

# **Administrator Guide**

HP ThinPro 6.2

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ftp://ftp.hp.com/pub/tcdebian/pool/
thinpro620/.

# **User input syntax key**

Text that you must enter into a user interface is indicated by fixed-width font.

Item	Description
Text without brackets or braces	Items you must type exactly as shown
<text angle="" brackets="" inside=""></text>	A placeholder for a value you must provide; omit the brackets
[Text inside square brackets]	Optional items; omit the brackets
{Text inside braces}	A set of items from which you must choose only one; omit the braces
1	A separator for items from which you must choose only one; omit the vertical bar
	Items that can or must repeat; omit the ellipsis

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# **Getting started**

This guide is for administrators of HP thin clients based on the HP ThinPro operating system and assumes that you will log in to the system as an administrator when modifying system configurations or using administrative tools as described in this guide.

NOTE: HP ThinPro has two possible OS configurations: ThinPro and Smart Zero. HP ThinPro-based thin clients can be purchased with either OS configuration as the default, and you can switch between OS configurations via Control Panel.

For more information about each OS configuration, see <a href="Choosing an OS configuration">Choosing an OS configuration on page 2</a>. For more information about switching between OS configurations, see <u>Customization Center on page 51</u>.

# **Finding more information**



NOTE: Information at websites listed in this table might be available in English only.

Resource	Contents
HP support website http://www.hp.com/support	Administrator guides, hardware reference guides, white papers, and other documentation
nttp.//www.np.com/support	Search for the thin client model, and then see the User Guides section of the support page for that model.
	<b>NOTE:</b> HP Device Manager and HP Remote Graphics Software each have a dedicated support page, so search for the app name instead, and then see the <b>User Guides</b> section.
Microsoft support website	Documentation for Microsoft software
http://support.microsoft.com	
Citrix support website	Documentation for Citrix software
http://www.citrix.com/support	
VMware support website	Documentation for VMware software
http://www.vmware.com/support	

## **Choosing an OS configuration**

HP ThinPro includes two OS configurations, each tailored for a different thin client deployment scenario:

- The ThinPro OS configuration is the complete version of the operating system and is the most suitable for multipurpose environments that require advanced administration or end-user customization.
   Features of this OS configuration include the following:
  - Boots to the ThinPro desktop or Active Directory login screen
  - Has more connection types than Smart Zero
  - Allows multiple connections (of any supported type) to be configured and run simultaneously
- The **Smart Zero** OS configuration is a simpler, more secure version of the operating system and is the most suitable for single-purpose, kiosk-style environments that require minimal administration and little to no end-user customization. Features of this OS configuration include the following:
  - Boots directly to a virtual session and hides the desktop, a feature also known as "kiosk mode"
  - Has fewer connection types than ThinPro
  - Supports only one connection to be configured and run at a time
  - Does not support Active Directory authentication or single sign-on



You can also customize some of the default settings of each OS configuration; for example, to change which connection types are available, enable kiosk mode for ThinPro, or boot to the desktop for Smart Zero.

For more information about kiosk mode, see Kiosk mode on page 8.

The following table lists the default available connection types for each OS configuration.

OS configuration	Default available connection types
ThinPro	• Citrix®
	• RDP
	<ul> <li>VMware® Horizon® View™</li> </ul>
	Web Browser (Firefox)
	• TeemTalk
	<ul> <li>XDMCP</li> </ul>
	• SSH
	• Telnet
	<ul> <li>Custom</li> </ul>
Smart Zero	• Citrix
	• RDP
	VMware Horizon View
	Web Browser (Firefox)

## Choosing a remote management service

Regardless of the OS configuration, there are two different remote management services that you can use to manage HP ThinPro-based thin clients:

- HP Device Manager (HPDM) is ideal for large environments with a variety of operating systems, including a mixture of HP ThinPro-based and Windows®-based thin clients. HPDM provides a greater variety of management options than HP Smart Client Services. For more information or to download HPDM, go to http://www.hp.com/go/hpdm.
- HP Smart Client Services can manage HP ThinPro-based thin clients only and is optimized for use with Smart Zero and a "zero management" scenario. For more information, see <u>HP Smart Client Services</u> on page 62. To download HP Smart Client Services, go to the HP support website (see <u>Finding more</u> information on page 1).

HP recommends evaluating both services and choosing the one that is best for your deployment.

## Starting the thin client for the first time

When you first start a new HP ThinPro-based thin client, a setup program runs automatically. When the setup program is complete, if no connections are configured, a wizard opens to help you configure a connection.

TIP: If you want to modify the configuration of a single thin client and then copy and deploy the configuration to other thin clients, first use Control Panel to modify the configuration. For more information, see <u>GUI overview on page 4</u> or <u>Control Panel on page 41</u>, and then deploy the configuration using HPDM or HP ThinState. For more information on HP ThinState, see <u>HP ThinState on page 55</u>.

## Switching between administrator mode and user mode

A Right-click the desktop, and then select **Administrator/User Mode Switch** from the menu.

For more information about the desktop, see Desktop on page 4.

– or –

Select Administrator/User Mode Switch in Control Panel.

For more information about Control Panel, see Taskbar on page 5 and Control Panel on page 41.

NOTE: The first time you switch to administrator mode, you are prompted to set up an administrator password. The administrator password must be entered every subsequent time you switch to administrator mode. When Active Directory authentication is enabled, you can also switch to administrator mode by entering the domain credentials of a person in the domain admin group.

When in administrator mode, the screen is surrounded by a red border.

# **GUI overview**

# **Desktop**

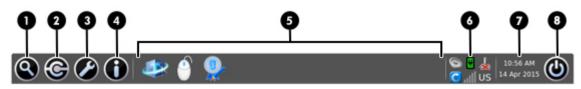
NOTE: The following image demonstrates the desktop for ThinPro with a U.S. locale setting. For Smart Zero, the taskbar is vertical and right-aligned by default, and the desktop theme varies by connection type. The display format of some taskbar information varies by locale setting.



ltem		Description
(1)	Desktop	In ThinPro, you can arrange connection shortcuts in the desktop area and customize the background theme.
		In Smart Zero, the desktop is replaced by a customizable login screen with a theme specific to the chosen connection type.
(2)	Connection shortcuts	Double-click a connection shortcut to launch a connection.
(3)	Taskbar	Provides quick access to programs and system functions (see <u>Taskbar on page 5</u> for more information).

# **Taskbar**

NOTE: The following image demonstrates the taskbar for ThinPro with a U.S. locale setting. For Smart Zero, the taskbar is vertical and right-aligned by default. The display format of some taskbar information varies by locale setting.



Item		Description
(1)	Search	Lets you search for and run configured connections, connection managers, Control Panel items, and power functions.
(2)	Connection Manager	In ThinPro, this button opens Connection Manager in a new window. See <u>Connection Manager (ThinPro only) on page 6</u> for more information.
		In Smart Zero, this button displays a menu that lets you add or edit a connection.
(3)	Control Panel	Lets you configure the thin client, switch between administrator mode and user mode, and check for software updates. See <a href="Control Panel on page 41">Control Panel on page 41</a> for more information.
(4)	System Information	Lets you view system, network, and software information about the thin client. See <a href="System information on page 61">System information on page 61</a> for more information.
(5)	Application area	Displays the icons for the currently open applications.
		<b>TIP:</b> You can hold down Ctrl+Alt and then press Tab repeatedly to select an application to bring to the foreground.
(6)	System tray	Provides quick access to or provides information about certain functions and services. Items in the system tray can include the following, but some items might not appear depending on the system configuration:
		Audio mixer
		Virtual keyboard
		<ul> <li>Network status—You can select this icon to see a list of available wireless networks and connect to one by creating a wireless profile for that network.</li> </ul>
		<ul> <li>Automatic Update status—A green icon with a check mark indicates that Automatic Update finished successfully. A yellow icon with an exclamation point indicates that the Automatic Update server was not found or that there are some problems with the server-side settings. A red icon with an X indicates that Automatic Update failed, such as when a package or profile is invalid. A blue icon with a spinning arrow indicates that Automatic Update is currently checking for updates.</li> </ul>
		Smart Common Input Method (SCIM) controls
		Citrix connections icon
		<ul> <li>Battery icon—To open Power Manager, right-click this icon and select Adjust Power Settings.</li> </ul>
(7)	Date and time	Displays the current date and time and opens the date and time settings.
(8)	Power button	Lets you log out of, restart, or shut down the thin client.

# **Connection Manager (ThinPro only)**



NOTE: The following image demonstrates Connection Manager with a U.S. locale setting.



ltem		Description
(1)	Connection list	Lists the configured connections and whether each connection is active or inactive.
(2)	Start	Starts the selected connection.
(3)	Stop	Stops the selected connection.
(4)	Edit	Lets you edit the selected connection.
(5)	Delete	Deletes the selected connection.
(6)	Add	Lets you add a new connection.
		<b>NOTE:</b> See <u>Choosing an OS configuration on page 2</u> for a list of the available connection types.
(7)	Settings	Lets you edit general settings for Citrix, RDP, or Web Browser connections. These settings apply to all connections of that type.

For more information about configuring connections, see the following:

- Connection configuration on page 7
- Connection types on page 9

# **Connection configuration**

# **Advanced connection settings**

The following table describes the settings that are available under the Advanced category when editing a connection of any connection type.



NOTE: These settings affect the connection you are currently configuring only.

Option	Description	
Fallback Connection	Specifies the fallback connection. If the connection fails to start, the fallback connection will attempt to start instead.	
	<b>NOTE:</b> This option is not available for the VMware Horizon View connection type.	
Auto start priority	Determines the order that connections will auto-start. <b>0</b> means auto-start is disabled. The other values determine the startup order, with <b>1</b> being the highes priority.	
Share credentials with screensaver	Enables users to unlock the local screensaver using their credentials for that connection.	
	<b>NOTE:</b> This option is only available for the Citrix, RDP, and VMware Horizon View connection types.	
Auto reconnect	If enabled, this connection will attempt to auto-reconnect if the connection is dropped.	
	<b>NOTE:</b> Stopping a connection via Connection Manager will prevent an autoreconnection.	
Wait for network before connecting	Disable this option if your connection doesn't need the network to start or if you don't want to wait for network to start the connection.	
Show icon on desktop	If enabled, a desktop icon will be created for this connection.	
Allow the user to launch this connection	If enabled, this connection can be launched by an end user.	
Allow the user to edit this connection	If enabled, this connection can be modified by an end user.	
Login dialog options	Enable or disable these options to configure the login dialog for the connection	
	<b>NOTE:</b> This option is only available for the Citrix, RDP, and VMware Horizon View connection types.	
	The following options are available:	
	Show username field	
	<ul> <li>Show password field</li> </ul>	
	Show domain field	
	Show 'remember me' checkbox	
	<b>NOTE:</b> This option saves the user name and domain, but the password still needs to be entered each time.	

## Kiosk mode

When a thin client is configured for kiosk mode, it performs an automatic login to the default connection on startup using predefined user credentials. If the connection is ever lost due to a logout, disconnect, or network failure, it reconnects automatically as soon as it can be restored.

TIP: The remote host can be configured to start resources automatically upon login, making the kiosk mode experience seamless.

The easiest way to configure a thin client for kiosk mode is to switch it to Smart Zero (see <u>Customization</u> <u>Center on page 51</u>) and configure a connection. When this is done, the following settings are set automatically:

- The taskbar auto-hides.
- The connection auto-starts.
- The connection auto-reconnects.
- The connection shares the user credentials with the local screensaver.
- The desktop theme is set to that connection type's default theme.
- The USB redirection protocol in USB Manager is set to that connection type's protocol.

If you want to configure a thin client for kiosk mode in ThinPro (for example, if you want to use a connection type available only with ThinPro), manually configure the following settings for the desired connection:

- In Customization Center, set the taskbar to Auto hide.
- In connection's settings, do the following:
  - Set Auto start priority to 1.
  - Enable Auto reconnect.
  - Enable **Share credentials with screensaver**, if available.
  - For a Web Browser connection only, select the **Enable kiosk mode** option.
- In USB Manager, set the proper USB redirection protocol, if necessary.
- TIP: When in kiosk mode, to minimize the connection and return to the local desktop, press Ctrl+Alt+End.

# **Connection types**

## **Citrix**

The following table describes the supported Citrix XenApp backends.

Access type	XenApp version
Direct (legacy)	4.5/5/6/6.5
PNAgent (legacy)	4.5/5/6/6.5/7.X
Web browser	4.5/5/6/6.5/7.X
StoreFront	4.5/5/6/6.5/7.X

The following table describes the supported Citrix XenDesktop® backends.

Access type	XenApp version
PNAgent (legacy)	4.5 / 5.5 / 5.6.5 / 7.X
Web browser	4.5 / 5.5 / 5.6.5 / 7.X
StoreFront	4.5 / 5.5 / 5.6.5 / 7.X

The following table describes the supported Citrix VDI-in-a-box backends.

Access type	XenApp version
PNAgent (legacy)	5.x
Web browser	5.x
StoreFront	5.x

## Citrix general settings



NOTE: These settings affect all Citrix connections.

## **Options**

The following table describes the settings that are available under the Options category when editing the Citrix general settings.

Option	Description
Enable HDX MediaStream	Enables HDX MediaStream.
Enable MultiMedia	Enables multimedia.

Option	Description
Enable Connection Bar	Enables the connection bar.
Enable Auto Reconnect	Enable automatic reconnection of dropped connections.
Enable Session Reliability	Enables the Citrix Session Reliability feature. See Citrix documentation for more information.
Enable Clipboard Redirection	Enables clipboard redirection.
Use Data Compression	Use data compression for this connection.
Enable H264 Compression	Enables H.264 compression. See Citrix documentation to determine if this method of data compression is best for your use cases.
Enable Middle Button Paste	Enables the middle mouse button paste function.
User Agent String	Specify a User Agent string to be used for requests sent to the Citrix server. This option is useful for a NetScaler configuration.
Sound	Sets the sound quality or disables sound entirely.
Encryption Level	Specifies the encryption level of an ICA session.

## **Local Resources**

The following table describes the settings that are available under the Local Resources category when editing the Citrix general settings.

Option	Description
Printers	Controls how local printer redirection is handled.
Webcam/Audio-Input	Controls how local webcam and audio input redirection is handled.
USB Redirection	Enables USB redirection.
Dynamic Drive Mapping	Enables dynamic drive mapping.
Static Drive Mapping (Legacy)	Enables static drive mapping, which allows you to specify drive mappings to local paths.

## Window

The following table describes the settings that are available under the Window category when editing the Citrix general settings.

Option	Description
TWI Mode	Lets you display a single seamless window on the local ThinPro desktop as if it were a native application.
Default Window Size	When <b>TWI Mode</b> is set to <b>Force Seamless Off</b> , this controls the default window size.
Default Window Colors	Sets the default color depth.
Left Monitor	When <b>Show the Virtual Desktop on all monitors</b> is disabled, these fields let
Right Monitor	you specify how the virtual desktop is displayed across specific monitors.

Option	Description
Top Monitor	
Bottom Monitor	

## **Firewall**

The following table describes the settings that are available under the Firewall category when editing the Citrix general settings.

Option	Description
Proxy Type	Specifies the proxy type.
Proxy Address	The IP address of the proxy server.
Proxy Port	The port for connection to the proxy server.
Username	The username to use for connection to the proxy server.
Password	The password to use for connection to the proxy server.
Use Alternate Address for Firewall Connection	The Citrix ICA Client will request the alternate address defined for the server when contacting servers inside the firewall. The alternate address must be specified for each server in a server farm.

## **Keyboard Shortcuts**

The following table describes the settings that are available under the Keyboard Shortcuts category when editing the Citrix general settings.

Option	Description
Enable UseLocalIM	Uses the local input method to interpret keyboard input. This is supported only for European languages.
Use EUKS Number	Controls the usage of Extended Unicode Keyboard Support (EUKS) on Windows servers. Valid options are described below:
	• 0—EUKS is not used.
	• 1—EUKS is used as a fallback.
	• 2—EUKS is used whenever possible.
Handling of keyboard shortcuts	Specifies how keyboard shortcuts should be handled. The following settings are available:
	<ul> <li>Translated—Keyboard shortcuts apply to the local desktop (client side)</li> </ul>
	<ul> <li>Direct in full screen desktops only—Keyboard shortcuts apply to the remote desktop (server side), but only for a non-seamless ICA session in full screen mode</li> </ul>
	<ul> <li>Direct—Keyboard shortcuts apply to the remote desktop (server side) for both seamless and non-seamless ICA sessions when their windows have the keyboard focus</li> </ul>

Option	Description
Stop Direct key handling	Specifies the key combination that disables Direct handling of keyboard shortcuts.
Alt+F1 Alt+F12	Lets you add keyboard shortcuts to be handled.

### Session

The following table describes the settings that are available under the Session category when editing the Citrix general settings.

Option	Description
Auto Logout Delay Before App Launch	When using a Citrix server with multiple published resources, this specifies the number of seconds to allow a user to launch an app after login before the system automatically logs out and returns to the initial login screen.
Auto Logout Delay After App Close	When using a Citrix server with multiple published resources, this specifies the number of seconds between the closing of the last Xen published resource and when the user is automatically logged out and returned to the initial login screen.
Server Check Timeout	To perform a basic connectivity check to the selected server and port, set this option to a value other than the default <b>–1</b> .
TIP: Setting any of these values to less than 0 will disa	ble auto-logout.
NOTE: Citrix processing delays might increase the auto-logout time.	

# **Citrix per-connection settings**



### **Connection**

The following table describes the settings that are available under the Connection category when editing a Citrix connection.

Option	Description
Name	The connection name.
Connection Mode	Sets the connection mode to one of the following:
	<ul> <li>PNAgent</li> </ul>
	<ul> <li>StoreFront</li> </ul>
	• Direct
	<b>NOTE:</b> Authentication options are displayed following this option and vary depending on the connection mode you selected. See Citrix documentation for more information.
	<b>NOTE:</b> You can test the connection settings by selecting the <b>Test connection</b> button.
URL	The Citrix server hostname or IP address. If you are configuring a connection to a server on an HTTPS site, enter the FQDN for the site and the local root certificate in the Citrix certificate store.
	The check box next to this option forces an HTTPS connection, if selected.

Option	Description
Ignore Certificate	Bypasses the verification of the Citrix server's certificate.
Credentials	Sets the authentication mode to one of the following:
	<ul> <li>Anonymous login: For StoreFront servers that allow unauthenticated (anonymous) users.</li> </ul>
	<ul> <li>Use Single Sign-On credentials: The credentials used at login are also used to start the connection.</li> </ul>
	<ul> <li>Ask for credentials at connection start: There are no pre-supplied credential components.</li> </ul>
	<ul> <li>Use predefined user, password, and/or domain: Some or all of the credentials are stored and supplied for the connection.</li> </ul>
	<ul> <li>Use predefined smart card: The connection is expected to be used with a smart card for authentication.</li> </ul>
User	The username for this connection.
Password	The password for this connection.
Domain	The domain name for this connection (optional).
Test connection	Checks the URL and the credentials.

## Configuration

The following table describes the settings that are available under the Configuration category when editing a Citrix connection.

Option	Description
Auto Reconnect Applications on Login	With this option selected, resources that were open when the user last logged out will be reopened when they log in again.
	<b>TIP:</b> If not using the Citrix SmoothRoaming feature, disable this option to increase your connection speed.
Autostart mode	Lets you set a specific application or desktop to start automatically when the Citrix connection begins. If set to <b>Auto Start Single Resource</b> , and if there is a single published resource, that resource starts automatically.
	<b>NOTE:</b> This option has no effect if <b>Auto Reconnect Applications on Login</b> is selected and there are applications to reconnect to.
	If you have selected Auto Start Application or Auto Start Desktop, select the <b>Enumeration</b> button to retrieve a list of resources (applications or desktops) and display them in Citrix Connection Manager, which enables you to select resources to start automatically upon connection.
	If you have selected Auto Start Single Resource, select the <b>Enumeration</b> button to retrieve the number of resources. If there is only one resource, it is started automatically upon connection.
Show resources on desktop	With this option selected, remote resources from the connection will be shown on the local ThinPro desktop.
Show resources on taskbar	With this option selected, remote resources from the connection will be shown on the local ThinPro taskbar.
Show only subscribed resources	If selected, only subscribed resources are shown during a Citrix connection.

#### **Advanced**



NOTE: See Advanced connection settings on page 7 for information about the settings available under the Advanced category when editing a connection.

## **RDP**

The RDP client is based on FreeRDP 1.1 and meets the following requirements for RDP:

- Hardware-accelerated RemoteFX
- MMR supported when connecting to Windows hosts with the Desktop Experience feature enabled
- USBR supported when connecting to RDP servers that enable it

## **RDP** general settings

The following table describes the RDP general settings.



NOTE: These settings affect all RDP connections.

Option	Description
Send hostname as	Specifies whether to send the thin client's hostname or MAC address as the hostname specified to the remote system.
Enable Multimedia Redirection	Enables multimedia redirection.

## **RDP per-connection settings**



NOTE: These settings affect the connection you are currently configuring only.

#### **Network**

The following table describes the settings that are available under the Network category when editing an RDP connection.

Option	Description
Connection Name	A custom name for this connection.
Server Name/Address	The IP address or server name for this connection, or the RD Web Access feed URL. If required, the port can be appended to the server after a colon (by default, the port is 3389 for a direct RDP connection).
	NOTE: The RD Web Access feed URL must begin with https://. By default, this is added automatically as specified by the rdWebFeedUrlPattern registry key, which defines the pattern of the URL.
Credentials	<ul> <li>Use Single Sign-On credentials: The credentials used at login are also used to start the connection.</li> </ul>
	<ul> <li>Ask for credentials at connection start: There are no pre-supplied credential components.</li> </ul>
	<ul> <li>Use predefined user, password, and/or domain: Some or all of the credentials are stored and supplied for the connection.</li> </ul>

Option	Description
	<ul> <li>Use predefined smart card: The connection is expected to be used with a smart card for authentication.</li> </ul>
User	The username for this connection.
Password	The password for this connection.
Domain	The domain name for this connection (optional).
Use RD Gateway	Enables additional RD Gateway options, such as the gateway address, port, and credentials.
Server Probe	Launches the Server Probe, which can be used to determine which RDP features are supported by your RDP server.

#### Service

The following table describes the settings that are available under the Service category when editing an RDP connection.

Option	Description
Service	Sets the RDP service to one of the following:
	<ul> <li>Remote Computer—When using this service, a direct RDP connection is created to a remote computer. A remote application or alternate shell can optionally be started upon connection. The following additional options are available for a Remote Computer service:</li> </ul>
	<ul> <li>If Mode is set to Remote Application, the Application field specifies the path of the application to run.</li> </ul>
	TIP: If using RDP Seamless Windows mode, type the path of seamlessrdpshell.exe on your server, followed by a space and then the path of the application to run. See the following example:
	<pre>c:\seamless\seamlessrdpshell.exe c:\Program Files \Microsoft\Word.exe</pre>
	<ul> <li>If Mode is set to Alternate Shell, the Command field specifies the command that executes the application to run in the alternate shell. For example, to run Microsoft® Word, type Word.exe.</li> </ul>
	If <b>Mode</b> is set to <b>Alternate Shell</b> , the <b>Directory</b> field specifies the server's working directory path for the application's program files. For example, the working directory for Microsoft Word is C:\Program Files\Microsoft.
	RD Web Access—When using this service, a list of RemoteApp resources is retrieved from the server and presented to the user, and the actual RDP connection is started when a resource is selected. The following additional options are

- is started when a resource is selected. The following additional options are available for RD Web Access:
  - **Keep resource selection window open**—With this option selected, users can open multiple resources simultaneously from the resource selection window.
  - **Auto-start single resource**—With this option selected, and if there is a single published resource, that resource will start automatically upon connection.
  - Resource filter and Web Feed Browser—These can be used to limit the remote resources that will be made available to the user in the resource selection window.

Option	Description
	<b>NOTE:</b> An advantage of using RD Web Access is that it handles the details of brokered connections and the Load Balance URL automatically.
	For more information, see the HP ThinPro white paper RD Web Access Deployment Example (available in English only).

## Window

The following table describes the settings that are available under the Window category when editing an RDP connection.

Option	Description
Hide Window Decoration	This setting makes sure that screen elements such as the menu bar, minimize and close options, and borders of the window pane are not displayed.
Window Size	Sets the window size to <b>full, fixed</b> , or <b>percent</b> .
Percentage Size	If <b>Window Size</b> is set to <b>percent</b> , this option sets the percentage of the screen that a desktop window occupies.
	NOTE: The resulting sizes might be rounded.
	NOTE: RemoteFX supports only a fixed list of resolutions.
Fixed Size	If <b>Window Size</b> is set to <b>fixed</b> , this option sets the width and height in pixels that the desktop window occupies.

## **Options**

The following table describes the settings that are available under the Options category when editing an RDP connection.

Option	Description
Enable motion events	If enabled, mouse motions are continuously relayed to the RDP server.
Enable data compression	Enables bulk compression of data between the RDP server and RDP client.
Enable deprecated RDP encryption	Enables last-generation RDP encryption when NLA is not available.
Enable offscreen cache	If enabled, off-screen memory is used to cache bitmaps.
Attach to admin console	Attaches the connection to the administrator console port.
Cross-session copy/paste	If enabled, copy and paste are enabled between different RDP sessions.
Enable buffering of RDP6 primitives	If enabled, non-RemoteFX graphics performance is increased at the cost of less frequent screen updates.
Enable Progressive RemoteFX Codec	Enables the RemoteFX Progressive Codec, which transmits the desktop in a series of sharper and sharper images.
	<b>NOTE:</b> This codec might cause visual artifacts on desktops with highly dynamic content, so this codec can be disabled, if necessary.
Certificate verification policy	Select one of the following:
	Accept all RDP server certificates

- Use remembered hosts; warn if unknown or invalid certificate

Option	Description	
	<ul> <li>Skip remembered hosts; warn if unknown or invalid certificate</li> </ul>	
	<ul> <li>Connect only to pre-approved RDP servers</li> </ul>	
TLS Version	Sets the version of Transport Layer Security to be used during the early stages of negotiation with the RDP server. Either set this to match the version of TLS used by your RDP server, or try setting it to <b>auto</b> .	
	<b>NOTE:</b> There are some server-side defects in some unpatched RDP servers that can cause the auto setting to fail, so it is not the default setting.	
Hostname to send	Normally, the thin client's hostname is used for Client Access Licenses. This field allows a different value to be sent.	
	TIP: Select the ? icon next to this option for more information.	
Load Balance Info	Use this option with a brokered RDP connection.	
	TIP: Select the ? icon next to this option for more information.	



NOTE: For more information about the options **Enable deprecated RDP encryption** and **TLS Version**, see the HP ThinPro white paper Security Layers for RDP Connections (available in English only).

#### **Local Resources**

The following table describes the settings that are available under the Local Resources category when editing an RDP connection.



NOTE: HP recommends high-level device redirection for all local devices unless there is a specific reason to use USB redirection (USBR) instead. For more information, see the HP ThinPro white paper USB Manager (available in English only).

Option	Description
Audio Devices	Determines whether audio devices are redirected by high-level RDP audio redirection, low-level USB redirection, or disabled for this connection.
Printers	Determines whether printers are redirected by high-level printer redirection (which requires them to be set up via the Printers tool in Control Panel), low-level USB redirection, or disabled for this connection.
Serial/Parallel Ports	Determines whether serial and parallel ports are redirected or disabled for this connection.
USB Storage	Determines whether USB storage devices such as flash drives and optical drives are redirected by high-level storage redirection, low-level USB redirection, or disabled for this connection.
Local Partitions	Determines whether local partitions of the thin client's flash drive are redirected or disabled for this connection.
Other USB Devices	Determines whether other classes of USB devices (such as webcams and tablets) are redirected by low-level USB redirection or disabled for this connection.

## **Experience**

The following table describes the settings that are available under the Experience category when editing an RDP connection.

Option	Description	
Choose your connection speed to optimize performance	Selecting a connection speed ( <b>LAN, Broadband,</b> or <b>Modem</b> ) will enable or disable the following options to optimize performance:	
	Desktop background	
	Font smoothing	
	Desktop composition	
	Show contents of window while dragging	
	Menu and window animation	
	• Themes	
	Selecting <b>Client Preferred Settings</b> allows the RDP client to choose which options to use to provide the best RDP experience.	
	You can also select your own custom combination of options.	
End-to-End Connection Health	Select to enable the timeout options.	
Monitoring	<b>NOTE:</b> For more information, see the HP ThinPro white paper <i>RDP Connection Drop Detection</i> (available in English only).	
Warning Timeout	Specifies the amount of time in seconds after receiving the last network traffic from the server before the user is warned of a lost connection. This function can be disabled by clearing the option or setting the time to zero.	
	With the <b>Show Warning Dialog</b> option selected, a warning dialog will be displayed when this timeout is reached. Otherwise, the warning is written to the connection log only.	
	<b>TIP:</b> HP recommends increasing the timeout value for networks that experience frequent busy periods or momentary outages.	
Recovery Timeout	Specifies the amount of time in seconds after receiving the last network traffic from the server that the RDP client waits for the connection to recover without taking any special action. At the end of this period, the RDP client attempts a quick reconnection with the session.	
Error Timeout	Specifies the amount of time in seconds after receiving the last network traffic from the server that the RDP client waits before stopping attempts to reconnect with that server.	
	TIP: Select the ? icon next to this field for more information.	

## **Diagnostics**

The following table describes the settings that are available under the Diagnostics category when editing an RDP connection.

Option	Description	
Show RDP dashboard	If enabled, the RDP dashboard is shown during the connection.	
	TIP: Select the ? icon next to this option for more information.	
Show Connection Health Graph	With this option enabled, a two-dimensional graph of response time from the RDP server will be shown when the connection is started.	
	TIP: Select the ? icon next to this option for more information.	
USB Redirection Analysis	This feature determines and displays the current redirection method for each redirected USB device.	
	TIP: Select the ? icon next to this option for more information.	

Option	Description
Synchronous X11	Forces frequent flushing of X11 buffers at the cost of performance.
Logging	Enables the X11 logfile. Select the <b>Autoflush</b> option to increase the frequency of log output at the cost of performance.
Capture	Allows the capture and replay of X11 output from a session.

#### **Advanced**



NOTE: See Advanced connection settings on page 7 for information about the settings available under the Advanced category when editing a connection.

#### RemoteFX

RemoteFX is an advanced graphics display protocol that is designed to replace the graphics component of the traditional RDP protocol. It uses the hardware acceleration capabilities of the server GPU to encode the screen contents via the RemoteFX codec and send screen updates to the RDP client. RemoteFX uses advanced pipelining technologies and adaptive graphics to make sure that it delivers the best possible experience based on content type, CPU and network bandwidth availability, and rendering speed.

RemoteFX is enabled by default. The administrator or user does not have to change any settings to enable it. The RDP client negotiates with any RDP server it contacts, and if RemoteFX is available, it will be used.



NOTE: For more information, see the HP ThinPro white paper Enabling RemoteFX for RDP (available in English only).

## **RDP** multi-monitor sessions

True multi-monitor support does not require special configuration. The RDP client automatically identifies which monitor is specified as the primary monitor in the local settings and places the taskbar and desktop icons on that monitor. When a window is maximized within the remote session, the window will only cover the monitor it was maximized on.

Display preferences and monitor resolutions can be viewed but not modified within the remote session. To modify the session resolution, log out of the session and change the resolution on the local thin client.

By default, all RDP sessions will be full-screen and cover all monitors to enhance the virtualization experience. Additional window options are available in the RDP Connection Manager.



NOTE: Remote Desktop Virtualization Host (RDVH) sessions with graphics card support might only support certain resolutions and counts of monitors. The limits are specified when the RemoteFX virtual graphics device is configured for the RDVH virtual machine.



NOTE: For more information about RDP multi-monitor sessions, see the HP ThinPro white paper True Multi-Monitor Mode for RDP (available in English only).

### **RDP** multimedia redirection

Multimedia redirection (MMR) is a technology that integrates with Windows Media Player on the remote host and streams the encoded media to the RDP client instead of playing it on the remote host and re-encoding it via RDP. This technology reduces the server load and network traffic, and greatly improves the multimedia experience, supporting 24 fps playback of 1080p videos with automatic audio syncing. MMR is enabled by default. The RDP client will negotiate with any RDP server it contacts, and if MMR is available, it will be used. MMR also uses an advanced codec detection scheme that identifies whether the thin client supports the codec being requested by the remote host before attempting to redirect it. The result is that only supported codecs will be redirected and all unsupported codecs fall back to server-side rendering.

To disable MMR on the thin client for all RDP connections, set the following registry key to 0:

root/ConnectionType/freerdp/general/enableMMR

Because RemoteFX already delivers acceptable multimedia performance, you can disable MMR with RemoteFX by setting the following registry key to 1:

root/ConnectionType/freerdp/connections/<UUID>/disableMMRwithRFX

TIP: For simplified management, HP recommends that MMR be enabled or disabled on the remote host.

### **RDP** device redirection

Device redirection makes sure that when a user plugs a device into the thin client, the device is automatically detected and accessible in the remote session. RDP supports redirection of many different types of devices.

#### **RDP USB redirection**

USB redirection works by transmitting low-level USB protocol calls over the network to the remote host. Any USB device plugged into the local host appears within the remote host as a native USB device, as if it were plugged in locally. Standard Windows drivers support the device in the remote session, and all device types are supported without requiring additional drivers on the thin client.

Not all devices default to USB redirection. For example, USB keyboards, mice, and other input devices usually are not set to be redirected, as the remote session expects input to come from the thin client. Some devices such as mass storage, printers, and audio devices might use additional options for redirection.

Note the following additional information about USB redirection with RDP:

- The server must support USB redirection for it to be available to the thin client. General-purpose USB redirection is supported with RDVH servers with RemoteFX, Windows 8, Windows 10, Windows Server 2012, and Windows Server 2016.
- The protocol in USB Manager in Control Panel must be set to RDP.
- For RDP connections, the controls in USB Manager determine if a USB device is redirected. The settings for the individual connection determine how a USB device is redirected.

#### **RDP** mass storage redirection

By default, the RDP session redirects all mass storage devices to the remote host using high-level drive redirection. When a device such as a USB flash drive, USB DVD-ROM drive, or USB external HDD is plugged into the thin client, the thin client detects and mounts the drive on the local file system. RDP then detects a mounted drive and redirects it to the remote host. Within the remote host, it will appear as a new disk drive in Windows Explorer, with the name <device label> on <client hostname>; for example, Bill\_USB on HP04ab598100ff.

There are three restrictions to this type of redirection.

The device will not appear in the taskbar on the remote host with an icon to eject the device. Because of
this, make sure to give the device a sufficient amount of time to sync data after a copy before removing
the device to be sure that the device does not corrupt. Typically, less than one second is required after

the file copy dialog finishes, but up to 10 seconds might be required depending on the device write speed and network latency.

- Only file systems supported by the thin client will be mounted. The supported file systems are FAT32, NTFS, ISO9660 (CD-ROMs), UDF (DVD-ROMs), and ext3.
- The device will be treated as a directory; common drive tasks like formatting and modification of the disk label will not be available.

USB redirection of storage devices can be disabled in an individual connection's settings. If desired, you can disable mass storage redirection altogether. To do this, turn off USB redirection, and then change the registry keys as described in the following table.

Registry entry	Value to set	Description
root/USB/root/holdProtocolStatic	1	Makes sure that the USBR type will not be automatically changed when a connection is set or unset
root/USB/root/protocol	local	Makes sure that the RDP connection does not attempt to redirect any devices to the remote session

To completely disable local mounting of USB mass storage devices or to disable the redirection of USB mass storage devices but still allow other devices to redirect, in the thin client file system, delete the udev rule /etc/udev/rules.d/010 usbdrive.rules.

## **RDP** printer redirection

By default, RDP has two methods of printer redirection enabled:

- **USB redirection**—Any USB printer plugged into the device will show up as a local printer in the remote session. The standard printer installation process must happen in the remote session if the printer is not already installed on that remote host. There are no settings to manage locally.
- High-level redirection—If either USB redirection is unavailable on the remote host or the printer is a parallel or serial printer, use high-level redirection. Configure the printer to use a local printer spooler, and the RDP client automatically sets up a remote printer that sends print spooling commands through a virtual channel from the remote host to the thin client.

This method requires both that the printer be configured on the thin client and a Windows driver be specified on the thin client because the RDP client needs to specify to the remote host which driver to use for the remote printer. This Windows driver must match the driver that the printer would use when locally attached to a Windows operating system. This information is usually found under the **Model** in the printer properties.



**NOTE:** See Serial or parallel printer configuration on page 69 for more information.

### RDP audio redirection

By default, high-level audio redirection will redirect audio from the remote host to the thin client. Basic voice control might need to be set up, and RDP 7.1 contains a number of advanced audio redirection features that might require additional configuration.

See the following notes about using audio redirection with RDP:

- RDP delivers the highest quality audio as the network bandwidth allows. RDP reduces audio quality to play on low-bandwidth connections.
- No native audio or video syncing mechanisms are available in standard RDP. Longer videos might not sync with audio. MMR or RemoteFX can resolve this issue.
- HP recommends high-level audio redirection, but USB redirection of audio devices is possible if additional functionality is present, such as a digital volume control. Only high-level redirection is available for analog devices.
- Microphone redirection is enabled by default. The default microphone volume might need to be adjusted on the thin client. Older Windows RDP servers must have their settings modified to enable audio input.
- Both the local and remote volume settings will affect the final volume. HP recommends setting the local volume to a maximum and adjusting the volume within the remote host.

### **RDP** smart card redirection

By default, smart cards will be redirected using high-level redirection, allowing them to be used to log in to the session and other remote applications.

To enable smart card login for an RDP connection:

Select **Allow Smartcard Login** in the RDP Connection Manager.

This will allow the user to connect without first specifying credentials. The RDP client will start the RDP session, and the user will be prompted to authenticate by smart card.

This technology requires drivers for the smart card reader driver to be installed on the thin client. By default, the CCID and Gemalto drivers are installed, which adds support for the majority of smart card readers available. Additional drivers can be installed by adding them to /usr/lib/pkcs11/.



**NOTE:** When smart card login is enabled, Network Level Authentication is not supported and is automatically disabled.

## VMware Horizon View

## **VMware Horizon View per-connection settings**



**NOTE:** These settings affect the connection you are currently configuring only.

#### **Network**

The following table describes the settings that are available under the Network category when editing a VMware Horizon View connection.

Option	Description
Name	Enter a name for this connection.
Address	Enter the hostname or IP address of a VMware Horizon View server.
Credentials	Log in anonymously using unauthenticated access
	<ul> <li>Use Single Sign-On credentials: The credentials used at login are also used to start the connection.</li> </ul>

Option	Description	
	<ul> <li>Ask for credentials at connection start: There are no pre-supplied credential components.</li> </ul>	
	<ul> <li>Use predefined user, password, and/or domain: Some or all of the credentials are stored and supplied for the connection.</li> </ul>	
	<ul> <li>Use predefined smart card: The connection is expected to be used with a smart card for authentication.</li> </ul>	
User	Enter the username to use for the connection.	
Password	Enter the password to use for the connection.	
Domain	Enter the domain to use for the connection.	

## General

The following table describes the settings that are available under the General category when editing a VMware Horizon View connection.

Option	Description
Automatic login	When enabled, the user is automatically logged in when the connection is established.
	NOTE: HP recommends enabling this option.
Allow Smartcard login	Enables smart card login.
	<b>NOTE:</b> For more information on smart cards, see <u>VMware Horizon View smart card</u> redirection on page 28.
Don't start application maximized	If enabled, applications do not start in maximized windows.
Preferred Protocol	Lets you select PCoIP, RDP, or BLAST as the preferred protocol or choose to select the protocol later.
Application Size	Sets the application window size. You can select <b>All Monitors</b> , <b>Full Screen, Large Window</b> , or <b>Small Window</b> .
Desktop Size	Sets the desktop window size. You can select <b>All Monitors</b> , <b>Full Screen, Large Window</b> , or <b>Small Window</b> .

## **Security**

The following table describes the settings that are available under the Security category when editing a VMware Horizon View connection.

Option	Description
Close After Disconnect	Makes the VMware Horizon View client close automatically after users log out of their desktops or the session terminates with an error.
	This option is a security feature designed so that a user does not need to take an additional step to fully log out after they are finished with their desktop session.
	This option is enabled by default for security purposes but can be disabled if users find that they are often switching to a new desktop pool after logging out of a session and do not want to fully log in again.
Hide top Menu bar	Makes the top menu bar invisible for users.

Option	Description
	This option enabled by default. Disable it if users prefer to access options for window size or desktop pool selection in a VMware Horizon View session.
Prevent users from changing server address	If enabled, end users cannot change the server address.
Connection Security Level	Use the <b>Connection Security Level</b> to adjust the security level that the VMware Horizon View client uses when connecting to the server.
	<b>NOTE:</b> For more information, see <u>VMware Horizon View HTTPS and certificate</u> management requirements on page 29 for details on how connection security levels behave.

# **RDP Options**

The following table describes the settings that are available under the RDP Options category when editing a VMware Horizon View connection.

Option	Description	
Enable motion events	Enables motion events for this connection.	
Enable data compression	Uses data compression for this connection.	
Enable deprecated RDP encryption	Enables encryption for this connection.	
Enable offscreen cache	If enabled, off-screen memory is used to cache bitmaps.	
Attach to admin console	Attaches the connection to the administrator console port.	
Cross-session copy/paste	If enabled, copy and paste are enabled between different RDP sessions.	
Enable buffering of RDP6 primitives	If enabled, non-RemoteFX graphics performance is increased at the cost of less frequent screen updates.	
Enable Progressive RemoteFX Codec	Enables the RemoteFX Progressive Codec, which transmits the desktop in a series of sharper and sharper images.	
Certificate verification policy	Select one of the following:	
	<ul> <li>Accept all RDP server certificates</li> </ul>	
	<ul> <li>Use remembered hosts; warn if unknown or invalid certificate</li> </ul>	
	<ul> <li>Skip remembered hosts; warn if unknown or invalid certificate</li> </ul>	
	<ul> <li>Connect only to pre-approved RDP servers</li> </ul>	
TLS Version	Sets the version of Transport Layer Security to be used during the early stages of negotiation with the RDP server. Either set this to match the version of TLS used by your RDP server, or try setting it to <b>auto</b> .	
	<b>NOTE:</b> There are some server-side defects in some unpatched RDP servers that can cause the auto setting to fail, so it is not the default setting.	
Hostname to send	Normally, the thin client's hostname is used for Client Access Licenses. This field allows a different value to be sent.	
	TIP: Select the ? icon next to this option for more information.	
Load Balance Info	Use this option with a brokered RDP connection.	
	TIP: Select the ? icon next to this option for more information.	

Option	Description
Remote computer sound	Specifies where the remote computer's sound should be played (remotely or locally) or if it should not be played at all.
Enable port mapping	Maps the thin client's serial and parallel ports to the remote session.
Enable printer mapping	Maps the local print queue to the remote session. Use this option if either USB redirection is unavailable on the remote host or the printer is a parallel or serial printer. Configure the printer to use a local printer spooler, and the VMware Horizon View client automatically sets up a remote printer that sends print spooling commands through a virtual channel from the remote host to the thin client.
	This method requires both that the printer be configured on the thin client and a Windows driver be specified on the thin client because the VMware Horizon View client needs to specify to the remote host which driver to use for the remote printer. This Windows driver must match the driver that the printer would use when locally attached to a Windows operating system. This information is usually found under the <b>Model</b> in the printer properties.
Shared folders	Add, Remove, or Edit shared folders.

## **RDP Experience**

The following table describes the settings that are available under the RDP Experience category when editing a VMware Horizon View connection.

Option	Description
Enable MMR	Enables multimedia redirection.
Choose your connection speed to optimize performance	Selecting a connection speed (LAN, Broadband, or Modem) will enable or disable the following options to optimize performance:
	Desktop background
	Font smoothing
	Desktop composition
	Show contents of window while dragging
	Menu and window animation
	• Themes
	Selecting <b>Client Preferred Settings</b> will allow the VMware Horizon View client to choose which options to use.
	You can also select your own custom combination of options.
End-to-End Connection Health Monitoring	Select to enable the timeout options.
Warning Timeout	Specifies the amount of time in seconds after receiving the last network traffic from the server before the user is warned of a lost connection. This function can be disabled by clearing the option or setting the time to zero.
	With the <b>Show Warning Dialog</b> option selected, a warning dialog will be displayed when thi timeout is reached. Otherwise, the warning is written to the connection log only.
	<b>TIP:</b> HP recommends increasing the timeout value for networks that experience frequent busy periods or momentary outages.
Recovery Timeout	Specifies the amount of time in seconds after receiving the last network traffic from the server that the RDP client waits for the connection to recover without taking any special

Option	Description
	action. At the end of this period, the RDP client attempts a quick reconnection with the session.
Error Timeout	Specifies the amount of time in seconds after receiving the last network traffic from the server that the RDP client waits before stopping attempts to reconnect with that server.
	TIP: Select the ? icon next to this field for more information.

#### **Advanced**



NOTE: See Advanced connection settings on page 7 for information about the settings available under the Advanced category when editing a connection.

#### **VMware Horizon View multi-monitor sessions**

VMware Horizon View supports multi-monitor sessions. To enhance the virtualization experience, the default VMware Horizon View sessions use full-screen and span all monitors. To choose a different window size, select **Full Screen – All Monitors** under the protocol type of the desktop pool for the connection and then choose another option from the window size list. The next time you connect to a session the window will open in the selected size.

### VMware Horizon View keyboard shortcuts

#### **Windows keyboard shortcuts**

To help administer Windows systems, VMware Horizon View supports Windows keyboard shortcuts. For example, when Ctrl+Alt+Del is used, VMware Horizon View displays a message that provides the following options:

- Send a Ctrl+Alt+Del command.
- Disconnect the session—Use this when you have no other way of ending the session.

Windows keyboard shortcuts will be forwarded to the remote desktop session. The result is that local keyboard shortcuts, such as Ctrl+Alt+Tab and Ctrl+Alt+F4, will not function while inside the remote session.

TIP: To be able to switch sessions, disable the Hide top Menu bar option in the VMware Horizon View Connection Manager or via the registry key root/ConnectionType/view/connections/<UUID>/ hideMenuBar.

#### Media keys

VMware Horizon View uses media keys to control options such as volume, play/pause, and mute during a remote desktop session. This supports multimedia programs such as Windows Media Player.

#### VMware Horizon View multimedia redirection

VMware Horizon View connections support MMR functionality when used with the Microsoft RDP protocol.

For more information, see RDP multimedia redirection on page 19.

#### **VMware Horizon View device redirection**

#### **VMware Horizon View USB redirection**

To enable USBR for VMware Horizon View connections, select **VMware Horizon View** as the remote protocol in USB Manager.

For more information on USBR, including device- and class-specific redirection, see <u>RDP USB redirection</u> on page 20.

#### VMware Horizon View mass storage redirection

You must use the RDP connection protocol to use mass storage redirection with a VMware Horizon View connection.

To perform drive redirection of a USB drive or internal SATA drive:

▲ Add - xfreerdpoptions='/drive:\$foldname, shared folder path, share device' in the command-line arguments option.

For example, -xfreerdpoptions='/drive:myfolder,/home/user,/dev/sda2' shares the / home/user on the /dev/sda2 drive as myfolder in a VMware Horizon View connection.

For more details, see <u>RDP mass storage redirection on page 20</u>.

#### **VMware Horizon View printer redirection**

For connections made with the PCoIP protocol on x86 units, printers can be shared using VMware Horizon View's high-level printer redirection or USBR. PCoIP connections on ARM units support only USBR printer redirection. For connections made with the RDP protocol, see RDP printer redirection on page 21 for more information.

#### **VMware Horizon View audio redirection**

If you do not need the audio recording capability, use high-level audio redirection. Audio will play out of the 3.5 mm jack or, by default, a USB headset if it is plugged in. Use the local audio manager to adjust the input/output level, select playback, and capture devices.

The VMware Horizon View client supports high-level audio-record redirection only via the PCoIP connection type on x86 units when connecting to a server running VMware Horizon View 5.2 Feature Pack 2 or higher. If you need audio-recording support and are using a different configuration, use one of the following methods:

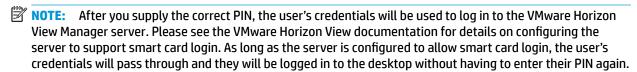
- If your system uses VMware Horizon View Client 1.7 or higher, use the RDP protocol to allow for high-level audio redirection through either the 3.5 mm jack or a USB headset.
  - NOTE: To use high-level audio-record redirection through the RDP protocol, the server must support it and be configured to allow audio recording over a remote session. The server must be running Windows 7 or greater. You also must make sure the HKLM\SYSTEM\CurrentControlSet\Control\Terminal Server\WinStations\RDP-Tcp\fDisableAudioCapture registry key is set to 0.
- If you have a USB headset with a microphone, you can use USBR. Set the USB headset to be redirected into the session. The headset will show up as an audio device. By default, USB audio devices are not redirected and the VMware Horizon View client uses high-level audio redirection. To redirect the USB headset, use the thin client's USB Manager and select the USB headset to be redirected. Make sure that VMware Horizon View is selected as the USBR protocol and make sure that the headset is selected under the devices to be redirected.

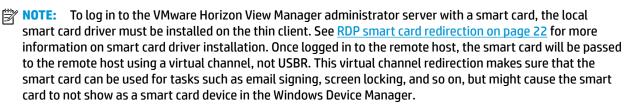
NOTE: VMware and HP do not recommend using USBR for headsets. A large amount network bandwidth is required to stream audio data over the USBR protocol. Also, you might experience poor audio quality with this method.

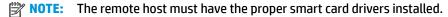
#### **VMware Horizon View smart card redirection**

To use a smart card to log in to the VMware Horizon View server:

- Be sure smart card login is enabled in the VMware Horizon View Connection Manager. After starting the connection, the VMware Horizon View client will display a list of server credentials.
- To unlock the credentials and access the VMware Horizon View Manager server, type the appropriate PIN for the server.







#### VMware Horizon View webcam redirection

The VMware Horizon View client supports high-level webcam redirection only through RTAV using x86 units connected to a back-end server running VMware Horizon View 5.2 Feature Pack 2 or higher. Other connection methods do not support high-level webcam redirection and can redirect webcams only using USBR. Based on internal testing and validation, HP has found that the performance of a webcam connected through basic USBR performs poorly. HP does not recommend the use of this configuration and suggests that customers who require this function test using x86 units with RTAV technology to ensure satisfactory levels of performance. With USBR, the webcam might perform poorly or not at all. See RDP USB redirection on page 20 for more information.

## Changing the VMware Horizon View protocol

VMware Horizon View Client can use either the PCoIP, RDP, or BLAST protocol.

To change the protocol:

- In VMware Horizon View Client, select a pool that supports one of the supported protocols.
- Under the **Connection** menu, select **Settings**.
- Change the protocol by using the drop-down box next to **Connect Via**.
- NOTE: Use VMware Horizon View Manager to set which protocol should be used for each desktop pool.
- ☆ TIP: HP recommends using the PCoIP protocol to enhance the desktop experience. However, the RDP protocol provides more options for customization and might work better on slower connections.

## VMware Horizon View HTTPS and certificate management requirements

VMware Horizon View Client 1.5 and VMware Horizon View Server 5.0 and later require HTTPS. By default, the VMware Horizon View client warns about untrusted server certificates, such as self-signed (like the VMware Horizon View Manager default certificate) or expired certificates. If a certificate is signed by a Certificate Authority (CA) and the CA is untrusted, the connection will return an error and the user will not be allowed to connect.

HP recommends that a signed certificate verified by a standard trusted root CA be used on the VMware Horizon View Manager server. This makes sure that users will be able to connect to the server without being prompted or required to do any configuration. If using an internal CA, the VMware Horizon View client connection returns an error until you complete one of the following tasks:

- Use the Certificate Manager to import the certificate from a file or URL.
- Use a remote profile update to import a certificate.
- In the VMware Horizon View Connection Manager, set Connection Security Level to Allow all connections.

The following table describes certificate trust when the security level is set to **Refuse insecure connections**.

Certificate trust	Result
Trusted	Trusted
Self-signed	Error
Expired	Error
Untrusted	Error

The following table describes certificate trust when the security level is set to Warn.

Certificate trust	Result
Trusted	Trusted
Self-signed	Warning
Expired	Warning
Untrusted	Error

The following table describes certificate trust when the security level is set to **Allow all connections**.

Certificate trust	Result
Trusted	Trusted
Self-signed	Untrusted
Expired	Untrusted
Untrusted	Untrusted

The following table describes the connection behavior associated with each result.

Result	Description
Trusted	Connects without a certificate warning dialog and displays a green lock icon
Untrusted	Connects without a certificate warning dialog and displays a red unlock icon
Warning	Connects with a certificate warning dialog and displays a red unlock icon
Error	Does not allow the connection

## **Web Browser**

## **Web Browser general settings**

The following table describes the Web Browser general settings.



NOTE: These settings affect all Web Browser connections.

Option	Description
Web Browser preferences	Opens the Firefox Preferences dialog.
Allow connections to manage their own settings	When enabled, Firefox settings are saved for each Web Browser connection. Otherwise, the settings are reset each time the connection is launched.

## **Web Browser per-connection settings**



NOTE: These settings affect the connection you are currently configuring only.

## **Configuration**

The following table describes the settings that are available under the Configuration category when editing a Web Browser connection.

Option	Description
Name	The connection name.
URL	The URL for the connection.
Intended Use	Lets you set the intended use of the connection to either Citrix, RDP, or Internet.
Enable kiosk mode	Enables kiosk mode.
Enable full screen	Uses full screen mode for the connection.
Enable print dialog	Enables the print dialog box.

#### **Advanced**



NOTE: See Advanced connection settings on page 7 for information about the settings available under the Advanced category when editing a connection.

## Additional connection types (ThinPro only)



NOTE: By default, these connection types are not available in Smart Zero. For more information, see Choosing an OS configuration on page 2.

#### **TeemTalk**



 $\square$  NOTE: These settings affect the connection you are currently configuring only.

For more information about HP TeemTalk, see the *User Guide* for HP TeemTalk.

#### **Configuration**

The following table describes the settings that are available under the Configuration category when editing a TeemTalk connection.

Option	Description
Name	The connection name.
TeemTalk creation wizard	Opens the TeemTalk Session Wizard. See the other tables in this section for more information.
System beep	Enables the system beep sound.

#### **TeemTalk Session Wizard**

The following table describes the settings that are available under the Connection Information category in the TeemTalk Session Wizard.

Option	Description
Session Name	The name of the session.
Transport	The network transport to use for the connection. Valid transports are: <b>TCP/IP</b> , <b>Serial</b> , <b>SSH2</b> , and <b>SSL</b> .
Connection	The connection method to be used. Advanced connection options can be configured via the button.
Emulation	Emulation types are: hp70092, IBM 3151, IBM3270 Display, IBM3270 Printer, IBM5250 Display, IBM5250 Printer, MD Prism, TA6530, VT Series, and Wyse.

The following table describes the settings that are available under the Advanced Options category in the TeemTalk Session Wizard.

Option	Description
Emulation Printer	The HP TeemTalk emulation printer settings.
Auto Logon	The HP TeemTalk auto login settings.
Key Macros	The HP TeemTalk key macros settings.
Mouse Actions	The HP TeemTalk mouse actions settings.
Soft Buttons	The HP TeemTalk soft buttons settings.

Option	Description	
Attributes	The HP TeemTalk attributes settings.	
Auxiliary Ports	The HP TeemTalk auxiliary ports settings.	
Hotspots	The HP TeemTalk hotspots settings.	

The following table describes the settings that are available under the Preferences category in the TeemTalk Session Wizard.

Option	Description	
Start session connected	Starts the session connected.	
Show Status Bar	Displays the status bar for this connection.	

The following table describes additional settings that are available under the Preferences category in the TeemTalk Session Wizard.

Option	Description	
Show Configuration Bar	Displays the Configuration Bar.	
Save Current Window Position	Saves current window's size and position when you select <b>Save Preferences</b> . It will be restored on the next system launch.	
	<b>NOTE:</b> Select <b>Save Preferences</b> each time you change the window size or position to save the new values.	
Run in Full Screen Mode	Select to make the window full screen and remove the frame, soft buttons, menu, and configuration bars.	
	<b>NOTE:</b> This option does not become effective until the next system launch and overrides the <b>Show Configuration Bar</b> and <b>Save Current Window Position</b> options.	
Browser Command	In the box, type the command that runs your web browser, such as:	
	/ display html links Firefox	
Command Line Start Up Options	Use to specify an alternate location for the startup options.	
	<b>NOTE:</b> For specific information on HP TeemTalk Command Line Startup Options, see the <i>HP TeemTalk Terminal Emulator User Guide</i> .	

#### **Advanced**



NOTE: See Advanced connection settings on page 7 for information about the settings available under the Advanced category when editing a connection.

#### **XDMCP**



NOTE: These settings affect the connection you are currently configuring only.

## **Configuration**

The following table describes the settings that are available under the Configuration category when editing an XDMCP connection.

Option	Description
Name	The connection name.
Туре	The XDMCP connection type. Valid options are: chooser, query, and broadcast.
Address	This value is required if the <b>Type</b> value is set to <b>query</b> .
Use font server	Use a remote X font server instead of locally installed fonts.
Font server	Font server is not enabled unless the <b>Use font server</b> option is selected.
Configure display	Select to set the display configuration for the connection. If you do not set this configuration, the default configuration will be used.

#### **Advanced**



#### SSH

NOTE: These settings affect the connection you are currently configuring only.

## Configuration

The following table describes the settings that are available under the Configuration category when editing an SSH connection.

Option	Description	
Name	The connection name.	
Address	The IP address of the remote system.	
Port	The remote port to use for the connection.	
User name	The username to use for the connection.	
Run application	The application to run to make the connection.	
Compression	Select this option if you want to compress the data sent between the server and thin client.	
X11 connection forwarding	If the server has an X server on it, select this option to allow the user to open user interfaces from the SSH session and display them locally on the thin client.	
Force TTY allocation	Select this option and specify a command to initiate a temporary session to run the command. Once the command has completed, the session will terminate. If no command is specified, then the session will run normally as if the option were not selected.	
Foreground color	The default color of the text in the SSH session.	

Option	Description	
Background color	The default color of the background in the SSH session.	
Font	Valid options are: <b>7X14</b> , <b>5X7</b> , <b>5X8</b> , <b>6X9</b> , <b>6X12</b> , <b>7X13</b> , <b>8X13</b> , <b>8X16</b> , <b>9X15</b> , <b>10X20</b> , and <b>12X24</b> .	

#### **Advanced**



### **Telnet**

NOTE: These settings affect the connection you are currently configuring only.

#### **Configuration**

The following table describes the settings that are available under the Configuration category when editing a Telnet connection.

Option	Description	
Name	The name of the connection.	
Address	The IP address of the remote system.	
Port	The port to use on the remote system.	
Foreground color	The foreground color.	
Background color	The background color.	
Font	Valid options are: <b>7X14</b> , <b>5X7</b> , <b>5X8</b> , <b>6X9</b> , <b>6X12</b> , <b>6X13</b> , <b>7X13</b> , <b>8X13</b> , <b>8X16</b> , <b>9X15</b> , <b>10X20</b> , and <b>12X24</b> .	

#### **Advanced**



#### Custom

If you would like to install a custom Linux® application, you can use the Custom connection to allow you to open this application through Connection Manager.

NOTE: These settings affect the connection you are currently configuring only.

#### **Configuration**

The following table describes the settings that are available under the Configuration category when editing a Custom connection.

Option	Description	
Name	The connection name.	
Enter command to run	The command to run to make the remote connection.	

### **Advanced**



NOTE: See Advanced connection settings on page 7 for information about the settings available under the Advanced category when editing a connection.

# 5 HP True Graphics

HP True Graphics offloads rich multimedia content to the thin client's GPU, delivering high-frame-rate images and boosting efficiency.

## **Server-side requirements**

See the following table for a list of supported server-side products of the independent software vendor (ISV) you are using for your virtual desktop infrastructure (VDI).

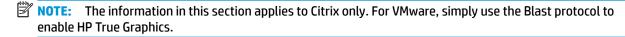
ISV	Supported products	
Citrix®	XenApp®/XenDesktop® 7.0 or newer	
	IMPORTANT: The Citrix server must support sending session data in H.264 format (a Citrix technology known as SuperCodec). H.264 is enabled by default and is processed using the DeepCompressionV2 encoder, a CPU-based compression algorithm.	
VMware <sup>®</sup>	VMware Horizon™ 6.0 and newer	
	VMware Horizon View™ 5.2 and 5.3	
	VMware View® 5.1	

## **Client-side requirements**

See the following table for a list of supported thin client operating systems and supported client-side software from the ISV you are using for your VDI.

Supported operating systems	Supported Citrix clients	Supported VMware clients
HP ThinPro 5.0 and newer	Citrix Receiver 13.1.1 and newer  NOTE: A version of Citrix Receiver that supports HP True Graphics is preinstalled starting with HP ThinPro 5.2 and is available as an add-on for HP ThinPro 5.0 and 5.1.	VMware Horizon Client 4.0 and newer (using the Blast protocol)

# **Client-side configuration**



## **Compression settings**

To enable HP True Graphics on HP ThinPro:

Select the Enable H264 Compression general setting for Citrix connections.

- NOTE: Some screen data, such as text, might be sent using methods other than H.264. In general, it is best to keep this feature enabled, but for troubleshooting or specific use cases, the following registry keys can be set to **0** to disable this feature:
  - root/ConnectionType/xen/general/enableTextTracking
  - root/ConnectionType/xen/general/enableSmallFrames

#### **Window settings**

To force remote applications to run in windowed mode:

Set the TWI Mode general setting for Citrix connections to Force Seamless Off.

### Monitor layout and hardware limitations

Consider the following limitations on monitor layout:

- Most configurations with a maximum of two monitors that have a 1920 × 1200 resolution are supported.
- HP t420 Thin Client: Due to its default BIOS configuration, this model uses HP True Graphics for one
  monitor only, by default. See <u>Enabling HP True Graphics for multiple monitors on the HP t420</u>
  on page 37 for more information.
- HP t630 Thin Client: This model supports a maximum of two monitors at 1920 × 1200 or one monitor at 3840 × 2160.
- HP t730 Thin Client: This model supports a maximum of three monitors at 1920 × 1200.
- Rotated monitors might not display correctly.
- If you are using HP True Graphics with two monitors and trying to play a video using HDX MediaStream, the video will fail because H.264 supports only two hardware decode sessions, which are being consumed by the monitors.
- NOTE: HDX MediaStream is also trying to leverage local hardware decoding of H.264, which causes the issue.

#### Enabling HP True Graphics for multiple monitors on the HP t420

To enable HP True Graphics for multiple monitors on the HP t420:

- Restart the thin client and press F10 to access the BIOS.
- Select Advanced ➤ Integrated Graphics.
- 3. Set Integrated Graphics to Force.
- Set UMA Frame Buffer Size to 512 MB.

After these steps are performed, the amount of memory available for graphics is expanded, and HP True Graphics can be used for two monitors.

TIP: These settings can also be configured via HPDM or via the BIOS tools included with HP ThinPro.

## **Tips & best practices**

Consider the following when using HP True Graphics:

- After connecting to a remote desktop, you can use Citrix HDX Monitor to determine which encoder is being used for the session by examining the Component\_Encoder value under the Graphics - Thinwire Advanced section. If the value reads DeepCompressionV2Encoder or DeepCompressionEncoder, then the server is properly sending the data in a format that is accelerated by HP True Graphics.
- NOTE: If legacy graphics are being forced via a server policy, such as CompatibilityEncoder or LegacyEncoder, the server is compressing graphics in a method that is compatible with older versions of Citrix clients, and HP True Graphics will not provide enhanced performance.
- HP True Graphics might provide some benefits to older versions of XenDesktop if using HDX 3D Pro.
   Benefits are not provided if HDX 3D Pro is used with the visual quality set to Always Lossless, because then the graphical information is not sent to the thin client in H.264 format.

#### **Active Directory integration** 6

By using Active Directory integration, you can force users to log in to the thin client using domain credentials. Optionally, those credentials can be encrypted and stored and then later supplied to remote connections as they start, which is a process known as single sign-on.



NOTE: Enabling authentication requires no special domain permissions.

There are two modes in which Active Directory integration can operate. By simply enabling authentication against the domain, domain credentials can be used for the following operations:

- Logging in to the thin client
- Starting a connection using Single Sign-On
- Switching to administrator mode using administrative credentials
- Unlocking a locked screen using the login credentials
- Overriding a locked screen using administrative credentials

The thin client can also be formally joined to the domain. This adds the thin client to the domain's database and might enable dynamic DNS, where the thin client informs the DNS server of changes in its IP address or hostname association. Unlike domain authentication, a formal join requires credentials of a domain user authorized to add clients to the domain. Joining to the domain is optional. All domain functions except dynamic DNS are available without joining.

## **Login screen**

When domain authentication is enabled, ThinPro displays a domain login screen upon startup. The login screen also includes options that might be necessary to configure before logging in.

The background desktop layout, login dialog style, login dialog text, and which buttons are available can all be adjusted via registry settings and/or configuration file settings. For more information, see the HP ThinPro white paper Login Screen Customization (available in English only).

If the system detects that the user tried to log in with expired credentials, they are prompted to update their credentials.

## Single sign-on

After a domain user has logged in, the credentials that were used can also be presented at startup to any connection configured to use them. This allows a user to sign in to the thin client and start Citrix, VMware Horizon View, and RDP sessions without having to enter their credentials again, for as long as they are logged in to the thin client.

## Desktop

Once the user has successfully logged in using domain credentials, an Active Directory icon is available on the taskbar. The user can select the icon to perform the following functions:

- Show who is logged in to the system
- Lock the screen
- Change the domain password

## Screen lock

The screen can be locked due to inactivity timeout or through manual locking. If the screen was locked by a domain user, the unlock dialog expects the user to provide the same domain password they used to log in. Like the login dialog, there are options provided, plus one additional function: screen unlock. If the screen-unlock button is selected, the unlock screen instead requires the root (administrator) password or any set of domain credentials in the domain admin group, which was designated during domain authentication setup. When the user supplies override credentials, the screen does not return to the desktop; it instead returns to the login screen.

## **Administrator mode**

In addition to the traditional method of using the root password to enter administrator mode, the domain credentials of a user in the designated domain administrator group can be used to switch to administrator mode.

## Settings and the domain user

When a domain user is logged in, any changes to settings are saved in a registry layer that applies only to that user. This includes newly created connections.

If the user has made no changes to system settings or connections, the system defaults will apply instead.

When the system is changed to administrator mode, settings and connection changes are no longer being made to the user-specific layer of the registry. Instead, while in administrator mode, all changes apply instead to the base-level registry. In that way, a change to a setting while in administrator mode applies to all users unless there is a user-specific, custom setting already specified.

# **Control Panel**

Control Panel lets you modify the system configuration.

NOTE: All Control Panel items are accessible in administrator mode. In user mode, only Control Panel items that are enabled by the administrator for use by users are accessible.

TIP: To specify which Control Panel items end users have access to, select the Control Panel button, select **Setup**, select **Customization Center**, and then select or clear items in the **Applications** list.

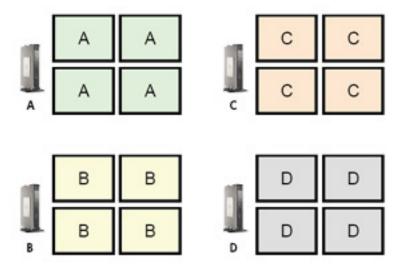
# **Peripherals**

Menu option	Description
Client Aggregation	Lets you combine thin clients to create additional screen real estate.
	For more information, see <u>Client aggregation on page 42</u> .
Display Preferences	Lets you configure and test display options.
	For more information, see <u>Display preferences on page 44</u> .
Keyboard Layout	Lets you change the keyboard layout to accommodate the language used by the keyboard.
Sound	Lets you control the playback and input audio levels.
Mouse	Lets you configure the mouse speed and whether mouse input is right-handed or left-handed.
	On thin clients with a TouchPad, this menu option also lets you disable or enable the TouchPad.
Printers	Lets you set up local and network printers. Local printers can be shared across the network.
	For more information, see <u>Configuring printers on page 44</u> .
Touch Screen	Lets you configure touch screen options.
USB Manager	Lets you configure the redirection options for USB devices.
	For more information, see Redirecting USB devices on page 45.
SCIM Input Method Setup	Lets you configure the Smart Common Input Method (SCIM) for Chinese, Japanese, and Korean input.
	For more information on this open source program, go to <a href="http://sourceforge.net/apps/mediawiki/scim/index.php?title=Main_Page">http://sourceforge.net/apps/mediawiki/scim/index.php?title=Main_Page</a> .

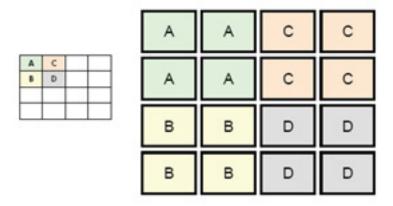
## **Client aggregation**

HP ThinPro-based thin clients can support up to four monitors, depending on the hardware model. If you need additional screen real estate, client aggregation allows up to four thin clients to be combined together making it possible to have a total of 16 monitors controlled by a single keyboard and mouse, without the need for additional hardware or software.

Assume that you have four thin clients, each with four monitors configured as a 2x2 array as shown below.

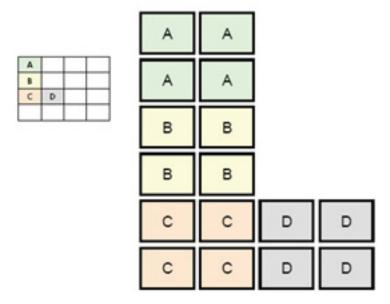


Client aggregation allows you to arrange the four thin clients on a 4x4 grid. The following illustration shows one possible arrangement.



When moving the mouse pointer off the right side of the thin client A monitors, for example, the pointer will appear on the left side of the thin client C monitors. Likewise, keyboard input will be redirected from thin client A to thin client C.

The following illustration shows another possible arrangement.



In this configuration, moving the mouse pointer off the right side of the thin client A monitors will cause it to appear on the upper 1/3 of the left side of the thin client D monitors. Similarly, moving the mouse pointer off the right side of the thin client B monitors will cause it to appear in the middle 1/3 of the left side of the thin client D monitors. Finally, moving the mouse pointer off the right side of the thin client C monitors will cause it to appear in the lower 1/3 of the left side of the thin client D monitors.

NOTE: Desktop windows cannot span or be moved between thin clients. Typically, each thin client will create windows based on its connection to an associated remote computer, and there won't be a need to move windows between thin clients.

The thin client physically connected to the keyboard and mouse is referred to as the aggregation server. The other thin clients are referred to as aggregation clients. When the mouse pointer is on one of the aggregation clients, the mouse and keyboard inputs (from the aggregation server) are encrypted and sent over the network to that aggregation client. The aggregation client decrypts the mouse and keyboard inputs and passes the inputs to the local desktop of the aggregation client.

Client aggregation is based on an open source software package called Synergy, with encryption provided by a package called stunnel.

#### **Configuring client aggregation**

Client aggregation configuration is a two-step process:

- 1. Configuring the aggregation clients on page 43
- 2. Configuring the aggregation server on page 44

#### **Configuring the aggregation clients**

Perform this procedure on each aggregation client:

- 1. Select **Peripherals > Client Aggregation** in Control Panel.
- Select Client.
- **3.** Enter the server hostname or IP address of the aggregation server in the field.
- 4. Select Apply.

#### Configuring the aggregation server

To configure the aggregation server:

- Select Peripherals > Client Aggregation in Control Panel.
- Select Server.
- 3. The aggregation server is displayed in a blue box that contains its hostname. Select and drag the aggregation server to the desired location in the 4x4 grid.
- **4.** Select the location in the 4x4 grid where you want to place the first aggregation client, type its hostname or IP address, and then press Enter. The aggregation client is displayed in a green box.
- 5. Add up to two additional aggregation clients in the 4x4 grid, if desired.

Placement of the aggregation server and the aggregation clients in the 4x4 grid can be modified at any time by clicking and dragging the corresponding box to a new location.

Once the aggregation clients and the aggregation server have been configured, they automatically attempt to establish encrypted communications with each other. Select **Status** to view the connection status between computers.

## **Display preferences**

HP ThinPro allows you to create profiles for display preferences and apply different profiles to different monitors. A profile includes resolution, refresh rate, bit depth, and orientation.

To configure display profiles:

- 1. Select Peripherals > Display Preferences in Control Panel.
- Configure the options as necessary, and then select Apply.
- NOTE: The options may differ depending on the hardware model.

See the following tips about when customizing display profiles would be useful:

- Some applications might require a specific resolution or bit depth to function properly.
- Some applications might require the display to be rotated.
- Using a 16-bit color depth should improve Citrix and RDP connection performance because less data has to be transmitted over the network or sent to the graphics chip.
- AMD-based platforms (t520, t610, t620) offer only 32-bit color depth. The t505 and t510 offer either 16-bit or 32-bit color depth. In all cases, 32-bit color depth actually uses 24 bits.
- An administrator might want to standardize on one display profile, even though there are many different monitors across the organization.

To quickly change the display configuration when using external monitors (mobile thin clients only):

Press Fn + F4.

## **Configuring printers**

To configure a printer:

- Select Peripherals > Printers in Control Panel.
- 2. In the **Printing** dialog, select **Add**.
- 3. In the **New Printer** dialog, select the printer to configure, and then select **Forward**.

- NOTE: If you select a serial printer, be sure to input the correct settings on the right side of the dialog, or the printer might not function correctly.
- **4.** Select the make of the printer. If you are unsure, select the **Generic (recommended)** option, and then select **Forward**.
- 5. Select the model of and driver for the printer, and then select **Forward**.
- NOTE: If you are unsure of the printer model or which driver to use, or if the model of your printer is not listed, select **Back** and try using the **Generic (recommended)** option for the make of the printer.

If using the **Generic (recommended)** make, be sure to select **text-only (recommended)** for the model and **Generic text-only printer [en] (recommended)** for the driver.

- **6.** Fill in optional information about the printer, such as its name and location.
- NOTE: HP recommends that you enter in the correct driver name into the **Windows Driver** box. Without a driver to map to when connecting to a remote session, Windows might not use the correct driver and printing might not work. The driver must also be installed on the Windows server for the printer to work properly.
- Select Apply, and then print a test page if desired.

Repeat this process to configure additional printers if necessary.

TIP: The most common problem is that the wrong driver is being used for the printer. To change the driver, right-click the printer and select **Properties**, and then change the make and model.

### **Redirecting USB devices**

To redirect USB devices:

- Select Peripherals > USB Manager in Control Panel.
- On the **Protocol** page, select a remote protocol.

If the setting is **Local**, you can also specify the options **allow devices to be mounted** and **mount devices read-only**.

- 3. On the **Devices** page, you can enable or disable redirection for individual devices if necessary.
- 4. On the **Classes** page, you can select specific device classes to be redirected to remote sessions.
- 5. When finished, select **OK**.

## Setup

Menu option	Description
Background Manager	Lets you configure the background theme and dynamically display system information (such as the thin client's hostname, IP address, hardware model, and MAC address) in the background.
	For more information, see the HP ThinPro white paper <i>Login Screen Customization</i> (available in English only).
Date and Time	Lets you configure the time zone and the date and time options.
Firewall Manager	Lets you configure firewall settings.
Language	Lets you display the HP ThinPro interface in a different language.

Menu option	Description
Network	Lets you configure network settings.
	For more information, see <u>Network settings on page 46</u> .
Power Manager	Lets you configure power management settings such as a screensaver, CPU settings, when to turn off the display, and when to enter sleep mode.
Security	For more information, see <u>Security settings on page 50</u> .
Customization Center	Lets you do the following:
	Switch between the ThinPro and Smart Zero configurations
	<ul> <li>Configure desktop and taskbar options</li> </ul>
	<ul> <li>Select which connection types and Control Panel items end users have access to</li> </ul>
	For more information, see <u>Customization Center on page 51</u> .

## **Network settings**

Network settings can be configured using the Network Manager. To open the Network Manager:

Select Setup > Network in Control Panel.

See the following sections for more information about the different tabs in the Network Manager:

- Wired network settings
- Wireless network settings
- DNS settings
- IPSec rules
- Configuring VPN settings
- Configuring HP Velocity

## **Wired network settings**

The following table describes the options available in the **Wired** tab of the Network Manager.

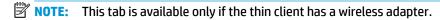
Option	Description	
Enable IPv6	Enables IPv6. IPv4 is used by default, and they cannot be used at the same time.	
Ethernet Speed	Lets you set the Ethernet Speed. If your switch or hub does not have a special requirement, leave this at the default setting of <b>Automatic</b> .	
Connection Method	Lets you choose between <b>Automatic</b> and <b>Static</b> . If your network environment is using DHCP, then the <b>Automatic</b> option should work without any further configurations needed.	
	If <b>Static</b> is selected, the <b>Static Address Configuration</b> settings will become available. Be sure to input these values according to whether you are using IPv4 or IPv6.	
MTU	Allows you to enter the maximum transmission unit (in bytes).	
Security Settings	Lets you set the authentication setting to one of the following:	
	<ul> <li>None</li> </ul>	

Option	Description	
	• 802.1X-TTLS	
	• 802.1X-PEAP	
	• 802.1X-TLS	
	Note the following about TTLS and PEAP:	
	<ul> <li>The Inner Authentication option should be set to whatever your server supports.</li> </ul>	
	<ul> <li>The CA Certificate setting should point to the server's certificate on the local thin client.</li> </ul>	
	<ul> <li>The Username and Password are the user's credentials.</li> </ul>	
	Note the following about TLS:	
	<ul> <li>The CA Certificate setting should point to the server's certificate on the local thin client.</li> </ul>	
	<ul> <li>If your Private Key file is .p12 or .pfx, then the User Certificate setting can be left blank.</li> </ul>	
	<ul> <li>The Identity setting should be the username that corresponds to the user certificate.</li> </ul>	
	<ul> <li>The Private Key Password setting is the password of the user's private key file.</li> </ul>	

## **Wireless network settings**

Use this tab to add, edit, and delete wireless profiles that correspond to wireless networks.

The following tables describe the options available when adding or editing a wireless profile.



You can also access these settings by selecting the network status icon in the taskbar.

Use the **Wireless** tab to configure general settings.

Option	Description	
Scan AP	Scans for available wireless networks.	
SSID	Use this box to manually enter the SSID of the wireless network if it is not found by the scan.	
Wireless Band	Select Auto, 2.4GHz, or 5GHz.	
SSID Hidden	Enable this option if the SSID of the wireless network is set to be hidden (not broadcasting).	
Enable IPv6	Enables IPv6. IPv4 is used by default, and they cannot be used at the same time.	
Enable Power Management	Enables the power management feature for the wireless adapter.	
Connection Method	Lets you select between <b>Automatic</b> and <b>Static</b> . If your network environment is using DHCP, then the <b>Automatic</b> option should work without any further configurations.	
	If <b>Static</b> is selected, the <b>Static Address Configuration</b> settings will become available. Be sure to input these values according to whether you are using IPv4 or IPv6.	
Security Settings	Lets you set the authentication setting to one of the following:	
	• None	
	• WEP	
	• WPA/WPA2-PSK	
	• 802.1X-TTLS	

Option	Description	
	• 802.1X-PEAP	
	• 802.1X-TLS	
	• EAP-FAST	
	For WEP and WPA/WPA2-PSK, you just need to enter the network key and select <b>OK</b> .  For EAP-FAST, set <b>Anonymous Identity, Username, Password</b> , and <b>Provisioning Method</b> . You do not need to change the PAC file settings.  See <u>Wired network settings on page 46</u> for more information about TTLS, PEAP, and TLS.	
Auto Connect	This option is reserved for future use.	
Enable Wireless	Enables the wireless adapter.	

## Use the **IPv4** tab to configure IPv4 connection settings.

Option	Description	
IPv4 Enabled	Enables IPv4.	
IPv4 Method	Lets you select between <b>Automatic</b> and <b>Static</b> . If your network environment is using DHCP, then the <b>Automatic</b> option should work without any further configurations.	
	If <b>Static</b> is selected, the <b>Static Address Configuration</b> settings are displayed, and you must enter the IPv4 settings.	

## Use the **IPv6** tab to configure IPv6 connection settings.

Option	Description
IPv6 Enabled	Enables the usage of an IPv6 global address.
	NOTE: HP ThinPro tries to obtain an IPv6 global address via route advertisement or DHCPv6.
IPv6 Method	Lets you select between <b>Automatic</b> and <b>Static</b> . If your network environment is using DHCP, then the <b>Automatic</b> option should work without any further configurations.
	If <b>Static</b> is selected, the <b>Static Address Configuration</b> settings are displayed, and you must enter the IPv6 settings.

## Use the **Security** tab to configure the connection security settings.

Option	Description
Authentication	Lets you set the authentication setting to one of the following:
	<ul> <li>None</li> </ul>
	• WEP
	WPA/WPA2-PSK
	WPA/WPA2 Enterprise-TTLS
	WPA/WPA2 Enterprise-PEAP
	WPA/WPA2 Enterprise-TLS

Option	Description	
	<ul> <li>EAP-FAST</li> <li>For WEP and WPA/WPA2-PSK, you just need to enter the network key and select <b>OK</b>.</li> </ul>	
	For EAP-FAST, set <b>Anonymous Identity, Username</b> , <b>Password</b> , and <b>Provisioning Method</b> . You do not need to change the PAC file settings.	
	See Wired network settings on page 46 for more information about TTLS, PEAP, and TLS.	

#### **DNS** settings

The following table describes the options available in the **DNS** tab of the Network Manager.

Option	Description	
Hostname	This is generated automatically according to the MAC address of the thin client. You can alternatively set a custom hostname.	
DNS Servers	Use this box to set custom DNS server information.	
Search Domains	Use this box to restrict the domains that are searched.	
HTTP Proxy	Use these boxes to set proxy server information using the following format:	
FTP Proxy	http:// <address>:<port></port></address>	
HTTPs Proxy	HP recommends using the $\mathtt{http://prefix}$ for all three proxy settings because it is supported better.	
	<b>NOTE:</b> The proxy settings are set to the <b>http_proxy</b> , <b>ftp_proxy</b> , and <b>https_proxy</b> environmental variables for the system.	

#### **IPSec rules**

Use this tab to add, edit, and delete IPSec rules. An IPSec rule should be the same for each system that uses IPSec to communicate.

When configuring an IPSec rule, use the General tab to set the rule's information, addresses, and authentication method. The Source Address is the IP address of the thin client, and the Destination Address is the IP address of the system that the thin client is going to communicate with.



NOTE: Only the PSK and Certificate authentication types are supported. Kerberos authentication is not supported.

Use the **Tunnel** tab to configure settings for tunnel mode.

Use the **Phase I** and **Phase II** tabs to configure advanced security settings. The settings should be the same for all peer systems that communicate with each other.



NOTE: An IPSec rule can also be used to communicate with a computer running Windows.

#### **Configuring VPN settings**

HP ThinPro supports two types of VPN:

- Cisco
- **PPTP**

Enable the **Auto Start** option to start the VPN automatically.

Note the following about creating a VPN using Cisco:

- The Gateway is the gateway's IP address or hostname.
- The **Group name** and **Group password** are the IPSec ID and IPSec password.
- The **Domain** setting is optional.
- The User name and User password are the user credentials that have rights to create a VPN connection
  on the server side.
- The **Security Type** should be set the same as it is on the server side.
- The NAT Traversal option should be set according to your VPN environment.
- The **IKE DH Group** option sets the Diffie-Hellman group to use for VPN.
- The **PFS Type** option sets the Diffie-Hellman group to use for Perfect Forward Secrecy.

Note the following about creating a VPN using PPTP:

- The Gateway is the gateway's IP address or hostname.
- The **NT Domain** setting is optional.
- The User name and User password are the user credentials that have rights to create a VPN connection on the server side.

#### **Configuring HP Velocity**

Use the **HP Velocity** tab to configure HP Velocity settings. Go to <a href="http://www.hp.com/go/velocity">http://www.hp.com/go/velocity</a> for more information about the HP Velocity modes.

## **Security settings**

Security settings can be configured using the Security Manager. To open the Security Manager, select **Setup > Security** in Control Panel.

See the following sections for more information about the different tabs in the Security Manager.

- Local Accounts on page 50
- Encryption on page 51
- Options on page 51

#### **Local Accounts**

The Local Accounts tab can be used to change the local root and user account passwords or to disable authentication using those accounts.

CAUTION: Disabling the root and/or user accounts might leave your system in an unusable state unless Active Directory authentication is enabled. For example, if the root account is disabled, you will only be able to change to administrator mode using domain credentials of an administrator. However, disabling the local accounts might improve security when Active Directory authentication is enabled because you no longer have to maintain and update a shared secret such as the thin client's root password.

If Active Directory authentication has been used and there is any cached data for domain users on the thin client, you can also delete the user's cached data from this tab.

NOTE: If the user logged in using a domain account, they cannot delete their own account's data because it would leave the system in an indeterminate state.

#### **Encryption**

Active Directory credentials and other secrets can be hashed for functions like screen-unlock and/or encrypted and stored on the system for single sign-on.

The hash algorithm for creating a password's hash can be selected from this menu. The default, scrypt, is a well-accepted key derivation function. Argon2, another key derivation function is also available, as well as conventional hashes SHA-256 and SHA-512. The advantage of a key derivation function is that it is computationally expensive to compute a rainbow table that matches plain-text passwords to precomputed hash values, whereas conventional hashes are meant to execute as fast as possible. All hashes are stored with 128 or more bits of random salt which changes each time the password hash is computed and stored.

Encrypted passwords are used in situations where they can be reversed and supplied to connections when they start (single sign-on). The encryption algorithm can be selected here from a wide variety supported by OpenSSL. Unless there is a good reason to select a different value, HP recommends using the default encryption algorithm, which is generally regarded as a modern, secure algorithm by the security community. The number of salt bits and key bits will vary from one algorithm to another and you can get details by pressing the info button next to the algorithm selector. Encryption keys are unique per thin client and are stored in a place that only administrators can read. Furthermore, only certain authorized applications on the system can do decryption.

Both hashes and encrypted secrets can be set with a time-to-live. If the amount of time between when the secret was hashed or encrypted and the time when it is used or decrypted exceeds the time-to-live, the hashmatch or decryption will fail.

#### **Options**

**Local user must log in**: If this option is selected when Active Directory authentication is disabled, the login screen still appears at startup and logout. In this situation, the local user or root credentials must be used to gain access to the system.

**Enable secret peek**: If enabled, most password and secret entry fields on the system display a small eyeball icon on the right side. When that eyeball icon is selected by pressing and holding down the left mouse button, the secret is displayed in plain text as long as the mouse button is held down. As soon as the button is released, the secret is again obscured.

**Use domain text entry**: If enabled, a separate Domain input field is provided for the domain name where applicable. If disabled, the domain is determined by the value entered in the User field instead. For instance, if the User field contains "mike@mycorp", the domain is assumed to be "mycorp". If the user field is "graycorp \mary", the domain is assumed to be "graycorp".

**Allow administrators to override screen lock**: If enabled, you can override a locked screen and return it to the login screen or ThinPro desktop, just as if the user had manually logged out of the thin client.

#### **Customization Center**

To open Customization Center:

Select Setup > Customization Center in Control Panel.

The button at the top of the **Desktop** page can be used to switch between the ThinPro and Smart Zero configurations. See <u>Choosing an OS configuration on page 2</u> for more information about the differences between the two configurations.



NOTE: When switching from ThinPro to Smart Zero, if you have configured a single connection, that connection is used automatically as the Smart Zero connection. If you have configured multiple connections, you are prompted to select the connection to use.

Before switching to Smart Zero mode, the domain authentication function on the thin client should be disabled. Domain authentication and Smart Zero mode are incompatible.

The following table describes the rest of the options available on the **Desktop** page.

Option	Description
Launch the Connection Manager at start up	When enabled, Connection Manager launches automatically at system startup.
Enable right-click menu	Disable this option to disable the context menu that appears when you right-click the desktop
Enable X host access control security	When enabled, only the systems listed in the <b>XHost Access Control List</b> area are allowed to remotely control the thin client.
Enable USB Update	Enables updates to be installed from a USB flash drive. See <u>USB updates on page 74</u> for more information.
Authenticate USB Update	Disable this option to allow end users to install updates via USB.
Allow user to switch to administrator mode	Disable this option to remove the <b>Administrator/User Mode Switch</b> option from Control Panel in user mode.
Time before cancelling administrator mode	Specifies the idle timeout (in minutes) after which administrator mode will be terminated. If set to 0 or negative, administrator mode will never be automatically terminated.

Use the **Connections** and **Applications** pages to select which connection types and Control Panel applications are available in user mode.

Use the **Taskbar** page to configure the taskbar.

# Management

Menu option	Description
Active Directory	For more information, see <u>Active Directory configuration</u> on page 54.
HPDM Agent	Lets you configure the HP Device Manager (HPDM) Agent.
	For more information, see the Administrator Guide for HPDM.
Automatic Update	Lets you configure the Automatic Update server manually.
	For more information, see <u>HP Smart Client Services on page 62</u> .
Component Manager	Lets you remove system components.
	For more information, see <u>Component Manager on page 53</u> .
Factory Reset	Lets you restore the thin client to its default factory configuration.
Snapshots	Lets you restore the thin client to a previous state or to its default factory configuration.
SSHD Manager	Enables access through a secure shell.
ThinState	HP ThinState lets you make a copy of or restore the entire operating system image or just its configuration settings.

Menu option	Description
	For more information, see <u>HP ThinState on page 55</u> .
VNC Shadow	Lets you configure VNC Shadowing options.
	For more information, see <u>VNC Shadowing on page 58</u> .
Wireless Statistics	Lets you view information about wireless access points.

## **Component Manager**

The Component Manager lets you remove system components that are not going to be used in your environment, which might be desirable to reduce the image size. For example, if Citrix connections are never used in your environment, you might want to remove the Citrix component.

As components are removed, the new configuration can be tested before you apply the changes permanently. You can also undo changes that were made, if the changes have not yet been applied permanently.

IMPORTANT: After the new configuration is applied permanently, all snapshots are removed and a new factory snapshot is created. Removed components cannot be restored after this point.

To open the Component Manager:

Select Management > Component Manager in Control Panel.

#### **Removing components**

To remove components:

- 1. In the Component Manager, select the desired components.
- TIP: To select multiple components, use Ctrl or Shift.
- Select Remove Component(s).
- 3. If the confirmation dialog appears, select **OK**.
- **4.** After the components are removed, test the new configuration.

#### **Undoing a change**

You can undo each change, one at a time, if the changes have not yet been applied permanently. A restart of the thin client is required after each undo.

To undo a change made with the Component Manager:

- 1. In the Component Manager, select **Revert Last Change**.
- Select Yes to restart the thin client.

Repeat this process for as many changes you want to undo.

IMPORTANT: If you take a snapshot of the image while testing a new configuration, you cannot undo the changes via the Component Manager. Those changes can be undone only by restoring a previous snapshot via the Snapshots tool. However, this does not work if the changes have already been applied permanently, because that function deletes all existing snapshots. If changes have already been applied permanently, you must reinstall the operating system to restore most removed components. Some components (such as Citrix, RDP, and VMware Horizon View) might be available as add-ons on the web and can be restored by reinstalling them.

#### **Applying the changes permanently**

To apply changes made with the Component Manager permanently:

- IMPORTANT: After the new configuration is applied permanently, all snapshots are removed and a new factory snapshot is created. Removed components cannot be restored after this point.
  - 1. In the Component Manager, select Apply Component Configuration.
  - Select Yes.

### **Active Directory configuration**

#### **Status tab**

This control lets you activate or deactivate authentication against a domain, joining the domain, and various domain-related options.

After you make a change to domain parameters on the Status tab, the page shows a pending action and you must select **Apply** to make that action happen. Joining or unjoining the domain requires credentials with permissions to perform that operation. After enabling authentication or joining the domain, some of the subparameters might be marked as read-only because it is not possible to change them at that point in time. Instead, you must unjoin or disable authentication altogether and then apply the changes. Then you can reenable authentication or join with altered sub-parameters.

Option	Description
Domain name	If the thin client can determine the domain name using DHCP options, it will be displayed here. Otherwise you will have to enter the fully-qualified domain name manually.
Authenticate against domain	When enabled, domain credentials can be used, as outlined in the Active Directory Integration section of this guide.
Require thin client login	This is on by default, and it causes the system to boot up into the domain login screen. If disabled, domain credentials can still be used to switch to administrator mode or to override a locked screen, but single sign-on will not be available.
Workgroup	Usually this is auto-detected from information provided by network servers, but you can use this as a manual override if you have an unusual network topology.
Domain controllers	These are usually detected using DNS lookups, but you can specify them manually if your network is not supplying that information.
Join the thin client to the domain	As explained in the chapter on Active Directory Integration, this option lets you formally add the thin client to the Active Directory's databases.
Organizational Unit (OU)	The thin client is usually added to the "Computers" OU of the database, but you can manually enter a different value here if your database schema demands it.
Dynamic DNS	If enabled, the thin client will try to update the DNS server whenever its IP-address/ hostname association changes.

#### **Options tab**

Option	Description	
Enable single sign-on	If enabled, a password supplied at login is encrypted and saved on the system. When a connection starts with SSO credentials configured, it can decrypt the password and pass it to the connection so that it can be used for remote login.	

Option	Description
Domain login group	If enabled, login is restricted to users in the listed domain group.
Domain admin group	If enabled, escalation to administrator mode and screen-lock override is limited to members of the listed domain group.
Enable cached domain login	If enabled, a hash of the user's password is saved on the system and can be used for login even when the Active Directory server is inaccessible.
Retain user preferences at logout	If this option is enabled, any setting changes made by a domain user are stored in a place where those settings are applied only to that user. If this option is disabled, any such userspecific changes are discarded when the user logs out.
Allow domain password changes	If enabled, expired passwords result in a prompt that allows the user to update their password, and they can manually update their password using the user icon on the taskbar.

#### **HP ThinState**

HP ThinState allows you to capture and deploy an HP ThinPro image or configuration (profile) to another thin client of compatible model and hardware.

#### Managing an HP ThinPro image

#### Capturing an HP ThinPro image to an FTP server

To capture an HP ThinPro image to an FTP server:

- IMPORTANT: The directory on the FTP server where you intend to save the captured image must already exist before initiating the capture.
  - Select Management > ThinState in Control Panel.
  - 2. Select the HP ThinPro image, and then select Next.
  - 3. Select make a copy of the HP ThinPro image, and then select Next.
  - 4. Select a FTP server, and then select Next.
  - 5. Enter the FTP server information in the fields.
  - NOTE: The name of the image file is set by default to be the thin client's hostname.

Select **Compress the image** if you want to compress the captured image.

- NOTE: The HP ThinPro image file is a simple disk dump. The uncompressed size is about 1 GB, and a compressed image without add-ons is approximately 500 MB.
- Select Finish.

When the image capture begins, all applications stop and a new window appears showing the progress. If a problem occurs, select **Details** for information. The desktop reappears after the capture is complete.

#### Deploying an HP ThinPro image using FTP or HTTP

IMPORTANT: If you abort a deployment, the previous image will not be restored and the contents of the thin client's flash drive will be corrupted.

To deploy an HP ThinPro image using FTP or HTTP:

- Select Management > ThinState in Control Panel.
- 2. Select the HP ThinPro image, and then select Next.
- 3. Select **restore** an **HP ThinPro** image, and then select **Next**.
- Select either the FTP or HTTP protocol, and then enter the server information in the fields.
- **NOTE:** The **Username** and **Password** fields are not required if you are using the HTTP protocol.
- 5. Select **Retain HP ThinPro Configuration** if you want to preserve all previously configured settings.
- 6. Select Finish.

When the image deployment begins, all applications stop and a new window appears showing the progress. If a problem occurs, select **Details** for information. The desktop reappears after the deployment is complete.

NOTE: An MD5sum check is done only if the MD5 file exists on the server.

#### Capturing an HP ThinPro image to a USB flash drive

To capture an HP ThinPro image to USB flash drive:

- IMPORTANT: Back up any data on the USB flash drive before you begin. HP ThinState automatically formats the flash drive to create a bootable USB flash drive. This process will erase all data currently on the flash drive.
  - Select Management > ThinState in Control Panel.
  - Select the HP ThinPro image, and then select Next.
  - 3. Select make a copy of the HP ThinPro image, and then select Next.
  - 4. Select create a bootable USB flash drive, and then select Next.

The thin client restarts and then prompts you to enter a USB flash drive.

- Insert a USB flash drive into a USB port on the thin client.
- Select the USB flash drive, and then select Finish.

A new window displays the progress. If a problem occurs, select **Details** for information. The desktop reappears after the capture is complete.

#### Deploying an HP ThinPro image with a USB flash drive

To deploy an HP ThinPro image with a USB flash drive:

- IMPORTANT: If you abort a deployment, the previous image will not be restored and the contents of the thin client's flash drive will be corrupted. In this state, the thin client must be reimaged using a USB flash drive.
  - Turn off the target thin client.
  - Insert the USB flash drive.
  - 3. Turn on the thin client.
- NOTE: The screen remains black for 10-15 seconds while the thin client detects and boots from the USB flash drive. If the thin client fails to boot from the USB flash drive, try unplugging all other USB devices and repeat the procedure.

#### Managing a client profile

A client profile contains the connections, settings, and customizations that you configured using Connection Manager and Control Panel. A profile is saved in a configuration file that is specific to the version of HP ThinPro in which it was created.

NOTE: A client profile can also be preconfigured and deployed using Profile Editor and Automatic Update (see <a href="Profile Editor on page 66">Profile Editor on page 66</a> and <a href="HP Smart Client Services on page 62">HP Smart Client Services on page 62</a> for more information).

#### Saving a client profile to an FTP server

To save a client profile to an FTP server:

- **IMPORTANT:** The directory on the FTP server where you intend to save the profile must already exist before initiating the save.
  - Select Management > ThinState in Control Panel.
  - **2.** Select **the HP ThinPro configuration**, and then select **Next**.
  - 3. Select save the configuration, and then select Next.
  - 4. Select on a FTP server, and then select Next.
  - 5. Enter the FTP server information in the fields.
  - 6. Select Finish.

#### Restoring a client profile using FTP or HTTP

To restore a client profile using FTP or HTTP:

- Select Management > ThinState in Control Panel.
- **2.** Select **the HP ThinPro configuration**, and then select **Next**.
- **3.** Select **restore a configuration**, and then select **Next**.
- Select on a remote server, and then select Next.
- 5. Select either the FTP or HTTP protocol, and then type the server information in the fields.
- NOTE: The **Username** and **Password** fields are not required if you are using the HTTP protocol.
- 6. Select Finish.

#### Saving a client profile to a USB flash drive

To save a client profile to a USB flash drive:

- 1. Insert a USB flash drive into a USB port on the thin client.
- 2. Select Management > ThinState in Control Panel.
- 3. Select the HP ThinPro configuration, and then select Next.
- Select save the configuration, and then select Next.
- 5. Select **on a USB key**, and then select **Next**.
- 6. Select the USB flash drive.
- Select Browse.
- 8. Navigate to the desired location on the USB flash drive and assign a file name to the profile.

- 9. Select Save.
- 10. Select Finish.

#### Restoring a client profile from a USB flash drive

To restore a client profile from a USB flash drive:

- Insert the USB flash drive containing the profile into a USB port on the target thin client.
- Select Management > ThinState in Control Panel.
- 3. Select the HP ThinPro configuration, and then select Next.
- **4.** Select **restore a configuration**, and then select **Next**.
- 5. Select **on a USB key**, and then select **Next**.
- **6.** Select the USB key.
- Select Browse.
- 8. Double-click the desired configuration file on the USB key.
- Select Finish.

## **VNC Shadowing**

Virtual Network Computing (VNC) is a remote desktop protocol that allows you to see the desktop of a remote computer and control it with your local mouse and keyboard.

To access the VNC Shadow tool:

Select Management > VNC Shadow in Control Panel.



The following table describes the options available in the VNC Shadow tool.

Option	Description
Enable VNC Shadow	Enables VNC Shadowing.
VNC Read Only	Makes the VNC session read-only.
VNC Use Password	Makes a password required when accessing the thin client using VNC. Select <b>Set Password</b> to set the password.
Stop Shadowing	If enabled, a <b>Stop Shadowing</b> button shows in the top left corner of the remote system which stops VNC shadowing when pressed.
VNC Notify User to Allow Refuse	Enables a notification dialog on the remote system that informs the remote user when someone is attempting to connect using VNC. The user can refuse either allow or refuse access.
Automatically close the notification after x seconds	Closes the User Notification Message after x seconds.
User Notification Message	Allows you to display a message in the notification dialog to the remote user.
Refuse connections in default	If enabled, the VNC connection will be refused by default when the timer expires.
Re-set VNC server right now	Resets the VNC server after applying the new settings.

## **Advanced**

Menu option	Description
Certificates	Opens the Certificate Manager, which lets you easily import, view, or remove certificates.
	For more information, see <u>Certificate Manager on page 59</u> .
DHCP Options	Lets you configure DHCP options.
	For more information, see <u>DHCP options on page 60</u> .
HP License	Lets you view the HP End-User License Agreement (EULA).
SCEP Manager	Allows for network-based certificate management.
Serial Manager	Lets you configure serial devices.
Keyboard Shortcuts	Lets you create, modify, and delete keyboard shortcuts.
Snipping Tool	Lets you take a snapshot of a rectangular selection of the screen, a specific window, or the entire screen.
Task Manager	Lets you monitor the CPU usage and the CPU usage history for the thin client.
Text Editor	Opens a basic text editor for viewing and editing text files.
X Terminal	Lets you execute Linux commands.

#### **Certificates**



#### **Certificate Manager**

To open the Certificate Manager:

Select **Advanced > Certificates** in Control Panel.

Use the Certificate Manager to manually install a certificate from a certificate authority (CA). This action copies the certificate to the user's local certificate store (/usr/local/share/ca-certificates) and configures OpenSSL to use the certificate for connection verification.

If desired, use Profile Editor to attach the certificate to a profile, as described in Adding certificates to a client profile on page 68.



NOTE: Generally, a self-signed certificate will work as long as it is valid according to specification and can be verified by OpenSSL.

#### **SCEP Manager**

To open the SCEP Manager:

Select **Advanced** > **SCEP Manager** in Control Panel.

Use the SCEP Manager when you need to enroll or renew client-side certificates from a CA.

During an enrollment or renewal, the SCEP Manager generates the thin client's private key and certificate request, and then it sends the request to the CA on the SCEP server. When the CA issues the certificate, the certificate is returned and placed in the thin client's certificate store. OpenSSL uses the certificate for connection verification.

NOTE: Before enrollment, make sure that the SCEP server is configured properly.

Use the **Identifying** tab of the SCEP Manager to enter information about the user, if desired.

NOTE: The Common Name is required and is the thin client's Fully Qualified Domain Name (FQDN) by default. The other information is all optional. The Country or Region is entered as two letters, such as US for the United States and CN for China.

Use the **Servers** tab of the SCEP Manager to add SCEP servers and enroll or renew certificates.

TIP: When entering a new SCEP server, save the server information first, and then use the **Settings** button to go back and do an enrollment.

#### **DHCP options**

To open the DHCP Option Manager:

Select **Advanced > DHCP Options** in Control Panel.

The DHCP Option Manager displays details of the DHCP options that are requested by the thin client.

🏋 TIP: The drop-down list in the lower-left corner of the DHCP Option Manager allows you to filter which DHCP tags are displayed.

To direct the thin client to request or ignore specific DHCP options:

Select or deselect the check boxes in the **Requested** column.

If a pencil is shown in the **DHCP Code** column, the code number can be changed in case there is a conflict on your DHCP server over a particular code number.

To change a DHCP code:

- Double-click the DHCP code and type a new number.
  - NOTE: Changeable DHCP codes can only be changed while that DHCP option is enabled in the Requested column.

To learn more about how a DHCP option is used on the thin client and on the DHCP server:

Select the icon in the **Info** column of that option.

#### **System information** 8

Select the **System Information** button on the taskbar to view system, network, and software information. The following table describes the information that is displayed on each panel.

Panel	Description	
General	Displays information about the BIOS, operating system, CPU, and memory.	
Network	Displays information about the network interface, gateway, and DNS settings.	
Net Tools	Provides the following tools for monitoring and troubleshooting purposes:	
	<ul> <li>Ping—Specify an IP address of another device on the network to attempt to establish contact.</li> </ul>	
	<ul> <li>DNS Lookup—Use this tool to resolve a domain name into an IP address.</li> </ul>	
	<ul> <li>Trace Route—Use this tool to track the path that a network packet takes from one device to another.</li> </ul>	
Software Information	Displays a list of installed add-ons on the <b>Service Packs</b> tab and software version information on the <b>Software Installed</b> tab.	
	TIP: You can also access the Administrator Guide (this document) from this screen.	
System Logs	Displays the following logs:	
	Authorization and Security	
	<ul> <li>Connection Manager</li> </ul>	
	DHCP Leases	
	General System Log	
	• Kernel	
	Network Manager	
	Smart Client Services	
	X Server	
	In administrator mode, the debug level can be changed to display additional information that might be requested by HP support for troubleshooting purposes.	
	Select <b>Diagnostic</b> to save a diagnostic file. For more information, see <u>Using system diagnostics</u> to troubleshoot on page 71.	



NOTE: See SystemInfo on page 145 for information about registry keys that can be used to hide the System Information screens.

# **HP Smart Client Services**

HP Smart Client Services is a set of server-side tools that enable you to configure client profiles that can be distributed to large numbers of thin clients. This function is called Automatic Update.

HP ThinPro detects an Automatic Update server upon startup and configures settings accordingly. This simplifies device installation and maintenance.

# Supported operating systems

HP Smart Client Services supports the following operating systems:

- Windows 7
- Windows Server® 2008
- Windows Server 2008 R2
- Windows Server 2003
- Windows Vista®
- Windows XP



NOTE: The installer is 32-bit only, although it is supported on both the 32-bit and 64-bit versions of the Windows operating system.

# **Prerequisites for HP Smart Client Services**

Before installing HP Smart Client Services, verify the configuration and installation status of the following components:

- Internet Information Services (IIS)
- .NET Framework 3.5

For information about installing or enabling these components on the operating system that you are using for the server, go to http://www.microsoft.com.

## Obtaining HP Smart Client Services

To obtain HP Smart Client Services, go to ftp://ftp.hp.com/pub/tcdebian/SmartClientServices/.

## Viewing the Automatic Update website

- On the server desktop, select **Start > Control Panel**, and then select **Administrative Tools**.
- Double-click Internet Information Services (IIS) Manager. 2.
- In the left pane of the IIS Manager, expand the following items:

"Server name" > Sites > HP Automatic Update > auto-update

C:\Program Files (x86)\HP\HP Smart Client Service\auto-update

# **Creating an Automatic Update profile**

Automatic Update uses profiles to deploy a configuration to thin clients. By default, when you create a profile using Profile Editor (see <a href="Profile Editor">Profile Editor</a> on <a href="page 66">page 66</a>), the tool lets you save it to the following folder:

```
C:\Program Files (x86)\HP\HP Smart Client Service\auto-update
\PersistentProfile\
```

You can also export an existing profile from a thin client using HP ThinState and copy the profile to this location.

When searching for updates, HP ThinPro looks for this folder and applies the profile saved there. This ensures that all thin clients use the same configuration.

#### **MAC-address-specific profiles**

Automatic Update profiles can be created for a single MAC address. This can be useful when some thin clients need a different configuration.

Profiles for a single MAC address must be stored on the Automatic Update server, in the following folder:

```
C:\Program Files (x86)\HP\HP Smart Client Service\auto-update
\PersistentProfile\MAC\
```

When searching for updates, HP ThinPro looks for the generic profile first, and then a MAC-address-based profile. These profiles are merged and installed together on the thin client. The MAC-address-based profile takes precedence; that is, if the same registry key has a different value in both files, the value in the MAC-address-based profile is used.

This ensures that a shared configuration can be provided to all thin clients, but a specific customization can be added, if necessary.

This section describes how to create an Automatic Update profile for a single MAC address.

- 1. Obtain the MAC address of the thin client using the system info. For example, the following steps use the MAC address <code>00fcab8522ac</code>.
- Use Profile Editor to create or modify a client profile (see <u>Profile Editor on page 66</u>) until you are ready to save the client profile.
- 3. In **Profile Editor**, select the **Finish** link in the left-hand pane to access the **Current profile** pane.
- **4.** Select **Save profile as** to save the client profile as the following:

```
C:\Program Files (x86)\HP\HP Smart Client Service\auto-update
\PersistentProfile\MAC\00fcab8522ac.xml
```

- 5. Select the **Finish** button in the **Current profile** pane to exit Profile Editor.
- Restart the thin client that uses the specified MAC address to initiate the Automatic Update process.

# **Updating thin clients**

#### Using the broadcast update method

To do a broadcast update, plug the thin client into the same network as the update server. A broadcast update relies on HP Smart Client Services, which works with IIS to automatically push updates to the thin client.

- NOTE: Broadcast updates work only if the thin client is on the same subnet as the server.
- TIP: To verify that the broadcast updates are working, run Profile Editor and make some changes. Connect the thin client and verify that it has downloaded the new profile. If it has not, see <a href="Troubleshooting">Troubleshooting</a> on page 71.

#### Using the DHCP tag update method

On the Windows Server 2003 and Windows Server 2008 systems, DHCP tagging enables a thin client to update. Use this method to update specific thin clients; however, if you have only one or two clients to update, consider using the manual update method instead. Otherwise, HP recommends the broadcast update method.

#### **Example of performing DHCP tagging**

The example in this section shows how to perform DHCP tagging on a Windows 2008 R2 Server.

- **NOTE:** To use DHCP tagging, see your DHCP server documentation.
  - On the server desktop, select Start > Administrative Tools > DHCP.
  - In the left pane of the DHCP screen, select the domain where the thin clients are connected.
  - In the right pane of the DHCP screen, expand and right-click IPv4, and then select Set Predefined Options.
  - 4. In the Predefined Options and Values dialog, select Add.
  - 5. In the Option Type box, configure the options as described in the following table.

Field	Entry
Name	Enter auto-update.
Data Type	Select <b>String</b> .
Code	Enter 137.
Description	Enter HP Automatic Update.

- 6. Select OK.
- 7. In the Predefined Options and Values dialog, under Value > String, enter the update server address in the format of the following example:
  - http://auto-update.dominio.com:18287/auto-update
- 8. To complete the setup, select **OK**. DHCP tagging is now ready to update specific thin clients.

### Using the DNS alias update method

During system startup, Automatic Update attempts to resolve the DNS alias **auto-update**. If that host name resolves, it attempts to check for updates at **http://auto-update:18287**. This update method enables thin

clients to access a single update server across the entire domain, thus simplifying management for deployments with many subnets and DHCP servers.

To configure the DNS alias update method:

▲ Change the hostname of the server hosting HP Smart Client Services to **auto-update** or create a DNS alias of **auto-update** for that server.

#### Using the manual update method

Use the manual update method to connect a thin client to a specific server for an update. Also, use this method if you want to test an update on a single thin client before pushing the update to many thin clients, or if you have specific updates to be installed on only one or two thin clients.

- NOTE: Be sure you specify the hostname of the manual server in the profile that you are updating to.

  Otherwise the settings reset to automatic when downloading the profile. Use **Profile Editor** to modify these settings at root/auto-update.
- NOTE: If multiple thin clients require specific updates, use the DHCP tagging method.

If no update segregation is required, use the broadcast update method.

#### Performing a manual update

- 1. Select Management > Automatic Update in Control Panel.
- 2. Select Enable manual configuration.
- 3. Set the **Protocol** as **http**.
- 4. In the **Server** field, enter the update server hostname and port in the following format:

<hostname>:18287

5. In the **Path** field, enter the following:

auto-update

- Select Preserve thin client configuration if you want to preserve all previously configured settings.
- 7. Select **OK**, and then the thin client will pull the updates.

# 10 Profile Editor

HP Smart Client Services contains Profile Editor, which allows administrators to create client profiles and upload them to the Automatic Update server.

🌣 TIP: In addition to creating a new client profile, you can edit an existing profile that was exported using HP ThinState.

A client profile contains the connections, settings, and customizations that were configured using Connection Manager and various Control Panel items. A client profile is saved in a configuration file that is specific to the version of HP ThinPro in which it was created.

# **Opening Profile Editor**

Select Start, select All Programs, select HP, select HP Automatic Update Server, and then select Profile Editor.

# Loading a client profile

The name of the currently-loaded client profile is indicated on the initial screen of Profile Editor.

To load a different client profile:

- At the initial screen of Profile Editor, select the link that displays the name of the currently-loaded client profile.
- Navigate to a client profile, and then select **Open**.

## **Client profile customization**

### Selecting the platform for a client profile

Use the **Platform** screen in Profile Editor to do the following:

- Select the desired HP ThinPro image version that is compatible with your hardware
- Choose between ThinPro and Smart Zero
- View installed client kits that provide additional registry settings
- **NOTE:** Client kits should be placed in the following directory:

C:\Program Files (x86)\HP\HP Smart Client Service\auto-update\Packages

To configure a client profile's platform settings:

- On the **Platform** screen in Profile Editor, select an **OS Build ID** that corresponds to the desired image version.
- **IMPORTANT:** Be sure to create a different client profile for each hardware type.

- NOTE: If a client kit is installed, it is displayed automatically in the Client Kits box, and additional registry settings will be available on the Registry screen.
- **2.** Set the configuration to either **standard** (ThinPro) or **zero** (Smart Zero).
- **NOTE:** For older image versions, this setting is greyed out and set to zero automatically.

#### Configuring a default connection for a client profile

To configure a default connection for a client profile:

- On the Connection screen in Profile Editor, choose the desired connection type from the Type dropdown list.
- NOTE: The available connection types differ depending on whether you chose ThinPro or Smart Zero on the Platform screen.
- 2. In the **Server** field, enter the name or IP address of the server.

#### Modifying the registry settings of a client profile

To change default registry settings for a client profile:

- On the Registry screen in Profile Editor, expand the folders in the Registry settings tree to locate the registry setting you want to change.
- 2. Select the registry key, and then enter the desired value in the **Value** field.
- NOTE: See Registry keys on page 77 for a comprehensive list and description of registry keys.

#### Adding files to a client profile

Use the **Files** screen in Profile Editor to add configuration files that will be installed on the thin client automatically when the client profile is installed. This is typically used for the following reasons:

- To add certificates
- To modify device settings when a registry setting for the change is unavailable
- To modify the behavior of the system by inserting custom scripts or modifying existing scripts

You can also specify a symbolic link that points to a file already installed on the thin client. Use this when the file needs to be accessed from more than one directory.

#### Adding a configuration file to a client profile

- On the Files screen in Profile Editor, select Add a file.
- **2.** Select **Import File**, locate the file to be imported, and then select **Open**.
  - NOTE: Files can also be exported using the **Export File** button, if further details about the file are required.
- 3. In the **Path** field, enter the path where the file will be installed on the thin client.
- 4. In the File details section, set the Owner, Group, and Permissions fields to the appropriate values.

- NOTE: Typically, setting the owner and group as **root** and the permissions as **644** is satisfactory. If a special owner, group, or permissions are required, refer to standard Unix® file permissions for guidelines on changing the file details.
- 5. Select **Save** to finish adding the configuration file to the client profile.
- NOTE: A file installed as part of a profile will automatically overwrite any existing file on the file system at the destination path. Additionally, a second profile without the file attached will not revert previously attached files. All files that have been installed through profile attachment are permanent and must be reverted manually or through a factory reset.

#### Adding certificates to a client profile

Client profiles automatically include certificates that are imported to a standard client certificate store for the following applications:

- VMware Horizon View, Citrix, RDP
- Automatic Update
- HP Smart Client Services
- Web browser stores

To import other certificates to a client profile:

- 1. On the Files screen in Profile Editor, select Add a file.
- 2. Select **Import File**, locate the certificate, and then select **Open**.
- **NOTE:** The certificate should be formatted as a .pem or .crt file.
- 3. In the **Path** field, set the path to the following:

/usr/local/share/ca-certificates

- **4.** Select **Save** to finish adding the certificate to the client profile.
- After installing the client profile, use the Certificate Manager to confirm that the certificate was imported properly.

#### Adding a symbolic link to a client profile

- 1. On the Files screen in Profile Editor, select Add a file.
- 2. In the **Type** drop-down list, select **Link**.
- In the Symbolic link details section, set the Link field to the path of the desired file already installed on the thin client.
- **4.** Select **Save** to finish adding the symbolic link.

### Saving the client profile

- 1. In **Profile Editor**, select **Finish** in the left-hand pane to access the **Current profile** screen.
- 2. Select **Save Profile** to save to the current client profile, or select **Save Profile As** to save as a new client profile.
- NOTE: If **Save Profile** is disabled, your client profile has not changed since the last time it was saved.
- **3.** Select the **Finish** button in the **Current profile** screen to exit Profile Editor.

# Serial or parallel printer configuration

You can use Profile Editor to set up the serial or parallel printer ports. A USB printer automatically maps when plugged in.

#### **Obtaining the printer settings**

Before configuring printer ports, obtain the printer's settings. If available, check the printer's documentation before going further. If it is not available, follow these steps:

- 1. For most printers, press and hold the **Feed** button while turning the device on.
- 2. After a few seconds, release the **Feed** button. This allows the printer to enter a test mode and print the required information.
  - TIP: You might need to turn the printer off to cancel the Test mode or press **Feed** again to print a diagnostic page.

### Setting up printer ports

- 1. In **Profile Editor**, select **Registry**, and then enable the **Show all settings** check box.
- **2.** Enable printer port mapping for your connection type:
  - Citrix—No action is required.
  - RDP—Navigate to root > ConnectionType > freerdp. Right-click on the connections folder, select
    New connection, and then select OK. Set the portMapping registry key to 1 to enable printer port
    mapping.
  - VMware Horizon View—Navigate to root > ConnectionType > view. Right-click on the connections
    folder, select New connection, and then select OK. Under the xfreerdpOptions folder, set the
    portMapping registry key to 1 to enable printer port mapping.
- Navigate to root > Serial. Right-click the Serial folder, select New UUID, and then select OK.
- Under the new directory, set the baud, dataBits, flow, and parity values to the ones obtained in <u>Obtaining the printer settings on page 69</u>.

Set the **device** value to the port the printer will be plugged into. For example, the first serial port would be /dev/ttyS0, the second serial port would be /dev/ttyS1, and so on. For USB serial printers, use the format /dev/ttyUSB#, where # is the number of the port, starting with 0.

## Installing printers on the server

- 1. On the Windows desktop, select **Start > Printers and Faxes**.
- Select Add Printer, and then select Next.
- Select Local Printer attached to this Computer and, if required, deselect Automatically detect and install my Plug and Play printer.
- When completed, select Next.
- In the menu, select a port.

- NOTE: The port you need is in the section of ports labeled TS###, where ### is a number between 000–009, 033–044. The appropriate port depends on your hostname and the printer you want to install. For example, with a hostname of ZTAHENAKOS and a serial printer, select the port with (ZTAHENAKOS:COM1). For a parallel printer, select (ZTAHENAKOS:LPT1). The TS### is assigned by the server, so it will not be the same every time.
- 6. Select the manufacturer and driver for your printer.
- TIP: If desired, use the driver disc **Windows Update** to install the driver.
- NOTE: For basic or test printing, the **Generic Manufacturer** or **Generic/Text Only** printer usually works.
- 7. If prompted to keep the existing driver and it is known to work, keep it, and then select Next.
- 8. Assign a name to the printer. To use it as the default printer, select Yes, and then select Next.
- 9. To share the printer, select **Share name** and assign it a share name. Otherwise, select **Next**.
- 10. On the next page, you may request a test print. HP recommends this because it will verify the printer setup is correct. If it is not set up properly, review the settings and try again.
- NOTE: If the thin client disconnects from the server, the printer will need to be set up again the next time the thin client connects.

# 11 Troubleshooting

# **Troubleshooting network connectivity**

- 1. Ping the desired server by doing the following:
  - **a.** Select the System Information button on the taskbar, and then select the **Net Tools** tab.
  - **b.** Under **Select Tool**, select **Ping**.
  - c. In the **Target Host** box, enter the server address, and then select **Start Process**.

If the ping is successful, the system will display the following output:

```
PING 10.30.8.52 (10.30.8.52) 56(84) bytes of data.

64 bytes from 10.30.8.52: icmp_seq-1 ttl=64 time=0.81 5 ms 64 bytes from 10.30.8.52: icmp seq=2 ttl=64 time=0.735 ms
```

If the ping is unsuccessful, the thin client might be disconnected from the network and experience a long delay with no system output.

- 2. If the thin client does not respond to the ping, do the following:
  - **a.** Check the network cable and check the network settings in Control Panel.
  - **b.** Try pinging other servers or thin clients.
  - **c.** If you can reach other thin clients, verify that you typed the correct server address.
  - **d.** Ping the server using the IP address instead of the domain name or vice-versa.
- 3. Check the system logs by doing the following:
  - Select the System Information button on the taskbar, and then select the System Logs tab.
  - **b.** Check for any errors in the logs.
  - **c.** If there is an error, then the **Server is not set up** notification appears. Verify that the server is set up properly and that HP Smart Client Services is running.

## **Troubleshooting Citrix password expiration**

If users are not being prompted to change expired Citrix passwords, then make sure the XenApp Services site (PNAgent site) has the **Prompt** authentication method set to allow users to change expired passwords. If you allow users to change their passwords by connecting directly to the domain controller, then make sure the time of the thin client is in sync with the domain controller and use the full domain name (for example, domain\_name.com) when entering the Citrix login credentials. For more information, see Citrix documentation.

# **Using system diagnostics to troubleshoot**

System diagnostics take a snapshot of the thin client that can be used to help solve issues without physical access to the thin client. This snapshot contains log files from the BIOS information and the processes active at the time the system diagnostics were run.

TIP: You can change the **Debug level** setting in the **System Logs** tab of the **System Information** window to specify the amount of information to be included in the diagnostic report. This information may be requested by HP for troubleshooting. Because the system resets log files when it reboots, be sure to capture logs before a reboot.

### Saving system diagnostic data

- Insert a USB flash drive into the thin client.
- Select the System Information button on the taskbar, and then select the **System Logs** tab.
- 3. Select **Diagnostic**, and then save the compressed diagnostic file **Diagnostic.tgz** to the USB flash drive.

#### Uncompressing the system diagnostic files

The system diagnostic file **Diagnostic.tgz** is compressed and will need to be uncompressed before you can view the diagnostic files.

#### Uncompressing the system diagnostic files on Windows-based systems

- Download and install a copy of the Windows version of **7-Zip**.
- NOTE: You may obtain a free copy of 7-Zip for Windows at <a href="http://www.7-zip.org/download.html">http://www.7-zip.org/download.html</a>.
- Insert the USB flash drive that contains the saved system diagnostic file, and then copy **Diagnostic.tgz** to the desktop.
- Right-click **Diagnostic.tgz** and select **7-zip > Extract files**. 3.
- Open the newly created folder named **Diagnostic** and repeat step 3 on **Diagnostic.tar**.

#### Uncompressing the system diagnostic files in Linux- or Unix-based systems

- Insert the USB flash drive that contains the saved system diagnostic file, and then copy **Diagnostic.tgz** to the home directory.
- Open a terminal and browse to the home directory. 2.
- On the command line, enter tar xvfz Diagnostic.tgz.

### Viewing the system diagnostic files

The system diagnostic files are divided into the **Commands**, **/var/log**, and **/etc** folders.

#### Viewing files in the Commands folder

This table describes the files to look for in the **Commands** folder.

File	Description	
demidecode.txt	This file contains information on the system BIOS and graphics.	
dpkglist.txt	This file lists the packages installed at the time system diagnostics were run.	
psef.txt	This file lists the active processes at the time system diagnostics were run.	

### Viewing files in the /var/log folder

The useful file in the **/var/log** folder is **Xorg.0.log**.

### Viewing files in the /etc folder

The **/etc** folder contains the file system at the time the system diagnostics were run.

# A USB updates

When USB updates are enabled (see <u>Customization Center on page 51</u>), you can use a USB flash drive to simultaneously install multiple add-ons and certificates, as well as deploy a profile.

#### To perform USB updates:

- Place the desired files onto a USB flash drive.
- **NOTE:** The files can be placed in the root directory or in subfolders.
- Connect the USB flash drive to the thin client.
  - Updates are detected automatically and displayed in the **USB Update** dialog, in which you can search and view details about the detected updates.
- Select the check boxes next to the updates you want to install, and then select Install.
- After installation, restart the thin client if prompted.

# **HP ThinUpdate**

HP ThinUpdate allows you to download images and add-ons from HP and create bootable USB flash drives for image deployment. For more information see the *Administrator Guide* for HP ThinUpdate.

# **BIOS tools (desktop thin clients only)**

There are two kinds of BIOS tools for HP ThinPro:

- BIOS settings tool—Used to retrieve or modify BIOS settings
- BIOS flashing tool—Used to update the BIOS

These tools can be run via an X terminal.

# **BIOS** settings tool

The following table describes the syntax for the BIOS settings tool.



**NOTE:** Changes do not take effect until the next reboot.

Syntax	Description
hptc-bios-cfg -G <file name=""></file>	Retrieves the current BIOS settings and saves them to the specified file so they can be viewed or modified (CPQSETUP.TXT by default).
hptc-bios-cfg -S <file name=""></file>	Writes the BIOS settings from the specified file (CPQSETUP.TXT by default) to the BIOS.
hptc-bios-cfg -h	Displays a list of options.

# **BIOS flashing tool**

The following table describes the syntax for the BIOS flashing tool.



**NOTE:** Changes do not take effect until the next reboot.

Syntax	Description
hptc-bios-flash <image name=""/>	Prepares the system to update the BIOS during the next restart. This command automatically copies the files into the correct location and prompts you to restart the thin client.
	<b>NOTE:</b> This command requires that the <b>Tool-less update</b> option in the BIOS settings is set to <b>Auto</b> .
hptc-bios-flash -h	Displays a list of options.

# C Resizing the flash drive partition

IMPORTANT: HP thin clients that ship from the factory with HP ThinPro use the entire flash drive. The image capture methods capture the smallest possible image, allowing images from larger flash drives to be deployed onto smaller flash drives that have enough space for the captured image. Resizing the flash drive partition should no longer be necessary for HP thin clients that ship from the factory with HP ThinPro. For thin clients with HP ThinPro that are not using the entire flash drive for any reason, see the following information.

To use the entire space of the flash drive, you have to modify the partition size and expand the file system to take up that additional space. This can be accomplished using the resize-image script via an X terminal.

NOTE: When an image is deployed via HPDM, HP ThinState, or Automatic Update, the file system is automatically resized to use all available space on the flash drive.

The following table describes the syntax for the resize-image script.

Syntax	Description
resize-image	When called with no parameters, the script displays the current size of the partition and the amount of available space on the flash drive. The script prompts you to enter the target partition size and then confirm the change. The change takes effect after the next thin client restart.
	<b>NOTE:</b> It is not possible to decrease the partition size. The entered value must be larger than the current partition size.
resize-imagesize <size in="" mb=""></size>	Using this syntax, you can specify the target partition size in megabytes (MB) as a parameter and then confirm the change.
Example: resize-imagesize 1024	megabytes (PID) as a parameter and their commit the change.
resize-imageno-prompt	Using this syntax, the script runs automatically with no user interaction required.
- or -	interaction required.
resize-imageno-promptsize <size in="" mb=""></size>	If no specific size is given as a parameter simultaneously, the partition size is increased to the maximum size.
Example: resize-imageno-promptsize 1024	TIP: This non-interactive mode is useful for scripting and performing this operation from a remote administration tool like HP Device Manager.

#### D **Registry keys**

The HP ThinPro registry keys are grouped into folders and can be modified in several different ways:

- Using a \_File and Registry task in HPDM
- Using the Registry Editor component of Profile Editor and then deploying the new profile
- Using the Registry Editor in the HP ThinPro user interface, which is available by typing regeditor in an X terminal.

Each top-level section in this appendix corresponds to one of the top-level registry folders.



NOTE: Some registry keys might apply to ThinPro or Smart Zero only.

## **Audio**

Registry key	Description
root/Audio/AdjustSoundPath	Sets the full path to the sound played when the playback volume is changed via the volume controls.
root/Audio/JackRetask	This registry key applies only to thin clients that have repurposable jacks.
	For the t730's lower front port:
	<ul> <li>0/1: No change / headphone</li> </ul>
	2: Microphone
	For the t630's back port:
	0: No change / line in
	• 1: Headphone / line out
	You must restart the thin client after changing these settings.
root/Audio/OutputMute	If set to 1, the internal speaker and headphone jack are muted.
root/Audio/OutputScale	Sets the volume scale for the internal speaker and headphone jack, ranging from 1 to 400.
root/Audio/OutputScaleAuto	If set to 1, the OutputScale value will be set automatically based on the thin client model.
root/Audio/OutputVolume	Sets the volume for the internal speaker and headphone jack, ranging from 1 to 100.
root/Audio/PlaybackDevice	Sets the device to use for playback.
root/Audio/PulseBuffer	The recommended range for this value is between 1024 and 8192. A value that is too high might cause jittering in playback, while a value that is too low might cause the thin client to crash.
root/Audio/RecordDevice	Sets the device to use for capture.
root/Audio/RecordMute	If set to 1, the microphone jack is muted.

Registry key	Description
root/Audio/RecordScale	Sets the volume scale for the microphone jack, ranging from 1 to 400.
root/Audio/RecordScaleAuto	If set to 1, the RecordScale value will be set automatically based on the thin client model.
root/Audio/RecordVolume	Sets the volume for the microphone jack, ranging from 1 to 100.
root/Audio/VisibleInSystray	If set to 1, a speaker icon is visible in the system tray.
root/Audio/shortcutPassThrough	Defines the apps that allow audio shortcuts to be passed through using a space-separated list. The available options are ${\tt freerdp}$ , ${\tt view}$ , and ${\tt xen}$ .

# CertMgr

This registry category is used internally and does not have any user-defined entries.

# ComponentMgr

Registry key	Description
<pre>root/ComponentMgr/ NotShowDeleteSnapshotWarning</pre>	If set to 1, warning information will not be shown while deleting a snapshot.

# ConnectionManager

Registry key	Description
root/ConnectionManager/customLogoPath	
root/ConnectionManager/defaultConnection	To properly launch a connection on startup, this must be set to a valid connection using the format $<$ type>:<1abel> like in the following example:
	xen:Default Connection
root/ConnectionManager/minHeight	
root/ConnectionManager/minWidth	
root/ConnectionManager/splashLogoPath	Sets the full path to the image displayed while a connection is loading.
root/ConnectionManager/useKioskMode	
root/ConnectionManager/ useSplashOnConnectionStartup	If set to 1, the image set by <code>splashLogoPath</code> is enabled. By default, this is enabled for ThinPro and disabled for Smart Zero.

# ConnectionType

### custom

Registry key	Description
root/ConnectionType/custom/authorizations/ user/add	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
root/ConnectionType/custom/authorizations/ user/general	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.
root/ConnectionType/custom/connections/ <uuid>/afterStartedCommand</uuid>	Sets the command to execute after the connection has been started.
root/ConnectionType/custom/connections/ <uuid>/afterStoppedCommand</uuid>	Sets the command to execute after the connection has been stopped.
root/ConnectionType/custom/connections/ <uuid>/authorizations/user/edit</uuid>	If set to 1, an end user has permission to modify the connection settings for this connection.
root/ConnectionType/custom/connections/ <uuid>/authorizations/user/execution</uuid>	If set to 1, an end user has permission to execute this connection.
root/ConnectionType/custom/connections/ <uuid>/autoReconnect</uuid>	If set to 1, the connection will be restarted when it is closed or disconnected.
root/ConnectionType/custom/connections/ <uuid>/autoReconnectDelay</uuid>	Sets the amount of time in seconds to wait before reconnecting the session. The default of 0 will cause the connection to reconnect immediately. This setting only takes effect when autoReconnect is set to 1.
root/ConnectionType/custom/connections/ <uuid>/autostart</uuid>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.
root/ConnectionType/custom/connections/ <uuid>/autostartDelay</uuid>	Sets the amount of time in seconds to wait before starting the connection after the system boots. The default of 0 will cause the connection to start immediately. This setting only takes effect when autostart is set to 1.
root/ConnectionType/custom/connections/ <uuid>/beforeStartingCommand</uuid>	Sets the command to execute before the connection starts.
root/ConnectionType/custom/connections/ <uuid>/command</uuid>	Sets the main command for the custom connection to execute.
root/ConnectionType/custom/connections/ <uuid>/connectionEndAction</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/custom/connections/ <uuid>/coord</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/custom/connections/ <uuid>/dependConnectionId</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/custom/connections/ <uuid>/extraEnvValues/<uuid>/key</uuid></uuid>	Sets the name of an extra environment variable for use with the connection.
root/ConnectionType/custom/connections/ <uuid>/extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.
root/ConnectionType/custom/connections/ <uuid>/fallBackConnection</uuid>	Sets the fallback connection via its UUID.

Registry key	Description
<pre>root/ConnectionType/custom/connections/ <uuid>/hasDesktopIcon</uuid></pre>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
<pre>root/ConnectionType/custom/connections/ <uuid>/label</uuid></pre>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to Default Connection and does not display in the UI.
<pre>root/ConnectionType/custom/connections/ <uuid>/startMode</uuid></pre>	If set to the default focus and the connection is already started, the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
root/ConnectionType/custom/connections/ <uuid>/waitForNetwork</uuid>	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/custom/coreSettings/ USBrelevant	Specifies if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.
<pre>root/ConnectionType/custom/coreSettings/ appName</pre>	Sets the internal application name to use for this connection type. This key should not need to be modified.
root/ConnectionType/custom/coreSettings/ className	Sets the internal application class name to use for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/custom/coreSettings/ editor</pre>	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.
root/ConnectionType/custom/coreSettings/ generalSettingsEditor	Sets the internal application name to use when the General Settings Manager is launched for this connection type. This key should not need to be modified.
root/ConnectionType/custom/coreSettings/ icon16Path	Sets the path to the 16x16 pixel icon for this application.
root/ConnectionType/custom/coreSettings/ icon32Path	Sets the path to the 32x32 pixel icon for this application.
root/ConnectionType/custom/coreSettings/ icon48Path	Sets the path to the 48x48 pixel icon for this application.
root/ConnectionType/custom/coreSettings/label	Sets the name to display for this connection type in the UI.
root/ConnectionType/custom/coreSettings/ priorityInConnectionLists	Sets the priority of this connection type when it is displayed in Connection Manager and the configuration wizard that displays during initial setup. A higher value moves the connection type towards the top of the list. If set to 0, the connection type is hidden from the configuration wizard and is shown last in Connection Manager. Connection types with the same priority are listed in alphabetical order.
root/ConnectionType/custom/coreSettings/ serverRequired	Sets whether a server name or address is unused, optional, or required for this connection type.
root/ConnectionType/custom/coreSettings/ stopProcess	Sets the behavior that should occur when <code>connection-mgr</code> stop is called on this connection. By default this is <code>close</code> , which will send a standard kill signal to the process. When set to <code>kill</code> , the process specified by <code>appName</code> will be forcefully killed. When set to <code>custom</code> , a custom execution script specified by <code>wrapperScript</code> will be executed with the argument <code>stop</code> to terminate the process gracefully.

Registry key	Description
root/ConnectionType/custom/coreSettings/ watchPid	If set to 1, the connection is monitored under the name specified by ${\tt appName}$ . This key should not need to be modified.
root/ConnectionType/custom/coreSettings/ wrapperScript	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
root/ConnectionType/custom/gui/CustomManager/ name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/custom/gui/CustomManager/ status	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/custom/gui/CustomManager/title	This registry key is either used internally or reserved for future use. The value should not be changed.
<pre>root/ConnectionType/custom/gui/CustomManager/ widgets/autoReconnect</pre>	Controls the state of the <b>Auto reconnect</b> widget in Custom Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/custom/gui/CustomManager/ widgets/autostart</pre>	Controls the state of the <b>Auto start priority</b> widget in Custom Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/custom/gui/CustomManager/ widgets/command</pre>	Controls the state of the <b>Enter command to run</b> widget in Custom Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/custom/gui/CustomManager/widgets/fallBackConnection	Controls the state of the <b>Fallback Connection</b> widget in Custom Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/custom/gui/CustomManager/widgets/hasDesktopIcon	Controls the state of the <b>Show icon on desktop</b> widget in Custom Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/custom/gui/CustomManager/widgets/label	Controls the state of the <b>Name</b> widget in Custom Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/custom/gui/CustomManager/widgets/waitForNetwork	Controls the state of the Wait for network before connecting widget in Custom Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

## firefox

Registry key	Description
<pre>root/ConnectionType/firefox/authorizations/ user/add</pre>	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/firefox/authorizations/ user/general</pre>	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/firefox/connections/ <uuid>/address</uuid></pre>	Sets the URL or IP address to connect to.
root/ConnectionType/firefox/connections/ <uuid>/afterStartedCommand</uuid>	Sets the command to execute after the connection has been started.
<pre>root/ConnectionType/firefox/connections/ <uuid>/afterStoppedCommand</uuid></pre>	Sets the command to execute after the connection has been stopped.
root/ConnectionType/firefox/connections/ <uuid>/authorizations/user/edit</uuid>	If set to 1, an end user has permission to modify the connection settings for this connection.
root/ConnectionType/firefox/connections/ <uuid>/authorizations/user/execution</uuid>	If set to 1, an end user has permission to execute this connection.
root/ConnectionType/firefox/connections/ <uuid>/autoReconnect</uuid>	If set to 1, the connection will be restarted when it is closed or disconnected.
root/ConnectionType/firefox/connections/ <uuid>/autoReconnectDelay</uuid>	Sets the amount of time in seconds to wait before reconnecting the session. The default of 0 will cause the connection to reconnect immediately. This setting only takes effect when autoReconnect is set to 1.
root/ConnectionType/firefox/connections/ <uuid>/autostart</uuid>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.
root/ConnectionType/firefox/connections/ <uuid>/autostartDelay</uuid>	Sets the amount of time in seconds to wait before starting the connection after the system boots. The default of 0 will cause the connection to start immediately. This setting only takes effect when autostart is set to 1.
root/ConnectionType/firefox/connections/ <uuid>/beforeStartingCommand</uuid>	Sets the command to execute before the connection starts.
root/ConnectionType/firefox/connections/ <uuid>/connectionEndAction</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/firefox/connections/ <uuid>/coord</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/firefox/connections/ <uuid>/dependConnectionId</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/firefox/connections/ <uuid>/enablePrintDialog</uuid>	If set to 1, the Print dialog in the web browser can be used.
root/ConnectionType/firefox/connections/ <uuid>/enableSmartCard</uuid>	If set to 1, smart card login is enabled for Citrix connections created via the web browser.
root/ConnectionType/firefox/connections/ <uuid>/extraEnvValues/<uuid>/key</uuid></uuid>	Sets the name of an extra environment variable for use with the connection.
root/ConnectionType/firefox/connections/ <uuid>/extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.

Registry key	Description
root/ConnectionType/firefox/connections/ <uuid>/fallBackConnection</uuid>	Sets the fallback connection via its UUID.
root/ConnectionType/firefox/connections/ <uuid>/forbiddenFiles</uuid>	This registry key only works when <b>Allow connections to manage their own settings</b> is selected in the Web Browser Connection General Settings Manager. The files listed in this registry key's value will be removed after a Web Browser connection is ended. The file names should be separated by a comma, and a wildcard is supported. For example: *.rdf,cookies.sqlite
root/ConnectionType/firefox/connections/ <uuid>/fullscreen</uuid>	If set to 1, the web browser will start in full screen. If ${\tt kioskMode}$ is disabled, the browser UI is accessible in full screen mode.
root/ConnectionType/firefox/connections/ <uuid>/hasDesktopIcon</uuid>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
root/ConnectionType/firefox/connections/ <uuid>/intendedUse</uuid>	Sets the intended usage of this Web Browser connection to Citrix, RDP, Or Internet.
root/ConnectionType/firefox/connections/ <uuid>/kioskMode</uuid>	If set to 1, the web browser will launch in kiosk mode, meaning that the web browser will start in full screen (even if fullscreen is set to 0) and the browser UI is inaccessible.
root/ConnectionType/firefox/connections/ <uuid>/label</uuid>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to Default Connection and does not display in the UI.
root/ConnectionType/firefox/connections/ <uuid>/showBackForwardButton</uuid>	If set to 1, the web browser's Back and Forward buttons are displayed when kiosk mode is enabled.
root/ConnectionType/firefox/connections/ <uuid>/showHomeButton</uuid>	If set to 1, the web browser's Home button is displayed when kiosk mode is enabled.
root/ConnectionType/firefox/connections/ <uuid>/showSearchBar</uuid>	If set to 1, the web browser's search bar is displayed when kiosk mode is enabled.
root/ConnectionType/firefox/connections/ <uuid>/showTabsBar</uuid>	If set to 1, the web browser's tabs are displayed when kiosk mode is enabled.
root/ConnectionType/firefox/connections/ <uuid>/showTaskBar</uuid>	If set to 1, the web browser's taskbar is displayed when kiosk mode is enabled.
root/ConnectionType/firefox/connections/ <uuid>/showUrlBarRefreshButton</uuid>	If set to 1, the web browser's URL bar and Refresh button are displayed when kiosk mode is enabled.
root/ConnectionType/firefox/connections/ <uuid>/startMode</uuid>	If set to the default ${\tt focus}$ and the connection is already started, the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
root/ConnectionType/firefox/connections/ <uuid>/waitForNetwork</uuid>	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/firefox/coreSettings/ USBrelevant	Specifies if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.
root/ConnectionType/firefox/coreSettings/ appName	Sets the internal application name to use for this connection type This key should not need to be modified.
root/ConnectionType/firefox/coreSettings/	Sets the internal application class name to use for this connection type. This key should not need to be modified.

Registry key	Description
root/ConnectionType/firefox/coreSettings/ editor	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/firefox/coreSettings/ generalSettingsEditor</pre>	Sets the internal application name to use when the General Settings Manager is launched for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/firefox/coreSettings/ icon16Path</pre>	Sets the path to the 16x16 pixel icon for this application.
root/ConnectionType/firefox/coreSettings/ icon32Path	Sets the path to the 32x32 pixel icon for this application.
root/ConnectionType/firefox/coreSettings/ icon48Path	Sets the path to the 48x48 pixel icon for this application.
root/ConnectionType/firefox/coreSettings/ label	Sets the name to display for this connection type in the UI.
root/ConnectionType/firefox/coreSettings/ priorityInConnectionLists	Sets the priority of this connection type when it is displayed in Connection Manager and the Configuration Wizard that displays during initial setup. A higher value will move the connection type towards the top of the list. If set to 0, the connection type is hidden from Configuration Wizard and is shown last in Connection Manager. Connections types with the same priority are listed in alphabetical order.
<pre>root/ConnectionType/firefox/coreSettings/ restartIdleTime</pre>	Sets the time in minutes before the web browser restarts when the system is not receiving user input. If set to 0, restart is disabled.
root/ConnectionType/firefox/coreSettings/ serverRequired	Sets whether a server name or address is unused, optional, or required for this connection type.
root/ConnectionType/firefox/coreSettings/ stopProcess	Sets the behavior that should occur when connection-mgr stop is called on this connection. By default this is close, which will send a standard kill signal to the process. When set to kill, the process specified by appName will be forcefully killed. When set to custom, a custom execution script specified by wrapperScript will be executed with the argument stop to terminate the process gracefully.
root/ConnectionType/firefox/coreSettings/ wrapperScript	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
root/ConnectionType/firefox/general/ enableUserChanges	If set to 1, the settings configured in the Firefox Preferences dialog will be saved after each session.
root/ConnectionType/firefox/gui/ FirefoxManager/name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/firefox/gui/ FirefoxManager/status	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/firefox/gui/ FirefoxManager/title	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/address	Controls the state of the <b>URL</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is

Registry key	Description
	hidden. If set to read-only, the widget is visible in the readonly state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/autoReconnect	Controls the state of the <b>Auto reconnect</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/autostart	Controls the state of the <b>Auto start priority</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/enablePrintDialog	Controls the state of the <b>Enable print dialog</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/fallBackConnection	Controls the state of the <b>Fallback Connection</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/hasDesktopIcon	Controls the state of the <b>Show icon on desktop</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/kioskMode	Controls the state of the <b>Enable kiosk mode</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/label	Controls the state of the <b>Name</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/showBackForwardButton	Controls the state of the <b>Show Back and Forward Button</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/showHomeButton	Controls the state of the <b>Show Home Button</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/showSearchBar	Controls the state of the <b>Show Search Bar</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

Registry key	Description
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/showTabsBar	Controls the state of the <b>Show Tabs Bar</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/firefox/gui/ FirefoxManager/widgets/showTaskBar</pre>	Controls the state of the <b>Show Task Bar</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/firefox/gui/ FirefoxManager/widgets/ showUrlBarRefreshButton</pre>	Controls the state of the <b>Show URL Bar and Refresh Button</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/firefox/gui/ FirefoxManager/widgets/startMode</pre>	Controls the state of the <b>Enable full screen</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/firefox/gui/ FirefoxManager/widgets/waitForNetwork	Controls the state of the <b>Wait for network before connecting</b> widget in Web Browser Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

# freerdp

Registry key	Description
<pre>root/ConnectionType/freerdp/authorizations/ user/add</pre>	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/freerdp/authorizations/ user/general</pre>	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/ExtraArgs</uuid></pre>	Specifies extra arguments for the xfreerdp client. Run xfreerdphelp from an X terminal to see all available arguments.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/SingleSignOn</uuid></pre>	
<pre>root/ConnectionType/freerdp/connections/ <uuid>/address</uuid></pre>	Sets the hostname or IP address to connect to. The port number can be appended on the end after a colon character. For example: servername: 3389
<pre>root/ConnectionType/freerdp/connections/ <uuid>/afterStoppedCommand</uuid></pre>	Sets the command to execute after the connection has been stopped.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/application</uuid></pre>	Specifies an alternate shell or application to run.

Registry key	Description
root/ConnectionType/freerdp/connections/ <uuid>/attachToConsole</uuid>	
root/ConnectionType/freerdp/connections/ <uuid>/audioLatency</uuid>	Sets the average milliseconds of offset between the audio stream and the display of corresponding video frames after decoding.
root/ConnectionType/freerdp/connections/ <uuid>/authorizations/user/edit</uuid>	If set to 1, an end user has permission to modify the connection settings for this connection.
root/ConnectionType/freerdp/connections/ <uuid>/authorizations/user/execution</uuid>	If set to 1, an end user has permission to execute this connection.
root/ConnectionType/freerdp/connections/ <uuid>/autoReconnect</uuid>	If set to 1, the connection will be restarted when it is closed or disconnected.
root/ConnectionType/freerdp/connections/ <uuid>/autoReconnectDelay</uuid>	Sets the amount of time in seconds to wait before reconnecting the session. The default of 0 will cause the connection to reconnect immediately. This setting only takes effect when autoReconnect is set to 1.
root/ConnectionType/freerdp/connections/ <uuid>/autostart</uuid>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.
root/ConnectionType/freerdp/connections/ <uuid>/autostartDelay</uuid>	Sets the amount of time in seconds to wait before starting the connection after the system boots. The default of 0 will cause the connection to start immediately. This setting only takes effect when autostart is set to 1.
root/ConnectionType/freerdp/connections/ <uuid>/bandwidthLimitation</uuid>	If set to a value greater than 0, the value represents an approximate bandwidth limitation for downloading and uploading in kilobytes per second. If set to 0 (the default), there is no limitation.
root/ConnectionType/freerdp/connections/ <uuid>/beforeStartingCommand</uuid>	Sets the command to execute before the connection starts.
root/ConnectionType/freerdp/connections/ <uuid>/clipboardExtension</uuid>	If set to 1, clipboard functionality is enabled between different RDP sessions and between RDP sessions and the local system.
root/ConnectionType/freerdp/connections/ <uuid>/compression</uuid>	If set to 1, compression of RDP data sent between the client and the server is enabled.
root/ConnectionType/freerdp/connections/ <uuid>/credentialsType</uuid>	Specifies the credential type between sso (single sign-on), startup (credentials are requested at startup), password (preconfigured user/domain/password), or smartcard (preconfigured smart card).
root/ConnectionType/freerdp/connections/ <uuid>/dependConnectionId</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/freerdp/connections/ <uuid>/directory</uuid>	Specifies the startup directory where an alternate shell application is executed.
root/ConnectionType/freerdp/connections/ <uuid>/disableMMRwithRFX</uuid>	If set to 1, multimedia redirection is disabled if a valid RemoteFX session is established.
root/ConnectionType/freerdp/connections/ <uuid>/domain</uuid>	Sets the default domain to supply to the remote host during login If a domain is not specified, the default domain for the remote host will be used.
root/ConnectionType/freerdp/connections/ <uuid>/extraEnvValues/<uuid>/key</uuid></uuid>	Sets the name of an extra environment variable for use with the connection.

Registry key	Description
root/ConnectionType/freerdp/connections/ <uuid>/extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.
root/ConnectionType/freerdp/connections/ <uuid>/fallBackConnection</uuid>	Sets the fallback connection via its UUID.
root/ConnectionType/freerdp/connections/ <uuid>/frameAcknowledgeCount</uuid>	Sets the number of video frames the server can push without waiting for acknowledgement from the client. Lower numbers result in a more responsive desktop but lower frame rate. If set to 0, frame acknowledgement is not used in the client-server interactions.
root/ConnectionType/freerdp/connections/ <uuid>/gatewayAddress</uuid>	Sets the RD Gateway server name or address.
root/ConnectionType/freerdp/connections/ <uuid>/gatewayCredentialsType</uuid>	Specifies the credential type between whether credentials are to be supplied by sso (single sign-on), startup (credentials are requested at startup), or password (preconfigured user/domain/password).
root/ConnectionType/freerdp/connections/ <uuid>/gatewayDomain</uuid>	Sets the default domain to supply to the RD Gateway during login. Usually, this setting is used with kiosk-style applications where a generic user name is used to login. If gatewayUsesSameCredentials is to 1, this value is
	disabled.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/gatewayEnabled</uuid></pre>	If set to 1, RD Gateway is expected to be used.
root/ConnectionType/freerdp/connections/ <uuid>/gatewayPassword</uuid>	Sets the default password to supply to the RD Gateway during login. This value is usually encrypted. Usually, this setting is used with kiosk-style applications where a generic user name is used to login. If gatewayUsesSameCredentials is to 1, this value is disabled.
root/ConnectionType/freerdp/connections/ <uuid>/gatewayPort</uuid>	Sets the port number to use when contacting the RDP server. This value can be left empty. The most common value is 443.
root/ConnectionType/freerdp/connections/ <uuid>/gatewayUser</uuid>	Sets the default user name to supply to the RD Gateway during login. Usually, this setting is used with kiosk-style applications where a generic user name is used to login. If gatewayUsesSameCredentials is to 1, this value is disabled.
root/ConnectionType/freerdp/connections/ <uuid>/gatewayUsesSameCredentials</uuid>	If set to 1, the same credentials that are used to connect to the final server are used to connect to the RD Gateway.
root/ConnectionType/freerdp/connections/ <uuid>/hasDesktopIcon</uuid>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
root/ConnectionType/freerdp/connections/ <uuid>/label</uuid>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to <code>Default Connection</code> and does not display in the UI.
root/ConnectionType/freerdp/connections/ <uuid>/loadBalanceInfo</uuid>	This value is the load balancing cookie sent for brokering purposes to the server upon connection and corresponds to the loadbalanceinfo field in the .rdp file. By default, the value is empty.
root/ConnectionType/freerdp/connections/ <uuid>/localPartitionRedirection</uuid>	If set to 1, the local non-USB storage partitions are redirected to the remote host via the Storage extension. If set to 0, the extension is disabled for non-USB storage partitions that are not used by HP ThinPro.

Registry key	Description
root/ConnectionType/freerdp/connections/ <uuid>/loginfields/domain</uuid>	If set to 1, the <b>Domain</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
root/ConnectionType/freerdp/connections/ <uuid>/loginfields/password</uuid>	If set to 1, the <b>Password</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/loginfields/rememberme</uuid></pre>	If set to 1, the <b>Remember me</b> check box is shown in the login dialog for the connection. If set to 2, the check box is shown but disabled. If set to 0, the check box is hidden.
root/ConnectionType/freerdp/connections/ <uuid>/loginfields/showpassword</uuid>	If set to 1, the <b>Show password</b> button is shown in the login dialog for the connection. If set to 2, the button is shown but disabled. If set to 0, the button is hidden.
root/ConnectionType/freerdp/connections/ <uuid>/loginfields/smartcard</uuid>	If set to 1, the <b>Smart card login</b> check box is shown in the login dialog for the connection. If set to 2, the check box is shown but disabled. If set to 0, the check box is hidden. This check box might not appear if no smart card is detected, even if this option is enabled.
root/ConnectionType/freerdp/connections/ <uuid>/loginfields/username</uuid>	If set to 1, the <b>User Name</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
root/ConnectionType/freerdp/connections/ <uuid>/mouseMotionEvents</uuid>	If set to 0, mouse motion events are not sent to the server. This can prevent some user feedback such as tooltips from functioning properly.
root/ConnectionType/freerdp/connections/ <uuid>/offScreenBitmaps</uuid>	If set to 0, off-screen bitmaps are disabled. This can increase performance slightly but will cause blocks of the screen to update asynchronously, causing screen transitions to update non-uniformly.
root/ConnectionType/freerdp/connections/ <uuid>/password</uuid>	Sets the default password to supply to the remote host during login. This value will be encrypted. Generally, this setting is used for kiosk-style applications where a generic password is used for login.
root/ConnectionType/freerdp/connections/ <uuid>/perfFlagDesktopComposition</uuid>	If set to 1, desktop composition (such as translucent borders) is allowed if supported by the server. Turning off desktop composition can improve performance for low-bandwidth connections. Generally, this only affects RemoteFX. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/freerdp/connections/ <uuid>/perfFlagFontSmoothing</uuid>	If set to 1, font smoothing is allowed if supported by the server and enabled. Turning off font smoothing can improve performance on low-bandwidth connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/freerdp/connections/ <uuid>/perfFlagNoCursorSettings</uuid>	If set to 1, cursor blinking is disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/freerdp/connections/ <uuid>/perfFlagNoCursorShadow</uuid>	If set to 1, mouse cursor shadows are disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/freerdp/connections/ <uuid>/perfFlagNoMenuAnimations</uuid>	If set to 1, menu animations are disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.

Registry key	Description
root/ConnectionType/freerdp/connections/ <uuid>/perfFlagNoTheming</uuid>	If set to 1, user interface themes are disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/perfFlagNoWallpaper</uuid></pre>	If set to 1, the desktop wallpaper is disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/perfFlagNoWindowDrag</uuid></pre>	If set to 1, full-content window dragging is disabled, which can improve performance on low-bandwidth RDP connections. The window outline is used instead. If set to 2, the value is selected based on the thin client performance.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/portMapping</uuid></pre>	If set to 1, all serial and parallel ports are redirected to the remote host via the ${\tt Ports}$ extension. If set to 0, the extension is disabled.
root/ConnectionType/freerdp/connections/ <uuid>/printerMapping</uuid>	If set to 1, all printers defined locally via CUPS are redirected to the remote host via the Printers extension. If set to 0, the extension is disabled. If set to 2, the USB printers are redirected as configured in USB Manager.
root/ConnectionType/freerdp/connections/ <uuid>/rdWebFeed/autoDisconnectTimeout</uuid>	Sets the number of minutes there can be no RemoteApp and Desktop resource running before the connection ends automatically. A countdown counter is displayed during the last 20 seconds providing the user an opportunity to disarm the timer. If set to 0 (the default), the timer is disabled.
root/ConnectionType/freerdp/connections/ <uuid>/rdWebFeed/autoStartSingleResource</uuid>	If set to 1, and if only a single published resource (RemoteApp program or virtual desktop) is returned by the server, that resource will be started automatically.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/rdWebFeed/filter/<uuid>/alias</uuid></uuid></pre>	Specifies the alias of a resource for the resource filter. RemoteApp and Desktop resources with a matching alias will be available to users.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/rdWebFeed/filter/<uuid>/name</uuid></uuid></pre>	Specifies the name of a resource for the resource filter. RemoteApp and Desktop resources with a matching name will be available to users.
root/ConnectionType/freerdp/connections/ <uuid>/rdWebFeed/keepResourcesWindowOpened</uuid>	If set to 0, the resource selection window is closed automatically after a resource has started. If set to 1, the resource selection window is kept open after resources have started. This allows a user to start several resources before closing the resource selection window.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/rdWebFeed/ trustedPublisherShalThumbprints</uuid></pre>	Specifies a comma-separated list of SHA1 thumbprints of the trusted resource publishers. Note that a certificate that matches one of these thumbprints is not verified. Import the publisher's root CA for better security. Also see the registry key verifyPublisherSignature and Certificate Manager in Control Panel.
root/ConnectionType/freerdp/connections/ <uuid>/rdWebFeed/verifyPublisherSignature</uuid>	If set to 1, the publisher's signature is verified when available in published .rdp files. Only resources with a valid signature from a trusted publisher can be run. If set to 0, no verification of the signature is done. Also see the registry key trustedPublisherShalThumbprints.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/rdp6Buffering</uuid></pre>	If set to 1, non-RemoteFX graphics performance is increased at the cost of less frequent screen updates.

Registry key	Description
<pre>root/ConnectionType/freerdp/connections/ <uuid>/rdp8Codecs</uuid></pre>	If set to 1, RDP 8 codecs are used if available. This setting should be disabled only in the case of a defect specific to RDP 8 codecs. Disabling this setting might also disable more advanced codecs.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/rdpEncryption</uuid></pre>	If set to 1, standard RDP encryption is used to encrypt all data between the client and the server.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/rdpH264Codec</uuid></pre>	If set to 1, RDP 8 H.264 codecs are used if available. This setting has known visual errors, particularly in multi-monitor configurations, and should be considered experimental and unsupported. Enabling this setting simply advises the server that the thin client supports H.264 for desktop display. The server must also support H.264, and the server makes the final decision on what codecs are used. This setting affects only the desktop codecs. It does not affect multimedia redirection codecs.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/rdpProgressiveCodec</uuid></pre>	If set to 1, RDP 8 progressive codecs are used if available. This setting should be disabled only in the case of a defect specific to RDP 8 progressive codecs. Disabling this setting might also disable more advanced codecs.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/redirectPreference</uuid></pre>	For redirection, the RDP client is given several destination possibilities. It normally tries them in the following order: FQDN, Primary IP, IP List, NetBIOS. If FQDN is not desired, one of the alternatives can be tried first by setting this registry key. If the specified method does not work, the RDP client falls back to the original order. A setting of auto forces the original order.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/remoteApp</uuid></pre>	Specifies the name of an available application to run in Remote Application Integrated Locally (RAIL) mode.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/remoteDesktopService</uuid></pre>	If set to Remote Computer, a direct RDP connection to a remote computer is done. If set to RD Web Access, a connection to an RD Web Access service is done first to retrieve a feed of the published RemoteApp resources.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/remoteFx</uuid></pre>	If set to 1, RemoteFX in the style of RDP 7.1 is used if available. This setting is deprecated and might disappear in a future release of HP ThinPro. This setting should be disabled only in the case of a defect specific to RemoteFX protocol. Disabling this setting might also disable more advanced codecs.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/scCertificate</uuid></pre>	If a preconfigured smart card login is selected, this gives an identifier corresponding to the certificate on that smart card to be used for authentication.
root/ConnectionType/freerdp/connections/ <uuid>/scPin</uuid>	If a preconfigured smart card login is selected, this gives the PIN or password for that smart card.
root/ConnectionType/freerdp/connections/ <uuid>/seamlessWindow</uuid>	If set to 1, window decorations are disabled. This can be desirable in a multi-monitor configuration to allow the connection to be set to the size of the primary monitor.
root/ConnectionType/freerdp/connections/ <uuid>/securityLevel</uuid>	Sets the certificate security level. If set to 0, all connections are allowed. If set to 1, remembered hosts are selected and a warning dialog is shown if verification is not passed. If set to 2, remembered hosts are not selected and a warning dialog is shown if verification is not passed. If set to 3, all insecure connections are refused.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/sendHostname</uuid></pre>	Sets the thin client hostname that is sent to the remote host. If left blank, the system hostname is sent. The registry key root/ConnectionType/freerdp/general/sendHostname must be set to hostname for this key to be used.

Registry key	Description
root/ConnectionType/freerdp/connections/ <uuid>/showConnectionGraph</uuid>	This is a diagnostic function. If set to 1, when the session starts, a separate program will be started to graph the connection's health
root/ConnectionType/freerdp/connections/ <uuid>/showRDPDashboard</uuid>	If set to 1, when the session starts, a separate window displays RDP performance and status.
root/ConnectionType/freerdp/connections/ <uuid>/smartcard</uuid>	If set to 1, local smartcard authentication to the remote host is allowed. Currently, this will disable Network Level Authentication (NLA).
root/ConnectionType/freerdp/connections/ <uuid>/sound</uuid>	If set to 1, the playback and recording devices are redirected to the remote host via the Audio extension. If set to 0, the extension is disabled. If set to 2, the USB audio devices are redirected as configured in USB Manager. Generally, HP recommends setting this value to 1 so that high-level audio redirection is used. This will improve audio quality and ensure that client audio redirected via other extensions (such as Multimedia Redirection) matches local audio settings.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/startMode</uuid></pre>	If set to the default ${\tt focus}$ and the connection is already started, the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/timeoutError</uuid></pre>	Sets the number of milliseconds to wait after losing the connection before giving up on reconnecting with the server. If set to 0, reconnection is attempted forever.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/timeoutRecovery</uuid></pre>	Sets the number of milliseconds to wait after losing the connection for networking to recover without trying a forced reconnect.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/timeoutWarning</uuid></pre>	Sets the number of milliseconds to wait after losing the connection before warning the user that the connection has been lost.
root/ConnectionType/freerdp/connections/ <uuid>/timeoutWarningDialog</uuid>	If set to 1, when an end-to-end connection drop is detected, a dialog is displayed and the screen will turn grayscale. Otherwise, messages are written to the connection log and the session freezes.
root/ConnectionType/freerdp/connections/ <uuid>/timeoutsEnabled</uuid>	If set to 1, end-to-end connection health checks are done.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/tlsVersion</uuid></pre>	Sets the version of Transport Layer Security to be used during the early stages of negotiation with the RDP server. Either set this to match the version of TLS used by your RDP server, or try setting it to auto.
	<b>NOTE:</b> There are some server-side defects in some unpatched RDP servers that can cause the auto setting to fail, so it is not the default setting.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/usbMiscRedirection</uuid></pre>	If set to 0, redirection is disabled for all other USB devices except those handled by sound, printerMapping, portMapping, usbStorageRedirection, and
	localPartitionRedirection. If set to 2, all other USB devices are redirected to the remote host as configured in USB Manager.
root/ConnectionType/freerdp/connections/ <uuid>/usbStorageRedirection</uuid>	If set to 1, USB storage devices are redirected to the remote host via the Storage extension. If set to 0, the extension is disabled. If set to 2, USB storage devices are redirected as configured in USE Manager.

Registry key	Description
root/ConnectionType/freerdp/connections/ <uuid>/username</uuid>	Sets the default user name to supply to the remote host during login. Generally, this setting is used for kiosk-style applications where a generic user name is used for login.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/waitForNetwork</uuid></pre>	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/freerdp/connections/ <uuid>/windowMode</uuid>	If set to Remote Application, RDP will run in Remote Application Integrated Locally (RAIL) mode. This requires that the RemoteApp server allows the desired application to run as a remote application. The application will be displayed in a separate window within the desktop environment, making it look like the application is part of the local system. Also see the remoteApp registry key. If set to Alternate Shell, a non-standard shell is invoked. Also see the application and directory registry keys.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/windowSizeHeight</uuid></pre>	
<pre>root/ConnectionType/freerdp/connections/ <uuid>/windowSizePercentage</uuid></pre>	
root/ConnectionType/freerdp/connections/ <uuid>/windowSizeWidth</uuid>	
<pre>root/ConnectionType/freerdp/connections/ <uuid>/windowType</uuid></pre>	
<pre>root/ConnectionType/freerdp/connections/ <uuid>/x11Capture</uuid></pre>	This is a diagnostic function. If set to 1, X11 operations are captured for later playback.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/x11CaptureDir</uuid></pre>	This is a diagnostic function. The value sets the directory for X11 capture files.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/x11LogAutoflush</uuid></pre>	This is a diagnostic function. If set to 1, the X11 logfile is more frequently flushed to disk.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/x11Logfile</uuid></pre>	This is a diagnostic function. The value sets the path to the X11 logfile.
root/ConnectionType/freerdp/connections/ <uuid>/x11Logging</uuid>	This is a diagnostic function. If set to 1, X11 operations are logged.
root/ConnectionType/freerdp/connections/ <uuid>/x11Synchronous</uuid>	This is a diagnostic function. If set to 1, X11 operations are not buffered.
<pre>root/ConnectionType/freerdp/connections/ <uuid>/xkbLayoutId</uuid></pre>	Sets an XKB layout ID for bypassing the system keyboard. To see the list of available IDs, enter the following command in an X terminal: xfreerdpkbd-list.
root/ConnectionType/freerdp/coreSettings/ USBrelevant	Specifies if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.
root/ConnectionType/freerdp/coreSettings/ appName	Sets the internal application name to use for this connection type. This key should not need to be modified.
root/ConnectionType/freerdp/coreSettings/ className	Sets the internal application class name to use for this connection type. This key should not need to be modified.
root/ConnectionType/freerdp/coreSettings/ disableLinkDropWarning	If set to 1, the operating system does not generate a dialog indicating that networking is down because the connection protocol handles such situations.

Registry key	Description
<pre>root/ConnectionType/freerdp/coreSettings/ editor</pre>	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/freerdp/coreSettings/ generalSettingsEditor</pre>	Sets the internal application name to use when the General Settings Manager is launched for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/freerdp/coreSettings/ icon16Path</pre>	Sets the path to the 16x16 pixel icon for this application.
<pre>root/ConnectionType/freerdp/coreSettings/ icon32Path</pre>	Sets the path to the 32x32 pixel icon for this application.
root/ConnectionType/freerdp/coreSettings/ icon48Path	Sets the path to the 48x48 pixel icon for this application.
<pre>root/ConnectionType/freerdp/coreSettings/ initialConnectionTimeout</pre>	Sets the number of seconds to wait for an initial response from the RDP server before giving up.
<pre>root/ConnectionType/freerdp/coreSettings/ label</pre>	Sets the name to display for this connection type in the UI.
root/ConnectionType/freerdp/coreSettings/ priorityInConnectionLists	Sets the priority of this connection type when it is displayed in Connection Manager and the Configuration Wizard that displays during initial setup. A higher value will move the connection type towards the top of the list. If set to 0, the connection type is hidden from Configuration Wizard and is shown last in Connection Manager. Connections types with the same priority are listed in alphabetical order.
<pre>root/ConnectionType/freerdp/coreSettings/ stopProcess</pre>	Sets the behavior that should occur when <code>connection-mgr</code> stop is called on this connection. By default this is <code>close</code> , which will send a standard kill signal to the process. When set to <code>kill</code> , the process specified by <code>appName</code> will be forcefully killed. When set to <code>custom</code> , a custom execution script specified by <code>wrapperScript</code> will be executed with the argument <code>stop</code> to terminate the process gracefully.
<pre>root/ConnectionType/freerdp/coreSettings/ watchPid</pre>	If set to 1, the connection is monitored under the name specified by <code>appName</code> . This key should not need to be modified.
<pre>root/ConnectionType/freerdp/coreSettings/ wrapperScript</pre>	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
<pre>root/ConnectionType/freerdp/coreSettings/ wrapperScriptGeneration</pre>	Lets Connection Manager know what type of parameters to pass to the wrapper script.
root/ConnectionType/freerdp/general/ autoReconnectDialogTimeout	If autoReconnect is enabled, this key sets the number of seconds before timing out any error dialogs for the connection. If set to 0, the dialogs wait indefinitely for user interaction.
root/ConnectionType/freerdp/general/ disablePasswordChange	When a remote login fails due to bad credentials, the user is presented with a button that brings up a dialog for updating their password. If this key is set is 1, that button and dialog are not displayed.
root/ConnectionType/freerdp/general/enableMMR	If set to 1, the Multimedia Redirection plugin is enabled, causing supported codecs played through Windows Media Player to be redirected to the client. This will greatly improve full screen and high definition video playback for codecs such as WMV9, VC1, and MPEG4.

Registry key	Description
<pre>root/ConnectionType/freerdp/general/ preferredAudio</pre>	Sets the default audio backend for high-level audio redirection (both in and out).
root/ConnectionType/freerdp/general/rdWebFeedUrlPattern	Sets the pattern used to build the RD Web Access URL. The host of the URL, e.g. myserver.com, is replaced by the value of the connection's <b>Address</b> field. This pattern is not used when the address is already a URL.
<pre>root/ConnectionType/freerdp/general/ sendHostname</pre>	If set to hostname, the system hostname is sent to the remote host. This is typically used to identify the thin client associated with a particular RDP session. The sent hostname can be overridden using sendHostname in the connection-specific settings. If set to mac, the MAC address of the first available network adapter is sent instead of the hostname.
<pre>root/ConnectionType/freerdp/general/ serialPortsDriver</pre>	This setting ensures a better compatibility with the expected underlying Windows driver SerCx2.sys, SerCx.sys, or Serial.sys.
<pre>root/ConnectionType/freerdp/general/ serialPortsPermissive</pre>	If set to 1, errors for unsupported features will be ignored.

# ssh

Registry key	Description
<pre>root/ConnectionType/ssh/authorizations/ user/add</pre>	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/ssh/authorizations/user/ general</pre>	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/ssh/connections/<uuid>/ address</uuid></pre>	Sets the hostname or IP address to connect to.
<pre>root/ConnectionType/ssh/connections/<uuid>/ afterStartedCommand</uuid></pre>	Sets the command to execute after the connection has been started.
<pre>root/ConnectionType/ssh/connections/<uuid>/ afterStoppedCommand</uuid></pre>	Sets the command to execute after the connection has been stopped.
<pre>root/ConnectionType/ssh/connections/<uuid>/ application</uuid></pre>	Specifies the application to run.
<pre>root/ConnectionType/ssh/connections/<uuid>/ authorizations/user/edit</uuid></pre>	If set to 1, an end user has permission to modify the connection settings for this connection.
<pre>root/ConnectionType/ssh/connections/<uuid>/ authorizations/user/execution</uuid></pre>	If set to 1, an end user has permission to execute this connection.
<pre>root/ConnectionType/ssh/connections/<uuid>/ autoReconnect</uuid></pre>	If set to 1, the connection will be restarted when it is closed or disconnected.
<pre>root/ConnectionType/ssh/connections/<uuid>/ autoReconnectDelay</uuid></pre>	Sets the amount of time in seconds to wait before reconnecting the session. The default of 0 will cause the connection to reconnect immediately. This setting only takes effect when autoReconnect is set to 1.
<pre>root/ConnectionType/ssh/connections/<uuid>/ autostart</uuid></pre>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.

Registry key	Description
root/ConnectionType/ssh/connections/ <uuid>/ autostartDelay</uuid>	Sets the amount of time in seconds to wait before starting the connection after the system boots. The default of 0 will cause the connection to start immediately. This setting only takes effect when autostart is set to 1.
root/ConnectionType/ssh/connections/ <uuid>/ backgroundColor</uuid>	Sets the background color for the connection.
root/ConnectionType/ssh/connections/ <uuid>/ beforeStartingCommand</uuid>	Sets the command to execute before the connection starts.
coot/ConnectionType/ssh/connections/ <uuid>/</uuid>	Enables compression for an SSH connection.
root/ConnectionType/ssh/connections/ <uuid>/ connectionEndAction</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/ssh/connections/ <uuid>/ coord</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/ssh/connections/ <uuid>/ dependConnectionId</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/ssh/connections/ <uuid>/ extraEnvValues/<uuid>/key</uuid></uuid>	Sets the name of an extra environment variable for use with the connection.
coot/ConnectionType/ssh/connections/ <uuid>/ extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.
root/ConnectionType/ssh/connections/ <uuid>/ fallBackConnection</uuid>	Sets the fallback connection via its UUID.
root/ConnectionType/ssh/connections/ <uuid>/ font</uuid>	Sets the font size for the connection.
root/ConnectionType/ssh/connections/ <uuid>/ foregroundColor</uuid>	Sets the foreground color for the connection.
root/ConnectionType/ssh/connections/ <uuid>/ fork</uuid>	If set to 1, the <b>Fork into background</b> option is enabled for the connection.
root/ConnectionType/ssh/connections/ <uuid>/ nasDesktopIcon</uuid>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
root/ConnectionType/ssh/connections/ <uuid>/ isInMenu</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/ssh/connections/ <uuid>/ label</uuid>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to Default Connection and does not display in the UI.
root/ConnectionType/ssh/connections/ <uuid>/</uuid>	Sets the port number to use when contacting the SSH server. The default is 22.
coot/ConnectionType/ssh/connections/ <uuid>/ startMode</uuid>	If set to the default ${\tt focus}$ and the connection is already started the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
root/ConnectionType/ssh/connections/ CUUID>/tty	If set to 1, the <b>Force TTY allocation</b> option is enabled for the connection.
root/ConnectionType/ssh/connections/ <uuid>/ username</uuid>	Sets the default user name to supply to the remote host during login. Generally, this setting is used for kiosk-style applications where a generic user name is used for login.

Registry key	Description
root/ConnectionType/ssh/connections/ <uuid>/ waitForNetwork</uuid>	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/ssh/connections/ <uuid>/x11</uuid>	If set to 1, the <b>X11 connection forwarding</b> option is enabled for the connection.
root/ConnectionType/ssh/coreSettings/ USBrelevant	Specifies if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.
root/ConnectionType/ssh/coreSettings/appName	Sets the internal application name to use for this connection type. This key should not need to be modified.
root/ConnectionType/ssh/coreSettings/ className	Sets the internal application class name to use for this connection type. This key should not need to be modified.
root/ConnectionType/ssh/coreSettings/editor	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.
root/ConnectionType/ssh/coreSettings/ icon16Path	Sets the path to the 16x16 pixel icon for this application.
root/ConnectionType/ssh/coreSettings/ icon32Path	Sets the path to the 32x32 pixel icon for this application.
root/ConnectionType/ssh/coreSettings/ icon48Path	Sets the path to the 48x48 pixel icon for this application.
root/ConnectionType/ssh/coreSettings/label	Sets the name to display for this connection type in the UI.
root/ConnectionType/ssh/coreSettings/ priorityInConnectionLists	Sets the priority of this connection type when it is displayed in Connection Manager and the Configuration Wizard that displays during initial setup. A higher value will move the connection type towards the top of the list. If set to 0, the connection type is hidden from Configuration Wizard and is shown last in Connection Manager. Connections types with the same priority are listed in alphabetical order.
root/ConnectionType/ssh/coreSettings/ serverRequired	Sets whether a server name or address is unused, optional, or required for this connection type.
root/ConnectionType/ssh/coreSettings/ stopProcess	Sets the behavior that should occur when <code>connection-mgr</code> stop is called on this connection. By default this is <code>close</code> , which will send a standard kill signal to the process. When set to <code>kill</code> , the process specified by <code>appName</code> will be forcefully killed. When set to <code>custom</code> , a custom execution script specified by <code>wrapperScript</code> will be executed with the argument <code>stop</code> to terminate the process gracefully.
root/ConnectionType/ssh/coreSettings/watchPid	If set to 1, the connection is monitored under the name specified by <code>appName</code> . This key should not need to be modified.
root/ConnectionType/ssh/coreSettings/ wrapperScript	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
root/ConnectionType/ssh/gui/SshManager/name	This registry key is either used internally or reserved for future use. The value should not be changed.

Registry key	Description
root/ConnectionType/ssh/gui/SshManager/title	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/ssh/gui/SshManager/ widgets/address	Controls the state of the <b>Address</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/ widgets/application	Controls the state of the <b>Run application</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/ widgets/autoReconnect	Controls the state of the <b>Auto reconnect</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/ widgets/autostart	Controls the state of the <b>Auto start priority</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/ widgets/backgroundColor	Controls the state of the <b>Background color</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/widgets/compression	Controls the state of the <b>Compression</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/widgets/fallBackConnection	Controls the state of the <b>Fallback Connection</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/ widgets/font	Controls the state of the <b>Font</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/ widgets/foregroundColor	Controls the state of the <b>Foreground color</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/ssh/gui/SshManager/ widgets/fork	Controls the state of the <b>Fork into background</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

Registry key	Description
<pre>root/ConnectionType/ssh/gui/SshManager/ widgets/hasDesktopIcon</pre>	Controls the state of the <b>Show icon on desktop</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/ssh/gui/SshManager/ widgets/isInMenu</pre>	This registry key is either used internally or reserved for future use. The value should not be changed.
<pre>root/ConnectionType/ssh/gui/SshManager/ widgets/label</pre>	Controls the state of the <b>Name</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/ssh/gui/SshManager/ widgets/port</pre>	Controls the state of the <b>Port</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/ssh/gui/SshManager/ widgets/tty</pre>	Controls the state of the <b>Force TTY allocation</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/ssh/gui/SshManager/ widgets/username</pre>	Controls the state of the <b>User name</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/ssh/gui/SshManager/ widgets/waitForNetwork</pre>	Controls the state of the <b>Wait for network before connecting</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/ssh/gui/SshManager/ widgets/x11</pre>	Controls the state of the <b>X11 connection forwarding</b> widget in Secure Shell Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

#### teemtalk

Registry key	Description
<pre>root/ConnectionType/teemtalk/authorizations/ user/add</pre>	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/teemtalk/authorizations/ user/general</pre>	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.
root/ConnectionType/teemtalk/connections/ <uuid>/afterStartedCommand</uuid>	Sets the command to execute after the connection has been started.

Registry key	Description
root/ConnectionType/teemtalk/connections/ <uuid>/afterStoppedCommand</uuid>	Sets the command to execute after the connection has been stopped.
root/ConnectionType/teemtalk/connections/ <pre>CUUID&gt;/authorizations/user/edit</pre>	If set to 1, an end user has permission to modify the connection settings for this connection.
root/ConnectionType/teemtalk/connections/ <pre>CUUID&gt;/authorizations/user/execution</pre>	If set to 1, an end user has permission to execute this connection.
root/ConnectionType/teemtalk/connections/ <pre>CUUID&gt;/autoReconnect</pre>	If set to 1, the connection will be restarted when it is closed or disconnected.
root/ConnectionType/teemtalk/connections/ <uuid>/autostart</uuid>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.
root/ConnectionType/teemtalk/connections/ <uuid>/beforeStartingCommand</uuid>	Sets the command to execute before the connection starts.
root/ConnectionType/teemtalk/connections/ <uuid>/connectionEndAction</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/teemtalk/connections/ <uuid>/coord</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/teemtalk/connections/ <pre>CUUID&gt;/dependConnectionId</pre>	This registry key is either used internally or reserved for future use. The value should not be changed.
coot/ConnectionType/teemtalk/connections/ CUUID>/extraEnvValues/ <uuid>/key</uuid>	Sets the name of an extra environment variable for use with the connection.
root/ConnectionType/teemtalk/connections/ <uuid>/extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.
root/ConnectionType/teemtalk/connections/ <pre>CUUID&gt;/fallBackConnection</pre>	Sets the fallback connection via its UUID.
root/ConnectionType/teemtalk/connections/ <uuid>/hasDesktopIcon</uuid>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
root/ConnectionType/teemtalk/connections/ <pre>CUUID&gt;/isInMenu</pre>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/teemtalk/connections/ <uuid>/label</uuid>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to Default Connection and does not display in the UI.
root/ConnectionType/teemtalk/connections/ <uuid>/startMode</uuid>	If set to the default focus and the connection is already started, the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
root/ConnectionType/teemtalk/connections/ <uuid>/systembeep</uuid>	If set to 1, system beep is enabled for the connection.
coot/ConnectionType/teemtalk/connections/ CUUID>/ttsName	Sets the TeemTalk profile name.
coot/ConnectionType/teemtalk/connections/ CUUID>/waitForNetwork	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/teemtalk/coreSettings/ JSBrelevant	Specifies if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.

Registry key	Description
<pre>root/ConnectionType/teemtalk/coreSettings/ appName</pre>	Sets the internal application name to use for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/teemtalk/coreSettings/ className</pre>	Sets the internal application class name to use for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/teemtalk/coreSettings/ editor</pre>	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.
root/ConnectionType/teemtalk/coreSettings/ generalSettingsEditor	Sets the internal application name to use when the General Settings Manager is launched for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/teemtalk/coreSettings/ icon16Path</pre>	Sets the path to the 16x16 pixel icon for this application.
<pre>root/ConnectionType/teemtalk/coreSettings/ icon32Path</pre>	Sets the path to the 32x32 pixel icon for this application.
<pre>root/ConnectionType/teemtalk/coreSettings/ icon48Path</pre>	Sets the path to the 48x48 pixel icon for this application.
root/ConnectionType/teemtalk/coreSettings/ label	Sets the name to display for this connection type in the UI.
root/ConnectionType/teemtalk/coreSettings/ priorityInConnectionLists	Sets the priority of this connection type when it is displayed in Connection Manager and the Configuration Wizard that displays during initial setup. A higher value will move the connection type towards the top of the list. If set to 0, the connection type is hidden from Configuration Wizard and is shown last in Connection Manager. Connections types with the same priority are listed in alphabetical order.
<pre>root/ConnectionType/teemtalk/coreSettings/ serverRequired</pre>	Sets whether a server name or address is unused, optional, or required for this connection type.
<pre>root/ConnectionType/teemtalk/coreSettings/ stopProcess</pre>	Sets the behavior that should occur when <code>connection-mgr</code> stop is called on this connection. By default this is <code>close</code> , which will send a standard kill signal to the process. When set to <code>kill</code> , the process specified by <code>appName</code> will be forcefully killed. When set to <code>custom</code> , a custom execution script specified by <code>wrapperScript</code> will be executed with the argument <code>stop</code> to terminate the process gracefully.
root/ConnectionType/teemtalk/coreSettings/ wrapperScript	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
root/ConnectionType/teemtalk/gui/ TeemtalkManager/name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/teemtalk/gui/ TeemtalkManager/status	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/teemtalk/gui/ TeemtalkManager/title	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/teemtalk/gui/ TeemtalkManager/widgets/autoReconnect	Controls the state of the <b>Auto reconnect</b> widget in TeemTalk Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

Registry key	Description
<pre>root/ConnectionType/teemtalk/gui/ TeemtalkManager/widgets/autostart</pre>	Controls the state of the <b>Auto start priority</b> widget in TeemTalk Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/teemtalk/gui/ TeemtalkManager/widgets/hasDesktopIcon</pre>	Controls the state of the <b>Show icon on desktop</b> widget in TeemTalk Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/teemtalk/gui/ TeemtalkManager/widgets/isInMenu	This registry key is either used internally or reserved for future use. The value should not be changed.
<pre>root/ConnectionType/teemtalk/gui/ TeemtalkManager/widgets/label</pre>	Controls the state of the <b>Name</b> widget in TeemTalk Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/teemtalk/gui/ TeemtalkManager/widgets/waitForNetwork	Controls the state of the Wait for network before connecting widget in TeemTalk Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

### telnet

Registry key	Description
<pre>root/ConnectionType/telnet/authorizations/ user/add</pre>	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/telnet/authorizations/ user/general</pre>	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/telnet/connections/ <uuid>/address</uuid></pre>	Sets the hostname or IP address to connect to.
<pre>root/ConnectionType/telnet/connections/ <uuid>/afterStartedCommand</uuid></pre>	Sets the command to execute after the connection has been started.
<pre>root/ConnectionType/telnet/connections/ <uuid>/afterStoppedCommand</uuid></pre>	Sets the command to execute after the connection has been stopped.
<pre>root/ConnectionType/telnet/connections/ <uuid>/authorizations/user/edit</uuid></pre>	If set to 1, an end user has permission to modify the connection settings for this connection.
<pre>root/ConnectionType/telnet/connections/ <uuid>/authorizations/user/execution</uuid></pre>	If set to 1, an end user has permission to execute this connection.
<pre>root/ConnectionType/telnet/connections/ <uuid>/autoReconnect</uuid></pre>	If set to 1, the connection will be restarted when it is closed or disconnected.
<pre>root/ConnectionType/telnet/connections/ <uuid>/autostart</uuid></pre>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.

Registry key	Description
root/ConnectionType/telnet/connections/ <uuid>/backgroundColor</uuid>	Sets the background color for the connection.
root/ConnectionType/telnet/connections/ <uuid>/beforeStartingCommand</uuid>	Sets the command to execute before the connection starts.
root/ConnectionType/telnet/connections/ <uuid>/connectionEndAction</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/telnet/connections/ <uuid>/coord</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/telnet/connections/ <uuid>/dependConnectionId</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/telnet/connections/ <uuid>/extraEnvValues/<uuid>/key</uuid></uuid>	Sets the name of an extra environment variable for use with the connection.
root/ConnectionType/telnet/connections/ <uuid>/extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.
root/ConnectionType/telnet/connections/ <uuid>/fallBackConnection</uuid>	Sets the fallback connection via its UUID.
root/ConnectionType/telnet/connections/ <uuid>/font</uuid>	Sets the font size for the connection.
root/ConnectionType/telnet/connections/ <uuid>/foregroundColor</uuid>	Sets the foreground color for the connection.
root/ConnectionType/telnet/connections/ <uuid>/hasDesktopIcon</uuid>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
root/ConnectionType/telnet/connections/ <uuid>/label</uuid>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to <code>Default Connection</code> and does not display in the UI.
root/ConnectionType/telnet/connections/ <uuid>/locale</uuid>	Sets the locale of the connection.
root/ConnectionType/telnet/connections/ <uuid>/port</uuid>	Sets the port number to use when contacting the server. The default is 23.
root/ConnectionType/telnet/connections/ <uuid>/startMode</uuid>	If set to the default focus and the connection is already started, the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
root/ConnectionType/telnet/connections/ <uuid>/waitForNetwork</uuid>	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/telnet/coreSettings/ USBrelevant	Specifies if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.
root/ConnectionType/telnet/coreSettings/ appName	Sets the internal application name to use for this connection type This key should not need to be modified.
root/ConnectionType/telnet/coreSettings/ className	Sets the internal application class name to use for this connection type. This key should not need to be modified.
root/ConnectionType/telnet/coreSettings/ editor	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.

Registry key	Description
<pre>root/ConnectionType/telnet/coreSettings/ generalSettingsEditor</pre>	Sets the internal application name to use when the General Settings Manager is launched for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/telnet/coreSettings/ icon16Path</pre>	Sets the path to the 16x16 pixel icon for this application.
root/ConnectionType/telnet/coreSettings/ icon32Path	Sets the path to the 32x32 pixel icon for this application.
root/ConnectionType/telnet/coreSettings/ icon48Path	Sets the path to the 48x48 pixel icon for this application.
root/ConnectionType/telnet/coreSettings/label	Sets the name to display for this connection type in the UI.
<pre>root/ConnectionType/telnet/coreSettings/ priorityInConnectionLists</pre>	Sets the priority of this connection type when it is displayed in Connection Manager and the Configuration Wizard that displays during initial setup. A higher value will move the connection type towards the top of the list. If set to 0, the connection type is hidden from Configuration Wizard and is shown last in Connection Manager. Connections types with the same priority are listed in alphabetical order.
<pre>root/ConnectionType/telnet/coreSettings/ serverRequired</pre>	Sets whether a server name or address is unused, optional, or required for this connection type.
root/ConnectionType/telnet/coreSettings/ stopProcess	Sets the behavior that should occur when <code>connection-mgr</code> stop is called on this connection. By default this is <code>close</code> , which will send a standard kill signal to the process. When set to <code>kill</code> , the process specified by <code>appName</code> will be forcefully killed. When set to <code>custom</code> , a custom execution script specified by <code>wrapperScript</code> will be executed with the argument <code>stop</code> to terminate the process gracefully.
root/ConnectionType/telnet/coreSettings/ wrapperScript	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
root/ConnectionType/telnet/gui/TelnetManager/ name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/telnet/gui/TelnetManager/ status	This registry key is either used internally or reserved for future use. The value should not be changed.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ title</pre>	This registry key is either used internally or reserved for future use. The value should not be changed.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/address</pre>	Controls the state of the <b>Address</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/autoReconnect</pre>	Controls the state of the <b>Auto reconnect</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/telnet/gui/TelnetManager/widgets/autostart	Controls the state of the <b>Auto start priority</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the

Registry key	Description
	widget is hidden. If set to ${\tt read-only}$ , the widget is visible in the read-only state.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/backgroundColor</pre>	Controls the state of the <b>Background color</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/fallBackConnection</pre>	Controls the state of the <b>Fallback Connection</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/foregroundColor</pre>	Controls the state of the <b>Foreground color</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/hasDesktopIcon</pre>	Controls the state of the <b>Show icon on desktop</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/label</pre>	Controls the state of the <b>Name</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/port</pre>	Controls the state of the <b>Port</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/telnet/gui/TelnetManager/ widgets/waitForNetwork</pre>	Controls the state of the <b>Wait for network before connecting</b> widget in Telnet Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

#### view

Registry key	Description
<pre>root/ConnectionType/view/authorizations/ user/add</pre>	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/view/authorizations/user/ commandLineBox</pre>	If set to 1, an end user has permission to enter command-line arguments in VMware Horizon View Connection Manager.
<pre>root/ConnectionType/view/authorizations/user/ general</pre>	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.

Registry key	Description
root/ConnectionType/view/connections/ <uuid>/ ExtraArgs</uuid>	Specifies extra arguments for the VMware Horizon View client.  Run view_clienthelp Or vmware-viewhelp from an X terminal to see all available arguments.
<pre>root/ConnectionType/view/connections/<uuid>/ SingleSignOn</uuid></pre>	
<pre>root/ConnectionType/view/connections/<uuid>/ afterStartedCommand</uuid></pre>	Sets the command to execute after the connection has been started.
root/ConnectionType/view/connections/ <uuid>/ afterStoppedCommand</uuid>	Sets the command to execute after the connection has been stopped.
root/ConnectionType/view/connections/ <uuid>/ appInMenu</uuid>	If set to 1, all applications for this connection will be displayed in the taskbar menu.
root/ConnectionType/view/connections/ <uuid>/ appOnDesktop</uuid>	If set to 1, all applications for this connection will be displayed on the desktop.
root/ConnectionType/view/connections/ <uuid>/ applicationSize</uuid>	Sets the size in which the VMware Horizon View client will launch applications.
root/ConnectionType/view/connections/ <uuid>/ attachToConsole</uuid>	
root/ConnectionType/view/connections/ <uuid>/ authorizations/user/edit</uuid>	If set to 1, an end user has permission to modify the connection settings for this connection.
root/ConnectionType/view/connections/ <uuid>/ authorizations/user/execution</uuid>	If set to 1, an end user has permission to execute this connection.
root/ConnectionType/view/connections/ <uuid>/ autoReconnect</uuid>	If set to 1, the connection will be restarted when it is closed or disconnected.
root/ConnectionType/view/connections/ <uuid>/ autoReconnectDelay</uuid>	Sets the amount of time in seconds to wait before reconnecting the session. The default of 0 will cause the connection to reconnect immediately. This setting only takes effect when autoReconnect is set to 1.
root/ConnectionType/view/connections/ <uuid>/ automaticLogin</uuid>	If set to 1, the VMware Horizon View client will attempt to log in automatically if all fields are provided. If set to 0, users have to select <b>Connect</b> manually in the VMware Horizon View client, log in, and select a desktop.
root/ConnectionType/view/connections/ <uuid>/ autostart</uuid>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.
root/ConnectionType/view/connections/ <uuid>/ autostartDelay</uuid>	Sets the amount of time in seconds to wait before starting the connection after the system boots. The default of 0 will cause the connection to start immediately. This setting only takes effect when autostart is set to 1.
root/ConnectionType/view/connections/ <uuid>/ beforeStartingCommand</uuid>	Sets the command to execute before the connection starts.
root/ConnectionType/view/connections/ <uuid>/ closeAfterDisconnect</uuid>	If set to 1, the connection is ended after the first desktop is closed. If set to 0, the VMware Horizon View client returns to the desktop selection screen. This is enabled by default to prevent users from accidentally leaving the connection at the desktop selection screen after logging off.
root/ConnectionType/view/connections/ <uuid>/ closeAfterRoaming</uuid>	If set to 1, the VMware connection will be disconnected if it is roamed to another place

Registry key	Description
root/ConnectionType/view/connections/ <uuid>/ coord</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/view/connections/ <uuid>/ credentialsType</uuid>	Specifies the credential type between anonymous (unauthenticated access), sso (single sign-on), startup (credentials are requested at startup), password (preconfigured user/domain/password), or smartcard (preconfigured smart card).
root/ConnectionType/view/connections/ <uuid>/ dependConnectionId</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/view/connections/ <uuid>/ desktop</uuid>	If specified, the named desktop will launch automatically upon login. By default, if there is only one desktop available, it will launch automatically without needing to be specified.
root/ConnectionType/view/connections/ <uuid>/ desktopSize</uuid>	Sets the size in which the VMware Horizon View client will launch the desktop.
root/ConnectionType/view/connections/ <uuid>/ directory</uuid>	
root/ConnectionType/view/connections/ <uuid>/ disableMaximizedApp</uuid>	If set to 1, window size settings for maximized applications are disabled.
root/ConnectionType/view/connections/ <uuid>/ domain</uuid>	Sets the domain to provide to View Connection Server. If no domain is specified, the default domain for the server is used.
root/ConnectionType/view/connections/ <uuid>/ enableMMR</uuid>	If set to 1, the Multimedia Redirection plugin is enabled, causing supported codecs played through Windows Media Player to be redirected to the client. This greatly improves full screen and high definition video playback for codecs such as WMV9, VC1, and MPEG4.
root/ConnectionType/view/connections/ <uuid>/ enableSingleMode</uuid>	
root/ConnectionType/view/connections/ <uuid>/ extraEnvValues/<uuid>/key</uuid></uuid>	Sets the name of an extra environment variable for use with the connection.
root/ConnectionType/view/connections/ <uuid>/ extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.
root/ConnectionType/view/connections/ <uuid>/ fallBackConnection</uuid>	Sets the fallback connection via its UUID.
root/ConnectionType/view/connections/ <uuid>/ fullscreen</uuid>	If set to 1, the VMware Horizon View client launches in full screen mode when started.
root/ConnectionType/view/connections/ <uuid>/ hasDesktopIcon</uuid>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
root/ConnectionType/view/connections/ <uuid>/ hideMenuBar</uuid>	If set to 1, the top menu bar within the desktop is hidden. This bar is used to manage remote devices and start other desktops.
root/ConnectionType/view/connections/ <uuid>/ isInMenu</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/view/connections/ <uuid>/ label</uuid>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to Default Connection and does not display in the UI.
root/ConnectionType/view/connections/ <uuid>/</uuid>	If set to 1, end users are prevented from changing the server address.

Registry key	Description
root/ConnectionType/view/connections/ <uuid>/ loginfields/domain</uuid>	If set to 1, the <b>Domain</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
root/ConnectionType/view/connections/ <uuid>/ loginfields/password</uuid>	If set to 1, the <b>Password</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
<pre>root/ConnectionType/view/connections/<uuid>/ loginfields/rememberme</uuid></pre>	If set to 1, the <b>Remember me</b> check box is shown in the login dialog for the connection. If set to 2, the check box is shown but disabled. If set to 0, the check box is hidden.
<pre>root/ConnectionType/view/connections/<uuid>/ loginfields/showpassword</uuid></pre>	If set to 1, the <b>Show password</b> button is shown in the login dialog for the connection. If set to 2, the button is shown but disabled. If set to 0, the button is hidden.
<pre>root/ConnectionType/view/connections/<uuid>/ loginfields/smartcard</uuid></pre>	If set to 1, the <b>Smart card login</b> check box is shown in the login dialog for the connection. If set to 2, the check box is shown but disabled. If set to 0, the check box is hidden. This check box might not appear if no smart card is detected, even if this option is enabled.
root/ConnectionType/view/connections/ <uuid>/ loginfields/username</uuid>	If set to 1, the <b>User Name</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
root/ConnectionType/view/connections/ <uuid>/ password</uuid>	Sets the default password to supply to the remote host during login. This value will be encrypted. Generally, this setting is used for kiosk-style applications where a generic password is used for login.
<pre>root/ConnectionType/view/connections/<uuid>/ preferredProtocol</uuid></pre>	Sets the preferred protocol.
root/ConnectionType/view/connections/ <uuid>/ printerMapping</uuid>	If set to 1, all printers defined locally via CUPS are redirected to the remote host via ThinPrint. If set to 0, the printer mapping is disabled. If set to 2, the USB printers are redirected as configured in USB Manager.
root/ConnectionType/view/connections/ <uuid>/ saveCredentials</uuid>	
root/ConnectionType/view/connections/ <uuid>/ server</uuid>	Sets the address of the remote host to connect to. This is typically a URL such as http://server.domain.com.
<pre>root/ConnectionType/view/connections/<uuid>/ sessionEndAction</uuid></pre>	
root/ConnectionType/view/connections/ <uuid>/ singleDesktop</uuid>	
root/ConnectionType/view/connections/ <uuid>/ smartcard</uuid>	If set to 1, locally-attached smart cards are forwarded to the remote host, allowing them to be used by applications on the remote host. This only enables smart card login for the remote host, not for View Connection Server.
<pre>root/ConnectionType/view/connections/<uuid>/ startMode</uuid></pre>	If set to the default ${\tt focus}$ and the connection is already started, the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
root/ConnectionType/view/connections/ <uuid>/ username</uuid>	Sets the default user name to supply to the remote host during login. Generally, this setting is used for kiosk-style applications where a generic user name is used for login.

Registry key	Description
<pre>root/ConnectionType/view/connections/<uuid>/ viewSecurityLevel</uuid></pre>	If set to Refuse insecure connections, the VMware Horizon View client will not allow a user to connect to View Connection Server if the server's SSL certificate is invalid. If set to Warn, the VMware Horizon View client will display a warning if the server's certificate is not able to be verified, and if the certificate is self-signed or expired, the user still will not be allowed to connect. If set to Allow all connections, the server certificate will not be verified and connections to any server will be allowed.
<pre>root/ConnectionType/view/connections/<uuid>/ waitForNetwork</uuid></pre>	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/attachToConsole</uuid></pre>	
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/audioLatency</uuid>	Sets the average milliseconds of offset between the audio stream and the display of corresponding video frames after decoding.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/clipboardExtension</uuid></pre>	If set to 1, clipboard functionality is enabled between different RDP sessions and between RDP sessions and the local system.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/colorDepth</uuid></pre>	This setting is deprecated. It is used to reduce the color depth of the connection below that of the native desktop resolution. Frequently, this has been used to reduce network bandwidth. Reducing color depth to a level not supported by the video driver can cause screen corruption or launch failures.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/compression</uuid></pre>	If set to 1, compression of RDP data sent between the client and the server is enabled.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/disableMMRwithRFX</uuid>	If set to 1, multimedia redirection is disabled if a valid RemoteFX session is established.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/frameAcknowledgeCount</uuid></pre>	Sets the number of video frames the server can push without waiting for acknowledgement from the client. Lower numbers result in a more responsive desktop but lower frame rate. If set to 0, frame acknowledgement is not used in the client-server interactions.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/general/sendHostname</uuid></pre>	If set to hostname, the system hostname is sent to the remote host. This is typically used to identify the thin client associated with a particular RDP session. The sent hostname can be overridden using sendHostname in the connection-specific settings. If set to mac, the MAC address of the first available network adapter is sent instead of the hostname.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/loadBalanceInfo</uuid></pre>	This value is the load balancing cookie sent for brokering purposes to the server upon connection and corresponds to the loadbalanceinfo field in the .rdp file. By default, the value is empty.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/mouseMotionEvents</uuid></pre>	If set to 0, mouse motion events are not sent to the server. This can prevent some user feedback such as tooltips from functioning properly.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/offScreenBitmaps</uuid>	If set to 0, off-screen bitmaps are disabled. This can increase performance slightly but will cause blocks of the screen to update asynchronously, causing screen transitions to update non-uniformly.

Registry key	Description
root/ConnectionType/view/connections/ <uuid>/ xfreerdpOptions/perfFlagDesktopComposition</uuid>	If set to 1, desktop composition (such as translucent borders) is allowed if supported by the server. Turning off desktop composition can improve performance for low-bandwidth connections. Generally, this only affects RemoteFX. If set to 2, the value is selected based on the thin client performance.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/perfFlagFontSmoothing</uuid></pre>	If set to 1, font smoothing is allowed if supported by the server and enabled. Turning off font smoothing can improve performance on low-bandwidth connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/view/connections/ <uuid>/ xfreerdpOptions/perfFlagNoCursorSettings</uuid>	If set to 1, cursor blinking is disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/perfFlagNoCursorShadow</uuid>	If set to 1, mouse cursor shadows are disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/perfFlagNoMenuAnimations</uuid>	If set to 1, menu animations are disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/view/connections/ <uuid>/ xfreerdpOptions/perfFlagNoTheming</uuid>	If set to 1, user interface themes are disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/view/connections/ <uuid>/ xfreerdpOptions/perfFlagNoWallpaper</uuid>	If set to 1, the desktop wallpaper is disabled, which can improve performance on low-bandwidth RDP connections. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/view/connections/ <uuid>/ xfreerdpOptions/perfFlagNoWindowDrag</uuid>	If set to 1, full-content window dragging is disabled, which can improve performance on low-bandwidth RDP connections. The window outline is used instead. If set to 2, the value is selected based on the thin client performance.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/portMapping</uuid>	If set to 1, the following serial and parallel ports are redirected to the remote host: ttyS0, ttyS1, ttyS2, ttyS3, ttyUSB0, lp0.
root/ConnectionType/view/connections/ <uuid>/ xfreerdpOptions/printerMapping</uuid>	If set to 1, all printers defined locally via CUPS are redirected to the remote host.
root/ConnectionType/freerdp/connections/ <uuid>/rdp6Buffering</uuid>	If set to 1, non-RemoteFX graphics performance is increased at the cost of less frequent screen updates.
root/ConnectionType/freerdp/connections/ <uuid>/rdp8Codecs</uuid>	If set to 1, RDP 8 codecs are used if available. This setting should be disabled only in the case of a defect specific to RDP 8 codecs. Disabling this setting might also disable more advanced codecs.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/rdpEncryption</uuid>	If set to 1, standard RDP encryption is used to encrypt all data between the client and the server.
root/ConnectionType/freerdp/connections/ <uuid>/rdpH264Codec</uuid>	If set to 1, RDP 8 H.264 codecs are used if available. This setting has known visual errors, particularly in multi-monitor configurations, and should be considered experimental and unsupported. Enabling this setting simply advises the server that the thin client supports H.264 for desktop display. The server must also support H.264, and the server makes the final decision on what codecs are used. This setting affects only the desktop codecs. It does not affect multimedia redirection codecs.
root/ConnectionType/freerdp/connections/ <uuid>/rdpProgressiveCodec</uuid>	If set to 1, RDP 8 progressive codecs are used if available. This setting should be disabled only in the case of a defect specific to RDP 8 progressive codecs. Disabling this setting might also disable more advanced codecs.

Registry key	Description
root/ConnectionType/freerdp/connections/ <uuid>/redirectPreference</uuid>	For redirection, the RDP client is given several destination possibilities. It normally tries them in the following order: FQDN, Primary IP, IP List, NetBIOS. If FQDN is not desired, one of the alternatives can be tried first by setting this registry key. If the specified method does not work, the RDP client falls back to the original order. A setting of auto forces the original order.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/remoteFx</uuid>	If set to 1, RemoteFX is used if available.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/sendHostname</uuid></pre>	Sets the thin client hostname that is sent to the remote host. If left blank, the system hostname is sent. The registry key root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/general/sendHostname must be set to hostname for this key to be used.</uuid>
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/sound</uuid>	If set to Bring to this computer, sound is redirected from the remote host to the client using a standard virtual channel. If set to Leave at remote computer, sound is left at the remote host. This can be useful when using a redirected USB audio device. If set to any other value, audio is disabled. Generally HP recommends setting this value to Bring to this computer and not redirecting USB playback devices to the remote host. This will improve audio quality and ensure that client audio redirected via other virtual channels (such as Multimedia Redirection) matches local audio settings.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/timeoutError</uuid>	Sets the number of milliseconds to wait after losing the connection before giving up on reconnecting with the server. If se to 0, reconnection is attempted forever.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/timeoutRecovery</uuid>	Sets the number of milliseconds to wait after losing the connection for networking to recover without trying a forced reconnect.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/timeoutWarning</uuid>	Sets the number of milliseconds to wait after losing the connection before warning the user that the connection has been lost.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/timeoutWarningDialog</uuid>	If set to 1, when an end-to-end connection drop is detected, a dialog is displayed and the screen will turn grayscale. Otherwise, messages are written to the connection log and the session freezes.
root/ConnectionType/view/connections/ <uuid>/xfreerdpOptions/timeoutsEnabled</uuid>	If set to 1, end-to-end connection health checks are done.
<pre>root/ConnectionType/view/connections/<uuid>/ xfreerdpOptions/tlsVersion</uuid></pre>	Sets the version of Transport Layer Security to be used during the early stages of negotiation with the RDP server. Either set this to match the version of TLS used by your RDP server, or try setting it to auto.
	<b>NOTE:</b> There are some server-side defects in some unpatched RDP servers that can cause the auto setting to fail, so it is not the default setting.
root/ConnectionType/view/connections/ <uuid>/ xfreerdpOptions/xkbLayoutId</uuid>	Sets an XKB layout ID for bypassing the system keyboard. To see the list of available IDs, enter the following command in an X terminal: xfreerdpkbd-list.
root/ConnectionType/view/coreSettings/ USBrelevant	Indicates if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.

Registry key	Description
root/ConnectionType/view/coreSettings/appName	Sets the internal application name to use for this connection type. This key should not need to be modified.
root/ConnectionType/view/coreSettings/ className	Sets the internal application class name to use for this connection type. This key should not need to be modified.
root/ConnectionType/view/coreSettings/editor	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.
root/ConnectionType/view/coreSettings/ icon16Path	Sets the path to the 16x16 pixel icon for this application.
root/ConnectionType/view/coreSettings/ icon32Path	Sets the path to the 32x32 pixel icon for this application.
root/ConnectionType/view/coreSettings/ icon48Path	Sets the path to the 48x48 pixel icon for this application.
root/ConnectionType/view/coreSettings/label	Sets the name to display for this connection type in the UI.
root/ConnectionType/view/coreSettings/ priorityInConnectionLists	Sets the priority of this connection type when it is displayed in Connection Manager and the Configuration Wizard that displays during initial setup. A higher value will move the connection type towards the top of the list. If set to 0, the connection type is hidden from Configuration Wizard and is shown last in Connection Manager. Connections types with the same priority are listed in alphabetical order.
root/ConnectionType/view/coreSettings/ serverRequired	Sets whether a server name or address is unused, optional, or required for this connection type.
root/ConnectionType/view/coreSettings/ stopProcess	Sets the behavior that should occur when <code>connection-mgr</code> stop is called on this connection. By default this is <code>close</code> , which will send a standard kill signal to the process. When set to <code>kill</code> , the process specified by <code>appName</code> will be forcefully killed. When set to <code>custom</code> , a custom execution script specified by <code>wrapperScript</code> will be executed with the argument <code>stop</code> to terminate the process gracefully.
root/ConnectionType/view/coreSettings/ watchPid	If set to 1, the connection is monitored under the name specified by appName. This key should not need to be modified.
root/ConnectionType/view/coreSettings/ wrapperScript	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
root/ConnectionType/view/coreSettings/ wrapperScriptGeneration	Lets Connection Manager know what type of parameters to pass to the wrapper script.
root/ConnectionType/view/general/rdpOptions	Options specified here will be forwarded directly to the RDP client if RDP is used as the display protocol for the VMware Horizon View connection. To see a full list of options, enter the following command in an X terminal: rdesktophelp
root/ConnectionType/view/gui/viewManager/name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/view/gui/viewManager/ status	This registry key is either used internally or reserved for future use. The value should not be changed.

Registry key	Description
<pre>root/ConnectionType/view/gui/viewManager/ widgets/autostart</pre>	Controls the state of the <b>Auto start priority</b> widget in VMware Horizon View Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/view/gui/viewManager/ widgets/fallBackConnection</pre>	Controls the state of the <b>Fallback Connection</b> widget in VMware Horizon View Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/view/gui/viewManager/ widgets/label</pre>	Controls the state of the <b>Name</b> widget in VMware Horizon View Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

## xdmcp

Registry key	Description
<pre>root/ConnectionType/xdmcp/authorizations/ user/add</pre>	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/xdmcp/authorizations/ user/general</pre>	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ address</uuid></pre>	Sets the hostname or IP address to connect to.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ afterStartedCommand</uuid></pre>	Sets the command to execute after the connection has been started.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ afterStoppedCommand</uuid></pre>	Sets the command to execute after the connection has been stopped.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ authorizations/user/edit</uuid></pre>	If set to 1, an end user has permission to modify the connection settings for this connection.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ authorizations/user/execution</uuid></pre>	If set to 1, an end user has permission to execute this connection.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ autoReconnect</uuid></pre>	If set to 1, the connection will be restarted when it is closed or disconnected.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ autostart</uuid></pre>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ beforeStartingCommand</uuid></pre>	Sets the command to execute before the connection starts.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ color</uuid></pre>	Sets the color depth of the display for the connection.
<pre>root/ConnectionType/xdmcp/connections/<uuid>/ connectionEndAction</uuid></pre>	This registry key is either used internally or reserved for future use. The value should not be changed.

Registry key	Description
root/ConnectionType/xdmcp/connections/ <uuid>/coord</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/connections/ <uuid>/dependConnectionId</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/connections/ <uuid>/extraEnvValues/<uuid>/key</uuid></uuid>	Sets the name of an extra environment variable for use with the connection.
root/ConnectionType/xdmcp/connections/ <uuid>/ extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.
root/ConnectionType/xdmcp/connections/ <uuid>/fallBackConnection</uuid>	Sets the fallback connection via its UUID.
root/ConnectionType/xdmcp/connections/ <uuid>/ fontServer</uuid>	Sets the address of the font server to use. The registry key useFontServer must also be set to 1.
root/ConnectionType/xdmcp/connections/ <uuid>/ hasDesktopIcon</uuid>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
root/ConnectionType/xdmcp/connections/ <uuid>/ isInMenu</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/connections/ <uuid>/ label</uuid>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to Default Connection and does not display in the UI.
root/ConnectionType/xdmcp/connections/ <uuid>/ refreshRate</uuid>	Sets the refresh rate of the display for the connection.
root/ConnectionType/xdmcp/connections/ <uuid>/ startMode</uuid>	If set to the default ${\tt focus}$ and the connection is already started, the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
root/ConnectionType/xdmcp/connections/ <uuid>/ type</uuid>	Sets the XDMCP connection type. If set to chooser, all available hosts are listed and the user can select which one to connect to. If set to query, an XDMCP request is sent to the specified host directly. If set to broadcast, all available hosts are listed and the first one is connected to automatically.
root/ConnectionType/xdmcp/connections/ <uuid>/useFontServer</uuid>	If set to 1, the font server is enabled. If set to 0, the local font is used.
root/ConnectionType/xdmcp/connections/ <uuid>/ waitForNetwork</uuid>	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/xdmcp/connections/ <uuid>/windowSize</uuid>	Sets the window size of the connection.
root/ConnectionType/xdmcp/coreSettings/ USBrelevant	Specifies if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.
root/ConnectionType/xdmcp/coreSettings/ appName	Sets the internal application name to use for this connection type. This key should not need to be modified.
root/ConnectionType/xdmcp/coreSettings/audio	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/coreSettings/ className	Sets the internal application class name to use for this connection type. This key should not need to be modified.

Registry key	Description
root/ConnectionType/xdmcp/coreSettings/ desktopButton	This registry key is either used internally or reserved for future use. The value should not be changed.
<pre>root/ConnectionType/xdmcp/coreSettings/editor</pre>	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.
root/ConnectionType/xdmcp/coreSettings/ generalSettingsEditor	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/coreSettings/ icon16Path	Sets the path to the 16x16 pixel icon for this application.
root/ConnectionType/xdmcp/coreSettings/ icon32Path	Sets the path to the 32x32 pixel icon for this application.
root/ConnectionType/xdmcp/coreSettings/ icon48Path	Sets the path to the 48x48 pixel icon for this application.
root/ConnectionType/xdmcp/coreSettings/label	Sets the name to display for this connection type in the UI.
<pre>root/ConnectionType/xdmcp/coreSettings/ priorityInConnectionLists</pre>	Sets the priority of this connection type when it is displayed in Connection Manager and the Configuration Wizard that displays during initial setup. A higher value will move the connection type towards the top of the list. If set to 0, the connection type is hidden from Configuration Wizard and is shown last in Connection Manager. Connections types with the same priority are listed in alphabetical order.
root/ConnectionType/xdmcp/coreSettings/ serverRequired	Sets whether a server name or address is unused, optional, or required for this connection type.
root/ConnectionType/xdmcp/coreSettings/ stopProcess	Sets the behavior that should occur when <code>connection-mgr</code> stop is called on this connection. By default this is <code>close</code> , which will send a standard kill signal to the process. When set to <code>kill</code> , the process specified by <code>appName</code> will be forcefully killed. When set to <code>custom</code> , a custom execution script specified by <code>wrapperScript</code> will be executed with the argument <code>stop</code> to terminate the process gracefully.
root/ConnectionType/xdmcp/coreSettings/ watchPid	If set to 1, the connection is monitored under the name specified by <code>appName</code> . This key should not need to be modified.
root/ConnectionType/xdmcp/coreSettings/ wrapperScript	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
root/ConnectionType/xdmcp/gui/XdmcpManager/ name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/gui/XdmcpManager/ status	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/gui/XdmcpManager/ title	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/gui/XdmcpManager/ widgets/address	Controls the state of the <b>Address</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

Registry key	Description
root/ConnectionType/xdmcp/gui/XdmcpManager/widgets/autoReconnect	Controls the state of the <b>Auto reconnect</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xdmcp/gui/XdmcpManager/widgets/autostart	Controls the state of the <b>Auto start priority</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/xdmcp/gui/XdmcpManager/ widgets/color</pre>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/gui/XdmcpManager/ widgets/fontServer	Controls the state of the <b>Font server</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xdmcp/gui/XdmcpManager/widgets/hasDesktopIcon	Controls the state of the <b>Show icon on desktop</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xdmcp/gui/XdmcpManager/ widgets/isInMenu	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/gui/XdmcpManager/widgets/label	Controls the state of the <b>Name</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xdmcp/gui/XdmcpManager/ widgets/refreshRate	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xdmcp/gui/XdmcpManager/ widgets/type	Controls the state of the <b>Type</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xdmcp/gui/XdmcpManager/ widgets/useFontServer	Controls the state of the <b>Use font server</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xdmcp/gui/XdmcpManager/widgets/waitForNetwork	Controls the state of the <b>Wait for network before connecting</b> widget in XDMCP Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xdmcp/gui/XdmcpManager/widgets/windowSize	This registry key is either used internally or reserved for future use. The value should not be changed.

Registry key	Description
root/ConnectionType/xen/authorizations/ user/add	If set to 1, an end user has permission to add a new connection of this type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/xen/authorizations/user/ general</pre>	If set to 1, an end user has permission to modify the general settings for this connection type using Connection Manager. This key has no effect on Smart Zero.
<pre>root/ConnectionType/xen/connections/<uuid>/ SingleSignOn</uuid></pre>	If set to 1, the connection shares credentials with the screen saver.
root/ConnectionType/xen/connections/ <uuid>/ address</uuid>	Sets the address of the remote host to connect to. This is typically a URL such as http://server.domain.com.
root/ConnectionType/xen/connections/ <uuid>/ afterStartedCommand</uuid>	Sets the command to execute after the connection has been started.
root/ConnectionType/xen/connections/ <uuid>/ afterStoppedCommand</uuid>	Sets the command to execute after the connection has been stopped.
root/ConnectionType/xen/connections/ <uuid>/ appInMenu</uuid>	If set to 1, all applications for the connection will be displayed in the taskbar menu.
root/ConnectionType/xen/connections/ <uuid>/ appOnDashboard</uuid>	If set to 1, all applications for the connection will be displayed on the taskbar.
root/ConnectionType/xen/connections/ <uuid>/ appOnDesktop</uuid>	If set to 1, all applications for the connection will be displayed on the desktop.
root/ConnectionType/xen/connections/ <uuid>/ authorizations/user/edit</uuid>	If set to 1, an end user has permission to modify the connection settings for this connection.
root/ConnectionType/xen/connections/ <uuid>/ authorizations/user/execution</uuid>	If set to 1, an end user has permission to execute this connection.
root/ConnectionType/xen/connections/ <uuid>/ autoLaunchSingleApp</uuid>	If set to 1, and if only a single published application or desktop is returned by the Citrix server, that resource will be launched automatically.
root/ConnectionType/xen/connections/ <uuid>/ autoReconnect</uuid>	If set to 1, the connection will be restarted when it is closed or disconnected.
root/ConnectionType/xen/connections/ <uuid>/ autoReconnectAppsOnLogin</uuid>	If set to 1, the system will attempt to reconnect any active or disconnected Citrix sessions upon initial login.
root/ConnectionType/xen/connections/ <uuid>/ autoReconnectDelay</uuid>	Sets the amount of time in seconds to wait before reconnecting the session. The default of 0 will cause the connection to reconnect immediately. This setting only takes effect when autoReconnect is set to 1.
root/ConnectionType/xen/connections/ <uuid>/ autoRefreshInterval</uuid>	Controls the amount of time in seconds before the resources are cleared and refreshed again from the server. Set to -1 to disable. It is normally not required to frequently refresh the resources from the server.
root/ConnectionType/xen/connections/ <uuid>/ autoStartDesktop</uuid>	If set to 1 and if autoStartResource is empty, the first desktop to become available when the connection is started will be launched automatically.
root/ConnectionType/xen/connections/ <uuid>/ autoStartResource</uuid>	Sets the name of the desktop or application to start automatically when the connection is launched.

Registry key	Description
root/ConnectionType/xen/connections/ <uuid>/ autostart</uuid>	If set to a value of 1–5, the connection will be started automatically after the system boots, with the value of 1 having the highest priority.
root/ConnectionType/xen/connections/ <uuid>/ autostartDelay</uuid>	Sets the amount of time in seconds to wait before starting the connection after the system boots. The default of 0 will cause the connection to start immediately. This setting only takes effect when autostart is set to 1.
root/ConnectionType/xen/connections/ <uuid>/ beforeStartingCommand</uuid>	Sets the command to execute before the connection starts.
root/ConnectionType/xen/connections/ <uuid>/ connectionMode</uuid>	Sets the Citrix connection mode for the connection.
root/ConnectionType/xen/connections/ <uuid>/ connectionStopAction</uuid>	Defines the action to be done when the connection is ended from Connection Manager. The available options are disconnect and logoff.
root/ConnectionType/xen/connections/ <uuid>/ coord</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xen/connections/ <uuid< credentialstype<="" td=""><td>Specifies the credential type between anonymous (unauthenticated access), sso (single sign-on), startup (credentials are requested at startup), password (preconfigured user/domain/password), or smartcard (preconfigured smart card).</td></uuid<>	Specifies the credential type between anonymous (unauthenticated access), sso (single sign-on), startup (credentials are requested at startup), password (preconfigured user/domain/password), or smartcard (preconfigured smart card).
root/ConnectionType/xen/connections/ <uuid>/ dependConnectionId</uuid>	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xen/connections/ <uuid>/ domain</uuid>	Sets the domain to provide to the XenDesktop server. If no domain is specified, the default domain for the server is used.
root/ConnectionType/xen/connections/ <uuid>/</uuid>	CAUTION: This functionality is unsupported.
enableRSAToken	If set to 1, the user will be prompted before connecting for a security token value to use when authenticating with NetScaler Gateway.
root/ConnectionType/xen/connections/ <uuid>/ extraEnvValues/<uuid>/key</uuid></uuid>	Sets the name of an extra environment variable for use with the connection.
root/ConnectionType/xen/connections/ <uuid>/ extraEnvValues/<uuid>/value</uuid></uuid>	Sets the value of an extra environment variable for use with the connection.
root/ConnectionType/xen/connections/ <uuid>/ fallBackConnection</uuid>	Sets the fallback connection via its UUID.
root/ConnectionType/xen/connections/ <uuid>/ folder</uuid>	
root/ConnectionType/xen/connections/ <uuid>/ forceHttps</uuid>	If set to 1, only HTTPS connections are allowed.
root/ConnectionType/xen/connections/ <uuid>/ fullscreen</uuid>	If set to 1, the Citrix client launches in full screen mode when started.
root/ConnectionType/xen/connections/ <uuid>/ hasDesktopIcon</uuid>	If set to 1, the desktop icon for this connection is enabled. This key has no effect on Smart Zero.
root/ConnectionType/xen/connections/ <uuid>/ ignoreCertCheck</uuid>	If set to 1, certificate checks are ignored for the connection.

Registry key	Description
<pre>root/ConnectionType/xen/connections/<uuid>/ label</uuid></pre>	Sets the connection name that is displayed in the UI. On Smart Zero, this will typically be set to Default Connection and does not display in the UI.
<pre>root/ConnectionType/xen/connections/<uuid>/ logOnMethod</uuid></pre>	
root/ConnectionType/xen/connections/ <uuid>/ loginfields/domain</uuid>	If set to 1, the <b>Domain</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
root/ConnectionType/xen/connections/ <uuid>/ loginfields/password</uuid>	If set to 1, the <b>Password</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
<pre>root/ConnectionType/xen/connections/<uuid>/ loginfields/rememberme</uuid></pre>	If set to 1, the <b>Remember me</b> check box is shown in the login dialog for the connection. If set to 2, the check box is shown but disabled. If set to 0, the check box is hidden.
<pre>root/ConnectionType/xen/connections/<uuid>/ loginfields/showpassword</uuid></pre>	If set to 1, the <b>Show password</b> button is shown in the login dialog for the connection. If set to 2, the button is shown but disabled. If set to 0, the button is hidden.
<pre>root/ConnectionType/xen/connections/<uuid>/ loginfields/smartcard</uuid></pre>	If set to 1, the <b>Smart card login</b> check box is shown in the login dialog for the connection. If set to 2, the check box is shown but disabled. If set to 0, the check box is hidden. This check box might not appear if no smart card is detected, even if this option is enabled.
<pre>root/ConnectionType/xen/connections/<uuid>/ loginfields/username</uuid></pre>	If set to 1, the <b>User Name</b> field is shown in the login dialog for the connection. If set to 2, the field is shown but disabled. If set to 0, the field is hidden.
root/ConnectionType/xen/connections/ <uuid>/ password</uuid>	Sets the default password to supply to the remote host during login. This value will be encrypted. Generally, this setting is used for kiosk-style applications where a generic password is used for login.
<pre>root/ConnectionType/xen/connections/<uuid>/ resListRequest</uuid></pre>	If set to 1, a connection only lists the resources without launching them or downloading icons.
root/ConnectionType/xen/connections/ <uuid>/ saveNewUrl</uuid>	This is an internal value. If set to <code>ToBeAsked</code> , the script prompts the user. If set to <code>Auto</code> , the script does not prompt the user, and whether the URL is saved depends on the case. If set to <code>Yes</code> , the user asked to save the new URL. If set to <code>No</code> , the user asked to not save the new URL.
<pre>root/ConnectionType/xen/connections/<uuid>/ savePassword</uuid></pre>	
root/ConnectionType/xen/connections/ <uuid>/ smartCardModuleKey</uuid>	Specifies the security module to use for a smart card connection.
root/ConnectionType/xen/connections/ <uuid>/ startMode</uuid>	If set to the default ${\tt focus}$ and the connection is already started, the connection will be given focus. Otherwise, an error will be returned stating that the connection is already started.
root/ConnectionType/xen/connections/ <uuid>/ subscribedOnly</uuid>	If set to 1, only subscribed resources for the connection are displayed.
root/ConnectionType/xen/connections/ <uuid>/ unplugSmartCardAction</uuid>	Sets the action to perform when a smart card is unplugged during a connection. disconnect will disconnect the current session. close will close all the opened resources. noaction will do nothing.

Registry key	Description
<pre>root/ConnectionType/xen/connections/<uuid>/ username</uuid></pre>	Sets the default user name to supply to the remote host during login. Generally, this setting is used for kiosk-style applications where a generic user name is used for login.
<pre>root/ConnectionType/xen/connections/<uuid>/ waitForNetwork</uuid></pre>	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/xen/coreSettings/ USBrelevant	Specifies if this connection type is USB-relevant. If it is, it might have a USB plugin for redirecting USB devices.
root/ConnectionType/xen/coreSettings/appName	Sets the internal application name to use for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/xen/coreSettings/ autoLogoutDelayAfterLaunch</pre>	This setting applies to Citrix servers with multiple published resources. If less than 0, no auto-logout is performed. Otherwise, this setting dictates the number of seconds between the closing of the last Xen published resource and when the user is logged out automatically and returned to the initial login screen. Citrix process delays might extend the auto-logout time.
root/ConnectionType/xen/coreSettings/ autoLogoutDelayBeforeLaunch	This setting applies to Citrix servers with multiple published resources. If less than 0, no auto-logout is performed. Otherwise, this setting dictates the number of seconds allowed to pass while no applications are launched before the user is logged out automatically and returned to the initial login screen. Citrix process delays might extend the auto-logout time.
root/ConnectionType/xen/coreSettings/className	Sets the internal application class name to use for this connection type. This key should not need to be modified.
root/ConnectionType/xen/coreSettings/editor	Sets the internal application name to use when Connection Manager is launched for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/xen/coreSettings/ generalSettingsEditor</pre>	Sets the internal application name to use when the General Settings Manager is launched for this connection type. This key should not need to be modified.
<pre>root/ConnectionType/xen/coreSettings/ icon16Path</pre>	Sets the path to the 16x16 pixel icon for this application.
<pre>root/ConnectionType/xen/coreSettings/ icon32Path</pre>	Sets the path to the 32x32 pixel icon for this application.
<pre>root/ConnectionType/xen/coreSettings/ icon48Path</pre>	Sets the path to the 48x48 pixel icon for this application.
root/ConnectionType/xen/coreSettings/label	Sets the name to display for this connection type in the UI.
<pre>root/ConnectionType/xen/coreSettings/ priorityInConnectionLists</pre>	Sets the priority of this connection type when it is displayed in Connection Manager and the Configuration Wizard that displays during initial setup. A higher value will move the connection type towards the top of the list. If set to 0, the connection type is hidden from Configuration Wizard and is shown last in Connection Manager. Connections types with the same priority are listed in alphabetical order.
<pre>root/ConnectionType/xen/coreSettings/ retryTimeout</pre>	This setting applies when a virtual machine is restarting and is not yet available to launch as a Citrix resource. If set to a negative number, reconnection is not attempted. Otherwise, it gives the time (in seconds) that HP ThinPro attempts to reconnect to the virtual machine.

Registry key	Description
root/ConnectionType/xen/coreSettings/ serverRequired	Sets whether a server name or address is unused, optional, or required for this connection type.
root/ConnectionType/xen/coreSettings/ stopProcess	Sets the behavior that should occur when <code>connection-mgr</code> stop is called on this connection. By default this is <code>close</code> , which will send a standard kill signal to the process. When set to <code>kill</code> , the process specified by <code>appName</code> will be forcefully killed. When set to <code>custom</code> , a custom execution script specified by <code>wrapperScript</code> will be executed with the argument <code>stop</code> to terminate the process gracefully.
root/ConnectionType/xen/coreSettings/watchPid	If set to 1, the connection is monitored under the name specified by <code>appName</code> . This key should not need to be modified.
root/ConnectionType/xen/coreSettings/ wrapperScript	Sets the script or binary to execute when launching this connection type. This is the primary script handling all connection settings and command line arguments for the connection. This key should not need to be modified.
root/ConnectionType/xen/coreSettings/ wrapperScriptGeneration	Lets Connection Manager know what type of parameters to pass to the wrapper script.
root/ConnectionType/xen/general/CGPAddress	Specifies the CGP address using the syntax hostname: port.
	Optionally, instead of specifying the hostname, you can type an asterisk (*). This will use the value from the connection's address registry key as the host. For example: *:2598
	The port value is optional. If you do not specify a port value, the default of 2598 is used. If a connection on port 2598 fails, the thin client tries to establish a connection on port 1494.
root/ConnectionType/xen/general/TWIMode	Controls seamless mode for published applications. This setting directly maps to the Citrix .ini file setting TWIMode.
root/ConnectionType/xen/general/ TWIModeResizeType	This setting directly maps to the Citrix .ini file setting TWIMOVERESIZEType.
root/ConnectionType/xen/general/ allowReadOnA allowReadOnZ	If set to 1, a user can read the mapped drive.
root/ConnectionType/xen/general/allowWriteOnA allowWriteOnZ	If set to 1, a user can write to the mapped drive.
root/ConnectionType/xen/general/async	If set to 1, asynchronous polling is enabled. This setting directly maps to the Citrix .ini file setting CommPollSize.
root/ConnectionType/xen/general/autoReconnect	If set to 1, automatic session reconnection is enabled. This is not the same as the connection-specific auto-reconnect. This occurs internally within the Citrix client without restarting the connection. This setting directly maps to the Citrix .ini file setting TransportReconnectEnabled.
root/ConnectionType/xen/general/ bitmapCacheSize	Sets the minimum size for bitmap caching. This setting directly maps to the Citrix .ini file setting  PersistentCacheMinBitmap.
root/ConnectionType/xen/general/bottomMonitor	Sets the screen area of the bottom monitor to show the virtual desktop. If set to 0, the monitor is not used to show the virtual desktop.
root/ConnectionType/xen/general/colorDepth	Forces a specific color depth for all connections. This is usually done only in specialized environments where the automatic depth selection fails or in very slow networks to reduce congestion.

Registry key	Description
root/ConnectionType/xen/general/colorMapping	If set to Shared - Approximate Colors, approximate colors from the default colormap are used. If set to Private - Exact Colors, precise colors are used. This setting directly maps to the Citrix .ini file setting ApproximateColors.
<pre>root/ConnectionType/xen/general/ contentRedirection</pre>	If set to 1, links from web content are sent from the server to the client so that the client can try to open them locally.
<pre>root/ConnectionType/xen/general/ defaultBrowserProtocol</pre>	Controls the protocol used to locate the host for the connection. If not specified, the default value from the [WFClient] section of wfclient.ini is used. This setting directly maps to the Citrix .ini file setting BrowserProtocol.
root/ConnectionType/xen/general/drivePathMappedOnZ	Sets the local filesystem directory to map to the remote host. Typically this is set to $/media$ to allow all connected USB drives to be mapped to the remote host via a single drive letter.
root/ConnectionType/xen/general/ enableAlertSound	If set to 1, Windows alert sounds are enabled. This setting indirectly maps to the Citrix .ini file setting <code>DisableSound</code> .
root/ConnectionType/xen/general/ enableClipboard	If set to 1, clipboard redirection is enabled.
root/ConnectionType/xen/general/ enableConnectionBar	If set to 1, enables Citrix Desktop Viewer in the session user interface. By default, this setting is set to 0 (disabled) on the client side because this value is set on the client by the ICA file for a desktop session.
root/ConnectionType/xen/general/ enableCursorColors	If set to 1, colored cursors are enabled. Setting this to 0 might fix graphical cursor corruption in some cases.
root/ConnectionType/xen/general/ enableDataCompression	If set to 1, data compression is enabled. This setting directly maps to the Citrix .ini file setting <code>Compress</code> .
root/ConnectionType/xen/general/ enableDriveMapAndRedirect	If set to 1, mapping and redirection for USB storage devices is enabled.
root/ConnectionType/xen/general/ enableDriveMapping	If set to 1, directories on the local filesystem can be forwarded to the remote host via a virtual drive. Typically $/media$ is mapped to $z$ to allow USB drives to be forwarded to the remote host. If USB redirection is enabled, this setting should be disabled to prevent storage conflicts. To be properly mapped to the remote host in this fashion, the USB device must use one of the following filesystems: FAT32, NTFS, ext2, ext3.
root/ConnectionType/xen/general/ enableDynamicDriveMapping	If set to 1, USB storage devices will be dynamically mapped on the Citrix server. If set to 0, dynamic mapping of USB storage devices is disabled.
root/ConnectionType/xen/general/ enableH264Compression	If set to 1, H.264 compression is enabled. The H.264 codec provides better performance of rich and professional graphics applications on WAN networks than the JPEG codec.
root/ConnectionType/xen/general/ enableHDXFlashRedirection	NOTE: This feature is supported for the 32-bit version of HP ThinPro only.
	Controls the behavior of HDX Flash Redirection. If set to <code>Always</code> , HDX Flash Redirection is used if possible, and the user is not prompted. If set to <code>Ask</code> , the user is prompted. If set to <code>Never</code> , the feature is disabled.
root/ConnectionType/xen/general/ enableHDXFlashServerContentFetch	NOTE: This feature is supported for the 32-bit version of HP ThinPro only.

Registry key	Description
	Controls the behavior of HDX Flash Server-Side Content Fetching. If disabled, the client will fetch for content.
root/ConnectionType/xen/general/ enableHDXMediaStream	If set to 1, HDX MediaStream is enabled. If set to 0, media files will still play via standard streaming, but the quality might not be as high.
root/ConnectionType/xen/general/enableHWH264	If set to 1, and if enableH264Compression is also set to 1, hardware compression for H.264 is enabled. If set to 0, H.264 compression will be handled by software.
root/ConnectionType/xen/general/ enableMapOnA enableMapOnZ	If set to 1, a local filesystem directory can be mapped to this drive on the remote host. The corresponding drivePathMappedOn registry key must be set to a valid local directory for drive mapping to work properly.
root/ConnectionType/xen/general/ enableMultiMedia	If set to 1, multimedia is enabled. HDX Lync might have a conflict when this setting is enabled. This setting maps directly to the multimedia in the virtual channels section of the Citrix .ini file settings. Enable this setting when HDX MediaStream is enabled.
root/ConnectionType/xen/general/ enableOffScreenSurface	If set to 1, the server can use the X PixMap format for off-screen drawing. This reduces bandwidth in 15-bit and 24-bit color modes at the expense of X server memory and processor time. This setting directly maps to the Citrix .ini file setting EnableOSS.
root/ConnectionType/xen/general/ enableSessionReliability	If set to 1, Citrix Session Reliability is enabled. Session Reliability changes the way sessions are resumed after losing a network connection. Please see Citrix documentation for more information on Session Reliability.
root/ConnectionType/xen/general/ enableSmallFrames	If set to 1, small non-H.264 rectangle updates are enabled for H. 264. enableTextTracking must also be enabled for this to have an effect.
root/ConnectionType/xen/general/ enableSmartCard	If set to 1, smart card login is enabled.
root/ConnectionType/xen/general/ enableTextTracking	If set to 1, optimized lossless text overlays are enabled for H.264.
root/ConnectionType/xen/general/ enableUSBRedirection	If set to 1, USB storage devices will be redirected.
root/ConnectionType/xen/general/ encryptionLevel	Sets the level of encryption. Encryption protocols for all levels are defined in the <code>[EncryptionLevelSession]</code> section of module.ini. This setting directly maps to the Citrix .ini file setting <code>[EncryptionLevelSession]</code> .
<pre>root/ConnectionType/xen/general/ fontSmoothingType</pre>	Sets the font smoothing type.
root/ConnectionType/xen/general/ hotKey<1thru15>Char	Sets the hot key to forward to the remote session when the key or key combination set in the corresponding ${\tt hotKeyShift}$ is pressed.
root/ConnectionType/xen/general/ hotKey<1thru15>Shift	Sets the key or key combination used to activate the hot key set in the corresponding <code>hotKeyChar</code> .
root/ConnectionType/xen/general/ httpAddresses/ <uuid>/address</uuid>	

Registry key	Description
root/ConnectionType/xen/general/ keyPassthroughEscapeChar	Sets the keyboard key for disabling the transparent keyboard mode. This setting directly maps to the Citrix .ini file setting KeyPassthroughEscapeChar.
<pre>root/ConnectionType/xen/general/ keyPassthroughEscapeShift</pre>	Sets the keyboard key combination for disabling the transparent keyboard mode. This setting directly maps to the Citrix .ini file setting KeyPassthroughEscapeShift.
<pre>root/ConnectionType/xen/general/ lastComPortNum</pre>	Sets the number of mapped serial ports. If set to 0, serial port mapping is disabled.
<pre>root/ConnectionType/xen/general/leftMonitor</pre>	Sets the screen area of the left monitor to show the virtual desktop. If set to 0, the monitor is not used to show the virtual desktop.
root/ConnectionType/xen/general/localTextEcho	Controls keyboard latency reduction. This setting indirectly maps to the Citrix .ini file setting <code>ZLKeyboardMode</code> .
root/ConnectionType/xen/general/ monitorNetwork	If set to Off, network connectivity is not monitored. If set to Local network link status only, only the local network link status is monitored. If set to Server online status, both the local network link status and server connectivity are monitored.
<pre>root/ConnectionType/xen/general/ mouseClickFeedback</pre>	Controls mouse latency reduction. This setting indirectly maps to the Citrix .ini file setting ${\tt ZLMouseMode.}$
root/ConnectionType/xen/general/ mouseMiddleButtonPaste	If set to 1, middle mouse button paste emulation for Windows sessions is enabled. This setting directly maps to the Citrix .ini file setting MouseSendsControlV.
root/ConnectionType/xen/general/noInfoBox	If set to 1, the client manager (wfcmgr) will not display when a client session terminates. This setting directly maps to the Citrix .ini file setting PopupOnExit.
root/ConnectionType/xen/general/ printerAutoCreation	If set to 0, printer mapping is disabled. If set to 1, printers defined locally will be mapped to the connection. If set to 2, USB printers are redirected as configured in USB Manager.
root/ConnectionType/xen/general/proxyAddress	Sets the proxy address to use if a manual proxy setting is selected via $\texttt{proxyType}$ .
root/ConnectionType/xen/general/proxyPassword	Sets the proxy password to use if a manual proxy setting is selected via $\texttt{proxyType}$ . This password will be encrypted using rc4 encryption.
root/ConnectionType/xen/general/proxyPort	Sets the proxy port to use if a manual proxy setting is selected via $\texttt{proxyType}.$
root/ConnectionType/xen/general/proxyType	Sets the type of proxy to use for XenDesktop connections. The value Use Browser settings is only supported if a local browser is installed.
root/ConnectionType/xen/general/proxyUser	Sets the proxy username to use if a manual proxy setting is selected via proxyType.
root/ConnectionType/xen/general/rightMonitor	Sets the screen area of the right monitor to show the virtual desktop. If set to 0, the monitor is not used to show the virtual desktop.
root/ConnectionType/xen/general/saveLogs	If set to 1, detailed log information is saved after the session ends. This log information will be saved to the following directory: /tmp/debug/citrix/ <date>/</date>

Registry key	Description
root/ConnectionType/xen/general/ serverCheckTimeout	
root/ConnectionType/xen/general/ sessionReliabilityTTL	Specifies the session reliability timeout in seconds. This configures the Session Reliability Time To Live (TTL).
root/ConnectionType/xen/general/ sessionSharingClient	If set to 1, session-sharing requests are sent to other Citrix sessions on the same X display. This setting directly maps to the Citrix .ini file setting <code>EnableSessionSharingClient</code> .
root/ConnectionType/xen/general/ showOnAllMonitors	If set to 1, the virtual desktop will be shown on all monitors.
root/ConnectionType/xen/general/ smartCardModuleMap/CoolKeyPK11	Specifies the path to the CoolKey PKCS #11 smart card security module.
root/ConnectionType/xen/general/ smartCardModuleMap/GemaltoDotNet	Specifies the path to the ${\tt Gemalto}$ . NET smart card security module.
root/ConnectionType/xen/general/sound	Sets the sound quality. This setting indirectly maps to the Citrix .ini file setting <code>AudioBandwidthLimit</code> .
root/ConnectionType/xen/general/speedScreen	
root/ConnectionType/xen/general/tcpAccel	
root/ConnectionType/xen/general/tcpAddresses/ <uuid>/address</uuid>	
root/ConnectionType/xen/general/topMonitor	Sets the screen area of the top monitor to show the virtual desktop. If set to 0, the monitor is not used to show the virtual desktop.
root/ConnectionType/xen/general/ transparentKeyPassthrough	Controls how certain Windows key combinations handled. If set to Translated, the key combinations apply to the local desktop. If
	set to Direct in full screen desktops only, the key combinations apply to the remote session only when it is in full screen mode. If set to Direct, the key combinations always apply to the remote session as long as the window has focus. This setting indirectly maps to the Citrix ini file setting TransparentKeyPassthrough.
root/ConnectionType/xen/general/ twRedundantImageItems	Controls the number of screen areas that will be tracked in ThinWire to prevent redundant drawing of bitmap images. An adequate value for 1024x768 sessions is 300.
root/ConnectionType/xen/general/ useAlternateAddress	If set to 1, an alternate address is used for firewall connections. This setting directly maps to the Citrix .ini file setting UseAlternateAddress.
root/ConnectionType/xen/general/ useBitmapCache	If set to 1, the persistent disk cache is enabled. The persistent disk cache stores commonly-used graphical objects such as bitmaps on the hard disk of the thin client. Using the persistent disk cache increases performance across low-bandwidth connections but reduces the amount of available disk space on the thin client. For thin clients on high-speed LANs, usage of the persistent disk cache is not necessary. This setting directly maps to the Citrix .ini file setting PersistentCacheEnabled.
root/ConnectionType/xen/general/useEUKS	Controls the use of Extended Unicode Keyboard Support (EUKS) on Windows servers. If set to 0, EUKS is not used. If set to 1, EUKS is used as a fallback. If set to 2, EUKS is used whenever possible.

Registry key	Description
root/ConnectionType/xen/general/useLocalIM	If this setting is enabled, the local X input method is used to interpret keyboard input. This is supported for European languages only. This setting directly maps to the Citrix .ini file setting useLocalIME.
root/ConnectionType/xen/general/userAgent	The string from this key will be presented by the Citrix client and will be helpful for administrators to know where the connection request is from.
root/ConnectionType/xen/general/ waitForNetwork	If set to 1, the connection will not be launched until networking is available. This ensures that, on a slow network, the connection does not launch before networking is available, which could cause a failure.
root/ConnectionType/xen/general/ webcamFramesPerSec	Controls the HDXWebCamFramesPerSec variable in the All_Regions.ini file.
root/ConnectionType/xen/general/webcamSupport	If set to 0, the webcam and webcam audio are disabled. If set to 1, the webcam and webcam audio are enabled, with compression. If set to 2, USB redirection of the webcam and webcam audio is enabled.
root/ConnectionType/xen/general/windowHeight	Sets the height of the window in pixels if windowSize is set to Fixed Size.
root/ConnectionType/xen/general/windowPercent	Sets the size of the window as a percentage if windowSize is set to Percentage of Screen Size.
root/ConnectionType/xen/general/windowSize	If set to Default, the server-side settings are used. If set to Full Screen, the window is maximized without borders on all available screens. If set to Fixed Size, the windowWidth and windowHeight registry keys can be used to specify the size of the window in pixels. If set to Percentage of Screen Size, the windowPercent key can be used to specify the size of the window as a percentage. For Percentage of Screen Size to take effect, enableForceDirectConnect must be set to 1 and TWIMode must be set to 0. This setting only works with XenApp and only if the server allows direct connections. This setting does not work with XenDesktop.
root/ConnectionType/xen/general/windowWidth	Sets the width of the window in pixels if windowSize is set to Fixed Size.
root/ConnectionType/xen/gui/XenDesktopPanel/disabled	If set to 1, the Xen Desktop panel and its taskbar are disabled. This is usually used when autoStartResource or autoStartDesktop is enabled.
root/ConnectionType/xen/gui/XenManager/name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xen/gui/XenManager/status	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xen/gui/XenManager/title	This registry key is either used internally or reserved for future use. The value should not be changed.
root/ConnectionType/xen/gui/XenManager/ widgets/address	Controls the state of the <b>Service URL</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

Registry key	Description
root/ConnectionType/xen/gui/XenManager/ widgets/appInMenu	Controls the state of the <b>Show applications on taskbar</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/ widgets/appOnDesktop	Controls the state of the <b>Show applications on desktop</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/ widgets/autoReconnect	Controls the state of the <b>Auto reconnect</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/ widgets/autoStartDesktop	Controls the state of the <b>Auto Start Desktop</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/widgets/autoStartResource	Controls the state of the <b>Auto Start Resource</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/ widgets/autostart	Controls the state of the <b>Auto start priority</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/widgets/domain	Controls the state of the <b>Domain</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/widgets/fallBackConnection	Controls the state of the <b>Fallback Connection</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/ widgets/folder	
<pre>root/ConnectionType/xen/gui/XenManager/ widgets/hasDesktopIcon</pre>	Controls the state of the <b>Show icon on desktop</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/XenManager/widgets/label	Controls the state of the <b>Name</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

Registry key	Description
<pre>root/ConnectionType/xen/gui/XenManager/ widgets/password</pre>	Controls the state of the <b>Password</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/xen/gui/XenManager/ widgets/username</pre>	Controls the state of the <b>Username</b> widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
<pre>root/ConnectionType/xen/gui/XenManager/ widgets/waitForNetwork</pre>	Controls the state of the Wait for network before connecting widget in Citrix Connection Manager. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/ConnectionType/xen/gui/fbpanel/autohide	If set to true, the taskbar auto-hides.
root/ConnectionType/xen/gui/fbpanel/edge	Sets the default position of the taskbar when more than one published desktop or application is available.
root/ConnectionType/xen/gui/fbpanel/hidden	If set to 1, the taskbar is completely hidden, but only if autoStartResource Or autoStartDesktop is enabled.

#### **DHCP**

This folder exists to support temporary registry keys that are added when the system acquires a DHCP lease. No modification is necessary.

### **Dashboard**



NOTE: The dashboard is the same thing as the taskbar.

Registry key	Description
root/Dashboard/GUI/Clock	If set to 1, the clock is shown on the taskbar.
root/Dashboard/GUI/ConnectionManager	If set to 1, the Connection Manager button is shown on the taskbar.
root/Dashboard/GUI/ControlPanel	If set to 1, the Control Panel button is shown on the taskbar.
root/Dashboard/GUI/DomainUser	If set to 1, the domain-user icon is shown on the taskbar if the system is in domain-login mode.
root/Dashboard/GUI/PowerButton	If set to 1, the power button is shown on the taskbar.
root/Dashboard/GUI/PowerButtonPosition	If set to 1, the power button is shown on the taskbar's right side (for a horizontal taskbar) or bottom (for a vertical taskbar). If set to 0, the power button is shown on the taskbar's left side (for a horizontal taskbar) or top (for a vertical taskbar).
root/Dashboard/GUI/Search	If set to 1, the Search button is shown on the taskbar.
root/Dashboard/GUI/SystemInformation	If set to 1, the System Information button is shown on the taskbar.

Registry key	Description
root/Dashboard/GUI/SystemTray	If set to 1, the system tray is shown on the taskbar.
root/Dashboard/GUI/TaskBar	If set to 1, the application area is shown on the taskbar.
root/Dashboard/General/AlwaysOnTop	If set to 1, the taskbar will always be on top.
root/Dashboard/General/AutoHide	If set to 1, the taskbar auto-hides.
root/Dashboard/General/EnterLeaveTimeout	Sets the amount of time in milliseconds before the taskbar will hide or show when AutoHide is enabled.
root/Dashboard/General/IconSize	Sets the size of the icons on the taskbar.
root/Dashboard/General/Length	Sets the length of the taskbar.
root/Dashboard/General/LengthToScreenSide	If set to 1, the length of taskbar is fixed and equal to the length of the side of the screen to which it is anchored.
root/Dashboard/General/PanelDockSide	Sets the side of the screen to which the taskbar is docked.
root/Dashboard/General/RemainPixel	Sets the number of pixels that are still visible when the taskbar hides.
root/Dashboard/General/SlidingTimeout	Sets the amount of time in milliseconds that it takes for the taskbar to hide or show when AutoHide is enabled.
root/Dashboard/General/Width	Sets the width of the taskbar.

# Display

Registry key	Description
root/Display/Configuration/Hotplug/ newMonitorPosition	On supported platforms, sets where new monitors should be placed (either to the left or right of currently attached monitors) when they are hotplug connected.
root/Display/Configuration/displaymode	Sets the display mode. If set to 0, the standard mode (a 1–4 monitor configuration) is used. If set to 1, a 6-monitor configuration can be used, but only on supported platforms with the appropriate add-on card.
root/Display/Configuration/hexlayout	Sets the layout in 6-monitor mode.
root/Display/Configuration/hexprofile	Sets the profile used in 6-monitor mode.
root/Display/Configuration/primaryprofile	Sets the profile to use for the primary monitor via the profile name. For Smart Zero, this must always be set to default.
root/Display/Configuration/quaternarymode	Sets the position of the fourth monitor relative to the monitor indicated in quaternaryrelative. This is hardware-dependent and is not supported on all models. Values are defined as follows: 0=Same As; 1=Above; 2=Right Of; 3=Left Of; 4=Below.
root/Display/Configuration/quaternaryprofile	Sets the profile to use for the fourth monitor via the profile name.
root/Display/Configuration/quaternaryrelative	Sets which monitor is used as a reference to set the position of the fourth monitor.
root/Display/Configuration/secondaryConnector	Sets the secondary connector.
root/Display/Configuration/secondarymode	Sets the position of the secondary monitor relative to the primary monitor. This is hardware-dependent and is not supported on all

Registry key	Description
	models. Values are defined as follows: 0=Same As; 1=Above; 2=Right Of; 3=Left Of; 4=Below.
root/Display/Configuration/ secondaryorientation	This registry key is either used internally or reserved for future use. The value should not be changed.
root/Display/Configuration/secondaryprofile	Sets the profile to use for the secondary monitor via the profile name.
root/Display/Configuration/swapstate	Specifies which connector is connected to the primary monitor. This is hardware-dependent and is not supported on all models. Generally, 0 means the primary monitor is on the VGA connector and 1 means the other connector. For the t510, 0 means the primary monitor is on the DVI-I connector, and 1 means the primary monitor is on the DVI-D connector. For platforms with an add-on video card, 0 means the primary monitor is on the built-in video card, and 1 means the primary monitor is on the add-on video card.
root/Display/Configuration/tertiarymode	Sets the position of the third monitor relative to the monitor indicated in tertiaryrelative. This is hardware-dependent and is not supported on all models. Values are defined as follows: 0=Same As; 1=Above; 2=Right Of; 3=Left Of; 4=Below.
root/Display/Configuration/tertiaryprofile	Sets the profile to use for the third monitor via the profile name.
root/Display/Configuration/tertiaryrelative	Sets which monitor is used as a reference to set the position of the third monitor.
root/Display/Profiles/ <uuid>/colorScaling</uuid>	Sets the color temperature or direct RGB scaling for thin clients with built-in monitors. The entry is a 6-digit hex value (RRGGBB), where ffffff would indicate full (100%) scaling on all three color channels.
root/Display/Profiles/ <uuid>/depth</uuid>	Sets the display color depth in bits-per-pixel. A higher color depth means better quality but lower performance.
root/Display/Profiles/ <uuid>/height</uuid>	Sets the monitor resolution height. If set to 0, the resolution is auto-detected.
root/Display/Profiles/ <uuid>/label</uuid>	Sets the display profile name. For Smart Zero, this must always be set to <code>default</code> .
root/Display/Profiles/ <uuid>/orientation</uuid>	Sets the monitor orientation as follows: 0=Normal; 1=Rotate Left; 2=Rotate Right; 3=Invert.
root/Display/Profiles/ <uuid>/refresh</uuid>	Sets the desired monitor refresh rate. Not all refresh rates are supported for all resolutions. If set to 0, the refresh rate is autodetected. The supported values are dependent on the monitor. Setting a refresh rate that is not supported by the attached monitor will lead to a black screen. HP recommends leaving this set to 0.
root/Display/Profiles/ <uuid>/width</uuid>	Sets the monitor resolution width. If set to 0, the resolution is auto-detected.
root/Display/userLock	If set to 1, and if the display settings have been modified by the user, the display settings are preserved when importing a client profile.
root/Display/userLockEngaged	This registry key is set to 1 automatically after the display settings have been modified by the user. You normally do not need to modify this setting.

## **Domain**

Registry key	Description
root/domain/OU	Specifies the organizational unit associated with the thin client's domain membership.
root/domain/allowSmartcard	This key is currently unused.
root/domain/cacheDomainLogin	If enabled, a hash of domain login credentials is saved to disk so that subsequent logins can occur even if the Active Directory server is inaccessible.
root/domain/ddns	If enabled, the thin client attempts to update the DNS server with its hostname and IP address during each DHCP renewal.
root/domain/domain	Specifies the domain to which this thin client is joined or to which this thin client is authenticating against.
root/domain/domainAdminGroup	If <code>enableDomainAdmin</code> is enabled, members of this AD group can switch the thin client to administrator mode.
root/domain/domainControllers	Specifies a comma-separated list of domain controllers to use with this domain. If left blank (recommended), automatic lookup of domain controllers is performed using DNS instead.
root/domain/domainJoined	Indicates if the thin client has been formally added to the domain.
root/domain/domainUsersGroup	If enableDomainUsers is enabled, domain logins are limited to direct members of this group. Nested groups are not supported for this feature.
root/domain/enableDomainAdmin	If set to 1, members of the group listed in <code>domainAdminGroup</code> can switch the thin client to administrator mode. If set to 0, the local root account must be used to perform local administrative tasks.
root/domain/enableDomainUsers	If set to 1, domain logins are limited to members of the group listed in domainUserGroup. If set to 0, any valid domain credential is permitted to log in to the thin client.
root/domain/enablePasswordChange	If set to 1, the user can change their domain password directly from the thin client.
root/domain/enableSSO	If enabled, encrypted current credentials are cached in memory and they can be reused when starting remote connections.
root/domain/loginAtStart	If set to 1, and if the thin client has been added to a domain, a login screen is displayed when the thin client starts up. Otherwise, the legacy ThinPro shared desktop is displayed at startup.
root/domain/retainUserRegistry	If set to 1, any custom setting changes made by the user are retained between login sessions.
root/domain/workgroup	Specifies the workgroup or "short domain" associated with the thin client's domain membership. This is also referred to as the NetBIOS domain name during creation of the Active Directory domain. This value is usually auto-detected during domain authentication by looking up the value from a domain controller.

### **Network**

Registry key	Description
root/Network/ActiveDirectory/Domain	This registry key is either used internally or reserved for future use. The value should not be changed.
root/Network/ActiveDirectory/DynamicDNS	This registry key is either used internally or reserved for future use. The value should not be changed.
root/Network/ActiveDirectory/Enabled	This registry key is either used internally or reserved for future use. The value should not be changed.
root/Network/ActiveDirectory/Method	This registry key is either used internally or reserved for future use. The value should not be changed.
root/Network/ActiveDirectory/Password	This registry key is either used internally or reserved for future use. The value should not be changed.
root/Network/ActiveDirectory/Username	This registry key is either used internally or reserved for future use. The value should not be changed.
root/Network/DNSServers	Additional DNS servers for domain name resolution can be specified here. The specified servers will be used in addition to any servers retrieved via DHCP. Up to three IPv4 or IPv6 addresses can be specified, separated by commas.
root/Network/DefaultHostnamePattern	Sets the default hostname pattern to use when generating a new hostname. This is used if the <code>Hostname</code> registry key and <code>/etc/hostname</code> are both empty. The hostname pattern uses <code>%</code> as a delimiter. In the example <code>HPTC%MAC:1-6%</code> , <code>HPTC</code> would be the prefix, and the first six characters of the thin client MAC address would follow. So if the MAC address of the thin client is $11:22:33:44:55:66$ , the generated hostname would be <code>HPTC112233</code> . If the pattern is <code>TC%MAC%</code> , the generated hostname would be <code>TC112233445566</code> . If the pattern is <code>HP%MAC:7%</code> , the generated hostname would be <code>HP1122334</code> .
root/Network/EncryptWpaConfig	If set to 1, the password is encrypted.
root/Network/FtpProxy	Sets the FTP proxy address. HP recommends using the following format for this value because the http prefix is better supported: http://ProxyServer:Port
root/Network/Hostname	Sets the hostname of the thin client.
root/Network/HttpProxy	Sets the HTTP proxy address. HP recommends using the following format: http://ProxyServer:Port
root/Network/HttpsProxy	Sets the HTTPS proxy address. HP recommends using the following format for this value because the http prefix is better supported: http://ProxyServer:Port
root/Network/IPSec/IPSecRules/ <uuid>/DstAddr</uuid>	Sets the destination address for the IPSec rule.
root/Network/IPSec/IPSecRules/ <uuid>/ MMAuthMethod</uuid>	Sets the authentication method for the IPSec rule. PSK is for using a pre-shared key, and Certificate is for using certificate files.
root/Network/IPSec/IPSecRules/ <uuid>/ MMAuthMethodCACert</uuid>	If the authentication method is <code>Certificate</code> , the CA certificate file path is saved in this registry key.
root/Network/IPSec/IPSecRules/ <uuid>/ MMAuthMethodClientCert</uuid>	If the authentication method is Certificate, the client certificate file path is saved in this registry key.

Registry key	Description
root/Network/IPSec/IPSecRules/ <uuid>/ MMAuthMethodPresharedKey</uuid>	If the authentication method is $\mathtt{PSK},$ the pre-shared key value is saved in this registry key.
root/Network/IPSec/IPSecRules/ <uuid>/ MMAuthMethodPrivateKey</uuid>	If the authentication method is <code>Certificate</code> , the private key file path that corresponds with the client certificate is saved in this registry key.
root/Network/IPSec/IPSecRules/ <uuid>/ MMDHGroup</uuid>	Sets the phase 1 Diffie-Hellman group.
root/Network/IPSec/IPSecRules/ <uuid>/ MMEncryptionAlg</uuid>	Sets the phase 1 encryption algorithm.
root/Network/IPSec/IPSecRules/ <uuid>/ MMIntegrityAlg</uuid>	Sets the phase 1 integrity algorithm.
root/Network/IPSec/IPSecRules/ <uuid>/ MMLifetimeMinutes</uuid>	Sets the phase 1 lifetime.
root/Network/IPSec/IPSecRules/ <uuid>/ QMAHEnable</uuid>	Enables phase 2 AH.
root/Network/IPSec/IPSecRules/ <uuid>/ QMAHIntegrityAlg</uuid>	Sets the phase 2 AH integrity algorithm.
root/Network/IPSec/IPSecRules/ <uuid>/ QMESPEnable</uuid>	Enables phase 2 ESP.
root/Network/IPSec/IPSecRules/ <uuid>/ QMESPEncryptionAlg</uuid>	Sets the phase 2 ESP encryption algorithm.
root/Network/IPSec/IPSecRules/ <uuid>/ QMESPIntegrityAlg</uuid>	Sets the phase 2 ESP integrity algorithm.
root/Network/IPSec/IPSecRules/ <uuid>/ QMLifetimeSeconds</uuid>	Sets the phase 2 lifetime.
root/Network/IPSec/IPSecRules/ <uuid>/ RuleDescription</uuid>	Sets the description for the IPSec rule.
root/Network/IPSec/IPSecRules/ <uuid>/ RuleEnable</uuid>	If set to 1, the rule is enabled.
root/Network/IPSec/IPSecRules/ <uuid>/RuleName</uuid>	Sets the name for the IPSec rule.
root/Network/IPSec/IPSecRules/ <uuid>/SrcAddr</uuid>	Sets the source address for the IPSec rule.
root/Network/IPSec/IPSecRules/ <uuid>/ TunnelDstAddr</uuid>	Sets the tunnel destination address for the IPSec rule.
root/Network/IPSec/IPSecRules/ <uuid>/ TunnelEnable</uuid>	Enables tunnel mode for the IPSec rule.
root/Network/IPSec/IPSecRules/ <uuid>/ TunnelSrcAddr</uuid>	Sets the tunnel source address for the IPSec rule.
root/Network/KeepPreviousDNS	If set to 1, previously-configured DNS servers and search domains not generated by the Network Manager will be kept in resolv.conf If set to 0, resolv.conf will be overwritten completely.
root/Network/SearchDomains	Additional search domains for FQDN resolution can be specified here. The specified domains will be appended to any incomplete server definitions in an attempt to generate an FQDN that can be resolved via DNS. For example, a search domain of mydomain.com will allow the server definition myserver to

Registry key	Description
	resolve properly to myserver.mydomain.com, even if the DNS server does not have myserver in its name resolution tables. Up to five additional search domains can be specified.
root/Network/VPN/AutoStart	If set to 1, VPN starts automatically when the system starts up.
root/Network/VPN/PPTP/Domain	Sets the PPTP domain.
root/Network/VPN/PPTP/Gateway	Sets the PPTP gateway.
root/Network/VPN/PPTP/Password	Sets the PPTP user password.
root/Network/VPN/PPTP/Username	Sets the PPTP username.
root/Network/VPN/Type	Sets the VPN type.
root/Network/VPN/VPNC/DPDEndianess	Sets the endianness of the DPD sequence number (see rfc3706). 0: big endian; 1: little endian. Try toggling this if the session aborts intermittently for no apparent reason.
root/Network/VPN/VPNC/DPDInterval	Sets the DPD interval (see rfc3706) in seconds.
root/Network/VPN/VPNC/DebugLevel	Sets the debug level to either 0, 1, 2, 3, or 99. This generates a lot of logs. Enable this only when you need to troubleshoot a VPN issue.
root/Network/VPN/VPNC/Domain	Sets the VPNC domain.
root/Network/VPN/VPNC/Gateway	Sets the VPNC gateway.
root/Network/VPN/VPNC/Group	Sets the VPNC group.
root/Network/VPN/VPNC/GroupPassword	Sets the VPNC group password.
root/Network/VPN/VPNC/IKEDHGroup	Sets the VPNC IKE Diffie-Hellman group.
root/Network/VPN/VPNC/LocalUDPPort	Sets the local UDP port to use for VPNC. If set to 0, a random port will be used. This setting is valid only when the NAT traversal mode (NATTMode) is cisco-udp.
root/Network/VPN/VPNC/NATTMode	Sets the VPNC NAT traversal mode.
root/Network/VPN/VPNC/Password	Sets the VPNC user password.
root/Network/VPN/VPNC/PerfectForwardSecrecy	Sets the VPNC Diffie-Hellman group to use for Perfect Forward Secrecy (PFS).
root/Network/VPN/VPNC/Security	Sets the VPNC security level.
root/Network/VPN/VPNC/Username	Sets the VPNC username.
root/Network/Wired/DefaultGateway	Sets the default gateway the device will use to communicate with the Internet. Typically this is the IP address of the router. This setting will only take effect when Method is set to Static.
root/Network/Wired/EnableDefGatewayAsDNS	If set to 1, the default gateway will also be the name server.
root/Network/Wired/EthernetSpeed	Sets the link speed of the primary Ethernet network interface.  Automatic allows the fastest available link speed to be used, which is usually 1 Gbps or 100 Mbps/Full depending on the switch. The link speed can also be forced to a single speed (100 Mbps or 10 Mbps) and duplex mode (Full or Half) to support switches and hubs that do not perform appropriate auto-negotiation.
root/Network/Wired/IPAddress	Sets the IPv4 address of the thin client. This setting will only take effect when Method is set to Static.

Registry key	Description
root/Network/Wired/IPv6Enable	If set to 1, IPv6 is enabled.
root/Network/Wired/Interface	Sets the default Ethernet interface or NIC.
root/Network/Wired/MTU	Sets the MTU. It does not matter if the IP address is static or DHCP-acquired.
root/Network/Wired/Method	If set to Automatic, the thin client will use DHCP to attempt to retrieve network settings. If set to Static, the values of the IPAddress, SubnetMask, and DefaultGateway registry keys are used. HP does not recommend using Static in a generic client profile because it will cause all thin clients to receive the same IP address.
root/Network/Wired/Profiles/ <uuid>/ AutoConnect</uuid>	If set to 1, automatic connection to the network is enabled.
root/Network/Wired/Profiles/ <uuid>/ EthernetSpeed</uuid>	Sets the link speed of the primary Ethernet network interface.  Automatic allows the fastest available link speed to be used, which is usually 1 Gbps or 100 Mbps/full depending on the switch. The link speed can be forced to a combination of a single speed (100 Mbps or 10 Mbps) and duplex mode (Full or Half) to support switches and hubs that do not perform auto-negotiation.
root/Network/Wired/Profiles/ <uuid>/IPv4/ Address</uuid>	Sets the IPv4 address of the client. This setting takes effect only if Method is set to Static.
root/Network/Wired/Profiles/ <uuid>/IPv4/ DefaultGateway</uuid>	Sets the default gateway that the device uses to communicate with the Internet. Typically, this is the IP address of the router.  This setting takes effect only if Method is set to Static.
root/Network/Wired/Profiles/ <uuid>/IPv4/ Enabled</uuid>	If set to 1, IPv4 is enabled for this profile.
root/Network/Wired/Profiles/ <uuid>/IPv4/ Method</uuid>	If set to Automatic, the client uses DHCP to attempt to retrieve network settings. If set to Static, the values of the Address, SubnetMask, and DefaultGateway registry keys are used. HP does not recommend using Static in a generic client profile, because all clients would use the same IP address.
root/Network/Wired/Profiles/ <uuid>/IPv4/ SubnetMask</uuid>	Sets the subnet mask of the device, such as 255.255.255.0 (for a standard class C subnet). This setting takes effect only if Method is set to Static.
root/Network/Wired/Profiles/ <uuid>/IPv6/ Address</uuid>	Sets the IPv6 address of the client. This setting takes effect only if Method is set to Static.
root/Network/Wired/Profiles/ <uuid>/IPv6/ DefaultGateway</uuid>	Sets the default gateway that the device uses to communicate with the Internet. Typically, this is the IP address of the router.  This setting takes effect only if Method is set to Static.
root/Network/Wired/Profiles/ <uuid>/IPv6/ Enabled</uuid>	If set to 1, IPv6 is enabled for this profile.
root/Network/Wired/Profiles/ <uuid>/IPv6/ Method</uuid>	If set to Automatic, the client uses DHCP to attempt to retrieve network settings. If set to Static, the values of the Address, SubnetMask, and DefaultGateway registry keys are used. HP does not recommend using Static in a generic client profile, because all clients would use the same IP address. If set to Automatic, the client uses DHCP to attempt to retrieve network settings. If set to Static, the values of the Address, SubnetMask, and DefaultGateway registry keys are used.

Registry key	Description
	HP does not recommend using $Static$ in a generic client profile, because all clients would use the same IP address.
root/Network/Wired/Profiles/ <uuid>/IPv6/ SubnetMask</uuid>	Sets the subnet mask of the device, which is usually the IPv6 prefix length. This setting takes effect only if Method is set to Static.
root/Network/Wired/Profiles/ <uuid>/MTU</uuid>	Sets the MTU. It does not matter if the IP address is static or acquired by DHCP.
root/Network/Wired/Profiles/ <uuid>/Priority</uuid>	Reserved for wired network.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPPEAP/AnonyIdentity</uuid>	Sets the anonymous identity for PEAP authentication.
root/Network/Wired/Profiles/ <uuid>/EAPPEAP/ CACert</uuid>	Sets the path to the CA certificate file for PEAP authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPPEAP/InnerAuth</uuid>	Sets the PEAP inner authentication protocol.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPPEAP/PEAPVer</uuid>	Sets the PEAP version.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPPEAP/Password</uuid>	Sets the password for PEAP authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPPEAP/Username</uuid>	Sets the username for PEAP authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPTLS/CACert</uuid>	Sets the path to the CA certificate file for TLS authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPTLS/Identity</uuid>	Sets the identity for TLS authentication.
root/Network/Wired/Profiles/ <uuid>/EAPTLS/ PrivateKey</uuid>	Sets the path to a private key file for TLS authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPTLS/PrivateKeyPassword</uuid>	Sets the password to a private key file for TLS authentication.
root/Network/Wired/Profiles/ <uuid>/EAPTLS/ JserCert</uuid>	Sets the path to a user certificate file for TLS authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPTTLS/AnonyIdentity</uuid>	Sets the anonymous identity for TTLS authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPTTLS/CACert</uuid>	Sets the path to a CA certificate file for TTLS authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPTTLS/InnerAuth</uuid>	Sets the TTLS inner authentication protocol.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPTTLS/Password</uuid>	Sets the password for TTLS authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ EAPTTLS/Username</uuid>	Sets the username for TTLS authentication.
root/Network/Wired/Profiles/ <uuid>/Security/ Type</uuid>	Sets the wired authentication type.
root/Network/Wired/Profiles/ <uuid>/ WiredInterface</uuid>	Sets the wired interface for the profile.

Registry key	Description
root/Network/Wired/Security/CACert	Sets the path to CA certificate file.
root/Network/Wired/Security/EnableMachineAuth	If set to 1, machine authentication for PEAP is enabled.
root/Network/Wired/Security/Identity	Sets the identity or anonymous identity.
root/Network/Wired/Security/InnerAuth	Sets the PEAP inner authentication protocol.
root/Network/Wired/Security/InnerAuthTTLS	Sets the TTLS inner authentication protocol.
root/Network/Wired/Security/MachineAuthName	Stores the machine account name when machine authentication is enabled.
root/Network/Wired/Security/ MachineAuthPassword	Stores the machine account password when machine authentication is enabled.
root/Network/Wired/Security/PEAPVersion	Sets the PEAP version.
root/Network/Wired/Security/Password	Sets the password.
root/Network/Wired/Security/PrivateKey	Sets the path to a private key file. This is only used for TLS authentication.
root/Network/Wired/Security/Type	Sets the 802.1x authentication type.
root/Network/Wired/Security/UserCert	Sets the path to a user certificate file. This is only used for TLS authentication.
root/Network/Wired/Security/Username	Sets the username.
root/Network/Wired/SubnetMask	Sets the subnet mask of the device, such as 255.255.255.0 (for a standard class C subnet). This setting will only take effect when Method is set to Static.
root/Network/Wired/UseWiredProfiles	If set to 1, the wired connection is configured in profile mode, which can connect to multiple wired networks. If set to 0, it can connect to only one wired network.
root/Network/WiredWirelessSwitch	If set to 0, a wired network and a wireless network can be connected simultaneously. If set to 1, the wired network takes priority over the wireless network; that is, if the wired network cannot connect, a configured wireless network is used.
root/Network/Wireless/DefaultGateway	Sets the default gateway the device will use to communicate with the Internet. Typically this is the IP address of the router. This setting will only take effect when Method is set to Static.
root/Network/Wireless/EnableDefGatewayAsDNS	If set to 1, the default gateway will also be the name server.
root/Network/Wireless/EnableWireless	If set to 1, wireless functionality is enabled. If set to 0, wireless functionality Is disabled.
root/Network/Wireless/IPAddress	Sets the IPv4 address of the thin client. This setting will only take effect when Method is set to Static.
root/Network/Wireless/IPv6Enable	If set to 1, IPv6 is enabled.
root/Network/Wireless/Interface	Sets the default wireless interface or wireless network adapter.
root/Network/Wireless/Method	If set to Automatic, the thin client will use DHCP to attempt to retrieve network settings. If set to Static, the values of the IPAddress, SubnetMask, and DefaultGateway registry keys are used. HP does not recommend using Static in a generic client profile because it will cause all thin clients to receive the same IP address.

Registry key	Description
root/Network/Wireless/PowerEnable	If set to 1, power management of the wireless network card is enabled.
root/Network/Wireless/Profiles/ <uuid>/ AutoConnect</uuid>	If set to 1, automatic connection to the SSID is enabled.
root/Network/Wireless/Profiles/ <uuid>/IPv4/ Address</uuid>	Sets the IPv4 address of the client. This setting takes effect only if Method is set to Static.
root/Network/Wireless/Profiles/ <uuid>/IPv4/ DefaultGateway</uuid>	Sets the default gateway the device uses to communicate with the Internet. Typically, this Is the IP address of the router. This setting takes effect only if Method is set to Static.
root/Network/Wireless/Profiles/ <uuid>/IPv4/ Enabled</uuid>	If set to 1, IPv4 is enabled for this profile.
root/Network/Wireless/Profiles/ <uuid>/IPv4/ Method</uuid>	If set to Automatic, the client uses DHCP to retrieve network settings. If set to Static, the values of the Address, SubnetMask, and DefaultGateway registry keys are used. HP does not recommend using Static in a generic client profile, because all clients using that profile would use the same IP address.
root/Network/Wireless/Profiles/ <uuid>/IPv4/ SubnetMask</uuid>	Sets the subnet mask of the device, such as 255.255.255.0 (for a standard class C subnet). This setting takes effect only if Method is set to Static.
root/Network/Wireless/Profiles/ <uuid>/IPv6/ Address</uuid>	Sets the IPv6 address of the client. This setting takes effect only if Method is set to Static.
root/Network/Wireless/Profiles/ <uuid>/IPv6/ DefaultGateway</uuid>	Sets the default gateway the device uses to communicate with the Internet. Typically, this Is the IP address of the router. This setting takes effect only if Method is set to Static.
root/Network/Wireless/Profiles/ <uuid>/IPv6/ Enabled</uuid>	If set to 1, IPv6 is enabled for this profile.
root/Network/Wireless/Profiles/ <uuid>/IPv6/ Method</uuid>	If set to Automatic, the client uses DHCP to attempt to retrieve network settings. If set to Static, the values of the Address, SubnetMask, and DefaultGateway registry keys are used. HP does not recommend using Static in a generic client profile, because all clients would use the same IP address.
root/Network/Wireless/Profiles/ <uuid>/IPv6/ SubnetMask</uuid>	Sets the subnet mask of the device, which is usually the IPv6 prefix length. This setting takes effect only if Method is set to
root/Network/Wireless/Profiles/ <uuid>/ PowerEnable</uuid>	If set to 1, power management of the wireless network card is enabled.
root/Network/Wireless/Profiles/ <uuid>/ Priority</uuid>	Defines the priority of the network. For a wireless network, a larger number means a higher priority. High priority is preferred for a wireless network connection.
root/Network/Wireless/Profiles/ <uuid>/SSID</uuid>	Sets the wireless access point to use via SSID.
root/Network/Wireless/Profiles/ <uuid>/ SSIDHidden</uuid>	Specifies whether the SSID of the wireless access point is hidden.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPFAST/AnonyIdentity</uuid>	Sets the anonymous identity for EAP-FAST authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPFAST/FastProvision</uuid>	Sets the provisioning option for EAP-FAST authentication.

Registry key	Description
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPFAST/PACFile</uuid>	Sets the path to the PAC file for EAP-FAST authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPFAST/Password</uuid>	Sets the password for EAP-FAST authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPFAST/Username</uuid>	Sets the username for EAP-FAST authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPPEAP/AnonyIdentity</uuid>	Sets the anonymous identity for EAP PEAP authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPPEAP/CACert</uuid>	Sets the path to the CA certificate file for EAP PEAP authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPPEAP/InnerAuth</uuid>	Sets the PEAP inner authentication protocol.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPPEAP/PEAPVer</uuid>	Sets the PEAP version.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPPEAP/Password</uuid>	Sets the password for EAP PEAP authentication.
coot/Network/Wireless/Profiles/ <uuid>/ Security/EAPPEAP/Username</uuid>	Sets the username for EAP PEAP authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPTLS/CACert</uuid>	Sets the path to the CA certificate file for TLS authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPTLS/Identity</uuid>	Sets the identity for TLS authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPTLS/PrivateKey</uuid>	Sets the path to a private key file for TLS authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPTLS/PrivateKeyPassword</uuid>	Sets the password to a private key file for TLS authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPTLS/UserCert</uuid>	Sets the path to a user certificate file for TLS authentication.
coot/Network/Wireless/Profiles/ <uuid>/ Security/EAPTTLS/AnonyIdentity</uuid>	Sets the anonymous identity for TTLS authentication.
root/Network/Wireless/Profiles/ <uuid>/ Security/EAPTTLS/CACert</uuid>	Sets the path to a CA certificate file for TTLS authentication.
coot/Network/Wireless/Profiles/ <uuid>/ Security/EAPTTLS/InnerAuth</uuid>	Sets the TTLS inner authentication protocol.
coot/Network/Wireless/Profiles/ <uuid>/ Security/EAPTTLS/Password</uuid>	Sets the password for TTLS authentication.
oot/Network/Wireless/Profiles/ <uuid>/ ecurity/EAPTTLS/Username</uuid>	Sets the username for TTLS authentication.
coot/Network/Wireless/Profiles/ <uuid>/</uuid>	Sets the password for PSK authentication.
coot/Network/Wireless/Profiles/ <uuid>/</uuid>	Sets the wireless authentication type.
coot/Network/Wireless/Profiles/ <uuid>/</uuid>	Sets the WEP authentication type.

Registry key	Description
root/Network/Wireless/Profiles/ <uuid>/ Security/WEP/Key</uuid>	Sets the WEP password.
root/Network/Wireless/Profiles/ <uuid>/ Security/WEP/KeyIndex</uuid>	Sets the WEP password index.
root/Network/Wireless/Profiles/ <uuid>/ Security/WirelessBand</uuid>	Specifies the frequency range selection. Select Auto to scan all wireless channels; select $2.4\mathrm{GHz}$ to scan only 2.4 GHz channels; select $5\mathrm{GHz}$ to scan only 5 GHz channels.
root/Network/Wireless/Profiles/ <uuid>/ Security/WirelessInterface</uuid>	Sets the wireless interface for the profile.
root/Network/Wireless/Roaming/ enableRoamingOptions	If set to 1, wireless roaming options are configurable.
root/Network/Wireless/Roaming/ roamingThreshold	Sets the minimum signal strength, in dBm, allowed before attempting to roam to a stronger access point. Note that this value is negative.
root/Network/Wireless/Roaming/scanInterval	Sets how often, in seconds, to scan for a stronger access point when the signal strength is below the roaming threshold.
root/Network/Wireless/SSID	Sets the wireless access point to use via its SSID.
root/Network/Wireless/SSIDHidden	Specifies if the SSID of the wireless access point is hidden.
root/Network/Wireless/SSIDWhiteList	Specifies a whitelist for wireless access points. If this registry key's value is not empty, only the SSIDs specified in the value will be shown in the wireless access point scan results. Use a semicolon to separate the SSIDs.
root/Network/Wireless/Security/CACert	Sets the path to CA certificate file.
root/Network/Wireless/Security/EAPFASTPAC	Sets the path to the PAC file for EAP-FAST authentication.
root/Network/Wireless/Security/ EAPFASTProvision	Sets the provisioning option for EAP-FAST authentication.
root/Network/Wireless/Security/Identity	Sets the identity or anonymous identity.
root/Network/Wireless/Security/InnerAuth	Sets the PEAP inner authentication protocol.
root/Network/Wireless/Security/InnerAuthTTLS	Sets the TTLS inner authentication protocol.
root/Network/Wireless/Security/PEAPVersion	Sets the PEAP version.
root/Network/Wireless/Security/Password	Sets the password.
root/Network/Wireless/Security/PrivateKey	Sets the path to a private key file. This is only used for TLS authentication.
root/Network/Wireless/Security/Type	Sets the wireless authentication type.
root/Network/Wireless/Security/UserCert	Sets the path to a user certificate file. This is only used for TLS authentication.
root/Network/Wireless/Security/Username	Sets the username.
root/Network/Wireless/Security/WEPAuth	Sets the WEP authentication type.
root/Network/Wireless/Security/WEPIndex	Sets the WEP password index.
root/Network/Wireless/SubnetMask	Sets the subnet mask of the device, such as 255.255.255.0 (for a standard class C subnet). This setting will only take effect when Method is set to Static.

Registry key	Description
root/Network/Wireless/UseWirelessProfiles	If set to 1, the wireless connection is configured in profile mode, which can connect to multiple wireless networks. This is useful for mobile computing. If set to 0, only one configured wireless network can be connected.
root/Network/Wireless/WirelessBand	Specifies the frequency range selection. Select $\mathtt{Auto}$ to scan all wireless channels; select $\mathtt{2.4GHz}$ to scan only 2.4 GHz channels; select $\mathtt{5GHz}$ to scan only 5 GHz channels.
root/Network/Wireless/WpaDriver	Specifies the driver used by wpa_supplicant (wext by default). $n180211$ is the only other driver that is currently supported.
root/Network/Wireless/bcmwlCountryOverride	Overrides the country value from the BIOS in case the BIOS does not have the necessary value. The bcmwl driver accepts the wl_country option, which is retrieved from BIOS values on an asneeded basis (only Indonesia is supported currently). A system restart is required for any changes to take effect.
root/Network/Wireless/ disableUserCreateWirelessProfile	If set to 1, user accounts cannot create wireless profiles from the wireless system tray.
root/Network/Wireless/ disableUserWirelessProfileTrayMenu	If set to 1, the wireless menu of the wireless system tray icon is disabled for the user account.
root/Network/Wireless/ disableWirelessProfileTrayMenu	If set to 1, the wireless menu of the wireless system tray icon is disabled.
root/Network/Wireless/ tryAutoWirelessIfUserFailed	If set to 1, if a user tries to connect to a wireless AP and fails, the wireless module tries to connect wirelessly using all available profiles. If set to 0, if a user tries to connect to a wireless AP and fails, the wireless status is set to disconnected. This is a fallback function.
root/Network/disableLeftClickMenu	If set to 1, the left-click menu for the network system tray icon is disabled.
root/Network/disableRightClickMenu	If set to 1, the right-click menu for the network system tray icon is disabled.
root/Network/enableVPNMenu	If set to 1, the left-click VPN menu accessible from the network taskbar icon is enabled.
root/Network/iPeak/ShowStatus	If set to 1, the HP Velocity status is displayed as part of the system tray icon. HP Velocity is not supported on the HP t420.
root/Network/iPeak/SingleSidedAccelerate	If set to 1, the single-sided acceleration feature of HP Velocity is enabled. If set to 0, this feature is disabled. HP Velocity is not supported on the HP t420 or HP mt20.
root/Network/iPeak/Status	If set to 1, HP Velocity is enabled. If set to 2, HP Velocity is enabled in Monitor mode. If set to 0, HP Velocity is disabled. HP Velocity is not supported on the HP t420.
root/Network/userLock	If set to 1, and if the network settings have been modified by the user, the network settings are preserved when importing a client profile.
root/Network/userLockEngaged	This registry key is set to 1 automatically after the network settings have been modified by the user. You normally do not need to modify this setting.

### **Power**

Registry key	Description
root/Power/currentPowerPlan	This registry key selects which power plan is used. This is automatically set to default.
root/Power/AC/brightness	Sets the default brightness percentage level for when the mobile thin client is plugged in.
root/Power/default/AC/cpuMode	Sets the CPU mode for a power plan while the computer is connected to AC power. By default, it is set to performance.
root/Power/default/AC/lidAction	Sets the action that occurs when the computer lid is closed while the computer is connected to AC power. By default, it is set to sleep.
root/Power/default/AC/powerButtonAction	Sets the action that occurs when the power button is pressed while the computer is connected to AC power. By default, it is set to shutdown.
root/Power/default/AC/sleep	Sets the value (in minutes) that the computer waits before it enters sleep mode while the computer is connected to AC power. By default, it is set to 30. If set to 0, the computer never enters sleep mode.
root/Power/default/AC/standby	Sets the value (in minutes) that the computer waits before the display turns off while the computer is connected to AC power. By default, it is set to 15. If set to 0, the computer never enters standby mode.
root/Power/default/AC/timeoutDim	This key is currently not in use.
root/Power/default/battery/brightness	Sets the default brightness percentage level for when the mobile thin client is not plugged in.
root/Power/default/battery/cpuMode	Sets the CPU mode for a power plan while the computer is not connected to AC power. By default, it is set to ondemand.
root/Power/default/battery/critical/ criticalBatteryAction	Sets the action to perform when the battery is at the critical charge level, defined by criticalBatteryLevel.
root/Power/default/battery/critical/ criticalBatteryLevel	Sets the percentage threshold for when the battery is considered to be at a critical level of power.
root/Power/default/battery/lidAction	Sets the action that occurs when the computer lid is closed while the computer is not connected to AC power. By default, it is set to sleep.
root/Power/default/battery/low/brightness	Sets the default brightness percentage level for when the battery is running low on power.
root/Power/default/battery/low/cpuMode	Sets the CPU mode (performance or on demand).
root/Power/default/battery/low/ lowBatteryLevel	Sets the percentage of battery power left for when the battery is considered to be at a low level of power.
root/Power/default/battery/low/sleep	Sets the value (in minutes) that the computer waits before it enters sleep mode while the computer is not connected to AC power. By default, it is set to 30. If set to 0, the computer never enters sleep mode.
root/Power/default/battery/low/standby	Sets the value (in minutes) that the computer waits before the display turns off while the computer is not connected to AC power By default, it is set to 15. If set to 0, the computer never enters standby mode.

Registry key	Description
root/Power/default/battery/low/timeoutDim	This key is currently not in use.
root/Power/default/battery/powerButtonAction	Specifies what to do when power button is pressed.
root/Power/default/battery/sleep	Sets how many minutes to wait before entering Sleep. 0 = never.
root/Power/default/battery/standby	Sets how many minutes to wait before turning off the display. 0 = never.
root/Power/default/battery/timeoutDim	This key is currently not in use.

### **SCIM**

Registry key	Description
root/SCIM/ScimEnabled	If set to 1, SCIM is enabled for Chinese, Japanese, and Korean input.

# ScepMgr

Registry key	Description
root/ScepMgr/General/AutoRenew/Enabled	If set to 1, certificates will be renewed automatically before they expire.
root/ScepMgr/General/AutoRenew/TimeFrame	Sets the number of days before a certificate's expiration date that the SCEP Manager will try to renew the certificate automatically.
root/ScepMgr/IdentifyingInfo/CommonName	Sets the common name to use for SCEP identifying information, such as your name or the Fully-Qualified Domain Name (FQDN) of the device. The FQDN is used by default if this value is left empty.
root/ScepMgr/IdentifyingInfo/CountryName	Sets the country or region to use for SCEP identifying information.
root/ScepMgr/IdentifyingInfo/EmailAddress	Sets the email address to use for SCEP identifying information.
root/ScepMgr/IdentifyingInfo/LocalityName	Sets the locality name to use for SCEP identifying information, such as a city name.
root/ScepMgr/IdentifyingInfo/OrganizationName	Sets the organization name to use for SCEP identifying information, such as a company name or government organization name.
root/ScepMgr/IdentifyingInfo/ OrganizationUnitName	Sets the organizational unit name to use for SCEP identifying information, such as a department name or section name.
root/ScepMgr/IdentifyingInfo/StateName	Sets the state or province to use for SCEP identifying information.
<pre>root/ScepMgr/ScepEnroll/ScepServers/<uuid>/ CertFileChanged</uuid></pre>	The registry key is used only to inform other applications that a certificate file has changed. This should not need to be modified.
<pre>root/ScepMgr/ScepEnroll/ScepServers/<uuid>/ KeySize</uuid></pre>	Sets the key size to use for the generated key pair.
<pre>root/ScepMgr/ScepEnroll/ScepServers/<uuid>/ ServerName</uuid></pre>	Sets the SCEP server name.
<pre>root/ScepMgr/ScepEnroll/ScepServers/<uuid>/ ServerUrl</uuid></pre>	Sets the SCEP server URL, which is necessary for the SCEP client to enroll a certificate.

Registry key	Description
<pre>root/ScepMgr/ScepEnroll/ScepServers/<uuid>/ Status/Code</uuid></pre>	Contains the status code of the SCEP enrollment. This value is read-only.
<pre>root/ScepMgr/ScepEnroll/ScepServers/<uuid>/ Status/Detail</uuid></pre>	Contains detailed information about the SCEP enrollment. This value is read-only.

### Search

Registry key	Description
root/Search/Category/Applications/ ConnectionManager/checked	
root/Search/Category/Applications/ ConnectionManager/enabled	
root/Search/Category/Applications/ Connections/checked	
root/Search/Category/Applications/ Connections/enabled	
root/Search/Category/Applications/ ControlPanel/checked	
root/Search/Category/Applications/ ControlPanel/enabled	
<pre>root/Search/Category/Applications/Desktop/ checked</pre>	
<pre>root/Search/Category/Applications/Desktop/ enabled</pre>	
root/Search/Category/Applications/icon	
root/Search/Category/Applications/name	
root/Search/Category/FileSystem/caseSensitive	
root/Search/Category/FileSystem/enabled	
root/Search/Category/FileSystem/folderFilter	Specifies the folders in the filesystem that the user will be allowed to search. Use a semicolon to separate folders. For example: /home/user; /usr/bin
root/Search/Category/FileSystem/location	
root/Search/Category/FileSystem/subFolder	
root/Search/Category/Miscellaneons/ CheckForUpdate	
root/Search/Category/Miscellaneons/Logout	
root/Search/Category/Miscellaneons/Reboot	
root/Search/Category/Miscellaneons/ShutDown	
root/Search/Category/Miscellaneons/Sleep	

Registry key	Description
root/Search/Category/Miscellaneons/ SwitchToAdmin	
root/Search/Category/Regeditor/byDir	
root/Search/Category/Regeditor/byKey	
root/Search/Category/Regeditor/byValue	
root/Search/Category/Regeditor/byWhole	
root/Search/GUI/showCategory	

### **Serial**

Registry key	Description
root/Serial/ <uuid>/baud</uuid>	Sets the speed of the serial device.
root/Serial/ <uuid>/dataBits</uuid>	Sets how many bits are in each character.
root/Serial/ <uuid>/device</uuid>	Specifies the serial device attached to the system.
root/Serial/ <uuid>/flow</uuid>	Sets the flow control of the serial device, which is used to communicate stops and starts of the serial communication.
root/Serial/ <uuid>/name</uuid>	Specifies the Windows device port for communicating with the serial device.
root/Serial/ <uuid>/parity</uuid>	Sets the parity bit of the serial device. The parity bit is used for error detection. If set to $\mathtt{none}$ , there is no parity detection.

# SystemInfo

Registry key	Description
root/SystemInfo/Pages/General	If set to 0, the <b>General</b> tab of the System Information window is hidden from end users.
root/SystemInfo/Pages/NetTools	If set to 0, the <b>Net Tools</b> tab of the System Information window is hidden from end users.
root/SystemInfo/Pages/Network	If set to 0, the <b>Network</b> tab of the System Information window is hidden from end users.
<pre>root/SystemInfo/Pages/SoftwareInformationTab/ ServicePacks</pre>	If set to 0, the <b>Service Packs</b> tab in the <b>Software Information</b> section of the System Information window is hidden from end users.
<pre>root/SystemInfo/Pages/SoftwareInformationTab/ SoftwareInformation</pre>	If set to 0, the <b>Software Information</b> tab of the System Information window is hidden from end users.
<pre>root/SystemInfo/Pages/SoftwareInformationTab/ SoftwareInstalled</pre>	If set to 0, the <b>Software Installed</b> tab in the <b>Software Information</b> section of the System Information window is hidden from end users.

Registry key	Description
root/SystemInfo/Pages/SystemLogs	If set to 0, the <b>System Logs</b> tab of the System Information window is hidden from end users.
root/SystemInfo/authorized	If set to 0, the System Information button on the taskbar is disabled for end users.

# TaskMgr

Registry key	Description
root/TaskMgr/General/AlwaysOnTop	If set to 1, the Task Manager window is always on top.

#### **USB**

Registry key	Description
root/USB/Classes/ <class type="">/ClassID</class>	Sets the USB class ID number.
root/USB/Classes/ <class type="">/DisplayName</class>	Sets the USB class name.
root/USB/Classes/ <class type="">/State</class>	Sets whether the class is mapped to the remote host.
root/USB/Classes/ <class type="">/Visible</class>	Sets whether the class is shown in the UI, not shown in the UI, or disabled.
root/USB/Devices/ <uuid>/DisplayName</uuid>	Sets the name to show in USB Manager. If not supplied, USB Manager will attempt to generate an appropriate name using device information.
root/USB/Devices/ <uuid>/ProductID</uuid>	Sets the product ID of the device.
root/USB/Devices/ <uuid>/State</uuid>	Sets whether this device is mapped to the remote host as follows: 0 = Do Not Redirect; 1 = Use Defaults; 2 = Redirect.
root/USB/Devices/ <uuid>/VendorID</uuid>	Sets the vendor ID of the device.
root/USB/root/autoSwitchProtocol	If set to 1, the remote USB protocol will switch automatically based on which protocol is chosen.
root/USB/root/mass-storage/allowed	If set to 1, mass storage devices will be mounted automatically when the protocol is $local$ .
root/USB/root/mass-storage/read-only	If set to 1, when mass storage devices are mounted automatically, they will be mounted as read-only.
root/USB/root/protocol	Sets which protocol owns remote USB. Valid values depend on which protocols are installed on the system but can include local, xen, freerdp, and view.
root/USB/root/showClasses	If set to 1, the <b>Classes</b> section is shown in the USB Manager.

# auto-update

Registry key	Description
root/auto-update/DNSAliasDir	Sets the default root directory for DNS alias mode on the server hosting HP Smart Client Services.
root/auto-update/LockScreenTimeout	Specifies the timeout (in minutes) after which the screen will unlock during an automatic update. If set to 0, the screen will be unlocked throughout the entire automatic update until the update is complete.
root/auto-update/ManualUpdate	If set to 1, the DHCP tag, DNS alias, and broadcast update methods for Automatic Update are disabled. When performing a manual update, the password, path, protocol, user, and ServerURL registry keys must be set to ensure the update server is known.
root/auto-update/ScheduledScan/Enabled	If set to 1, the thin client performs periodic scans of the Automatic Update server to check for updates. If set to 0, the thin client will only check for updates at system startup.
root/auto-update/ScheduledScan/Interval	Sets the amount of time to wait between scheduled update scans. This should be specified in the ${\rm HH:MM}$ format. Intervals longer than 24 hours can be specified. For example, to have the scans occur every 48 hours, set this to $48:00$ .
root/auto-update/ScheduledScan/Period	Thin clients will randomly activate their scheduled scan throughout the defined period. Using a long period avoids cases where all thin clients update at exactly the same, which could cause network congestion. The period should be specified in the HH: MM format. For example, to spread thin client updates over a 2.5-hour period, set this to 02:30.
root/auto-update/ScheduledScan/StartTime	Sets the start time of the first scheduled update scan period in the format ${\tt HH:MM}$ , using the 24-hour time format. For example, 4:35 p.m. would be $16:35$ .
root/auto-update/ServerURL	Sets the IP address or domain name of the update server used when Manual Update is enabled.
root/auto-update/VisibleInSystray	If set to 1, the Automatic Update system tray icon is enabled.
root/auto-update/enableLockScreen	If set to 1, the screen locks while an automatic update is in progress.
root/auto-update/enableOnBootup	If set to 1, Automatic Update is enabled at system startup.
root/auto-update/enableSystrayLeftClickMenu	If set to 1, the left-click menu for the Automatic Update system tray icon is enabled.
root/auto-update/enableSystrayRightClickMenu	If set to 1, the right-click menu for the Automatic Update system tray icon is enabled.
root/auto-update/gui/auto-update/ManualUpdate	Controls the state of the <b>Enable manual configuration</b> widget in the Automatic Update tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/auto-update/gui/auto-update/ServerURL	Controls the state of the <b>Server</b> widget in the Automatic Update tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

Registry key	Description
root/auto-update/gui/auto-update/ enableLockScreen	Controls the state of the <b>Enable Lock Screen when Automatic Update</b> widget in the Automatic Update tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/auto-update/gui/auto-update/ enableOnBootup	Controls the state of the <b>Enable Automatic Update on system startup</b> widget in the Automatic Update tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/auto-update/gui/auto-update/password	Controls the state of the <b>Password</b> widget in the Automatic Update tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/auto-update/gui/auto-update/protocol	Controls the state of the <b>Protocol</b> widget in the Automatic Update tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/auto-update/gui/auto-update/tag	This registry key is either used internally or reserved for future use. The value should not be changed.
root/auto-update/gui/auto-update/user	Controls the state of the <b>User name</b> widget in the Automatic Update tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/auto-update/password	Sets the password used when ManualUpdate is enabled. This is only used when protocol is set to ftp. This value will be encrypted.
root/auto-update/path	Sets the relative path from the default server URL for when ManualUpdate is enabled. Typically, this is empty or set to auto-update.
root/auto-update/preserveConfig	If set to 1, the current thin client configuration settings will be preserved when an image update occurs via Automatic Update.
root/auto-update/protocol	Sets the protocol used when Manual Update is enabled.
root/auto-update/tag	This registry key is obsolete. It previously set the tag number used for DHCP (137). This is now detected via the tag name auto-update.
root/auto-update/user	Sets the username used when Manual Update is enabled. This is only used when 'protocol' is set to 'ftp'.

# background

Registry key	Description
root/background/bginfo/alignment	Sets the Background Sysinfo text alignment.

Registry key	Description
root/background/bginfo/enabled	If set to ${\tt l}$ , system information is displayed on the desktop background (Background Sysinfo).
root/background/bginfo/horizontalLocation	Sets the Background Sysinfo location on the X-axis in a percentage.
root/background/bginfo/interval	Sets the Background Sysinfo text refresh interval in seconds.
root/background/bginfo/preset	Sets the Background Sysinfo preset file to ${\tt use}$ . If set to ${\tt none}$ , you can customize the settings in Background Manager.
root/background/bginfo/shadowColor	Sets the Background Sysinfo shadow color.
root/background/bginfo/shadowOffset	Sets the Background Sysinfo shadow offset. If set to $^{\circ}$ , the shadow is disabled.
root/background/bginfo/text	Sets the Background Sysinfo text. For more information, see the HP ThinPro white paper <i>Login Screen Customization</i> (available in English only).
root/background/bginfo/textColor	Sets the Background Sysinfo text color.
root/background/bginfo/textSize	Sets the Background Sysinfo text size.
root/background/bginfo/verticalLocation	Sets the Background Sysinfo location on the Y-axis in a percentage.
root/background/desktop/color	If theme is set to none, this key stores the color used by the user-defined theme.
root/background/desktop/imagePath	If theme is set to none, this key stores the desktop background image path used by the user-defined theme.
root/background/desktop/lastBrowseDir	If theme is set to none, this key stores the last used directory.
root/background/desktop/style	If theme is set to none, this key stores how the background image is placed on the desktop (such as center, tile, stretch, fit, and fill).
root/background/desktop/theme	Specifies the system theme setting. This value is set via the Background Manager tool in Control Panel. The valid values depend on the themes that exist on the system. This can be set to none to let the user define the theme, to auto to have the system automatically set the appropriate protocol's theme for Smart Zero, or to default to use the default theme for ThinPro.

# config-wizard

Registry key	Description
<pre>root/config-wizard/FirmwareUpdate/ firmwareUpdateTimeout</pre>	Sets the timeout period in seconds for when checking for updates. If set to -1, there is no timeout.
root/config-wizard/FirmwareUpdate/ firmwareUpdateURL	Sets the FTP URL for image updates.
<pre>root/config-wizard/FirmwareUpdate/ preserveConfig</pre>	If set to 1, the current thin client configuration settings will be preserved when an image update occurs via the initial configuration wizard.

Registry key	Description
root/config-wizard/SelfUpdate/ selfUpdateTimeout	Sets the timeout period in seconds to search for when checking for self updates. If set to -1, there is no timeout.
root/config-wizard/SelfUpdate/selfUpdateURL	Sets the FTP URL for the configuration wizard.
root/config-wizard/disableAllChecksAtStartup	If set to 1, all checks at startup are disabled. If set to 0, you can enable/disable each type of check individually with the registry keys enableConnectionCheck, enableNetworkCheck, and enableUpdateCheck.
root/config-wizard/enableConfigWizard	If set to 1, the configuration wizard at system startup is enabled.
root/config-wizard/enableConnectionCheck	If set to 1, the connection check at system startup is enabled.
root/config-wizard/enableNetworkCheck	If set to 1, the network check at system startup is enabled.
root/config-wizard/enableUpdateCheck	If set to 1, the update check at system startup is enabled.
root/config-wizard/enableUpdateCheckGui	If set to 1, the update check GUI at system startup is enabled.
root/config-wizard/showNetworkSettingsButton	If set to 1, the network settings button is shown in the network check window.

# desktop

Registry key	Description
root/desktop/shortcuts/ <action>/command</action>	Sets the command that is run by the shortcut.
root/desktop/shortcuts/ <action>/enabled</action>	If set to 1, the shortcut is enabled.
root/desktop/shortcuts/ <action>/shortcut</action>	Sets the shortcut name.

### entries

Registry key	Description
root/entries/ <uuid>/command</uuid>	
root/entries/ <uuid>/folder</uuid>	
root/entries/ <uuid>/icon</uuid>	
root/entries/ <uuid>/label</uuid>	
root/entries/ <uuid>/metaInfo</uuid>	
root/entries/ <uuid>/onDesktop</uuid>	
root/entries/ <uuid>/onMenu</uuid>	

## keyboard

Registry key	Description
root/keyboard/DrawLocaleLetter	If set to 1, the keyboard system tray icon will draw the language locale string instead of using static images.
root/keyboard/SystrayMenu/keyboardLayout	If set to 1, the right-click menu on the keyboard system tray icon offers an option to open the Keyboard Layout tool in Control Panel.
root/keyboard/SystrayMenu/languages	If set to 1, the right-click menu on the keyboard system tray icon offers an option to open the Language tool in Control Panel.
root/keyboard/SystrayMenu/virtualKeyboard	If set to 1, the right-click menu on the keyboard system tray icon offers an option to open the virtual keyboard.
root/keyboard/VisibleInSystray	If set to 1, the keyboard system tray icon is displayed and indicates the current keyboard layout.
root/keyboard/XkbLayout	This is an internal key used to map to an XKB keyboard layout. This key should not need to be modified.
root/keyboard/XkbModel	This is an internal key used to map to an XKB keyboard model. This key should not need to be modified.
root/keyboard/XkbOptions	This is an internal key used to map to XKB keyboard options. This key should not need to be modified.
root/keyboard/XkbVariant	This is an internal key used to map to an XKB keyboard variant. This key should not need to be modified.
root/keyboard/enable2	If set to 1, the secondary keyboard layout can be switched to via the keyboard shortcut defined by ${\tt switch}$ .
root/keyboard/layout	Sets the primary keyboard layout.
root/keyboard/layout2	Sets the secondary keyboard layout.
root/keyboard/model	Sets the primary keyboard model.
root/keyboard/model2	Sets the secondary keyboard model.
root/keyboard/numlock	If set to 1, the Num Lock function is enabled at system startup. This registry key is intentionally ignored on mobile thin clients.
root/keyboard/rdp_kb	This is an internal key used to map to an RDP keyboard map. This key should not need to be modified.
root/keyboard/switch	Sets the keyboard shortcut for switching between the first and second keyboard layout (enable2 must also be set to 1). Valid values are as follows: grp:ctrl_shift_toggle, grp:ctrl_alt_toggle, grp:alt_shift_toggle.
root/keyboard/variant	Sets the primary keyboard variant.
root/keyboard/variant2	Sets the secondary keyboard variant.

# logging

Registry key	Description
root/logging/general/debug	If set to 1, debugging is enabled for all debug-supported subsystems. This is usually used in conjunction with generateDiagnostic.sh or the System Information Diagnostic tool to generate a diagnostic bundle with system debug logs included.
root/logging/general/debugLevel	Sets the debug level. This value will be leveraged by other modules to generate the corresponding logs.
root/logging/general/showDebugLevelBox	If set to 1, the <b>Debug level</b> option on the <b>System Logs</b> tab of the <b>System Information</b> window will be available to end users. If set to 0, the option is available to administrators only.

# login

Registry key	Description
root/login/buttons/configure/authorized	If set to 1, the Configuration button is available at the login screen.
root/login/buttons/info/authorized	If set to 1, the System Information button is available at the login screen.
root/login/keyboard/authorized	If set to 1, keyboard layout settings can be configured at the login screen.
root/login/locale/authorized	If set to 1, language settings can be configured at the login screen.
root/login/mouse/authorized	If set to 1, mouse settings can be configured at the login screen.
root/login/onscreenKeyboard/authorized	If set to 1, the onscreen keyboard is available at the login screen.
root/login/power/authorized	If set to 1, the power button is available at the login screen.
root/login/poweroff/authorized	If set to 1, the shut down function is available at the login screen.
root/login/reboot/authorized	If set to 1, the restart function is available at the login screen.
root/login/show/authorized	If set to 1, the button drawer containing additional options is available at the login screen.
root/login/sleep/authorized	If set to 1, the Sleep function is available at the login screen.
root/login/touchscreen/authorized	If set to 1, touch screen settings can be configured at the login screen. The registry key root/touchscreen/enabled must also be enabled.

#### mouse

Registry key	Description
root/mouse/MouseHandedness	If set to 0, the mouse is right-handed. If set to 1, the mouse is left-handed.

Registry key	Description
root/mouse/MouseSpeed	Sets the acceleration of the mouse pointer. Typically, a value from 0 to 25 is in the usable range. A value of 0 completely disables acceleration, causing the mouse to move at a constant slow, but measurable pace.
root/mouse/MouseThreshold	Sets the number of pixels before mouse acceleration is enabled. A value of 0 sets the acceleration to a natural curve that gradually scales acceleration, allowing for both precise and quick movements.
root/mouse/disableTrackpadWhileTyping	If set to 1, the trackpad will temporarily be disabled while typing. If set to 0, the trackpad will not be temporarily disabled while typing.
root/mouse/enableTrackpad	If set to 1, the trackpad is enabled. If set to 0, the trackpad is disabled.

# restore-points

Registry key	Description
root/restore-points/factory	Specifies which snapshot to use for a factory reset.

#### screensaver

Registry key	Description
root/screensaver/SlideShowAllMonitors	If set to 1, the screen saver slide show will be shown on all monitors. If set to 0, the slide show will be shown on the primary monitor only.
root/screensaver/SlideShowInterval	Sets the interval in seconds for switching images in the screen saver slide show.
root/screensaver/SlideShowPath	Specifies the directory that contains the images for the screen saver slide show.
root/screensaver/buttons/configure/authorized	If set to 1, the Configuration button is available while the screen is locked.
root/screensaver/buttons/info/authorized	If set to 1, the System Information button is available while the screen is locked.
root/screensaver/buttons/keyboard/authorized	If set to 1, keyboard layout settings can be configured while the screen is locked.
root/screensaver/buttons/locale/authorized	If set to 1, language settings can be configured while the screen is locked.
root/screensaver/buttons/mouse/authorized	If set to 1, mouse settings can be configured while the screen is locked.
root/screensaver/buttons/onscreenKeyboard/authorized	If set to 1, the onscreen keyboard is available while the screen is locked.
root/screensaver/buttons/power/authorized	If set to 1, the power button is available while the screen is locked.

Registry key	Description
root/screensaver/buttons/poweroff/authorized	If set to 1, the shut down function is available while the screen is locked.
root/screensaver/buttons/reboot/authorized	If set to 1, the restart function is available while the screen is locked.
root/screensaver/buttons/show/authorized	If set to 1, the button drawer containing additional options is available while the screen is locked.
root/screensaver/buttons/sleep/authorized	If set to 1, the Sleep function is available while the screen is locked.
root/screensaver/buttons/touchscreen/authorized	If set to 1, touch screen settings can be configured while the screen is locked. The registry key root/touchscreen/enabled must also be enabled.
root/screensaver/enableCustomLogo	If set to 1, the custom image defined in <code>logoPath</code> is used for the screen saver.
root/screensaver/enableDPMS	If set to 0, monitor power management is disabled. This causes the monitor to always stay on unless turned off manually.
root/screensaver/enableScreensaver	If set to 1, the screen saver is enabled.
root/screensaver/enableSleep	If set to 1, Sleep is enabled.
root/screensaver/lockScreen	If set to 1, a password is required to return to the desktop from the screen saver.
root/screensaver/logoPath	Sets the path to a custom image to use for the screen saver.
root/screensaver/mode	Sets the rendering mode for the screen saver image (such as Center, Tile, and Stretch). If set to Default, the image is displayed without any processing. If set to SlideShow, the screen saver will cycle through images in the directory specified by SlideShowPath.
root/screensaver/off	Sets the timeout delay in minutes before the monitor turns off.
root/screensaver/origImageCopyPath	This is the path where the custom image is saved when mode is set to Default.
root/screensaver/standby	Sets the timeout delay in minutes before the monitor goes into standby mode.
root/screensaver/suspend	Sets the timeout delay in minutes before the monitor goes into suspend mode.
root/screensaver/timeoutScreensaver	Sets the timeout delay in minutes before the screen saver starts.
root/screensaver/timeoutSleep	Sets the timeout delay in minutes before the thin client goes into sleep mode.

# security

Registry key	Description
root/security/authenticationFailDelay	Sets the approximate time, in milliseconds, to delay after a failed login attempt. The actual time will vary plus or minus 25% of this value. For example, use a value of 3000 to obtain a delay of approximately 3 seconds.

Registry key	Description
root/security/domainEntryMode	If set to 1, the domain is expected to be entered in a separate text field labeled <b>Domain</b> . if set to 0, the domain is expected to be entered as part of the <b>User</b> field.
root/security/enableLockOverride	If set to 1, administrators can override the screen lock of a local desktop.
root/security/enableSecretPeek	If set to 1, password and PIN dialogs will have a button that, while selected, will show the entered password/PIN in clear text.
<pre>root/security/encryption/identity/ encryptedSecretCipher</pre>	Sets the algorithm for symmetric encryption of a secret. All algorithms use an appropriate amount of random salt, which is regenerated each time the secret is stored. The encryption key is different on each thin client, and encryption and decryption are available only to authorized programs. The supported cipher list includes most OpenSSL ciphers and ChaCha20–Poly1305.
<pre>root/security/encryption/identity/ encryptedSecretTTL</pre>	Sets the number of seconds since the last successful login that a stored encrypted secret will be considered valid. If set to a negative number, encrypted secrets will not time out.
root/security/encryption/identity/ secretHashAlgorithm	Sets the algorithm for creating a hash of a secret. Key Derivation Functions (KDFs) such as scrypt or argon2 are better than straightforward hashes because it is not quick to compute a rainbow dictionary using a KDF. All algorithms use an appropriate amount of random salt, which is regenerated each time the secret is hashed. The supported list includes scrypt, Argon2, SHA-256, and SHA-512 (though the latter two are not KDFs).
root/security/encryption/identity/ secretHashTTL	Sets the number of seconds since the last successful login that a stored hashes of secrets will be considered valid. If set to a negative number, hashes of secrets will not time out.
root/security/mustLogin	If set to 1, all users are forced to $\log$ in before accessing the desktop.

### shutdown

Registry key	Description
root/shutdown/enableAutomaticShutdownTimeout	If set to 1, a progress bar is shown in the shutdown/restart/logout confirmation dialog box. If the question is not answered in time, automatically shutdown/restart/logout.
root/shutdown/timeOfAutomaticShutdownTimeout	Sets the wait time for automatic shutdown timeout.

### sshd

Registry key	Description
root/sshd/disableWeakCipher	If set to 1, disable the CBC mode cipher and other known weak ciphers, such as 3DES, arcfour, etc.
root/sshd/disableWeakHmac	If set to 1, disable 96 bit hmac and any sha1–based and md5–based hmac.
root/sshd/disableWeakKex	If set to 1, disable key exchange algorithms that have DH with SHA1.

Registry key	Description
root/sshd/enabled	If set to 1, the SSH daemon is enabled and the thin client can be accessed via SSH.
root/sshd/userAccess	If set to 1, end users can connect to the thin client via SSH.

## time

Registry key	Description
root/time/NTPServers	Specifies NTP servers to use via a comma-separated list. Private NTP servers or large virtual NTP clusters such as pool.ntp.org are the best choices to minimize server load. Clear this value to return to using DHCP servers (tag 42) instead of a fixed list.
root/time/dateFormatLong	An optional way to override the long date format used in various ThinPro tools. For formatting, do a web search for QDate::toString. If left blank, a locale-specific string is usually used.
root/time/dateFormatShort	An optional way to override the short date format used in various ThinPro tools. For formatting, do a web search for QDate::toString. If left blank, a locale-specific string is usually used.
root/time/dateTimeFormatLong	An optional way to override the long date&time format used in various ThinPro tools. For formatting, do a web search for QDate::toString. If left blank, a locale-specific string is usually used.
root/time/dateTimeFormatShort	An optional way to override the short date&time format used in various ThinPro tools. For formatting, do a web search for QDate::toString. If left blank, a locale-specific string is usually used.
root/time/hideCountries	A semicolon-separated list of countries that you want hidden in the time zone selection GUI.
root/time/hideWinZones	A semicolon-separated list of Windows-format time zones, such as "(UTC+2:00) Tripoli", that you want hidden in the time zone selection GUI.
root/time/hideZones	A semicolon-separated list of Linux-format time zones, such as "America/Denver", that you want hidden in the time zone selection GUI.
root/time/timeFormatLong	An optional way to override the long time format used in various ThinPro tools. For formatting, do a web search for QDate::toString. If left blank, a locale-specific string is usually used.
root/time/timeFormatShort	An optional way to override the short time format used in various ThinPro tools. For formatting, do a web search for QDate::toString. If left blank, a locale-specific string is usually used.
root/time/timezone	Sets the time zone. Time zones should be specified as defined by <b>Linux Timezone</b> in the <b>Date and Time</b> tool in Control Panel, and they should be in the following format:
	<region>/<subregion></subregion></region>

Registry key	Description
root/time/use24HourFormat	If set to -1, the system chooses the format automatically according to the locale. If set to 0, the a.m./p.m. format is used. If set to 1, the 24-hour format is used.
root/time/useADDNSTimeServers	If set to 1, the thin client will attempt to set the time zone via the Active Directory domain controllers auto-discovered on the local network. It does this via the following DNS query for SRV records:  _ldaptcp.dcmsdcs.domain.
root/time/useDHCPTimezone	If set to 1, the thin client will attempt to set the time zone via DHCP. To properly set the time zone via this registry key, ensure that the DHCP server for the thin client forwards the tcode DHCP tag (which is usually tag 101, although 100 and 2 can work also).
root/time/useNTPServers	If set to 1, the use of NTP time servers to synchronize the thin client clock is enabled. If this is enabled, ensure that an NTP server is specified via DHCP or via NTPServers.

## touchscreen

Registry key	Description
root/touchscreen/beep	Defines whether the thin client beeps when the touch screen is used.
root/touchscreen/calibrated	This registry key is either used internally or reserved for future use. The value should not be changed.
root/touchscreen/enabled	If set to 1, touch input is enabled.
root/touchscreen/maxx	This registry key is either used internally or reserved for future use. The value should not be changed.
root/touchscreen/maxy	This registry key is either used internally or reserved for future use. The value should not be changed.
root/touchscreen/minx	This registry key is either used internally or reserved for future use. The value should not be changed.
root/touchscreen/miny	This registry key is either used internally or reserved for future use. The value should not be changed.
root/touchscreen/port	Specifies the port that is connected to the touch screen.
root/touchscreen/swapx	This registry key is either used internally or reserved for future use. The value should not be changed.
root/touchscreen/swapy	This registry key is either used internally or reserved for future use. The value should not be changed.
root/touchscreen/type	Specifies the controller type of the touch screen.

### translation

Registry key	Description
<pre>root/translation/coreSettings/localeMapping/ <languagecode></languagecode></pre>	These are internal keys used to provide the text string next to the appropriate language on the language selector. These keys should not need to be modified.
root/translation/coreSettings/localeSettings	Sets the locale for the thin client. This locale will also be forwarded to the remote connection. Valid locales are <code>en_US</code> (English), <code>de_DE</code> (German), <code>es_ES</code> (Spanish), <code>fr_FR</code> (French), <code>ru_RU</code> (Russian), <code>ja_JP</code> (Japanese), <code>ko_KR</code> (Korean), <code>zh_CN</code> (Simplified Chinese), and <code>zh_TW</code> (Traditional Chinese).
root/translation/gui/LocaleManager/name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/translation/gui/LocaleManager/status	This registry key is either used internally or reserved for future use. The value should not be changed.
root/translation/gui/LocaleManager/title	This registry key is either used internally or reserved for future use. The value should not be changed.
root/translation/gui/LocaleManager/widgets/localeSettings	Controls the state of the locale setting widget in the Language tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

# usb-update

Registry key	Description
root/usb-update/authentication	If set to 1, an administrator password is required to do USB updates.
root/usb-update/enable	If set to 1, USB update auto-detection is enabled.
root/usb-update/height	Sets the height of the USB Update window in pixels.
root/usb-update/searchMaxDepth	Sets the depth of subdirectories to be searched for updates. Setting a high search depth can cause delays on USB flash drives that have thousands of directories.
root/usb-update/width	The width of the USB Update window in pixels.

#### users

Registry key	Description
root/users/gui/hptc-user-rights/name	This registry key is either used internally or reserved for future use. The value should not be changed.
root/users/gui/hptc-user-rights/status	This registry key is either used internally or reserved for future use. The value should not be changed.
root/users/gui/hptc-user-rights/title	This registry key is either used internally or reserved for future use. The value should not be changed.

Registry key	Description	
root/users/root/enablePassword	If enabled, logins to the local root administrator account are enabled. If disabled, only Active Directory administrators can change the thin client to administrator mode.	
root/users/root/password	Sets the administrator password. If empty, administrator mode is locked.	
root/users/root/timeout	Specifies the idle timeout (in minutes) after which administrator mode will be terminated. If set to 0 or negative, administrator mode will never be automatically terminated.	
root/users/user/SSO	This registry key is either used internally or reserved for future use. The value should not be changed.	
root/users/user/WOL	If set to 1, Wake On LAN (WOL) is enabled.	
root/users/user/XHostCheck	If set to 1, only the systems listed under root/users/user/xhosts are allowed to remotely control the thin client.	
root/users/user/apps/hptc-ad-dns-mgr/ authorized	If set to 1, the <b>AD/DDNS Manager</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-agent-mgr/ authorized	If set to 1, the <b>HPDM Agent</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-auto-update/ authorized	If set to 1, the <b>Automatic Update</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-background-mgr/ authorized	If set to 1, the <b>Background Manager</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-cert-mgr/authorized	If set to 1, the <b>Certificate Manager</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-clientaggregation- mgr/authorized	If set to 1, the <b>Client Aggregation</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-date-mgr/authorized	If set to 1, the $\boldsymbol{\text{Date}}$ and $\boldsymbol{\text{Time}}$ Control Panel item is accessible by end users.	
root/users/user/apps/hptc-dhcp-mgr/authorized	If set to 1, the <b>DHCP Option Manager</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-display-prefs/ authorized	If set to 1, the <b>Display Preferences</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-easy-update/ authorized	If set to 1, the <b>Easy Update</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-energy-star/ authorized	If set to 1, the <b>Energy Star</b> Control Panel item is accessible by endusers.	
root/users/user/apps/hptc-i18n-mgr/authorized	If set to 1, the <b>Language</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-keyboard-layout/ authorized	If set to 1, the <b>Keyboard Layout</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-mixer/authorized	If set to 1, the <b>Sound</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-mouse/authorized	If set to 1, the <b>Mouse</b> Control Panel item is accessible by end users.	
root/users/user/apps/hptc-network-mgr/ authorized	If set to 1, the <b>Network Manager</b> Control Panel item is accessible by end users.	

Registry key	Description
root/users/user/apps/hptc-power-mgr/ authorized	If set to 1, the <b>Power Manager</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-printer-mgr/ authorized	If set to 1, the <b>Printers</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-restore/authorized	If set to 1, the <b>Snapshots</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-screenlock/ authorized	If set to 1, the <b>Power Manager</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-security/authorized	If set to 1, the <b>Security</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-shortcut-mgr/ authorized	If set to 1, the <b>Keyboard Shortcut Manager</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-sshd-mgr/authorized	If set to 1, the <b>SSHD Manager</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-task-mgr/authorized	If set to 1, the <b>Task Manager</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-text-editor/ authorized	If set to 1, the <b>Text Editor</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-thinstate/ authorized	If set to 1, the <b>ThinState</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-touchscreen/ authorized	If set to 1, the <b>Touch Screen</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-usb-mgr/authorized	If set to 1, <b>USB Manager</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-user-rights/ authorized	If set to 1, <b>Customization Center</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-vncshadow/ authorized	If set to 1, the <b>VNC Shadow</b> Control Panel item is accessible by end users.
root/users/user/apps/hptc-xterm/authorized	If set to 1, the <b>X Terminal</b> Control Panel item is accessible by end users.
	<b>CAUTION:</b> Enabling X terminal access is a security risk and is not recommended in a production environment. The X terminal should only be enabled for use in debugging a protected, non-production environment.
root/users/user/apps/scim-setup/authorized	If set to 1, the <b>SCIM Input Method Setup</b> Control Panel item is accessible by end users.
root/users/user/enablePassword	If enabled, logins to the local shared account user are enabled.
root/users/user/hideDesktopPanel	If set to 1, desktop panels such as the taskbar are not started or shown in the desktop.
root/users/user/kioskMode	This registry key is either used internally or reserved for future use. The value should not be changed.
root/users/user/launchConnectionManager	If set to 1, Connection Manager launches at system startup.

Registry key	Description
root/users/user/ssoconnectiontype	This registry key is either used internally or reserved for future use. The value should not be changed.
root/users/user/switchAdmin	If set to 1, switching to administrator mode is enabled.
root/users/user/xhosts/ <uuid>/xhost</uuid>	Specifies the IP address or hostname of a system that will be allowed to remotely control the thin client when XHostCheck is enabled.

#### vncserver

Description
If set to 1, the VNC shadowing server for the thin client is enabled
Sets the notification message that is shown to the user when someone is attempting to connect to the thin client using VNC.
If set to 1, only a localhost or loopback address is allowed for VNC connections.
If set to 1, Num Lock is on by default. If set to 0, Num Lock is off by default.
If set to 1, a timeout is applied to the notification dialog that is shown to the user when someone is attempting to connect to the thin client using VNC.
Sets the timeout in seconds for the notification dialog that is shown to the user when someone is attempting to connect to the thin client using VNC.
If set to 1, a notification is shown to the user when someone is attempting to connect to the thin client using VNC.
Sets the password for VNC shadowing. The key vncUsePassword must also be enabled.
If set to 1, VNC shadowing will operate in view-only mode.
If set to 1, VNC requests are refused automatically if the user does not interact with the notification dialog before the timeout.
If set to 1, an always-on-top button is shown on the left corner of the screen. Selecting that button disconnects the VNC session.
If set to 1, VNC settings take effect immediately after being modified.
If set to 1, the password specified in <code>vncPassword</code> is required for VNC shadowing.
If set to 1, SSL is used for VNC connections.
This registry key is either used internally or reserved for future use. The value should not be changed.
This registry key is either used internally or reserved for future use. The value should not be changed.
This registry key is either used internally or reserved for future

Registry key	Description
root/vncserver/gui/VNCShadowManager/widgets/ enableVncShadow	Controls the state of the <b>Enable VNC Shadow</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ userNotificationMessage	Controls the state of the <b>User Notification Message</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/vncAllowLoopbackOnly	Controls the state of the <b>Allow Loopback Connections Only</b> widget in the VNC Shadow utility. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncNotifyShowTimeout	Controls the state of the VNC Show Timeout for Notification widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncNotifyTimeout	Controls the state of the numerical widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncNotifyUser	Controls the state of the <b>VNC Notify User to Allow Refuse</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncPassword	Controls the state of the <b>Set Password</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncReadOnly	Controls the state of the <b>VNC Read Only</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncRefuseInDefault	Controls the state of the <b>Refuse connections in default</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/vncStopButton	Controls the state of the <b>VNC Stop Shadow button</b> widget in the VNC Shadow utility. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncTakeEffectRightNow	Controls the state of the <b>Re-set VNC server right now</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the

Registry key	Description
	widget is hidden. If set to ${\tt read-only}$ , the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncUsePassword	Controls the state of the <b>VNC Use Password</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.
root/vncserver/gui/VNCShadowManager/widgets/ vncUseSSL	Controls the state of the <b>VNC Use SSL</b> widget in the VNC Shadow tool. If set to active, the widget is visible in the UI and the user can interact with it. If set to inactive, the widget is hidden. If set to read-only, the widget is visible in the read-only state.

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