

Administrator's Guide

HP Compaq t5125/t5135 Thin Clients, build S1ST0031



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Administrator's Guide

Business PCs

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About This Book



WARNING! Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.



CAUTION: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.



NOTE: Text set off in this manner provides important supplemental information.

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HP Compaq t5125/t5135 Thin Clients, build S1ST0031



CAUTION: Thin clients are designed for remote data storage. Excessive writes to flash may damage the flash memory.

This guide provides the network administrator with instructions for configuration of the thin client and explains the various configuration utilities.

Typically, to configure multiple terminals, you can configure a terminal locally and then use it as a template for other terminals, which you can then configure using remote administration tools.



NOTE: The client automatically boots into the Administrator account with HP Thin Connect open.

NOTE: Users cannot add connections; therefore, the Administrator must add all needed connections and then deploy the image.

Usage modes

There are three main ways to use the thin client—local mode, network mode (Stateless), and Program Neighborhood mode.

The image is always the same on every box; therefore, a settings file is the only thing that changes.

Local usage mode

Local usage mode includes two types of accounts — Administrator and User. The default password for Administrator is `admin`. There is no default password for User.

In local usage mode, all settings are stored locally on the thin client — when you reboot the unit, the settings remain. There are only accounts named “Administrator” and “User”. Only the administrator can make changes to the thin client.

Log in as Administrator to create the thin client settings and connections for users in User mode, and then save the settings. When users log in, they will not be able to make any changes to the settings. Administrators can capture the settings and deploy them to other thin clients.

Network usage mode (Stateless)

In network usage mode (Stateless), most settings are stored remotely in a global profile `.ini` file and in a user profile `.ini` file that both reside on the FTP server. These `.ini` files are loaded onto the thin client each time a new user logs on. You can use the global profile `.ini` file to apply the same settings to all network

users. In addition, you can use a user profile .ini file to apply different settings to each unique user. You can use any name for the user profile .ini file, such as scott.ini, beth.ini, etc., so that each user will have specific settings and connections.

Configure the settings as in “Local Usage Mode,” and then use the ThinState tool to extract the settings file and place the .ini file on an FTP server as a user profile .ini file.

Program Neighborhood mode

Program Neighborhood mode is for use in Citrix environments in which the server is specifically set up to run in this mode. In Program Neighborhood mode, all of the ICA application connections and settings are predefined on the Citrix Application server. You can enable the thin client image to operate in this environment as described in this guide.

Thin client image

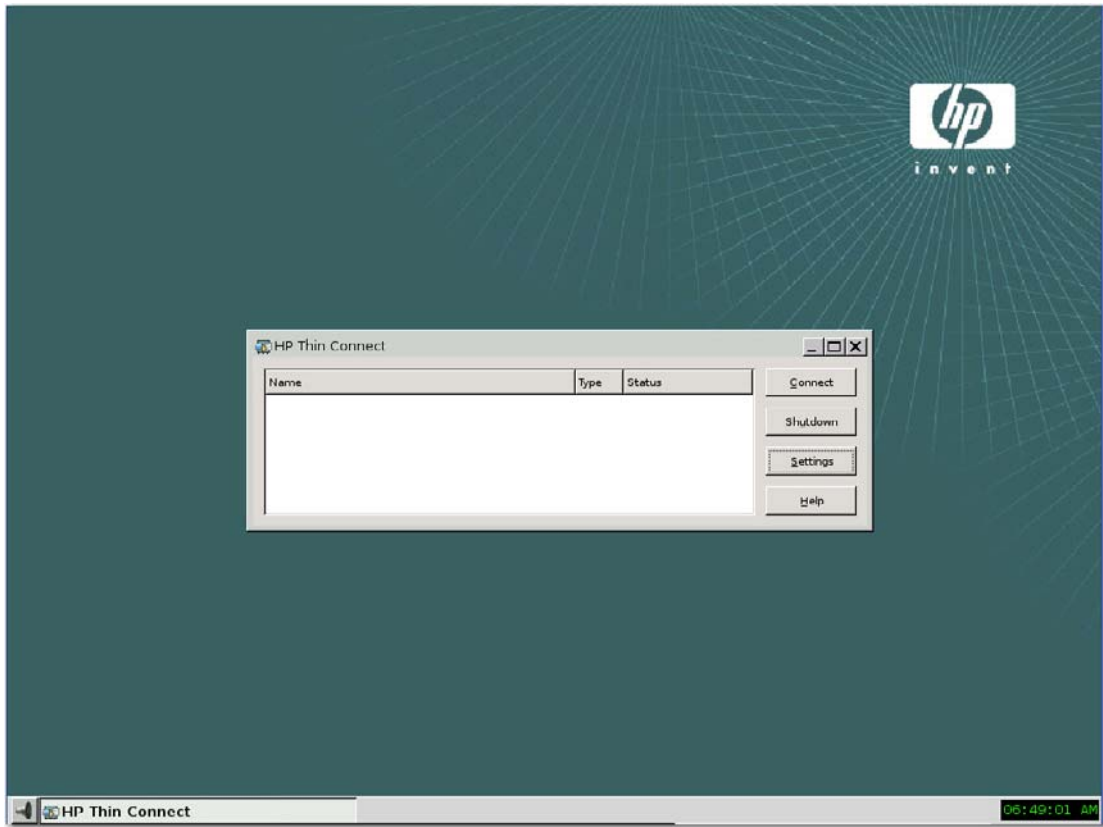
The t5125/t5135 thin client offers a very straightforward network access solution. Once you configure the client, users can quickly and easily establish a connection to the unit.

You can use the Altiris client to provide remote management of thin clients and to upgrade images. An FTP server feature is also available for upgrading images.

Desktop

The desktop has a simplified Windows look and feel. HP Thin Connect displays by default when you turn on the thin client. The desktop includes a taskbar that provides access to open applications, a volume icon, and a clock.

Middle-click (or press the scroll wheel) with the cursor on the desktop to show all running programs and the workspaces in which the programs are running.



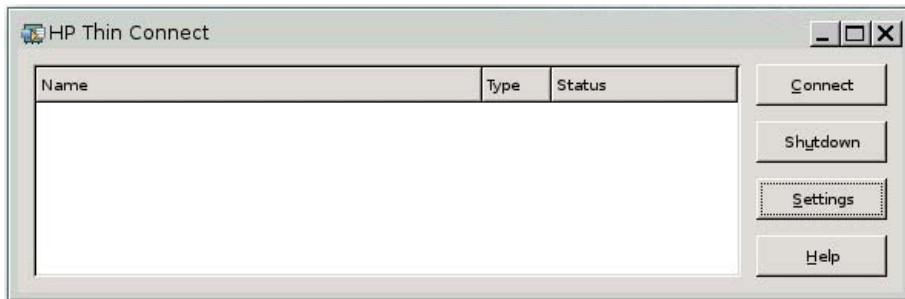
Connection types

By default the thin client comes ready to run use the following connection types:

- ICA
- rdesktop (RDP)

HP Thin Connect

HP Thin Connect allows you to manage server and application connections by setting up RDP and ICA connections and assigning them to users. To access all HP Thin Connect functionality, you must log in as an Administrator. As a User, you can run connections and have limited access to Thin Connect functionality.



Click **Settings > Connections** tab to start, add, edit, and delete connections. The **Settings** button also provides access to the configuration tabs for the thin client.

For more information about connections, see [Connections on page 5](#).



NOTE: You must log in with administrator permissions to access all components of the HP Thin Connect window.

- **Connections display:** Lists all server and/or application connections assigned to the user currently logged on to the terminal. For each connection, the display shows the name, type, and status of the connection.

If you have primary and secondary connections, you can expand or collapse the connections using the >.



NOTE: Double-click any displayed connection to activate that connection.

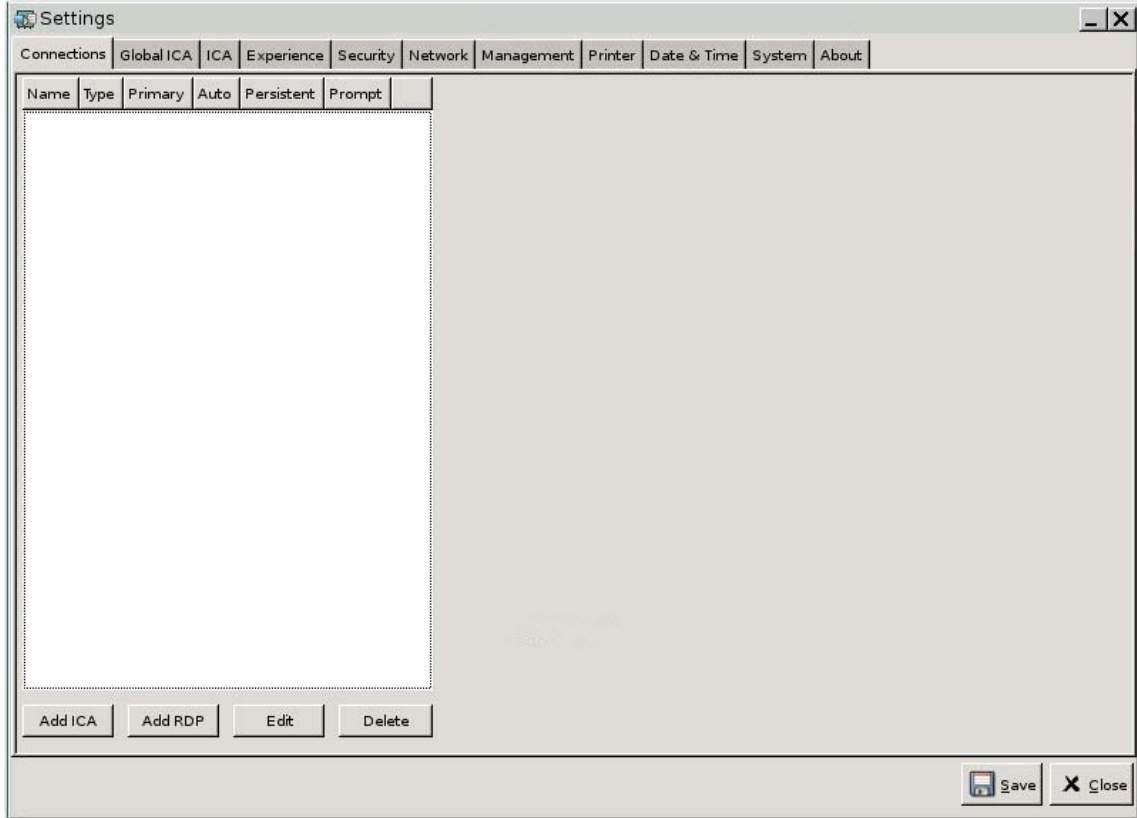
- **Connect:** Click to activate a selected connection.
- **Shutdown:** Click to quit the current session, reboot, or turn off the computer.
- **Settings:** Click to access the Settings applications, which provides access to a Control Panel type interface. Use this interface to configure the thin client.
- **Help:** Click to access window that provides information about the location of help documentation.

Connections

You can configure and assign connections in the **Connections** tab.



NOTE: You must log in with administrator permissions to access the **Connections** tab.



The area on the left side of the screen lists all connections that you can assign to users.

You can drag and drop to change the order of connections.

Connections Box

- **Name:** Displays the name of the connection. You cannot change the connection name from this column.
- **Type:** Displays the type of connection (RDP or ICA). You cannot change the connection type from this column.
- **Primary:** Select to designate a connection as primary. The thin client attempts secondary connections if the primary connection fails. If more than one secondary connection is associated with a primary connection, the thin client prioritizes the secondary connections starting with the first connection in a group.
- **Auto:** Select to designate whether a user is automatically logged on when HP Thin Connect starts up. You must log in using the administrator account to enable or disable automatic connections.
- **Persistent:** Select to designate whether the system will attempt to reconnect when a connection fails. You can make only primary connections persistent.



NOTE: To disable an automatic connection, the user must quit the current session using **Ctrl +Alt+Backspace**, and then log in as Administrator and edit the connection. HP highly recommends that you do not set the Administrator connection as Persistent, because this configuration may require that you re-image the thin client to stop automatically connecting.

- **Prompt:** Select to configure the system to determine whether a user is still using the thin client after a group of connections fails. Clear this check box to allow the system to continue to cycle through the connections in the group.

Buttons

- **Add ICA:** Click to create a new ICA connection and add it to the list of available connections in the current user's connection list. For more information, see [Adding an ICA Connection on page 7](#).
- **Add RDP:** Click to create a new RDP connection and add it to the list of available connections in the current user's connection list. For more information, see [Adding an RDP Connection on page 9](#).
- **Edit:** Click to edit the selected connection.
- **Delete:** Click to delete the selected connection. The connection is deleted from the lists of connections assigned to all users, not just the user currently logged on to the terminal.



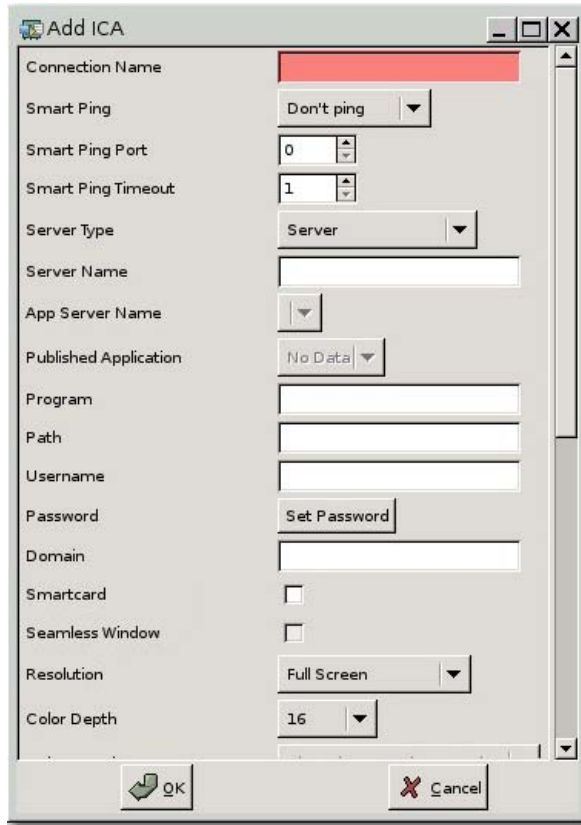
NOTE: Clicking the **Delete** button immediately deletes the connection. There is no confirmation message.

- **Save:** Click to save all changes. You must click **Save** for the client to save changes.
- **Close:** Click to exit the **Connections** tab without saving changes.

Adding an ICA Connection

To configure an ICA connection:

1. From the **Connections** tab, click **Add ICA**.



The screenshot shows the 'Add ICA' dialog box with the following fields and settings:

- Connection Name: [Redacted]
- Smart Ping: Don't ping
- Smart Ping Port: 0
- Smart Ping Timeout: 1
- Server Type: Server
- Server Name: [Empty]
- App Server Name: [Empty]
- Published Application: No Data
- Program: [Empty]
- Path: [Empty]
- Username: [Empty]
- Password: Set Password
- Domain: [Empty]
- Smartcard:
- Seamless Window:
- Resolution: Full Screen
- Color Depth: 16

2. **Connection Name:** Specify the name of the connection. Once entered, you cannot change the connection name.
3. **Smart Ping:** Allows you to enable HP Thin Connect to ping the server before attempting a connection. If the server name fails to resolve or the server fails to respond to the ping, the thin client aborts the connection attempt.
4. **Smart Ping Port:** Specific a port for Smart Ping.
5. **Smart Ping Timeout:** Specify a time period for Smart Ping to keep pinging.
6. **Server Type:** Allows you to choose to connect to an ICA server or a Published Application server.
 - **Server Name:** The name of the server.
 - **Published Application:** If you want to set up an ICA connection to a Published Application server, you must first define the Published Application server in the **ICA** tab. For more information about the **ICA** tab, see [ICA on page 13](#)
7. **Server Name:** Allows you to select programs to run after logon. For example: c:\Program Files\Windows Media Player\wmplayer.exe
8. **App Server Name:** If one or more Published Application servers are defined in the **ICA** tab, select the server, and then this box automatically populates with the names of the defined servers.

9. **Published Application:** After selecting the Published Application server in Step 8, this box automatically populates with the application names pulled from the defined Published Application server.
10. **Program:** Type the name of a program you want to run first at the server.
11. **Path:** Type the path for the location of the server.
12. **Username:** Specify the username for the account to use to connect to a remote computer.
13. **Password:** Click **Set Password** to define a password for the account to use to connect to a remote computer.
14. **Domain:** Specify the domain of the remote computer.
15. **Smartcard:** Select to allow smart card logon to an ICA server.
16. **Seamless Window:** Select to control seamless mode for Published Applications.
17. **Resolution:** Select the connection window size for the remote desktop.
18. **Color Depth:** Select the color quality of the connection window for the remote desktop.
19. **Color Mapping:** Use only when **Color Depth** is set to 256 colors.
20. **Compress Data:** Select to enable or disable data compression. HP recommends enabling this option for better display quality.
21. **Sound Quality:** Select sound playback quality.
22. **Microphone:** Select to enable audio input for a connection.
23. **Sound:** Select to enable client audio playback.
24. **Speed Screen:** Select to SpeedScreen Browser Accelerator image.
25. **Mouse Click Feedback:** Allows you to control mouse latency reduction.
26. **Local text echo:** Allows to you control keyboard latency reduction.
27. **Encryption level:** Allows you to specify the encryption protocol for each level of encryption.
28. **Proxy:** Select a proxy type.
 - **None (direct)**
 - **Default**
 - **SOCKS**
 - **Secure (HTTPS)**
29. **Proxy Address:** Type the proxy host name.
30. **Proxy Port:** Type the proxy host port.

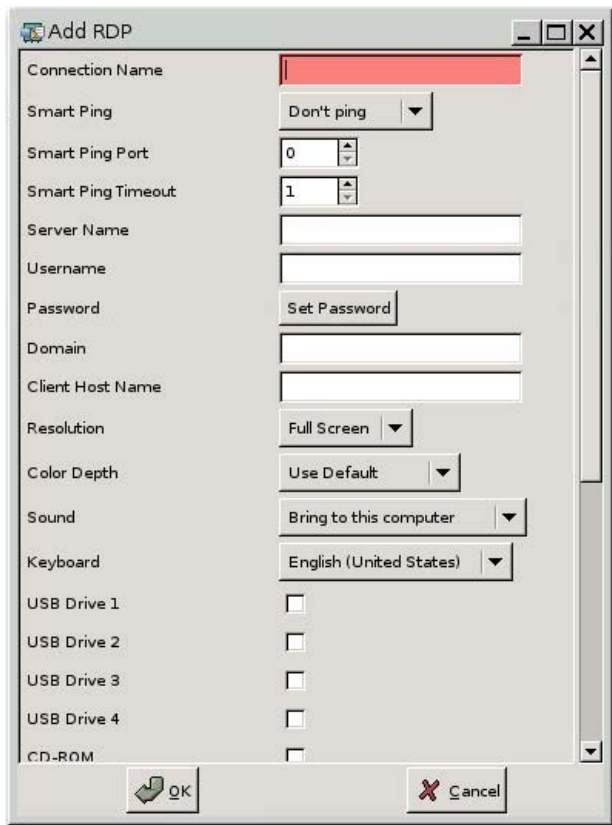
31. Protocol: Select the protocol used to locate the ICA host for the connection.

- **TCP+HTTP Browser**
- **TCP Browser**
- **SSL/TLS + HTTPS Browser**

32. Performance

Adding an RDP Connection


This procedure allows you to set up a remote desktop (RDP) connection. RDP is an open source client capable of speaking Remote Desktop Protocol. Unlike ICA, rdesktop requires no server extensions.




To configure an RDP connection:

- 1. Connection Name:** Specify the name of the connection. Once entered, you cannot change the connection name.
- 2. Smart Ping:** Allows you to enable HP Thin Connect to ping the server before attempting a connection. If the server name fails to resolve or the server fails to respond to the ping, the thin client aborts the connection attempt.
- 3. Smart Ping Port:** Specific a port for Smart Ping.
- 4. Smart Ping Timeout:** Specify a time period for Smart Ping to keep pingging.
- 5. Server Name:** Type the name of the server to connect to.

6. **Username:** Type the user name for the account to use to connect to a remote computer.
7. **Password:** Click **Set Password** to define a password for the account to use to connect to a remote computer.
8. **Domain:** (Optional) Type the domain of the remote computer.
9. **Client Host Name:** (Optional) Type the host name for the terminal services session. This entry allows you to dictate what is displayed when viewing shared resources.
10. **Resolution:** Select the screen resolution of the remote desktop.
11. **Color Depth:** Select the color quality of the remote desktop.
12. **Sound:** Select to either play the remote computer's sound on the thin client, play no sound at all, or leave the sound at the remote computer.
13. **Keyboard:** Select the desired keyboard language.
14. **USB Drive 1–4:** Selecting these boxes enables forwarding of USB drives.
15. **CD-ROM:** Select to forward a CD-ROM drive on the host.
16. **Printer:** Type the locally-defined name of the printer to forward to the host. For example: MyParallelPrinter="HP LaserJet 1200 Series PCL 6". You must type exactly the Windows printer driver name.
17. **Parallel Port:** Type the location of the physical device. The default is **/dev/lp0**.
18. **Serial Port:** Type the location of the physical device. The default is **/dev/ttyS0**
19. **Program:** Allows you to launch programs through the remote desktop connection. To launch a program, type the program path and file name. You must put the program path and file name in double quotation marks.
20. **Path:** Type the working directory.
21. **Performance:** Select the type of connection the client uses to connect to the remote computer.
22. **Bitmap caching:** Select to allow bitmap caching, which places commonly used bitmaps in a file on the thin client. This process improves performance by minimizing the amount of display information that must be passed over a connection.

 **NOTE:** Depending upon connection configuration, selecting **Bitmap caching** may or may not improve performance.

23. **Pers. Bitmap cache:** Select to allow persistent bitmap caching, which stores bitmaps that are sent from the server on permanent media, such as a hard disk. Upon connection, the thin client informs the server of the bitmaps it has so that the server does not have to resend them.

 **NOTE:** Depending upon connection configuration, selecting **Use persistent bitmap caching** may or may not improve performance.

24. **Compression:** Select to enable protocol compression, which makes communication between computers faster.
25. **BackingStore:** Select to enable BackingStore. A BackingStore contains the set of operations that can be performed on a JNDI Attributes. Java Naming and Directory Interface (JNDI) is a

programming interface (API) that allows you to connect Java programs to naming and directory services such as DNS, LDAP, and NDS.

26. Options: Populate to use additional rdesktop options

For additional information, please visit the rdesktop Web site at: <http://www.rdesktop.org>.

Configuring primary, secondary, and automatic connections

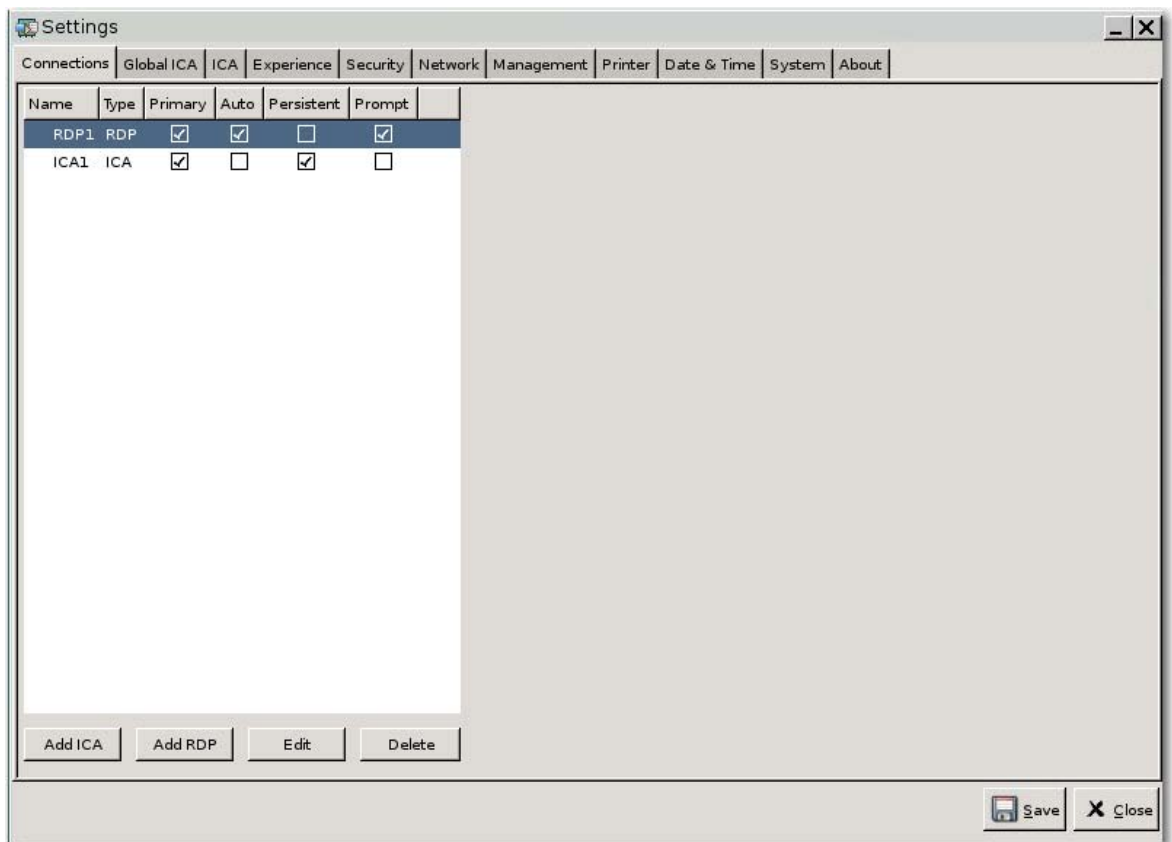
You can designate connections as primary or secondary. A primary connection is the first attempted in a group of connections. Secondary connections are attempted if the primary connection fails, and attempt to connect in their listed order. You can assign several primary connections, each with several associated secondary connections. By default, any new connection is designated as primary.

You can set primary connections to automatically connect when HP Thin Connect starts up.

You can set primary connections to automatically reconnect if the connection is lost.

Use the following procedure to configure connections.

1. If you want to make a connection a secondary connection:
 - a. To assign a secondary connection to a primary connection, drag and drop the secondary connection on top of the primary connection. The connection is then indented in the connection list and is secondary to the primary connection directly above it. To remove a connection as secondary connection, drag the secondary connection to an empty spot in the list. After you release the connection, it becomes a primary connection.
 - b. Click **Save** to save your changes.





NOTE: Since each secondary connection must have an associated primary connection listed above it, the connection at the top of the list must be a primary connection.

2. If you want to set automatic connections:
 - a. In the **Auto** column, select the check box.
 - b. Click **Save** to save your changes.



NOTE: You can set only primary connections to automatically connect when HP Thin Connect is launched.

3. If you want to set automatic reconnections:
 - a. In the **Persistent** column, select the check box.



NOTE: You cannot disable an automatic connection unless the user quits the current session.

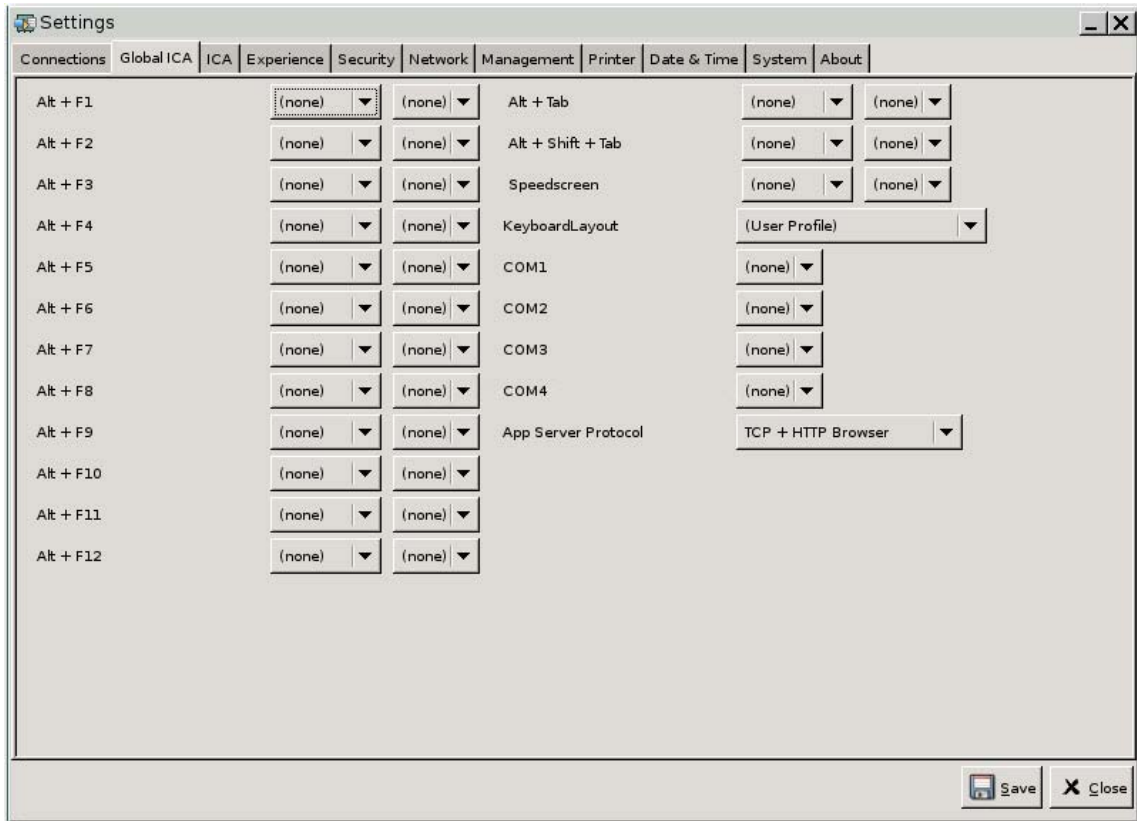
- b. Click **Save** to save your changes.



NOTE: You can set only primary connections to automatically reconnect.

Global ICA

The Global ICA tab allows you to set Citrix ICA settings across all ICA connection, including hot keys and COM ports.



Alt + Function Keys: Use these components to configure thin client hot keys.

For example, in Microsoft Windows, the standard key combination **ALT+TAB** cycles through all applications. The same key combination works on the local desktop. When you want to use an **ALT + TAB** key combination during a session, you can use the mapped hot key instead, such as **CTRL +TAB**. Note that the key combination works when the ICA window is not a full screen.

COM1–4: Use these components to map devices to COM ports.

Speedscreen: A Citrix technology used to reduce the effects of latency in some network environments.

KeyboardLayout: Select the keyboard language.

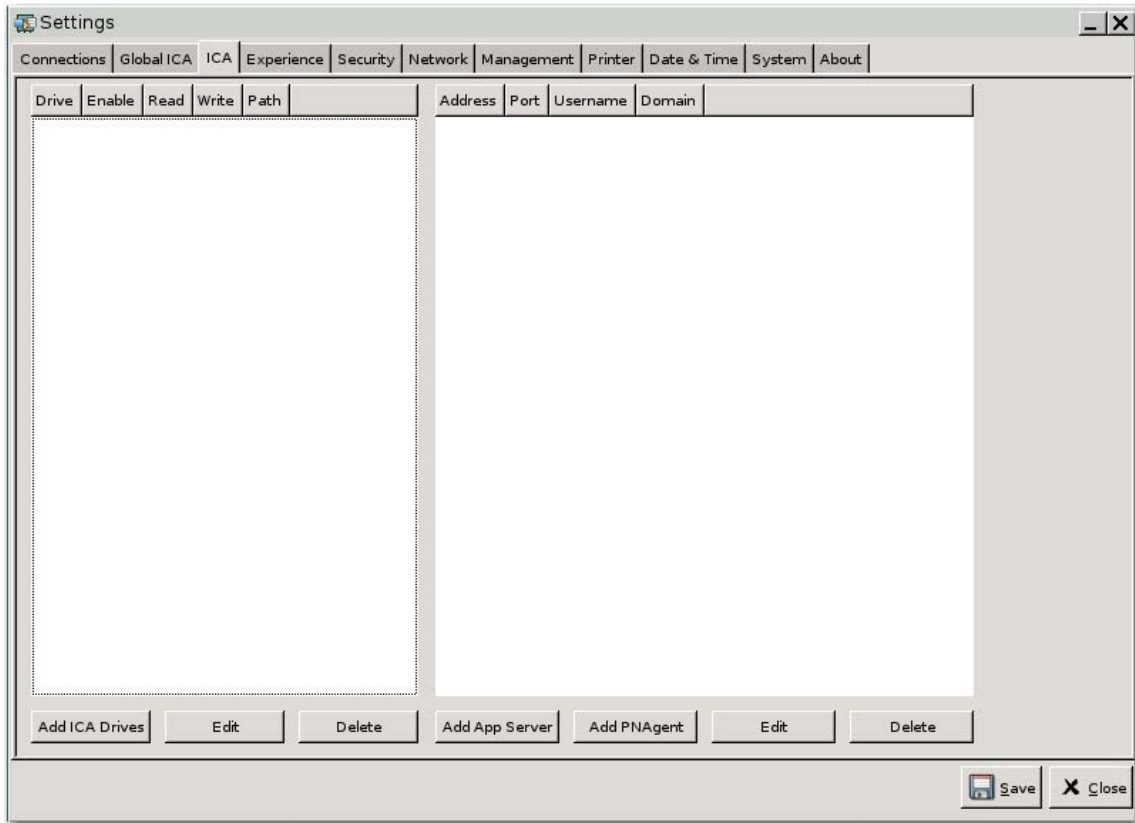
AppServerProtocol: Select one of the following:

- TCP+HTTP Browser
- TCP Browser
- SSL/TLS + HTTPS Browser

For more detailed help about configuring the ICA client, see the Clients for UNIX Administrator's Guide at: <http://support.citrix.com/docs/>

ICA

The ICA tab allows you to set up the forwarding of local drives to an ICA server. The tab also allows you to set up Published Application servers and Program Neighborhood servers.



Add ICA Drives

To add ICA drives:

1. Click **Add ICA drives**.

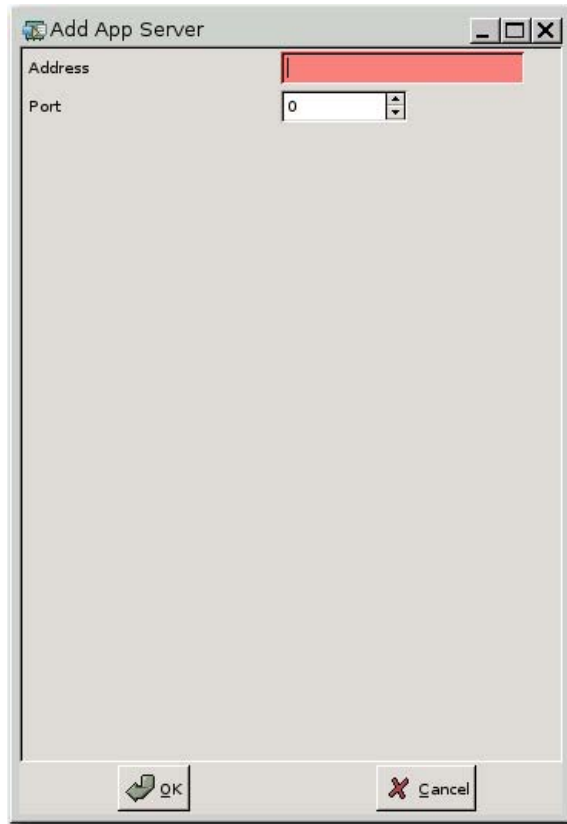


2. **Drive:** Select the drive letter to assign from the list.
3. **Enable:** Select to enable this ICA drive.
4. **Read:** Select to enable the ability to read on this ICA mapped drive.
5. **Write:** Select to enable writing on this ICA mapped drive.
6. **Path:** Select to assign the path name to the mapped drive.
7. Click **OK** to add the drive.
8. To make changes to an ICA drive, select the drive and click **Edit**.
9. To delete a drive, select the drive and click **Delete**.

Add App Server

Use this screen to define the Published Application server to use to create ICA Published Application connections under the **Connections** tab.

1. Click **Add App Server**.



The screenshot shows a dialog box titled "Add App Server". It has a standard Windows-style title bar with minimize, maximize, and close buttons. The main area contains two input fields: "Address" and "Port". The "Address" field is currently empty and highlighted in red. The "Port" field contains the number "0". At the bottom of the dialog are two buttons: "OK" and "Cancel".

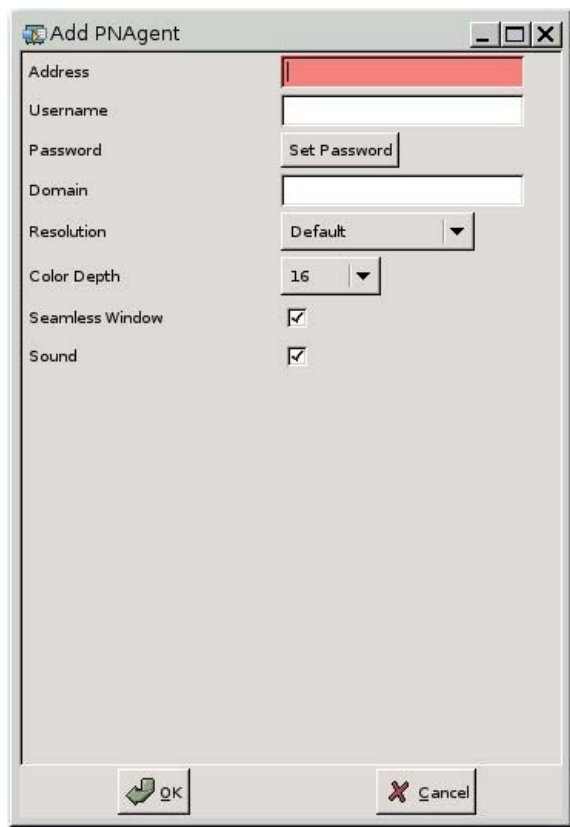
2. In the **Address** box, type the Citrix Publish App server name.
3. If available, in the **Port** box select or type the port.
4. Click **OK**.
5. To make changes to an App Server, select the server and click **Edit**.
6. To delete a server, select the server and click **Delete**.

Add PNAgent

In PNAgent View, you can view and activate the applications that have been published in the “neighborhood” on a Citrix server or server farm.

To add a PNAgent:

1. Click **Add PNAgent**.



The screenshot shows a dialog box titled "Add PNAgent". It contains the following fields and controls:

- Address:** A text input field, currently highlighted in red.
- Username:** A text input field.
- Password:** A text input field with a "Set Password" button next to it.
- Domain:** A text input field.
- Resolution:** A dropdown menu currently set to "Default".
- Color Depth:** A dropdown menu currently set to "16".
- Seamless Window:** A checked checkbox.
- Sound:** A checked checkbox.
- Buttons:** "OK" and "Cancel" buttons at the bottom.

2. Type the **Address** of the agent.
3. Type the **Username** to access the agent.
4. Click **Set Password** to set the password.
5. Type the **Domain** for the agent.
6. Select the **Resolution** to set screen size.
7. Select the **Color Depth** for color quality.
8. Select **Seamless Window** to enable seamless functionality.
9. Select **Sound** to enable sound.
10. Click **OK**.
11. To make changes to a PNAgent, select the agent and click **Edit**.
12. To delete an agent, select the agent and click **Delete**.

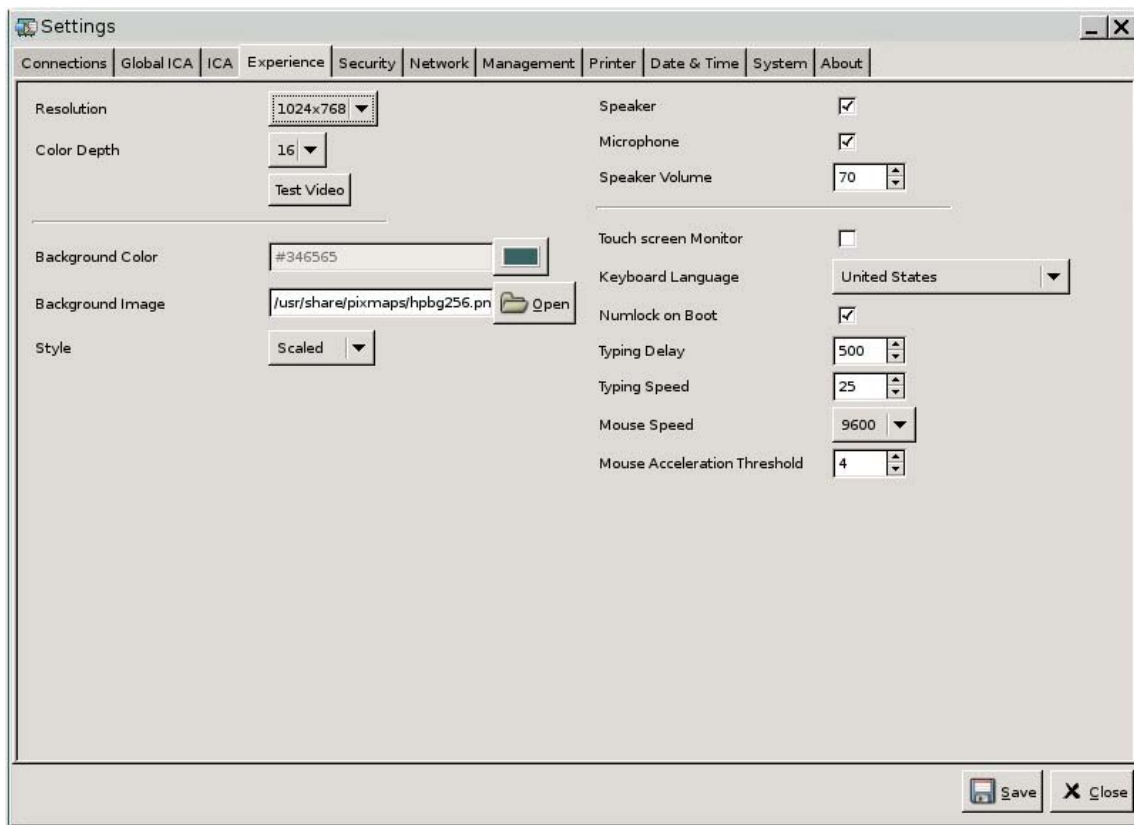


NOTE: If you type inaccurate data or omit data, an “Invalid data detected” warning displays. Check your data and try again. Click **OK** to proceed, or click **Edit** or **Delete** to change or delete current PNAgent settings.

Experience

Use the **Experience** tab to change the following settings:

- Screen settings
- Background settings
- Sound settings
- Keyboard and mouse settings



Display Settings

- **Resolution:** Select the appropriate resolution for your monitor.
- **Color Depth:** Select color depth. The higher the number, the more memory and bandwidth the client requires.
- **Test Video** button: Click to test the display settings. If the settings do not provide the desired results, you can cancel them to revert to the previous settings.

Background Settings

- **Background Color:** Allows you to select the background color.
- **Background Image:** Allows you to navigate to the background image you want to use.
- **Style:** Allows you to select the pattern of the background image.



NOTE: You can change the background image to any .jpg or .png image.

To change the background image:

1. Next to the **Background Image** box, click the **Open** button.
2. Navigate to the location of the image file you want to use.
3. Double-click the image file. The main **Experience** tab screen displays.
4. Click **Save**.

Sound Settings

- **Speaker:** Select to turn on the thin client speaker.
- **Microphone:** Select to turn on the thin client microphone.
- **Speaker Volume:** Type or select the thin client volume.

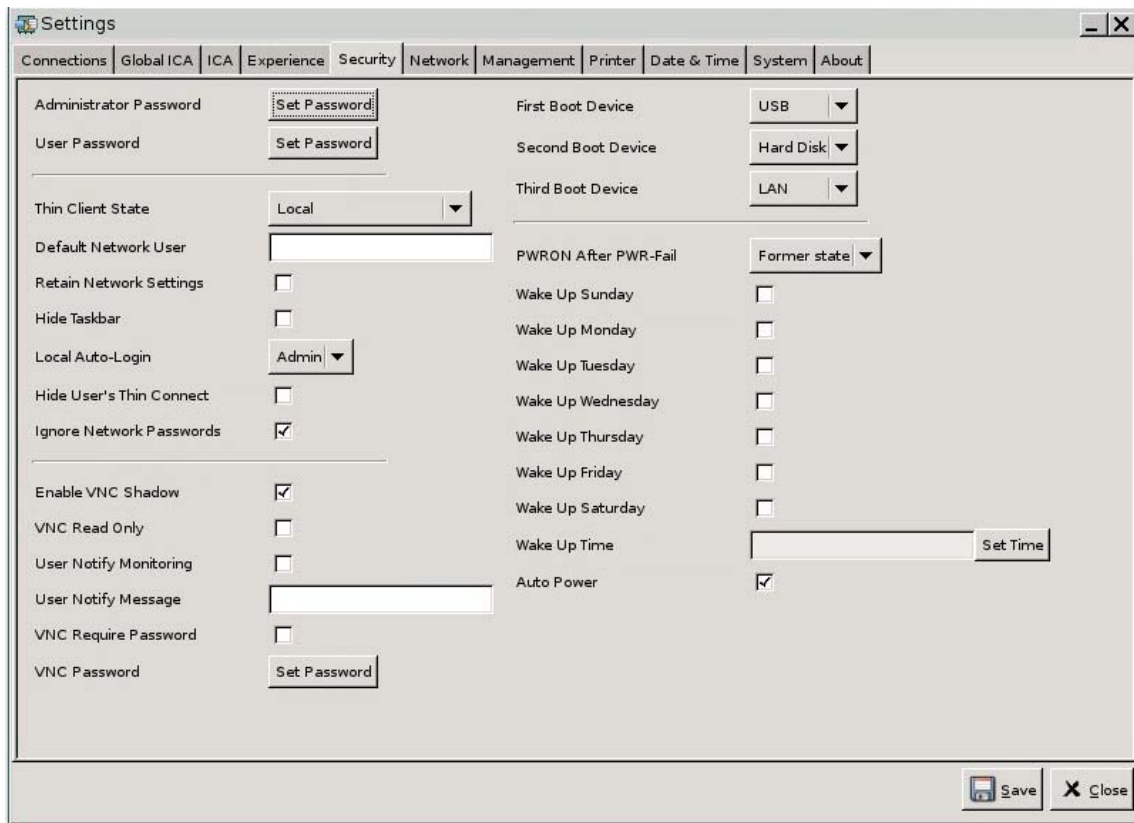
Keyboard and Mouse Settings

- **Touch screen Monitor:** Select to enable a touch screen monitor.
- **Keyboard Language:** Allows you to select the keyboard language. Changes to the keyboard language apply locally. Remote settings are determined by the applications (rdesktop, Citrix, etc) and server, but may be affected by local settings.
- **Numlock on Boot:** Select to turn on Numlock when the client is booted.
- **Typing Delay:** Type or select the value for the typing delay.
- **Typing Speed:** Type or select the value for the typing speed.
- **Mouse Speed:** Select the mouse speed.
- **Mouse Acceleration Threshold:** Type or select the mouse acceleration.

Security

Use the **Security** tab to:

- Set passwords
- Configure various client connection settings
- Configure VNC settings
- Set boot order
- Configure various power settings



Passwords

- **Administrator Password:** Click **Set Password** to change the current administrator password.
- **User Password:** Click **Set Password** to change the current user's password.

Misc Connection/Network Settings:

- **Thin Client State:** From this menu you can select either **Local**, **Network**, or **Program Neighborhood**. By default, the thin client is in Local mode.

You can change this setting if you want to operate the unit in Network mode (Stateless), which will pull the user .ini profiles from an ftp server. In Network mode (Stateless), all of the settings are stored on the network and not locally.

Program Neighborhood is a specific Citrix ICA environment.

After you add a PNAgent server, you must change **Thin Client State** to **Program Neighborhood** to access in PNAgent mode (**Settings > Security > Thin Client State**).

To log on in Program Neighborhood mode, go to the **ICA** tab and add a PNAgent server. Or, if you log on after changing **Thin Client State** to **Program Neighborhood** without adding a PNAgent server, the PNAgent logon window launches.

- **Default Network User:** If the thin client will be used in Network mode (Stateless), you can specify a default user in this box. The unit automatically logs in with the specified default user.

To operate the thin client in Network mode (Stateless), the network administrator must configure a network environment that has a DHCP server and an FTP server.

The DHCP server provides the information for the FTP server for the thin clients to connect to and get the profile .ini files. The FTP server is used to hold the profile files (.ini files). By default, the following DHCP options should be set on the DHCP server:

- DHCP Server - 161: FTP_SERVER - type IP; value IP address
- DHCP Path - 162: FTP_SERVER_PATH - type string; value base path
- DHCP Password - 184: FTP_USERNAME - type string
- DHCP Username - 185: FTP_PASSWORD - type string

In Network mode (Stateless), most settings are stored remotely in the profile .ini files. Settings are loaded onto the thin client each time a new user logs on.

- **Retain Network Settings:** Select to enable this setting. If you enable this setting in Network mode (Stateless), the thin client retains the last successful settings file used.



NOTE: Using this feature could create a security risk because the previous user's settings remain on the thin client until a different user successfully logs in.

- **Hide Taskbar:** Select to hide the taskbar by default.
- **Local Auto-Login:** Select the option you want. By default, the unit automatically logs in as Administrator.



NOTE: To interrupt an auto login, press the left **Shift** key during boot up.

- **Hide User's Thin Client:** Select to hide the thin connect window by default. For this setting to work, a connection must be in Auto mode.
- **Ignore Network Passwords:** Select if you want the log in manager to ignore access specific passwords that may exist inside a user profile and allow that user profile to be loaded. If this setting is not enabled, you cannot use profiles that have access passwords.

VNC Settings

Virtual Network Computing (VNC) is a remote control program that allows you to see the desktop of a remote machine and control it with your local mouse and keyboard, just as if you were sitting in the front of that computer.

- **Enable VNC Shadow:** Select to enable the thin client to be accessed using VNC.
- **VNC Read Only:** Select to make the VNC session read only.
- **User Notify Monitoring:** Select to display a message when someone uses VNC to access the thin client.
- **User Notify Message:** Type the message to display when someone uses VNC to access the thin client. This box is valid only when **User Notify Monitoring** is selected.
- **VNC Require Password:** Select to require a password to access the thin client using VNC.
- **VNC Password:** Click **Set Password** to enter the password required to access the thin client using VNC. This box is valid only when **VNC Require Password** is selected.

Boot Order

- **First Boot Device:** Select the first device for the thin client to boot to.
- **Second Boot Device:** Select the second device for the thin client to boot to.
- **Third Boot Device:** Select the third device for the thin client to boot to.

Various Power Settings

- **PWRON After PWR-Fail:** Select whether power is to be on/off or defaults to its former state after a power failure. HP recommends setting to **Former state**.
- **Wake Up [Sunday – Saturday]:** Select to choose the day on which the thin client wakes up.
- **Wake Up Time:** Click **Set Time** to set the time of day the thin client wakes up. You must first reboot and then shut down the unit for this feature to work.
- **Auto Power:** Select to enable auto power.

Network

The **Network** tab allows you to configure connectivity between the terminal and the Internet, a network, or a computer.

The screenshot shows the 'Settings' application window with the 'Network' tab selected. The window has a title bar with 'Settings' and standard window controls. Below the title bar is a tabbed interface with 'Network' highlighted. The main area contains two columns of settings:

- Left Column:**
 - MAC Address: 00:0A:E4:95:D3:B5
 - Connection Type: Ethernet (dropdown)
 - IP Address: [Empty text box]
 - Gateway: [Empty text box]
 - Subnet Mask: [Empty text box]
 - Default Domain: [Empty text box]
 - DNS Server: [Empty text box]
 - DNS Server 2: [Empty text box]
 - DNS Server 3: [Empty text box]
 - DHCP:
 - Network Login Timeout: 30 (spin box)
 - Network Tools: [Button]
 - DSL Username: [Empty text box]
 - DSL Password: Set Password (button)
 - DSL Connect On Demand:
 - DSL Demand Timeout: 300 (spin box)
- Right Column:**
 - Wireless Power:
 - Wireless Mode: Infra (dropdown)
 - Auth Mode: WEPAUTO (dropdown)
 - Encryption Type: WEP (dropdown)
 - SSID: [Empty text box]
 - SSID Channel: 0 (spin box)
 - Wep Key: 0 (spin box)
 - Wep Key 1: [Empty text box]
 - Wep Key 2: [Empty text box]
 - Wep Key 3: [Empty text box]
 - Wep Key 4: [Empty text box]
 - WPA Passphrase: [Empty text box]
 - Wireless Statistics: [Button]
 - Ethernet Speed: Auto (dropdown)
 - Wake On Lan:

At the bottom right of the window are 'Save' and 'Close' buttons.

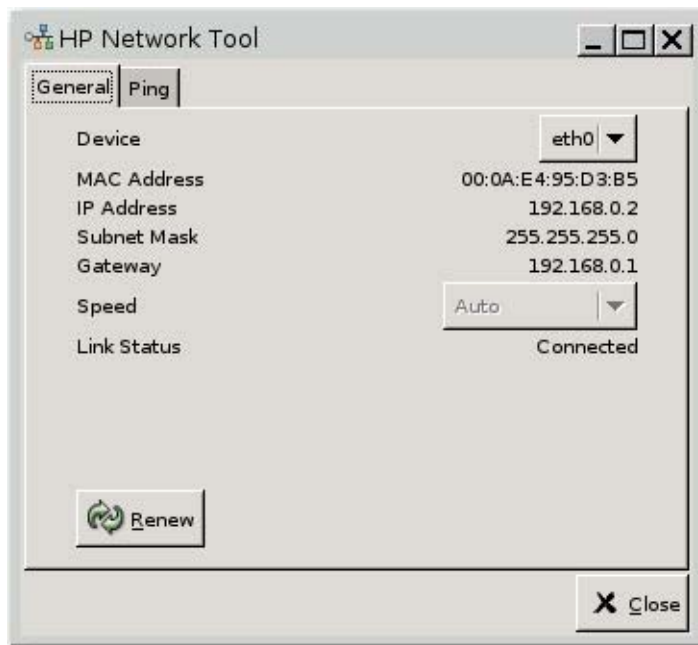
Network Settings

- **MAC Address:** Displays the MAC address of the client.
- **Connection Type:** Select either **Ethernet** or **Wireless** to view and configure the respective settings.
- **IP Address:** Assign a static IP address for the unit (i.e., 150.0.0.249).
- **Gateway:** Set the IP address of the gateway (i.e., 150.0.0.5).
- **Subnet Mask:** Set the subnet mask (i.e., 255.255.0.0).
- **Default Domain:** Set the domain (i.e., local-ad.server.net).
- **DNS Server:** Set the IP address of the first DNS server (i.e., 150.0.0.1).
- **DNS Server 2:** Set the IP address of the second DNS server (i.e., 150.0.0.2).
- **DNS Server 3:** Set the IP address of the third DNS server (i.e., 150.0.0.3).
- **DHCP:** Select for the DHCP server to automatically assign the IP address settings.
- **Network Login Timeout:** Select or type the amount of time.

If the thin client is set to Local or Program Neighborhood mode, this value is ignored.

If the thin client is set to Network mode (Stateless), this setting controls the amount of time the thin client waits for login credentials before continuing through the boot process. If **Retain Network Settings** is selected (**Security** tab), once the time out value is reached, the system assumes the FTP server is down and loads the settings of the last successful user login. If **Retain Network Settings** is not selected, the thin client boots to the Thin Connect desktop but with no connections available. Users must restart the session and log in to access their specific connections.

- **Network Tools** button: Click to view network-related information for the thin client. Use the **Ping** tab in the HP Network Tool window to ping a URL.



Wireless Settings

Set **Connection Type** to **Wireless** to turn on these settings.

- **Wireless Power:** Select to enable wireless capability.
- **Wireless Mode:** Select the wireless mode:
 - Infra
 - Adhoc
- **Auth Mode:** Select the wireless authentication mode.
 - WEPAUTO
 - WPAPSK
 - OPEN
 - SHARED
 - WPANONE
 - WPA2PSK
- **Encryption Type:** Select the encryption type.
 - WEP
 - TKIP
 - AES
 - NONE
- **SSID:** Type the SSID name.
- **SSID Channel:** Type or select the SSID channel. Default = 0.
- **Wep Key:** Type or select to use from 1 - 4 of the available keys.
- **Wep Key 1–4:** Type the WEP key as established by the networks wireless administrator.
- **WPA Passphrase:** Type the pass phrase if you selected WPA encryption mode.
- **Wireless Statistics** button: Click to see information about your wireless connection.

DSL Settings

Configure DSL settings for connections using a DSL high speed connection where the client may require a DSL account username/password and other settings related to DSL.

- **DSL Username:** Type the DSL user name.
- **DSL Password:** Type the DSL password.
- **DSL Connect on Demand:** Select to enable Cconnect on Demand functionality.
- **DSL Demand Timeout:** Type or select the timeout for DSL Connect on Demand.

Ethernet Information

- **Ethernet Speed:** Select the speed of the network that connects the thin client.
- **Wake On Lan:** Select to enable wake on LAN.

Management

Use the **Management** tab to:

- Configure FTP settings
- Configure DHCP settings
- Configure Altiris
- Use HP ThinState to replicate thin client settings

The screenshot shows the 'Settings' window with the 'Management' tab selected. The window contains several configuration sections:

- Enable Automatic Updates:** A checkbox that is currently unchecked.
- FTP Settings:** Fields for FTP Address, FTP Location, FTP Port (set to 21), FTP Username, and FTP Password (with a 'Set Password' button).
- Altiris configuration:** A section with a button labeled 'Altiris configuration'.
- Replicate Settings by using HP Thinstate:** A checkbox that is currently checked.
- DHCP Settings:** Fields for DHCP Force (180), DHCP Server (161), DHCP Server Type (IP), DHCP Path (162), DHCP Username (184), DHCP Password (185), DHCP Altiris Server (190), and DHCP Altiris Server Type (IP).
- Auto Detect Network Env.:** A checkbox that is currently checked.

At the bottom right of the window are 'Save' and 'Close' buttons.

FTP Settings

Use this window to configure automatic FTP updates as an alternative to Altiris Deployment Solution, as follows. Path definitions for these fields are listed after the procedure.

1. **Enable Automatic Updates:** Select to enable the thin client to check a specific FTP location for a newer image or package upon reboot.
2. **FTP Address:** Type the IP address of the FTP server that houses the operating system image file (i.e., 150.0.0.5).
3. **FTP Location:** Type the FTP server path that houses the operating system image file (i.e., /hp/tc/).

4. **FTP Port:** By default, FTP uses port 21. HP recommends that you do not change this setting.
5. **FTP Username:** Type a valid user name on the server to authenticate the FTP process.
6. **FTP Password:** Type a valid password on the server to authenticate the FTP process.
7. Click **Save**, and then reboot the system.

After rebooting, using the information provided in the previous fields, the unit automatically looks for the FTP server, logs in, goes to the specified path, and updates with the newer image.



NOTE: You must create a shared folder on the FTP server.

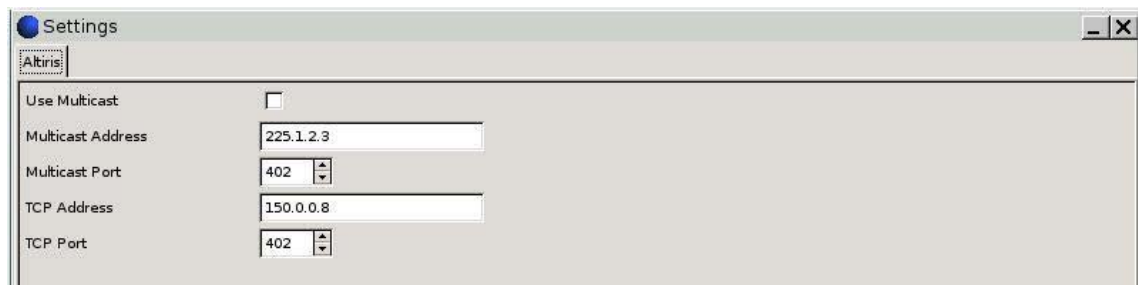
Definitions of the fields in these paths are as follows:

- `<FTP root>/linux/<imageid>/image`: For flashing images.
- `<FTP root>`: Shared directory on the FTP server where you can find the new image files.
- `<linux>`: System-defined directory that must be present below the FTP directory on the FTP server.
- `<imageid>`: Directory with the same name as the image version from which you wish to upgrade that you can find in the **About** tab (for example, S1ST0031, S1ST0032, etc).
- `<image>`: System-defined directory that contains the image to which you want to upgrade.

For example, to upgrade a thin client from image S1ST0030 using an FTP server with a directory titled /hp/tc, place the new image in /hp/tc/linux/S1ST0030/image on the FTP server.

For more information, see the FTP white paper at <http://h20000.www2.hp.com/bc/docs/support/SupportManual/c00555197/c00555197.pdf>.

Altiris configuration: Click to display the window that allows you to configure Altiris settings.



- **Use Multicast:** Select if you want to use the default Altiris server address.
- **Multicast Address:** The default address is displayed. Type your installation address if necessary.
- **Multicast Port:** Type or select the Altiris server port.
- **TCP Address:** If **Use Multicast** is not selected, type the specific Altiris server address.
- **TCP Port:** Type or select the Altiris server port.

HP ThinState

HP ThinState allows you to copy and deploy thin client settings to another HP thin client of identical model and hardware.



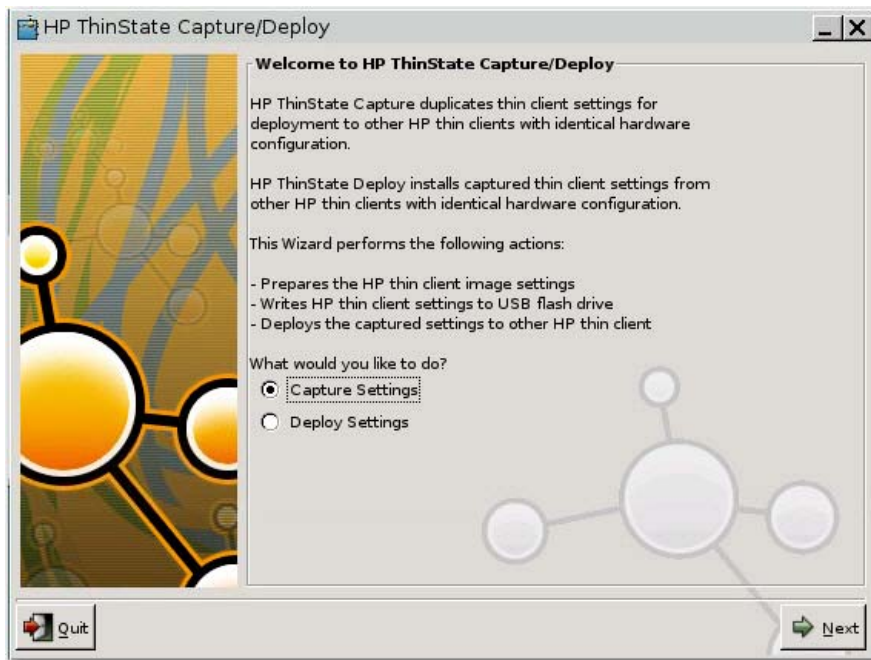
NOTE: The HP ThinState Capture tool is not a standalone tool and can only be accessed by the administrator from within the thin client image.

What do I need to have?

- An HP thin client unit that contains the latest HP provided image.
- An HP-approved USB flash drive (disk on-key).

To use ThinState to capture thin client settings:

1. Attach a USB flash drive to the thin client. The following screen displays.
2. From the **Management** tab, click **Replicate Settings by using HP Thinstate**.



3. Select **Capture Settings**, and then click **Next**. The following screen displays:



4. Select the target USB flash drive from the list.



NOTE: The ThinState Capture tool formats the USB flash drive.

5. Click **Capture**.
6. Click **Yes** on the warning screen. The ThinState Capture tool formats and makes the USB flash drive bootable. ThinState Capture will now reboot the system.

Image setting capture is done. You may remove the USB drive. If you do not remove the USB drive, when you boot the system, you must press a key at the startup screen.

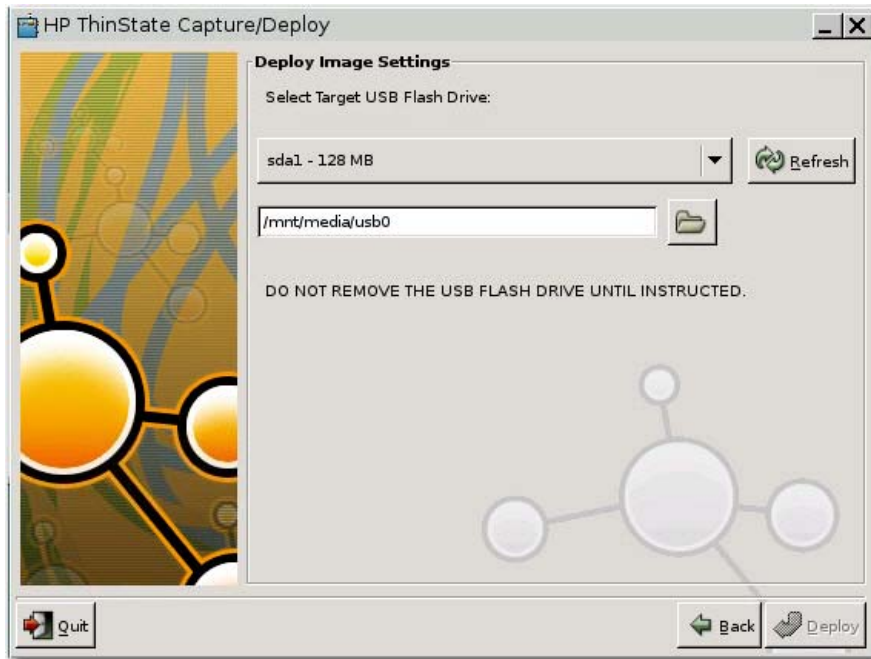
7. Click **OK**, and then close the window.

Use the capture settings on the USB drive to replicate on different systems or restore the current capture back to its original setting after settings were altered.

To use ThinState to deploy captured settings:

1. On the client to which you want to deploy captured settings, click **Settings > Management > Replicate Settings by using HP Thinstate**.
2. Plug in the USB flash drive on which you captured settings.

3. Click **Next**.



4. Click **Deploy**.
5. After image setting capture has completed, you may remove the USB flash drive
6. Click **OK**.



NOTE: If you do not remove the USB flash drive, when you boot the system you must press a key at the startup screen.

DHCP Settings

DHCP Force	180
DHCP Server	161
DHCP Server Type	IP
DHCP Path	162
DHCP Username	184
DHCP Password	185
DHCP Altiris Server	190
DHCP Altiris Server Type	IP
Auto Detect Network Env.	<input checked="" type="checkbox"/>

If you want to use DHCP image update, the thin client requires no configuration or setup because the DHCP options provide all the necessary configuration information and direct the thin client to begin the

update process. By default, thin clients that support this feature use the following options that you must configure on the DHCP server:

- **DHCP Force:** Default port 180.
- **DHCP Server:** Default port 161.
- **DHCP Server Type:** Default type = IP.
- **DHCP Path:** Default port 162.
- **DHCP Username:** Default port 184.
- **DHCP Password:** Default port 185.
- **DHCP Altiris Server:** Default port 190.
- **DHCP Altiris Server Type:** Default type = IP.

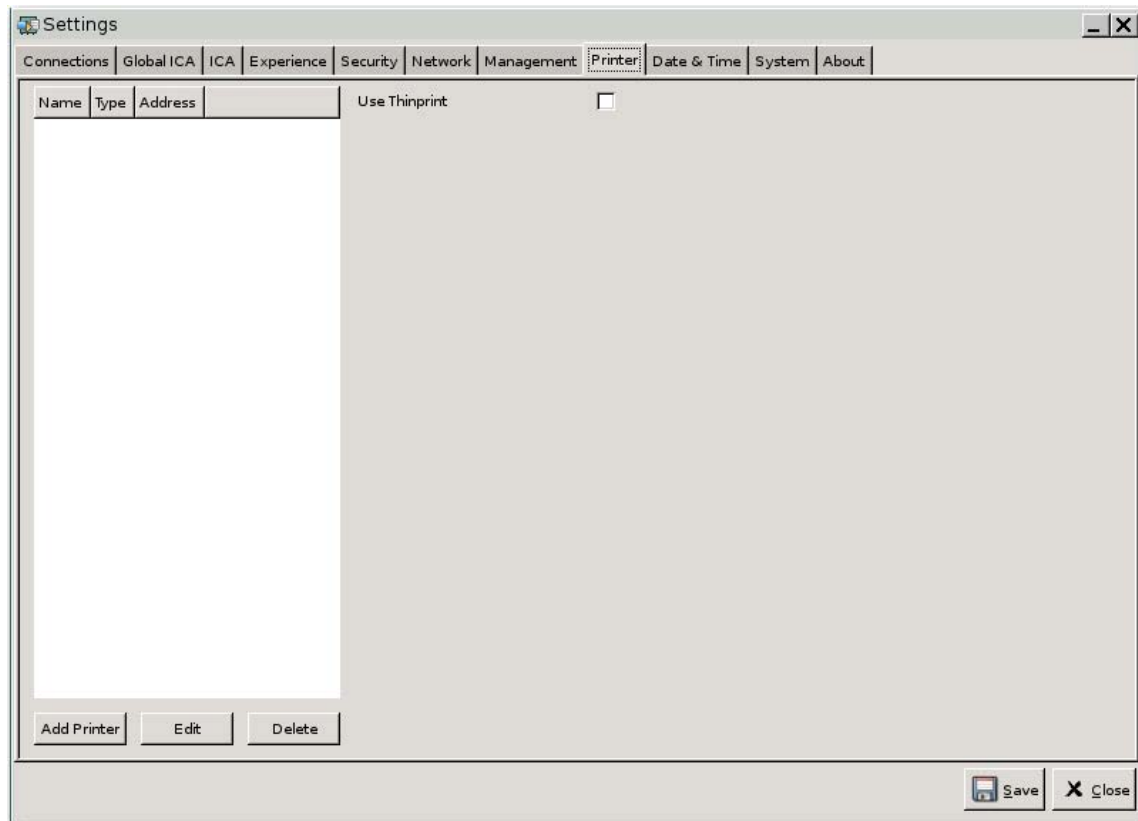
Upon rebooting, the unit will automatically look for the FTP server, log in, go to the path, and update itself with the newer image using the information provided by the DHCP options.



NOTE: You must create a shared folder on the FTP server.

Printer

Use the **Printer** tab to add, modify, and delete printers from the thin client.



Use Thinprint: Select if you use ThinPrint for printing.

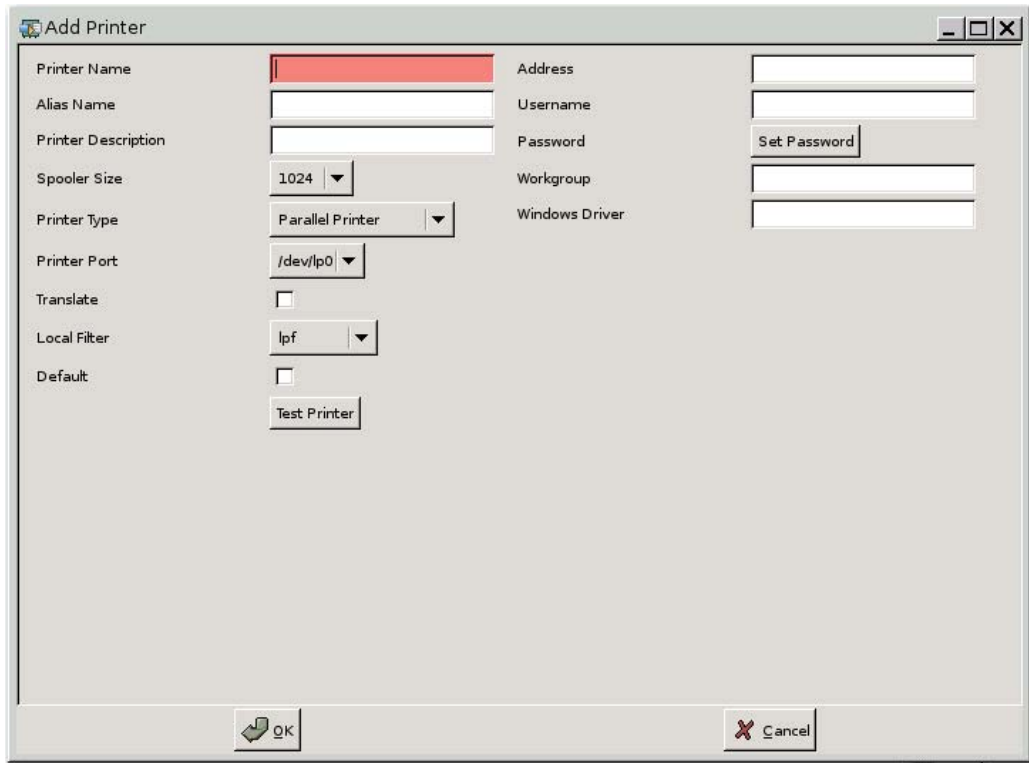


NOTE: If you use ThinPrint, you do not have to add printers on this window.

if you want to share a locally attached printer through ThinPrint, you must add the printer. Additionally, the locally defined printer name has to match the .print server printer name.

To add a printer:

1. Click **Add Printer**.



2. In the **Printer Name** box, type a name for the printer.
For a samba printer, the printer name should be the name of the shared printer of the samba printer. For example: < \\myservername\myprinter ==>, where "myprinter" is the printer name.
3. (Optional). In the **Alias Name** box, type an alias for the printer.
4. (Optional). In the **Printer Description** box, type a description for the printer.
5. From the **Spooler Size** list, select how large you want the print spooler to be, in KB.
6. From the **Printer Type** list, select the type of printer to add.
7. (Samba only) Select **Translate** if you want to translate carriage returns and line feeds from Windows to Linux or Linux to Windows.
8. From the **Local Filter** list, select whether you want the lpr to use the specified driver/filter.
9. Select **Default** if you want to make this the default printer.
10. In the **Address** box, type the print server IP address.



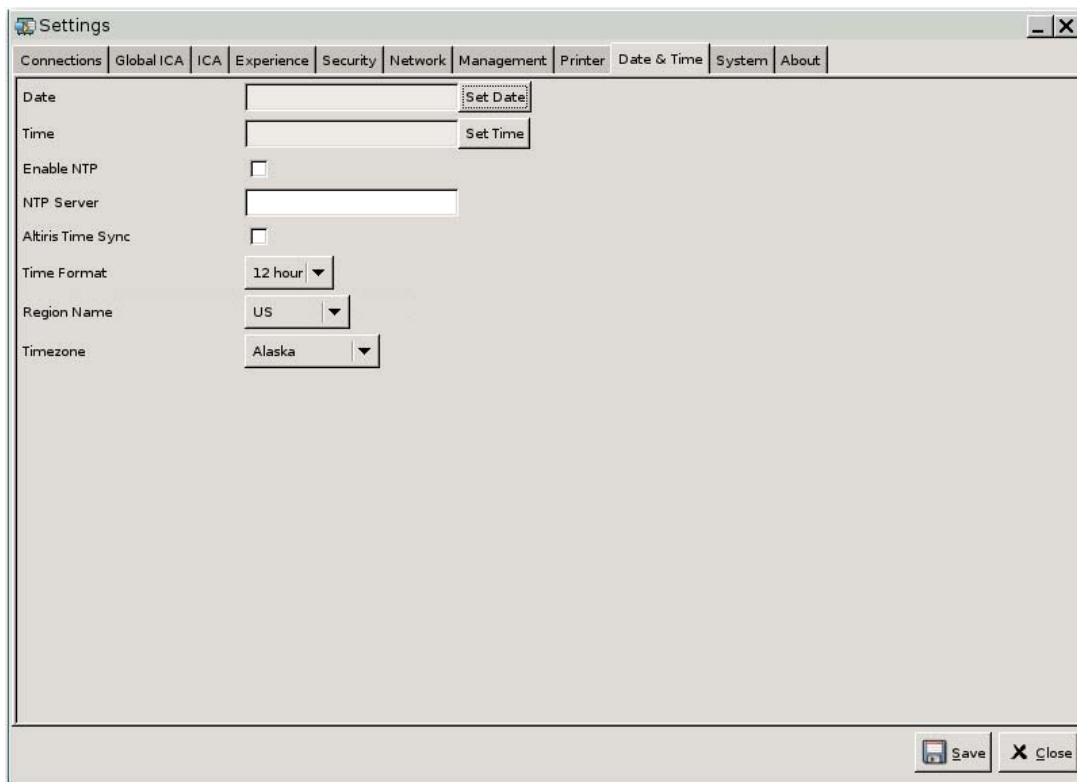
NOTE: For an LPD printer, you must populate the **Address** field.

For a Samba printer, you must populate the **Address**, **Username**, and **Password** fields.

11. In the **Username** box, type the user name for the account you want the printer to use to log into the remote computer.
12. Next to **Password** box, click **Set Password**, and then type the password for the account you want the printer to use to log into the remote computer.
13. (Optional, Samba only) In the **Workgroup** box, type the Windows domain workgroup.
14. (Optional) In the **Windows Driver** box, type a driver name. Citrix ICA uses this field to set the printer driver for the session. You must type the windows driver name exactly as it is on the server.
15. If desired, click **Test Printer** to send a sample job to the printer.
16. Click **OK** to save changes.

Date & Time

Use the **Date & Time** tab to configure date and time settings on the thin client. Network Time Protocol (NTP) is designed to synchronize the clocks of computers over a network. There are numerous servers available on the Internet that are synchronized to Coordinated Universal Time.



- **Date:** Click **Set Date** to display a calendar from which you can select the current date.
- **Time:** Click **Set Time** to display a dialog box that allows you to set the current time.
- **Enable NTP:** Select to enable Network Time Protocol (NTP).

- **NTP Server:** Type the URL of the NTP server to which you want the thin client to sync. For NTP to function properly, the date on the thin client must match the date on the server.
- **Altiris Time Sync:** Select to enable time synchronization with an Altiris server, if available.
- **Time Format:** Select whether you want time to display in 12 or 24 hour format.
- **Region Name:** Select the region in which the client resides.
- **Timezone:** Select the time zone in which the client resides.

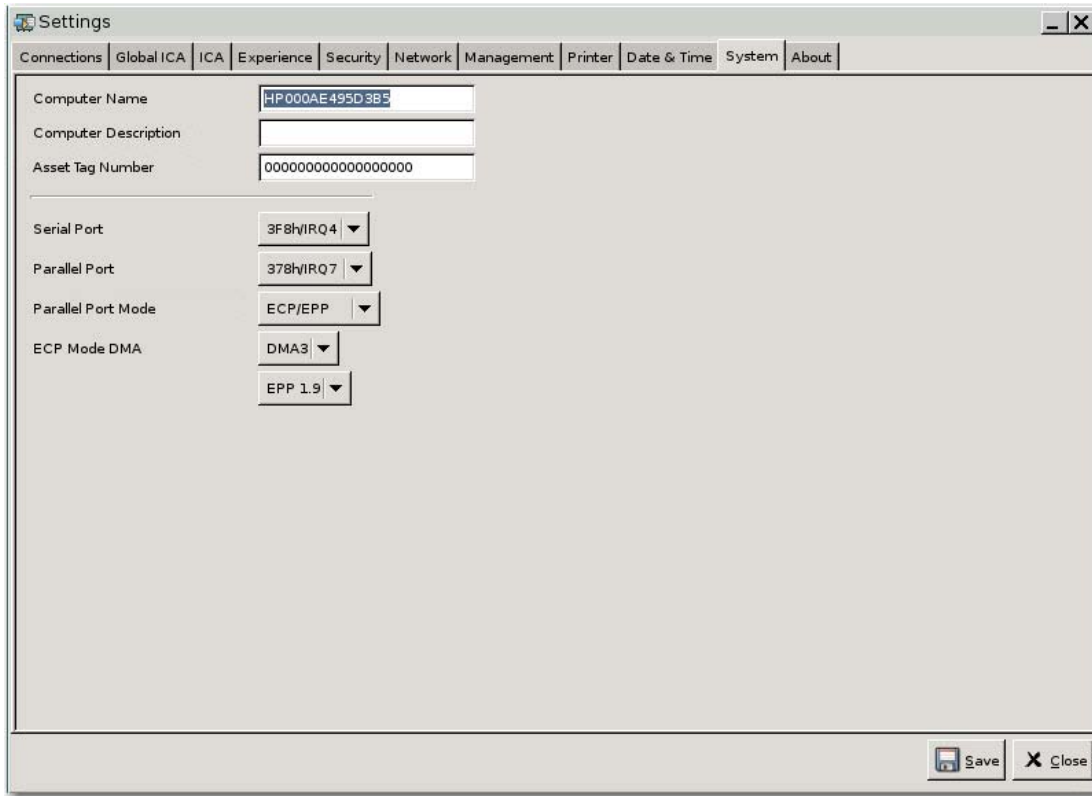
Enabling Network Time Protocol

To enable NTP:

1. Select the appropriate time zone.
2. Select **Enable NTP**.
3. In the **NTP Server** box, type the IP address of the NTP server you want to use to set the time on the thin client.
4. Click **Save**.

System

Use the **System** tab to view or change the computer name, description, and asset tag number, as well as change port settings.



- **Computer Name:** Displays the computer name. Highlight and type over the entry to change the name.
- **Computer Description:** Displays the computer description. Highlight and type over the entry to change the description.
- **Asset Tag Number:** Displays the asset tag number. Highlight and type over the entry to change the number.
- **Serial Port:** Select a different address, interrupt line, or disable this port.
- **Parallel Port:** Select a different address, interrupt line, or disable this port.
- **Parallel Port Mode:** Select the port mode.
- **ECP Mode DMA:** Select the DMA options.
- **EPP Type:** Select the Enhanced Parallel Port (EPP) type.

About

Provides information about the thin client and its software.



Information includes:

- Product (thin client) name
- Image version
- Kernel version
- Processor
- Flash memory
- Total memory
- Thin client serial number
- BIOS version number
- BIOS release date
- Copyright information

Support

If you require support for your thin client, contact your region's HP Technical Support Center.

Support contact information is available at the Contact HP link on the HP home page or at:
http://welcome.hp.com/country/us/en/contact_us.html

Hardware warranty

The hardware warranty is three years limited coverage and is upgradeable through the purchase of an optional HP Care Pack.

Software warranty

The software warranty covers several features, including:

- Altiris Remote Management Client
- Citrix Client
- Network Management Applet

Note that Altiris is supported directly by Altiris, Inc. All other services and features are from open source community packages and are not supported by HP.

For ThinPrint Warranty and support information contact your ThinPrint service representative.

Image updates and add-ons

HP provides periodic updates to the image. Check the HP support site for important documentation that provides specific information for your image version. You can find support documentation at:

www.hp.com/support/

To search for support documentation, enter your country and product name, and then click **Manuals**.

Custom image requests

To obtain a custom image from HP, contact your HP Account Team, which will work through the HP Specials Process to understand the opportunity, image requirements, schedule, and costs involved.

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