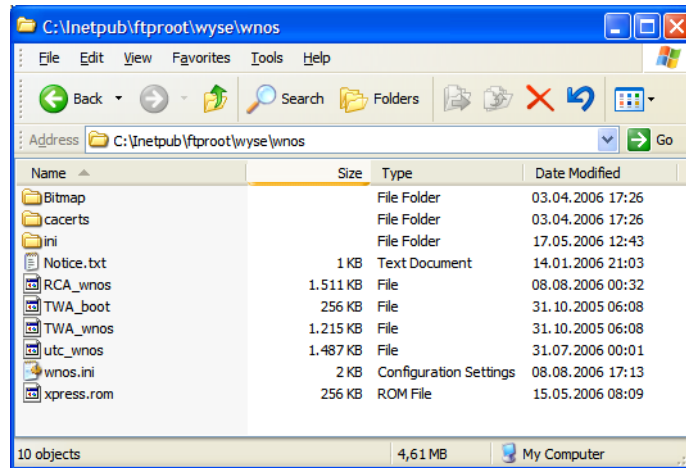
Note

For detailed information on setting up a server environment (including the various network services used by the thin client such as DHCP, FTP, Virtual Desktop, and DNS), refer to the *Administrators Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.

The FTP folder structure that is required by thin clients running WTOS is \wyse\wnos and must be placed under the FTP root folder (if DHCP option tag 162 is not used) or under the folder which has been specified by DHCP option 162. For example, if DHCP option tag 162 has been configured with the name *ThinClients* and DHCP option tag 161 has been configured with IP address 192.168.1.1, then the thin client will check the folder <FTPRoot>\ThinClients\wyse\wnos for a wnos.ini and firmware on the FTP server with the IP address (192.168.1.1). The subfolder \bitmap must be placed under the \wnos folder and can contain graphical images for icons and background images. The sub-folder \inc can be placed under the \wnos folder and can contain the mac.ini files (note that the use of the parameter *Include=\$mac.ini* will load "/wnos/inc/mac-address.ini" so that you can use inc in the folder structure and use \$MAC.ini).

Figure 1 shows an example of the folder structure of an FTP server for WTOS.

Figure 1 Example of the folder structure of an FTP server for WTOS



To configure an FTP server, complete the following:

1. Create the following directory structure on your FTP server:

```
<path from anonymous user FTP root>\wyse\wnos\  
<path from anonymous user FTP root>\wyse\wnos\ini\  
<path from anonymous user FTP root>\wyse\wnos\bitmap\  
<path from anonymous user FTP root>\wyse\wnos\cacerts\  
<path from anonymous user FTP root>\wyse\wnos\inc\
```



Note

There is a difference between a path obtained from the DHCP server and a path entered in the UI. If the path is obtained from DHCP, \wyse\wnos are appended. If the path is obtained from the UI, the \wyse portion is not appended; only \wnos is automatically inserted. As written in this first step, the configuration procedure will only work in conjunction with a DHCP server.

2. If you need to upgrade the firmware for your thin client, you must have a Software Maintenance agreement to download the files (for details, go to <http://www.wyse.com/products/software/os/index.asp>). Copy the RCA_boot and RCA_wnos (if you have an S10) or V10L_boot and V10L_WNOS (if you have a V10L) and place it in the wnos subdirectory of your FTP server.
3. Obtain the Sample User INI files (go to <http://www.wyse.com/manuals>, search for sample.ini, click the reference guide link, and then click the sample ini link to open and use the file download dialog box to save the compressed file to a folder you want) and unpack them into a directory from which they can be examined and modified using an ASCII text editor. These sample files are annotated to allow you to use them as a starter set on your FTP server and can be modified to suit your needs. The compressed file includes:
 - **wnos.kiosk** - Example wnos.ini file for a kiosk configuration
 - **wnos.login** - Example wnos.ini file to enable multiple user accounts
 - **user.ini** - Template for {username}.ini for individual user profiles
4. Determine whether all the thin clients served by this FTP server will be used as kiosks or will support individual user accounts. You must rename the downloaded files so that there will be one wnos.ini file available to all users globally; and for a multiple user account configuration there will be a unique {username}.ini file for each user. In addition:

- **If the kiosk configuration is to be used** - Change the name of `wnos.kiosk` to `wnos.ini`. Otherwise, for multiple user accounts, change the name of `wnos.login` to `wnos.ini`.
 - **If the individual user account configuration is to be used** - Make a copy of the `user.ini` file for each user name as `{username}.ini` (where `{username}` is the name of the user) and place the files in the subdirectory `ini` of `wnos`. The files must have read permission enabled, and if users are to be allowed to change their passwords, the files also must have write permission enabled (so that the thin clients can write the encrypted user passwords to them). **For Linux servers**, use the `chmod` command to set the read/write permissions. **For Microsoft servers**, use the Properties dialog box to set read/write permissions.
5. If desired, you can customize the initialization files to match the local environment using the instructions in the *Reference Guide: Wyse ThinOS™ INI Files* is. If you modify the INI files to include icons and logos, place the images in the FTP subdirectory `bitmap` of `wnos`.

The following example of a `wnos.ini` file locks down the user, sets the display and screensaver settings, enables printing and creates one ICA and one RDP session (note that for ICA and RDP each line but the last must end with a backslash):

```

autoload=2
Rapportserver=172.16.60.1
Privilege=None Lockdown=no

Language=De

Resolution=1280x1024 Refresh=60
DeskColor="0 128 192"
Screensaver=10 LockTerminal=yes Type=2

Timeserver=time.nist.gov timeformat="24-hour format" Dateformat=dd/mm/yyyy
TimeZone='GMT + 01:00' ManualOverride=yes

SignOn=No
MaxVNCD=1
VncPassword=password
VncPrompt=Yes

Printer=LPT2 Name=HPLaser PrinterID="HP LaserJet 4" Enabled=yes
DefaultPrinter=LPT2
ThinPrintEnable=yes

Seamless=yes
PnliteServer=172.16.60.1
DomainList=Wyse

CONNECT=ICA \
BrowserIP=172.16.60.1 \
Application=Word \
Description="WinWord 2003" \
Resolution=seamless \
LocalCopy=yes

CONNECT=RDP \
Host=172.16.60.1 \
Description="Desktop" \
Colors=high \
Experience=15 \
Resolution=1024x768 \
LocalCopy=no

```

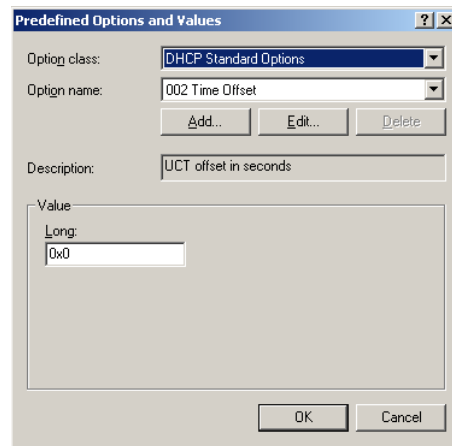
Phase 3 - Configuring a DHCP Server for WTOS

You can skip this phase if you do not intend to use DHCP service. The DHCP service provides all thin clients on the network with their IP addresses and related network information when the thin clients boot. DHCP also supplies the IP address and directory path to the thin client software images and user profiles located on the file servers.

Use of DHCP is recommended. However, 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 the fixed IP addresses must be entered locally for each device using the thin client **Network Setup** dialog box as described in the *Administrators Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.

WTOS uses several DHCP option tags. These option tags must be created, activated within the DHCP scope(s), and then added for the thin clients to use them. Figure 2 shows the Windows DHCP Server **Predefined Options and Values** dialog box that is displayed when right-clicking the DHCP server and selecting **Set Predefined Options**. The most commonly used tags are 161 and 186. Depending on the Terminal Server environment, more options can be added using the **Predefined Options and Values** dialog box.

Figure 2 Predefined Options and Values dialog box



Use the guidelines shown in Table 1 when creating and adding the DHCP option tags you need for your thin clients:



Note

Ensure that within the DHCP scope these new DHCP option tags you create are activated (this can be done using the **Configure Options** command), before you add them.

Table 1 DHCP Options

Option	Description	Notes
161	FTP server list	Optional string. Can be either the name or the IP address of the FTP server. If a name is given, the name must be resolvable by the DNS server(s) specified in Option 6. If the option provided by the server is blank or the server provides no value for the field, the machine on which the DHCP server resides is assumed to also be the FTP server.
162	Root path to the FTP files	Optional string. If the option provided by the server is blank and the server provides no value for the field, a null string is used. \wyse\wnos is automatically appended to the search path. For example, if you enter pub\serversoftware, the path searched will be pub\serversoftware\wyse\wnos. Note: You can have the \wyse automatic component of the search path omitted by appending a dollar sign (\$) to the entered path. For example, if you enter pub\serversoftware\$, the path searched will be pub\serversoftware\wnos. Note: The usage or omission of a leading slash (\) on the path is critical on some servers. Some servers limit access to the root path of the user specified at login. For those servers, the usage of the leading slash is optional. Some *NIX servers can be configured to allow the FTP user access to the entire file system. For those servers, specifying a leading slash specifies that access is to start at the root file system. Proper matching of the file specification to the FTP server in use is critical to ensuring proper operation. A secured Windows server requires the slash be specified in order to complete proper access.
181	PNAgent/PNLite server list	Optional string. The thin client uses the server to authenticate the Windows credentials of the user and to obtain a list of ICA published applications valid for the validated credentials. The user supplies those credentials when logging in to the thin client.

Table 1 DHCP Options, Continued

Option	Description	Notes
182	NT Domain list for PNAgent/PNLite	Optional string. The thin client creates a pull-down list of domains from the information supplied in option 182. This list is presented at thin client login in the order specified in the DHCP option (for example, the first domain specified becomes the default). The selected domain is the one which must authenticate the user ID and password. Only the selected domain is used in the authentication process. If the domain list is incomplete and the user credentials must be verified against a domain not in the list (assuming that the server in option 181 is capable of authenticating against a domain not in the list), the user has the option of not using any of the domains specified in option 182 and typing a different domain name at the time of login.
184	FTP Username	Optional string. WTOS version 4.3 and later only.
185	FTP Password	Optional string. WTOS version 4.3 and later only.
186	Wyse Device Manager (WDM) server list	Optional binary IP addresses of WDM. This option can specify up to two Wyse Device Manager servers. If two are specified, at boot time the thin client will attempt to check-in to the first server. If it cannot contact the first server it will try to check-in to the second server. WTOS version 4.3 and later only.
187	WDM server port	Optional number. Byte, word, or two-bytes array. NOTE: The value of this option tag, when not embedded in Vendor Class Specific Information option, is interpreted in reverse order when it is sent as 2 bytes (for example, the value of 0x0050 is interpreted as 0x5000). This option tag was used by old WTOS releases. New WTOS releases still accept this option tag for backward compatibility.
188	Virtual Desktop Broker port	Optional string.
190	WDM secure port	Optional number. Word, or two-bytes array.
192	WDM server port	Optional number. Word, or two-bytes array. NOTE: The value of this option tag represents the same information as option tag 187. The difference is that WTOS interprets the value of this option tag in correct order (for example, the value of 0x0050 is interpreted as 0x0050). If the DHCP server provides both option tag 192 and 187, option tag 192 takes precedence.

Phase 4 - Setting Up Other Supported Services for WTOS

In this phase, you can set up the following services that are also supported for your WTOS environment. While non of these services are required, you can set up any or all of the services you want to get the most out of your environment. For instructions on configuring and using these services, refer to the *Administrators Guide: Wyse® 1 Series, Based on Wyse ThinOS™* and the *Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.

Other supported services include:

- Citrix Program Neighborhood (PN) support** - Citrix PNAgent/PNLite is a component of the Citrix XML publishing service. PNAgent/PNLite is an ICA connection mode that enables the thin client to connect to applications available (published) on an ICA server without having to configure connections for individual published applications. For example, you can use the following:

```
SignOn=Yes
PnliteServer=your_PN_or_XENDDC_server_here
```
- Virtual Desktop Infrastructure (VDI) servers** - When a thin client boots, it can access the global (wnos.ini) and user ({username}.ini) configuration profile files from VDI servers through DHCP option tags. For example, you can use the following:

```
SignOn=Yes
VDIBroker=your_View_server_here
ConnectionBroker=VDM
```
- XenDesktop support** - XenDesktop (a desktop virtualization solution to provision, manage, and deliver desktops) is supported in WTOS v6.2 and later without the need to use a Web browser. To connect to XenDesktop, do not use the *VDIBroker* parameter. Instead, use the same parameter and configuration that is used when connecting to PNAgent/Lite Servers. For example, you can use the following:

```
TCXLicense=your_TCX_license_here
Timeserver=TCXeval_needs_timeserver Timeformat="24-hour format"
Dateformat=dd/mm/yyyy
```
- Wyse® TCX Software™** - Wyse TCX software provides an enrichment layer above your ICA or RDP connections that allows thin computing sessions to behave much like locally accessed computing (smooth multimedia, broad USB peripheral support, and multi-monitor awareness). WTOS has built-in support for several Wyse TCX solutions. For example, you can use the following:

```
IEEE8021X=yes network=wireless access=WPA2-PSK
wpa2pskpwd=your_qpa2_passphrase encryption=TKIP
Device=Wireless Mode=Infrastructure SSID=your_SSID_here
```
- Wyse® Virtual Desktop Accelerator software** - Wyse® Virtual Desktop Accelerator (VDA) software provides an “accelerated” user experience on remote desktop sessions with high round-trip delay between the server and client.
- Wireless support** - Thin clients running WTOS can support 802.11b/g wireless connections. WEP is used as the encryption method in 802.11b wireless access. WEP, WPA-PSK, WPA2-PSK, WPA-Enterprise and WPA2-Enterprise are used as the encryption and authentication methods in 802.11g wireless access. For a wireless access point, Cisco, TP-Link, and D-Link products are recommended. For a Radius server used in EAP-TLS, the IAS, FreeRadius and Cisco ACS are recommended.

Phase 5 - Reviewing a Few Important Thin Client Details

In this phase, you will review a few important details about the thin clients in your WTOS environment before you get them up and running.

Configuring Local Settings

Thin clients can be configured in two ways centrally (from servers) and locally (through the thin client). While all thin client settings can be configured centrally, you can still configure most thin client settings locally. Central settings are done through a configuration file that is stored on an FTP Server. The IP address of the FTP server and the path can be adjusted either through DHCP option tags (highly recommended) or locally in the **Network Settings** dialog box (on the thin client desktop, click the User Name button, select **System Setup**, and then select **Network**).

Since the setup information for individual users (user profile) is usually stored in a remote database, very little setup is required of a thin client operator. The user profile is loaded into the thin client when a user logs-on. For this reason, a user can log-on to another thin client (under the same account name) and see the same user profile settings.

A few setup items are reserved for local selection (not available to Non-privileged users). They are available locally because they are user preference items or pertain to the thin client hardware rather than the person using the thin client. Additional local settings may be required if some of the network services are not available. Generally, the defaults and initial setup configurations are adequate and any changes should be made under guidance of a network administrator.

To access the local setup menus (System Settings submenu), click the User Name button (located at the bottom-left side of the taskbar), and select **System Setup**.

The System Setup submenu provides access to local system setup dialog boxes for:

- Setting System Preferences
- Configuring Network Settings
- Selecting Display Settings
- Configuring Serial Communications
- Setting Up Printers
- Configuring Touch Screens

Configuring Local Connections

Although it is recommended to use a central configuration file for adding and modifying connections, you can add ICA and RDP connections locally by using the Connect Manager.

Clicking **Connect Manager** on the task bar opens the Connect Manager. The Connect Manager has a list of connection entries and a set of command buttons available for use with the connections. For example, to create an ICA or RDP connection, click **Add** and follow the wizard.

Accessing Thin Client BIOS Settings

While starting a Wyse client you will see a Wyse logo for a short period of time. During this start-up you can press **Del** to enter the BIOS of the thin client to make your modifications (enter **Fireport** as the password).

Resetting the Thin Client

If you have configured the thin client with settings that put it in an unwanted state, you can reset the thin client to a factory default state.

To reset the thin client to a factory default state complete either of the following:

- During system start, press the **G** key
- On the thin client desktop, click the User Name button, click **Shutdown**, and then select **Restart the system setting to factory default**.



Note

If a user privilege level is set to *none*, that user cannot reset the thin client to a factory default state.

Phase 6 - Getting Your Thin Clients Up and Running

In this phase, you will get your thin clients up and running.

What Happens After a User Turns on a Thin Client

What a user will see, initially, when they turn on or reboot a thin client, depends on the method of access to the enterprise intranet and how the network administrator has set up the user account.

Accessing 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 settings cannot be automated because the thin client has not yet accessed global and user profiles. For certain privileges, these local settings are retained and are available for the next thin client system start. Activating these local settings and the defined connections can also be automated at thin client system start.

Methods of access include:

- **Ethernet Direct** - This is a connection from the thin client Ethernet port directly to the enterprise intranet. No additional hardware is required. An account sign-on dialog box displays if required, then either the desktop or an application window opens (the application window opens, with or without a session server logon requirement, if set by the administrator to open automatically). User profiles normally are used in this mode and are accessed automatically. However, if the DHCP - a protocol for assigning dynamic IP addresses to devices on a network - is not available on the enterprise intranet, the location of the file server where user profiles are located must be entered in the **Network Setup** dialog box. For information on the **Network Setup** dialog box, refer to the *Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.
- **Wireless Direct** - If a wireless network device is connected to the thin client, you can use the **Wireless Setup** dialog box to configure the wireless connection. When a connection is established, the behavior is the same as for an Ethernet Direct connection, including automatic access to user profiles through DHCP. For information using wireless, refer to the *Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.
- **PPPoE** - The PPPoE Manager is available from the desktop to configure and invoke PPPoE connection to WAN. Once connected, all WAN packets go through a PPP connection over Ethernet to the DSL modem. The PPPoE Manager is not accessible for users with privileges set to *None*. Open the PPPoE Manager by selecting it from the

desktop menu. The PPPoE Manager can also be set to open automatically on system start-up. For information on the PPPoE Manager, refer to the *Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.

- **Dialup Modem** - If both the Dialup Manager and the Connect Manager open automatically when the thin client is turned on or restarted, the thin client is configured to access the network through a modem dial-up. A sign-on dialog box may appear when the network connection is accomplished. DHCP cannot automatically connect your thin client to user profiles when using dial-up access; the location of the FTP server where the profiles reside must be entered in the **Network Setup** dialog box. For information on the Dialup Manager and the **Network Setup** dialog box, refer to the *Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.
- **PPTP VPN** - The PPTP Manager can be configured to open automatically when the thin client is turned on or restarted. This facilitates connection to an enterprise network through an ISP, the Internet, and a virtual private network (VPN) PPTP server. If dial-up is used to contact the ISP providing access to the Internet, the Dialup Manager and Connect Manager also open. DHCP cannot automatically connect your thin client to user profiles when using PPTP VPN access; the location of the FTP server where the profiles reside must be entered in the **Network Setup** dialog box. For information on the PPTP Manager, the Dialup Manager, the Connect Manager, and the **Network Setup** dialog box, refer to the *Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.



Note

If the **Network Setup** dialog box initially appears, or the Connect Manager is active when the thin client is started (or when the enterprise intranet is accessed), network services are not fully configured. In this case sign-on is not required and thin client network settings (and possibly connection definitions) must be entered locally on the thin client (for example, a Stand-alone user). For more information, refer to the *Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.

If the network to which the thin client is connected does not provide FTP services, a user profile will not be available and network addresses and connection definitions must be entered locally on the thin client. If user profiles (and update services) are available from an FTP server but DHCP does not supply the location of the FTP server, you can access the profiles by entering the location of the FTP server locally on the thin client using the **Servers** tab of the **Network Settings** dialog box. For more information, refer to the *Users Guide: Wyse® 1 Series, Based on Wyse ThinOS™*.

Signing On

After a connection to the enterprise intranet is established, sign-on to the network and/or session services may or may not be required (depending on a global profile option set by the network administrator, the session servers, or any requirements of PNAgent/PNLite services). If sign-on to the enterprise intranet is required, a sign-on dialog box opens when you turn on the thin client, when you restart the thin client, or after signing off from a User profile account.



Note

In a Virtual Desktop environment, user authentication is made against the Virtual Desktop Broker. Therefore, you will only authenticate against the Broker. You will not sign-on when a Virtual Desktop environment is used.

Sign-on name and password are assigned initially by the administrator when the account is established, but the password can be changed by the user at a thin client in some cases (depending on user privileges). To sign on to a standard account, enter the user name for the account and password allocated by the network administrator (account user names are not case sensitive, however, passwords are case sensitive).

If a user account is not established but PNAgent/PNLite-published applications are to be accessed on the PNAgent/PNLite server, you must enter the user name for the account and password (account user names are not case sensitive, however, passwords are case sensitive) and also select a Domain in which the applications appears (if the correct domain does not appear in the list, type it into the **Domain** box).



Note

Applications can be published to the network by PNAgent/PNLite services. These applications are available to the thin clients on the network as long as accounts are established on the PNAgent/PNLite server. If user profiles are used, the thin client will send the enterprise server sign-on and domain information to the PNAgent/PNLite server for log-on. If user profiles are not used (a sign-on is not required to access user profiles) but a PNAgent/PNLite server address is entered in the **Network Setup** dialog box, then the sign-on dialog box with the **PNAgent/PNLite Domain** box will still be presented to you for access to the published applications.

If your thin client supports smart card log-ins, the Sign-on dialog box changes when you insert a smart card. Instead of being asked to enter your username and password, you are asked to enter a PIN to gain access to your applications and connections. If you want to exit the Smart Card Sign-on dialog box, you can press the Esc key; you will be presented with the normal Sign-on dialog box.



Note

If you use an unsupported card, the Sign-on dialog box will not change.

Using the Session Services and Available Applications

The desktop connection icons and Connect Manager list entries allow you to initiate connections to servers providing ICA and RDP services (configured by the administrator for thin client use). Depending on user privileges, some of the settings on these services can be modified locally on the thin client. You can start connections by using the various desktop or the Connect Manager options made available by the administrator.

Applications is a desktop menu option that is available (click the User Name desktop button). Applications contains a menu of locally configured applications and is populated with published applications when a user is signed on using either PNLite or PNAgent.

Signing Off and Shutting Down

After using your thin client, you can sign off from your account (if you signed in initially) or you can shut down the thin client (if your privilege or user mode allows). Click the User Name on the taskbar and select **Shutdown** from the Desktop menu to open the **Sign-off/Shutdown/Restart the System** dialog box. Use this dialog box to do one of the following:

- **Sign-off from the account User Name** - Allows you to sign off from the current open account (the **Sign-on** dialog box appears and is ready for another user).
- **Shutdown the system** - Turns off the thin client.

- **Restart the system** - Signs off the user account and also allows posted software updates to be loaded into the thin client memory (the **Sign-on** dialog box appears after the thin client restarts).
- **Reset the system setting to factory default** - Appears for High-privileged and Stand-alone users only. This option allows you to reset the thin client to factory defaults.

**Note**

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

What's Next

After you complete these instructions, you can refer to the related documentation for details on using and managing your WTOS environment as described in "Related Documentation and Services."

Getting Started Guide

Wyse ThinOS™
Issue: 061709

Written and published by:
Wyse Technology Inc., June 2009

Created using FrameMaker® and Acrobat®