INI Files Reference Guide for Cisco Virtualization Experience Client 6215 Firmware Release 8.6

September 5, 2012

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Preface

Overview

The Cisco Virtualization Client 6215 (Cisco VXC 6215) delivers superior voice and video collaboration capabilities in desktop virtualization. It unifies voice, video, and virtual desktop in one device.

The Cisco VXC 6215 provides workers with secure, real-time access to business applications and content without compromising the collaborative user experience. Cisco VXC 6215 supports the following capabilities:

- Combines virtual desktops with voice and video capabilities
- Supports processing capabilities that use network and data center CPU resources efficiently
- Supports high-quality, scalable voice and video, delivering an optimal user experience

The Cisco VXC 6215 provides support for the following hosted virtual desktop protocols:

- Citrix Independent Computing Architecture (ICA)
- PC over IP (PCoIP) (in base virtual desktop infrastructure [VDI] mode only)
- Remote Desktop Protocol (RDP) (in base VDI mode only)

Cisco VXC 6215 Initialization (INI) files are plain-text files that you can construct to contain the configuration information you want for your thin clients on a global level. For example, you can use INI files to configure and save information about connection settings, display options, and printer options.

Caution Information and procedures that are presented in this guide are intended for use by system administrators and should not be used by untrained persons.

Audience

This guide is intended for administrators of Cisco VXC 6215 thin clients. It provides the detailed information you need to help you understand and use the Cisco VXC 6215 INI files. It contains information on the different INI files you can use and the rules for constructing the files. It also provides the parameter details you need (with working examples) to get the most out of your INI files.

Organization

This manual is organized as described in the following table.

Chapter	Description
Chapter 1, "Getting Started: Learning INI File Basics"	Contains the basic information you need to help you understand and use the Enhanced SLE INI files. It contains information on the different INI files you can use and the rules and recommendations for constructing the files.
Chapter 2, "Parameters for WLX INI and $MAC INI Files"	Provides the supported parameters that you can use in a wlx.ini file and in a $MAC.ini file.
Appendix A, "Connect Options"	Provides lists of connect options for the supported connections.
Appendix B, "Printer Parameters: Options"	Describes printer-definition commands and parameters for wlx.ini files. It also describes common parameters that the printer-definition commands share.
Appendix C, "TimeZone Parameter Values"	Lists TimeZone values for use with the wlx.ini file.
Appendix D, "Keyboard.layouts Parameter Values"	Lists Keyboard.layouts values for use in the wlx.ini file (to designate the keyboard type).

Related Documentation

For more information, see the documents available at the following URLs:

Cisco Virtualization Experience Client 6000 Series

http://www.cisco.com/en/US/products/ps11976/tsd_products_support_series_home.html

Cisco Virtualization Experience Client Manager

http://www.cisco.com/en/US/products/ps11582/tsd_products_support_series_home.html

Obtaining Documentation, Obtaining Support, and Security Guidelines

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http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

Document Conventions

This document uses the following conventions:

Note Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

Caution Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Warnings use the following convention:

Warning **IMPORTANT SAFETY INSTRUCTIONS**

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device. Statement 1071

SAVE THESE INSTRUCTIONS

CHAPTER 1

Getting Started: Learning INI File Basics

In this chapter you will learn how to construct and use the supported INI files.

It includes the following sections:

After you become familiar with the INI file basics, you can refer to the parameter details you need in the other chapters and appendixes of this guide.

INI Parameter Updates Using Cisco VXC Manager

Cisco VXC Manager is the standard tool used to push and schedule INI configuration updates to your thin clients. Cisco VXC Manager allows you to push the common INI file configurations to all of the thin clients in your environment.

Caution Do not modify INI files directly on the Cisco VXC 6215 as doing so can cause configuration issues and operational errors.

For detailed information about configuring thin clients using Cisco VXC Manager, see *Administration Guide for Cisco Virtualization Experience Client Manager* and the *Cisco Virtualization Experience Client 6215 Administration Guide*.

Supported INI Files You Can Construct

The INI files contain the parameters (and associated options and values) necessary for the functionality you want.

You can construct the following INI files:

- wlx.ini file (see Working with wlx.ini Files, page 1-2)
- $MAC.ini file (see Working with $MAC.ini Files, page 1-2)

Working with wlx.ini Files

A wlx.ini file contains the global parameters you want that affect all thin clients accessing the server.

Working with $MAC.ini Files

A $MAC.ini file contains device-specific configuration parameters. If the thin client locates a $MAC.ini file (stored in the same directory as a wlx.ini file), the thin client uses the $MAC.ini file for its configuration rather than the wlx.ini file. In this case, the thin client does not access the wlx.ini file unless you specify the include=wlx.ini parameter in the $MAC.ini file.

Note If a duplicate parameter appears in both the wlx.ini and the $MAC.ini files, the thin client assigns higher precedence based on which parameter appears last in the $MAC.ini file: either the duplicate parameter or the include=wlx.ini parameter.

For example, assume the following parameter definitions:

- The wlx.ini file contains parameterA=valueB
- The $MAC.ini file contains parameterA=valueC

The following table describes the final value for parameterA based on its placement relative to the include=wlx.ini parameter in the $MAC.ini file.

Parameter placement	Final value for parameterA
parameterA=valueC appears **before** include=wlx.ini	ParameterA=ValueB (from wlx.ini file)
parameterA=valueC appears **after** include=wlx.ini	parameterA=valueC (from $MAC.ini file)

Rules and Recommendations for Constructing the INI Files

In general, Enhanced SLE INI files follow currently accepted standard INI file formatting conventions. The INI files consist of parameters that you can enter as necessary for reference. The parameters are not mandatory unless you require changes from the default values or the parameter is noted as required in the tables. Every parameter has a name and a value with the name appearing to the left of the equal sign (name=value). All parameters with the same name in the various INI files have the same meaning (that is, a parameter named XYZ in a wlx.ini file and named XYZ in a $MAC.ini file have the same meaning). Number signs (#) indicate the start of a comment. Comments can begin anywhere on a line. Everything between the # and the End of Line is ignored.

Along with these general formatting conventions, use the following guidelines when you construct Enhanced SLE INI files:

1. **Order of Parameters**

   List global connect parameters before other connect parameters in a wlx.ini file.

2. **Mandatory Parameters**

   As previously stated, you can enter parameters as necessary for reference, but the parameters are not mandatory unless you require changes from the default values or the parameter is noted as required in the tables.

   To create a connection using an INI file, you must specify the Connect= parameter, as well as the mandatory connect options associated with the specified connection type (for example, for Mozilla Firefox or VMWare View). For more information about the Connect= parameter, including configuration examples, see Connect Options, page A-1.

3. **Use of Backslashes and White Spaces**

   To indicate line continuation, place a space and backslash (\) at the end of a line. The backslash means that the line and the following line are, for the purposes of reading code, the same line. No white space can appear after the backslash; the requirement of white space between parameter entries is maintained by the use of the space before the backslash. In addition, starting all parameters at the left margin and placing at least one leading space (or tab) at the beginning of all (and only) continuation lines makes an INI file easier to read.

   Note that in circumstances where you require string concatenation, you can use a backslash without a space before or after it to concatenate with the first set of characters from the previous line; for example the strings snow and ball may be concatenated to give snowball.

   You must use the backslash continuation character to configure a connection with multiple parameters. For examples, see Connect Options, page A-1.

4. **Use of Blank Lines**

   Use blank lines to make the code easier to read.

5. **Use of Number Signs**

   As stated previously, number signs (#) indicate the start of a comment. Comments can begin anywhere on a line. Everything between the # and the End of Line is ignored.

6. **Use of Quotation Marks**

   You must place string parameters containing white spaces inside quotation marks (use common-practice nesting rules).

7. **Use of List Separators**

   Use semicolons or commas for list separators.

8. **Use of Equivalent Parameter Values**

   For parameter values of type {0, 1}, the 0 indicates false or no, and the 1 indicates true or yes, as applicable. You can use the format {0, 1} as an alternative to the format {no, yes}.

9. **Number of Connection Entries Allowed**

   The combined number of connection entries that you define in a wlx.ini file cannot exceed a defined total maximum number of connections. The maximum number of connections has a default limit of 216, but you can modify this limit within a range of 100 to 1000 using the wlx.ini file.

CHAPTER 2

Parameters for WLX INI and $MAC INI Files

This chapter describes the supported parameters that you can use in a wlx.ini file and in a $MAC.ini file.

Tip For information to help you construct and use the supported INI files, see Chapter 1, "Getting Started: Learning INI File Basics".

To increase usability, the supported parameters are separated into the following categories:

- General Settings (wlx.ini and $MAC.ini Files), page 2-1
- Peripheral Settings (wlx.ini and $MAC.ini Files), page 2-6
- Connection Settings (wlx.ini and $MAC.ini Files), page 2-10

General Settings (wlx.ini and $MAC.ini Files)

Table 2-1 describes the parameters that you can use to configure general settings (bold values are defaults).

Caution You can use the parameters in Table 2-1 through Table 2-3 in a wlx.ini file or a $MAC.ini file.

Table 2-1 General Settings: wlx.ini and $MAC.ini Files

Parameter	Description
AudioMute={**no**, yes}	Specifies whether to mute the audio. Default is no.
AudioVolume={0 to 100}	Specifies the volume level. Values of 0 to 100 provide more exact volume level.
ChangeAdminPassword={password must be base-64 encoded}	Specifies the new password for the user with administrative privileges. You can use any third-party base-64 encoder/decoder.
ChangeGuestPassword={password must be base-64 encoded}	Specifies the new password for the guest user. You can use any third-party base-64 encoder/decoder.
ChangeRootPassword={password must be base-64 encoded}	Specifies the new password for the root user. You can use any third-party base-64 encoder/decoder.
ChangeThinUserPassword={password must be base-64 encoded}	Specifies the new password for the thin user. You can use any third-party base-64 encoder/decoder.

Table 2-1 General Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
DesktopTaskBar={**bottom**, top, left, right} AutoHide={**no**, yes} [AlwaysOnTop={**no**, yes}]	DesktopTaskBar—Specifies the position of the taskbar. For example: DesktopTaskBar=left AutoHide—Specifies whether to hide the taskbar until the user moves the mouse cursor over the taskbar area. AlwaysOnTop—Specifies whether to always display the taskbar on top of all other windows.
DisableReadyMode={no, **yes**}	Specifies whether to disable the ready mode. When a device is shut down and ready mode is enabled, the device logs out of the session, places the power button LED in a state of off, and then goes into Suspend mode. If a user presses the power button again, the device wakes up immediately for the user to log in. Default is DisableReadyMode=yes. The ready mode functionality can be enabled using DisableReadyMode=no. Example: DisableReadyMode=no will enable ReadyMode functionality. DisableReadyMode=yes will disable ReadyMode functionality.
EncryptPasswords={0,**1**}	Specifies whether to enable or disable encryption/decryption (encoding/decoding). • 0—specifies plain password • 1—specifies encrypted/encoded password (Default) **Note** • Cisco recommends that you define this parameter as the first parameter in the INI file. • In an INI file, if you place any connection or parameter that has a password before this INI parameter, the preceding connection or parameter will not work.
IdleAction.Enable={**no**, yes} [IdleAction.TimeOut={0 to 1440}] [IdleAction.Action={Any valid Command}]	Configures the action of the device for an idle state. If IdleAction.Enable=yes and the device is idle for the IdleAction.Timeout (in minutes from 0 to 1440), then the device executes the command that is specified in the IdleAction.Action parameter. By default, IdleAction.Enable=no. Example: IdleAction.Enable=yes IdleAction.TimeOut=30 IdleAction.Action=/sbin/reboot
ImportCerts={**no**, yes} [Certs=list of certificate names]	Indicates whether to import certificates from the server. Default is no. Certs is a list of certificate names (the names must be separated by a semicolon). **Note** Certificates must be placed in the /wlx/certs directory. **Note** The certificates must be .crt, .pem, or any valid certificate type. Example: ImportCerts=yes Certs=Cert1.cer;Cert2.crt;Cert3.pem;Cert4.der

Table 2-1 General Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
Include=path/filename	Includes another INI file at the position of this command. **Note** Only one level of include is allowed (nesting is not allowed).
InstallAddons=name of add-on OR NewAddons= name of add-on	Specifies add-ons to install. Use comma-separated add-on names.
Password=password [PasswordEncryptionCode={**yes**, no}]	Specifies the encrypted password for the INI user. Use the crypt utility available on standard Linux machines to encrypt the plain-text password and use the encrypted string for the password. For example: Password=lF2Sqd7qEqBg PasswordEncryptionCode—Specifies whether to use a Base64 encoded password. If no, a plain-text password is used.
PowerButtonAction={**interactive**, reboot, restart, halt, shutdown, sleep, logoutandsleep, none, nothing}	Specifies the action the thin client takes when the power button is pressed. Default is interactive. interactive—Presents an option window to the user reboot or restart—Reboots the device halt or shutdown—Shuts down the device sleep—Puts the device into sleep mode logoutandsleep—Logs out the device and puts the device into sleep mode none or nothing—No action (does nothing)
PowerManager={X,Y}	X is the system sleep time range:0..3600 seconds. Default value is 0 (never) Y is the display sleep time range:0..3600 seconds. Default value is 300
RemoveAddons=name of add-on	Specifies add-ons to uninstall. Use comma-separated add-on names.
RootPath=root path	The thin client uses this root path to access files on the file server. The directory name /wlx is appended to the root path entry before use.

Table 2-1 General Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
ScreenSaver={0 to 180} [LockTerminal={no, yes}] [SoftSaver={no, yes}] [LogoutButton={no, yes}] [Type={1 | 2 | name[,name...]}] [CycleDelay=0 to 180] [Image=filename] [Layout={none | centered | wallpaper | scaled | stretched}]	Specifies to put the thin client in a screensaver state when the time limit for inactivity in minutes (delay before starting) is reached. **Note** Put the parameters on the same line. For example: ScreenSaver=5 LockTerminal=yes SoftSaver=yes Type=coral,drift,hypertorus,interaggregate,pipes,skytentacles CycleDelay=5 LockTerminal—Specifies whether to lock the client when the screen saver is activated. • no—Disabled • yes—Puts the thin client in a LOCK state when the screen saver is activated. The user is prompted with an unlock dialog box to enter the sign-on password to unlock the thin client. SoftSaver—Specifies whether the thin client runs a soft saver. Soft savers are available only when the optional SCREENSAVER-THEMES add-on is installed. • no—Displays a blank screen • yes—Runs a graphical display LogoutButton—Displays a Logout button in the unlock dialog box if LockTerminal=yes Type—Specifies which display programs should run if SoftSaver=yes **Note** Names are preferred over the legacy numbers. 1=fadeplot; 2=rocks CycleDelay—When more than one Type name is specified, CycleDelay specifies how many minutes each Type name should run. Image—Specifies the filename to use for the screen saver (this option is ignored in cases of backward compatibility). Layout—Specifies the layout to use for the screen saver (this option is ignored in cases of backward compatibility). **Note** For a complete list of screensaver names, install the SCREENSAVER-THEMES add-on and then search in /usr/share/applications/screensavers. The filenames, without the .desktop suffix, are the available screensaver names. The Name entry in each .desktop file provides the value that is displayed in the Screensaver configuration GUI application; and the Comment entry provides a brief description.
TerminalName=text string	Specifies the name of the thin client comprising a 15-character string.
TimeFormat={“12-hour format”, “24-hour format”}	Specifies the time format to use (how the clock on the desktop panel is displayed). By default, the local format is used.
TimeServer=host[;host]	Specifies the SNTP time servers to use for time retrieval. You can designate one or two Network Time Protocol servers (separated by a semicolon). The client synchronizes the time of day to the servers at boot time, and keeps the time in sync with the servers during operation.

Table 2-1 General Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
TimeZone={zone value} [ManualOverride={**no**, yes}]	Specifies the time zone if the zone is unspecified on the thin client or is used with ManualOverride. ManualOverride specifies whether to override the thin client System Preference Menu setting with this TimeZone setting. **Note** For the complete list of TimeZone values, see Appendix C, "TimeZone Parameter Values".
UpdateBiosCmos={**no**, yes}	Enables or disables the BIOS CMOS update. By default, UpdateBiosCmos is disabled (set to no). See also the BiosCmosImages parameter. Example: UpdateBiosCmos=1
Update.Mode={Both, Image, Addons, None}	Specifies the update mode for image upgrades. **Value and Description** Both—Updates image and add-ons Image—Updates image only Addons—Updates add-ons only None—Does not upgrade
Update.Preserve_changes={no, yes}	Specifies whether to preserve changes while upgrading. With update.preserve_changes=no, the thin client does not locally cacheconfiguration settings during an image upgrade. Instead, the thin client erases all existing configurations and applies the configuration specified by the Cisco VXC Manager package that you use to push the upgrade. This is the Cisco-recommendedsetting. With update.preserve_changes=yes, the thin client caches configuration settingsduring the image upgrade.

Peripheral Settings (wlx.ini and $MAC.ini Files)

Table 2-2 contains the parameters that you can use to configure peripheral settings (such as keyboard, monitor, mouse, and printer). Default values appear in bold.

Table 2-2 Peripheral Settings: wlx.ini and $MAC.ini Files

Parameter	Description
CursorHideDelay={1–60}	Specifies the amount of time to wait before the cursor is hidden (the cursor is hidden after the specified number of seconds). After you move or click the mouse or press any keyboard key, the cursor reappears.
DeskColor=<color> [{solid | horizontal-gradient | verticalgradient}<color>]	Specifies the desktop background color where <color> can be one of the following values: • rrggbb—An RGB color specification in the form commonly used in HTML. • <color name>—A color name from the /usr/share/X11/rgb.txt file. Note that these names are case sensitive. • 0–255 0–255 0–255—Three integers in the range of 0 to 255 representing the amount of red, green, and blue, respectively. **CAUTION:** This form is deprecated. it is available for backward compatibility only. For example: Deskcolor=DarkGoldenrod horizontal-gradient LightGoldenrod The first <color> is the primary color and is used if no shading is specified or if the shading is solid. The second color is the secondary color. When shading is specified, the primary color appears on the left (horizontal) or top (vertical) edge with a smooth transition to the secondary color on the opposite edge.
Desktop=image file [Layout={**Center**, Tile, Stretch, Scale, None} Opacity={0–**100**}]	Desktop—Specifies an image file to use as wallpaper for the local desktop. The file must be located in the wlx/bitmap directory on the server. The image file can be any type that is supported by SUSE/GNOME for use as wallpaper (such as PNG, JPG, and GIF). The filename is case sensitive. The default is no wallpaper. Layout—Specifies the arrangement on the desktop background of the specified image file. The tile value replicates the image across the desktop; the stretch value adjusts the image to fill the screen; the scale value enlarges the image to fill either the screen width or height. Opacity—Specifies the amount of transparency. Default is 100. At less than 100, the image is blended with the colors specified by the DeskColor option as though the image is not entirely opaque. A value of 0 indicates total transparency, and the image is not displayed at all. For Example: Desktop=ciscologo.gif Layout=Tile Opacity=25
DesktopColorDepth={8, 16, **24**}	Specifies the number of colors of the desktop in bits. 8 is 256 colors; 16 is High Color; and 24 is True Color.

Table 2-2 Peripheral Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
DisplaySettings=MON1 <resolution> [; MON2 <resolution> <position>]	Defines the display settings for single and multimonitor display, clone and span mode. Possible values for: resolution={{x}X{y}, DDC} position={mirror, on-left, on-right, on-above, on-below} **Note** Meaning of different position values: mirror—Clone mode on-left—Span on left side on-right—Span on right side on-above—Span on top on-below—Span on bottom Examples: DisplaySettings=MON1 rotate-normal 1024x768@75 MON2 rotate-normal 1024x768@75 on-below DisplaySettings=MON1 rotate-normal 1280x1024 DisplaySettings=MON1 1280x1024 DisplaySettings=MON1 1280x768 DisplaySettings=MON1 960x540 DisplaySettings=MON1 1024x768 rotate-right DisplaySettings=MON1 1024x768 rotate-normal MON2 1024x768 rotate-right on-right DisplaySettings=MON1 1024x768 rotate-normal MON2 1024x768 rotate-right on-left DisplaySettings=MON1 1024x768 rotate-normal MON2 1024x768 rotate-left on-left DisplaySettings=MON1 1024x768 rotate-normal MON2 1024x768 rotate-normal on-left DisplaySettings=MON1 800x600@60 rotate-normal MON2 800x600 rotate-left on-left DisplaySettings=MON1 800x600@75 rotate-normal DisplaySettings=MON1 800x600@75 rotate-normal MON2 800x600@75 rotate-normal on-above DisplaySettings=MON1 1280x1024 rotate-normal MON2 1280x1024 rotate-normal mirror DisplaySettings=MON1 1280x1024 rotate-normal MON2 1280x1024 rotate-normal on-right DisplaySettings=MON1 720x400 rotate-right
EnableNumLock={**no**, yes}	Specifies whether to enable the default state of the numeric keypad. If set to yes, the numeric keypad is activated, if set to no (default), the numeric keypad becomes the cursor control pad.
ForwardPrinters={**yes**, no}	Specifies whether to forward all available printers for use in the RDP session. This parameter is supported with any direct RDP connection (not supported through VMware View broker). By default, ForwardPrinters is set to yes. For example: ForwardPrinters=yes

Table 2-2 Peripheral Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
JetDirectPrinter={options}	The JetDirectPrinter command line defines a printer served by an HP JetDirect print server. For parameter options that are used in the command line, see JetDirectPrinter in Appendix B, "Printer Parameters: Options".
Keyboard.layouts={Keyboard layout value}	The Keyboard.layouts parameter specifies the keyboard layout. For a list of supported keyboard layout values, see Appendix D, "Keyboard.layouts Parameter Values". Example: Keyboard.layouts=us (for United States) Keyboard.layouts=ru (for Russia)
MicMute={**no**, yes}	Specifies whether to mute the microphone volume. Default is no.
MicVolume={0–100}	Specifies the microphone volume level. Default is **50**.
MouseLocate={**no**, yes}	Specifies whether to briefly display an animated graphic showing the location of the mouse pointer when pressing and releasing the Ctrl key (with no other keys pressed).
MouseSendsControlV={**no**, yes}	**For ICA only.** Allows the administrator to control the mouse button action in a UNIX environment. The values are: yes—In a UNIX environment, a middle mouse performs the same Paste function as the Ctrl+V keystroke combination in Windows. no—(default) Disables "enable middle button paste" when used in the wlx.ini file with ICA v.10.
MouseSpeed={0–100}	Specifies the speed when moving the mouse. **Note** When the value includes a decimal point, it is taken as a direct multiplier of mouse motion. You can use the following values for backward compatibility. **Value and Mouse Speed** 0—Slow (0.2) 1—Medium (default) (2.0) 2—Fast (6.0)
MouseSwap={**no**, yes}	Specifies whether to swap the button order on the mouse. The default value is no.
NetworkPrinter={options}	Defines a printer that uses traditional UNIX Line Printer Daemon protocols. For parameter options that are used in the command line, see NetworkPrinter in Appendix B, "Printer Parameters: Options"
NoGrabKeyboard={**no**, yes}	Configures keyboard event grabbing in any direct RDP connection session (not supported through VMware View broker). By default, NoGrabKeyboard is set to no. For example: NoGrabKeyboard=yes
Printer={options}	Defines a locally attached printer that is connected through the noted interface. For parameter options that are used in the command line, see Printer in Appendix B, "Printer Parameters: Options".

Table 2-2 Peripheral Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
PrinterURI={options}	Defines a printer using a URI supported by the Common UNIX Printing System (CUPS). This command is useful when you want the thin client to access a printer for which you already have a working CUPS client because you can simply copy the URI from the /cups/printers.conf file on the existing client. For parameter options that are used in the command line, see PrinterURI in Appendix B, "Printer Parameters: Options".
RepeatDelay=value	Expresses, in milliseconds (100–10000), the delay before a repeat key press is recognized. Enter a value greater than 100. The default value is 660 milliseconds. For backward compatibility, you can also use the following values: 0—1/4 second 1—1/4 second **2—1/2 second (default)** 3—1/2 second 4—3/4 second 5—3/4 second 6—1 second 7—1 second
RepeatRate=value	Expresses the number of allowable repeat key presses per second. Enter a value between 3 and 255 or a designated rate, as follows: **Value and Keyboard Repeat Rate** 0—Slow (GUI value is 10) 1—Medium (default) (no GUI value) 2—Fast (GUI value is 110)
SMBPrinter={options}	Defines a network printer shared through the Windows Server Message Block protocols. For parameter options that are used in the command line, see SMBPrinter in Appendix B, "Printer Parameters: Options".
TransparentKeyPassThrough={Local/Remote/**FullScreenOnly**}	Enables keyboard shortcut sequences defined by the local Windows manager in the session. Default is FullScreenOnly. FullScreenOnly—Key event is processed locally except in Fullscreen mode Local—Key event is processed locally in order to use ICA hotkeys Remote—Key event is forwarded to the server so that ICA hotkeys do not work

Connection Settings (wlx.ini and $MAC.ini Files)

Table 2-3 describes the parameters that you can use to configure connection settings. Default values appear in bold.

Table 2-3 Connection Settings: wlx.ini and $MAC.ini Files

Parameter	Description
AddtoEtcHosts="ip1 FQDN1 aliases1;ip2 FQDN2 aliases2;..."	Adds entries to the /hosts file, where aliases are an optional space-separated list of hostnames.
Alternate={**no**, yes}	**For ICA only.** Specifies the use of an alternate IP address returned from an ICA master browser to get through firewalls. Default is no.
AutoSignoff={**no**, yes}	Specifies whether to automatically log the user off when all connections are closed.
Browser.Homepage=URL	If the browser add-on is installed, this is the home page for the browser.
Browser.Prefsurl=URL	If the browser add-on is installed, this is the URL to download preferences.
Connect={BROWSER, RDP, VMWARE_VIEWCLIENT}	Specifies the connection protocol. To create a connection using an INI file, you must specify the Connect= parameter, as well as the mandatory connect options associated with the specified connection type. Appendix A describes these parameters: • BROWSER, see Mozilla Firefox Connect Options, page A-1 • RDP, see RDP Connect Options, page A-3 • VMWARE_VIEWCLIENT, see VMware View Client Connect Options, page A-5 For details about configuring a XenDesktop connection, see XenDesktop Connection Example, page A-2 and Mozilla Firefox Connect Options, page A-1. **Note** The availability of connection types depends on the add-ons that are installed on the client.
DisableDomain={no, yes}	Specifies whether to disable the display of a Domain field. The default value depends on the value of the DomainList option. When the DomainList is empty, DisableDomain defaults to yes (the display of a Domain field does not display); otherwise, it defaults to no (the display of a Domain field does display).
DisableVNC={no, **yes**}	Specifies whether to disable an installed VNC-Server Add-on.
DomainList=list of Windows domain names	Specifies a list of domain names that appear in the login dialog box as options to help users select the domain to use to log in to PNAgent/PNLite servers. After you specify the list, it is saved in nonvolatile memory. **Note** Be sure to enclose the domain list in quotation marks if you include spaces. For example: DomainList="North_America, SQA, test-domain" Names must be separated by semicolons or commas.

Table 2-3 Connection Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
Drives=drive letter={floppy, cdrom, disk}, {rw, ro} [, basedir] drive letter=...	Maps drives on the server to USB mass storage devices that are attached to the thin client, where: drive letter=A to Z floppy=USB floppy cdrom=USB CDROM disk=USB drive or memory stick rw=read/write ro=read only basedir is an optional directory on the USB device to use. **Note** Be sure each drive command is separated by a space.
EnableBanner={**no**, yes} [BannerMsg=text description]	Provides a banner description.The text must be enclosed in double quotation marks if it contains spaces or punctuation characters.
EthernetSpeed=[**Auto**, 100M-F, 100M-H, 10M-F, 10M-H]	Specifies the NIC speed. Auto—Auto-negotiates speed with the peer (default). 100M-F is 100 Mb/s Full Duplex. 100M-H is 100 Mb/s Half Duplex. 10M-F is 10 Mb/s Full Duplex. 10M-H is 10 Mb/s Half Duplex. **Note** Gigabit Ethernet (1000 Mb/s) is available on hardware that supports it using the Auto value.
FileServer=[protocol://]host	Specifies a file server from which the device can access files using the specified protocol. If no protocol is specified, FTP is assumed (for example, 192.168.0.1 is understood as ftp:// 192.168.0.1).
HomePage=URL	If the browser add-on is installed, this is the URL to the home page for the browser.
ICABrowsing={udp, **http**, https}	**For ICA only.** Specifies the default browsing protocol. Default is http. This setting can be overridden by the HttpBrowsing={yes,no,ssl} in each connection property.
ICAComports=COMx={COMy, USBSERz}, COMx=...	**For ICA only.** Maps serial devices on the server to serial devices on the thin client, where x=1 to 4; if COMy, map to that serial port on the thin client; if USBSERz, map to that USB serial port. **Note** Be sure each serial device command is separated by a comma and space.
IcaDesktopApplianceMode={**yes**, no}	**For ICA only.** Specifies whether to enable Citrix HDX USB startup (for Desktop Appliance Mode) for any USB devices that are already plugged in (the USB device will start up provided the device is not disallowed with a deny rule in the USB policies on either the server [registry entry] or the client [policy rules configuration file]). This parameter requires two thin client reboots.

Table 2-3 Connection Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
ICADrives=drive letter={floppy, cdrom, disk}, {rw, ro}, basedir [drive letter=...]	**For ICA only.** To map drives on the server to USB mass storage devices that are attached to the thin client, where: drive letter=A to Z floppy=USB floppy cdrom=USB CDROM disk=USB drive or memory stick rw=read/write ro=read only basedir is an optional directory on the USB device to use. **Note** Be sure each drive command is separated by a space.
IcaEnhancedAudio={**no**, yes}	**For ICA only.** Enables/Disables Citrix enhanced audio. true—enables Citrix enhanced audio false—disables Citrix enhanced audio Default is false.
ICAhotkey={**yes**, no} [hotkey value]	**For ICA only.** Specifies whether to allow mapping of the hotkeys. For example: ICAhotkey=yes Hotkey1Char=F1 Hotkey1Shift=Shift Hotkey2Char=F3 Hotkey2Shift=Shift Hotkey3Char=F2 Hotkey3Shift=Shift Hotkey4Char=F1 ..... Hotkey11Char=plus Hotkey11Shift=Ctrl **Note** You must enter all hotkey options on one line.
IcaMMAudio={**yes**, no}	**For ICA only.** Specifies whether to enable Citrix HDX MultiMedia audio (see also ICADesktopApplianceMode and ICAMMVideo parameters). This parameter requires two thin client reboots. For example: To redirect audio to a USB audio device, set the following parameters as shown: ICADesktopApplianceMode=yes ICAMMVideo=yes ICAMMAudio=no To redirect audio to an analog audio device, set the following parameters as shown: ICADesktopApplianceMode=yes ICAMMVideo=yes ICAMMAudio=yes

Table 2-3 Connection Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
IcaMMVideo={**yes**, no}	**For ICA only.** Specifies whether to enable Citrix HDX MultiMedia video (see also ICADesktopApplianceMode and IcaMMAudio parameters). This parameter requires two thin client reboots. For example: To redirect audio to a USB audio device, set the following parameters as shown: ICADesktopApplianceMode=yes ICAMMVideo=yes ICAMMAudio=no To redirect audio to an analog audio device, set the following parameters as shown: ICADesktopApplianceMode=yes ICAMMVideo=yes ICAMMAudio=yes
ICAMultiMedia={**no**, yes}	**For ICA only.** Specifies whether to enable Citrix multimedia redirection. yes—Enables Citrix multimedia redirection no—Disables multimedia redirection Default is no.
ICAProxyHost=proxy server IP address	**For ICA only.** Specifies the firewall server address for the ICA connection. When you configure an alternate address for firewalls, and you specify HTTPS or SOCKS for the ICAProxyType, you must specify the proxy server IP address and port. You must specify each entry as host:port, where :port is optional. If you do not specify the port, the value depends on the browsing protocol.
ICAProxyType=[None, HTTP, SOCKS]	**For ICA only.** Defines the proxy type for the ICA connection. When you configure an alternate address for firewalls, you can select the proxy type of None, HTTP, or SOCKS.
NFuseServer=host[:port][;host [:port]] OR PNAgentServer=host[:port][;host [:port]] OR PNLiteServer=host[:port][;host [:port]]	Specifies a list of PN-Agent servers. If you do not specify a port, the port value depends on the browsing protocol. Default is Empty.
NLA={**no**, yes}	**For RDP only.** Specifies whether to enable Network Level Authentication for RDP sessions.
PermitSSHRootLogin={**no**, yes}	Specifies whether to enable login through SSH as the Linux superuser (root). Default is no.
PNAgentServer	See NFuseServer.
PNLiteServer=host[:port]	Specifies a list of hosts with optional port numbers. If no port is specified, the port value depends on the browsing protocol. Default is Empty. (See also NFuseServer.)

Table 2-3 Connection Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
RapportSecurePort=port	Designates the HTTP(S) secure port used for the Cisco VXC Manager agent. Default port number is 443. Example: RapportServer=192.168.0.2:80 RapportSecurePort=443
RapportServer=host[:port]	Specifies the Cisco VXC Manager Server and optional port to connect to. This can either be a DNS name or IP address, optionally followed by a ":" and a port number. The default port number is 80.
RdpClipBoard={**yes**, no}	**For RDP only.** Specifies whether to enable or disable the clipboard in an RDP session. Default is yes.
RdpDriveMap={**yes**, no}	**For RDP only.** Specifies whether to enable or disable drive mapping in an RDP session. Default is yes.
Seamless={**no**, yes}	Specifies whether to set the default resolution for ICA-published applications to seamless. Default is no.
Serial={**COM1**, COM2, COM3, COM4} {Baud={1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200}} {Parity={None, Even, Odd, Mark, Space}} {Stop={1, 1.5, 2}} {Size={5, 6, 7, 8}} {Flow={None, XON/XOFF, CTS/RTS, Both}}	Configures local serial ports: Serial—Specifies the configuration for local serial ports. Baud—Specifies the local serial port baud rate. Parity—Specifies the local serial port parity. Stop—Specifies the local serial port stop. Size—Specifies the local serial port size. Flow—Specifies the local serial port flow. **Note** You must specify the parameters in the order shown.
StopWatchMin=integer	Specifies an integer value to control over-scrolling; for example 100. Users may experience problems with over-scrolling when using some published applications. Prevent this problem by adjusting the value to a greater number.
VNCAuthTypes=string {none, vnc}	Set VNCAuthTypes=vnc to enforce the use of a password for remote VNC connection (use the VNCPasswd parameter to specify the password used). If VNCAuthTypes=none, no password is required for the VNC connection.
VNCPasswd=string {password must be base-64 encoded}	If the VNC-Server Add-on is installed, specifies the password to be entered for the remote VNC connection. If no VNCPasswd is specified, the default password is password.

Table 2-3 Connection Settings: wlx.ini and $MAC.ini Files (continued)

Parameter	Description
VNCPrompt={**yes**, no}	Specifies whether to prompt the user before shadowing starts, in which case the user can select to decline or accept VNC shadowing. VNCPrompt=yes means the user is always prompted before shadowing starts. VNCPrompt=no means the user cannot decline or accept shadowing. Default is yes (the user is prompted).
XFontServers=host:port[;host:port...]	Specifies the font server for X11 applications. **Note** When the font server address is set by the GUI, the GUI has priority, and the parameters from the INI file are ignored.

APPENDIX A

Connect Options

This appendix provides the connect options that you can use for the supported connections.

It includes:

Tip You can use the Connect parameter in wlx.ini and $MAC.ini files.

Tip Options marked with an asterisk (*) in these tables are mandatory. Default values appear in bold.

Mozilla Firefox Connect Options

Table A-1 contains the supported options you can use for Mozilla Firefox connections.

Example:

```
CONNECT=BROWSER \
Description="Cisco Home Page" \
URL=http://www.cisco.com \
Resolution=FullScreen \
Mode=Normal
```

Table A-1 Mozilla Firefox Connect Options

Parameter	Description
AutoConnect={**no**, yes}	Specifies whether to start a connection automatically at sign-on. Default is no.
Description=string description	Specifies a connection name for the Desktop icon and the Connection Manager. The text must be enclosed in double quotation marks if it contains spaces or punctuation characters. These characters are not allowed: & ‘ “ $? ! | ; ( ) [ ] { } \

Table A-1 Mozilla Firefox Connect Options (continued)

Parameter	Description
Icon=image file	Specifies an icon to appear on the local desktop or Connection Manager. The file must be located in the wlx/bitmap directory on the server. If no image file is specified, the default icon is displayed (except in the case of a published application). Supported file types are PNG, JPEG, and GIF, as well as XPM for backward compatibility.
Mode={kiosk, normal}	Launches Firefox in kiosk or normal mode. (In kiosk mode, Firefox appears full-screen on the desktop, and the user has no access to the address bar.)
Reconnect={**no**, yes}	Specifies whether to enable automatic reconnection to an application server after a disconnection.
ReconnectSeconds={seconds}	Specifies the amount of time in seconds (default is **30**) to wait before automatic reconnection to an application server after a disconnection. Requires Reconnect=yes or 1.
Resolution={640x480, 800x600, 1024x768, 1280x1024, 1600x1200, **FullScreen**}	Specifies the connection window size.
URL=URL	Specifies the starting URL.

XenDesktop Connection Example

To create XenDesktop server connections, use the Mozilla Firefox Connect options to specify the URL of the XenDesktop server to which users must connect. When the server URL is specified in the INI configuration, Firefox opens to this URL and the user can enter their credentials to initiate the connection to the HVD.

Example:

```
CONNECT=BROWSER \
Description="Windows Desktop" \
URL=http://xd.company.com \
Reconnect=yes \
ReconnectSeconds=5 \
AutoConnect=yes \
mode=kiosk
```

Caution In the above example, replace xd.company.com with the URL of your XenDesktop server.

With the optional Autoconnect=yes parameter specified in the preceding example, the browser connects to the specified URL when the client boots up. In addition, the optional Reconnect=yes and ReconnectSeconds=5 parameters specify to reconnect a disconnected connection after 5 seconds. Finally, the optional mode=kiosk parameter specifies to operate in kiosk mode, in which Firefox operates in full-screen mode with no access to the address bar.

RDP Connect Options

Table A-2 contains the supported options you can use for RDP connections.

Example:

```
CONNECT=RDP \
Host=10.150.123.35 \
Description="RDP_Server" \
AutoConnect=yes \
Colors=16m \
Username=Administrator \
Password=Password \
Domainname=$DN \
Resolution=800x600 \
Reconnect=no \
Drives=J=disk \
Drives=k=floppy \
Sound=off
```

Table A-2 RDP Connect Options

Parameter	Description
AutoConnect={**no**, yes}	Specifies whether to start a connection automatically after sign-on. Default is no.
Colors={256, **64k**, **High**, 16m}	Specifies the session color mode. For faster display performance, use 256 colors. Default is 64k or High (these options are the same).
Command=start command	Lists a string of commands to be executed after logging in to the server. The maximum is 127 characters.
Description=string description	Specifies a connection name for the Desktop icon and the Connection Manager. **Caution** The text must be enclosed in double quotation marks if it contains spaces or punctuation characters. These characters are not allowed: & ‘ “ $? ! | ; ( ) [ ] { } \
Directory=working directory	Specifies a directory to be used as the working directory after logging in to the server. The maximum is 63 characters.
DomainName={Windows domain name, $DN}	Specifies the domain name in a Windows network. $DN specifies to use the thin client sign-on domain name.
Drives=drive letter={floppy, cdrom, disk} [, basedir] drive letter=...	Maps drives on the server to USB mass storage devices that are attached to the thin client, where drive letter=A to Z floppy=USB floppy cdrom=USB CDROM disk=USB drive or memory rw=read/write ro=read only basedir=an optional directory on the USB device to use. **Note** Be sure each drive command is separated by a space.

Table A-2 RDP Connect Options (continued)

Parameter	Description
Encryption=none	If you specify none, no encryption is used. **Note** Use this option when connecting to a server with data encryption between the communication of the server and the client.
FullScreen={**no**, yes}	Runs the session at full screen (not in a window).
* Host=host[;host...]	Specifies a host or lists of host values. The thin client attempts to connect to the next server on the list if the current one fails. You must separate list items by semicolons or commas. **Note** This option is mandatory.
Icon=image file	Specifies an icon to appear on the thin client desktop for this connection. The file must be located in the server wlx/bitmap directory. If no image file is specified, the default icon is displayed (except in the case of a published application). Supported file types are PNG, JPEG, and GIF, as well as XPM for backward compatibility.
LowBand={**no**, yes}	Specifies whether to enable optimization for low-speed connections, such as reducing audio quality and/or decreasing protocol-specific cache size.
LPTports=LPTx={LPTy, USBLPz}, LPTx=...	Maps parallel devices on the server to parallel devices on the thin client, where x=1 to 4; if LPTy, map to that parallel port on the thin client; if USBLPz, map to that USB parallel port. **Note** Be sure each serial device command is separated by a comma and space. **Note** Windows 2000 servers do not support LPT port mapping.
Password={password must be base-64 encoded, $SN, $MAC, $IP, $UN, $PW, $TN}	Specifies the password for login to the application server. You can specify either a conventional login password or a variable. **Variable and Description** password—Conventional login password $SN—Serial number $MAC—MAC address $IP—IP address $UN—Sign-on name $PW—Sign-on password $TN—Terminal name **Caution** The application server password is not encrypted; not specifying it is strongly recommended. The user will be prompted to enter the password when the connection is made. This application server password directive never starts a line so it can be distinguished from the thin client user sign-on password, which starts a line.
ping={**yes**, no}	Specifies whether to enable ping. For nonpublished application connections, the thin client sends an ICMP ping to the host server before connecting to verify that the host is reachable. Default is yes

Table A-2 RDP Connect Options (continued)

Parameter	Description
Protocol={4, **5**}	Access servers running RDP 4 or RDP 5. To access servers running RDP 4, set the protocol to 4. Default is 5 (access servers running RDP 5)
Reconnect={**yes**, no}	Controls automatic reconnection to an application server after a disconnection. **Option Value and Action** yes—(default) Immediately restarts the connection 30 seconds after a disconnect. The default for a reconnection is 30 seconds. no—Does not reconnect after a disconnect.
ReconnectSeconds={1...3600}	Specifies the interval to wait (in seconds, an integer, 1...3600) before automatically restarting the connection after a disconnection. Valid range is 1 to 3600.
Resolution={**default**, seamless, 640x480, 800x600, 1024x768, 1280x1024, 1600x1200}	Specifies the connection display resolution. The default value starts the connection using the current desktop display setting.
Sound={off, **local**, remote}	Specifies if and where to enable sound. off—Disable sound local—Enable sound to local machine (default) remote—Enable sound to remote
Username={username, $SN, $MAC, $IP, $TN, $UN, $PW}	Specifies the name to log in to the application server. You can specify either a conventional login name or a variable. **Variable and Description** username—Conventional login username $SN—Serial number $MAC—MAC address $IP—IP address $UN—Sign-on name $PW—Sign-on password $TN—Terminal name

VMware View Client Connect Options

Table A-3 contains the supported options you can use for VMware View Client connections.

Example:

```
CONNECT=VMWARE_VIEWCLIENT \
Description="VMview" \
Host=192.168.0.2 \
DomainName=$DN \
AutoConnect=yes \
Username=Administrator \
```

```
Password=Password \
Fullscreen=yes \
Ping=yes
```

Example:

```
CONNECT=VMWARE_VIEWCLIENT \
Description="VMview" \
Host=192.168.0.2 \
DomainName=$DN \
Username=Administrator \
Password=Password \
DesktopSize=800x600 \
Ping=yes
```

Table A-3 VMware View Client Connect Options

Parameter	Description
AutoConnect={**no**, yes}	Specifies whether to start a connection automatically at sign-on. Default is no.
Description=string description	Specifies a connection name for the Desktop icon and the Connection Manager. **Caution** The text must be enclosed in double quotation marks if it contains spaces or punctuation characters. These characters are not allowed: & ‘ “ $? ! | ; ( ) [ ] { } \
Desktop=string	Specifies the published desktop name.
Desktopsize={fullscreen, largewindow, **smallwindow**, <x>x<y>}	Specifies the desktop size. Valid values include fullscreen, largewindow, and smallwindow, or you can specify the exact size in the form XxY.
Domain=string	Specifies the domain name in a Windows network where the VMware server is located.
FullScreen={**no**, yes}	Runs the session at full screen (not in a window). Default is no.
* Host=host[;host...]	Specifies a host or list of host values. The thin client attempts to connect to the next server on the list if the current one fails. List items must be separated by semicolons or commas. **Note** This option is mandatory.
Interactive={**yes**, no}	Specifies whether to enable interactive connection mode.

Table A-3 VMware View Client Connect Options (continued)

Parameter	Description
Password={password must be base-64 encoded, $SN, $MAC, $IP, $UN, $PW, $TN}	Specifies the password to log in to the application server. You can specify either a conventional login password or a variable. **Variable and Description** password—Conventional login password $SN—Serial number $MAC—MAC address $IP—IP address $UN—Sign-on name $PW—Sign-on password $TN—Terminal name ⚠ **Caution** The application server password is not encrypted; not specifying it is strongly recommended. The user will be prompted to enter the password when the connection is made. This application server password directive never starts a line, so it can be distinguished from the thin client user sign-on password (which starts a line).
ping={**yes**, no}	Specifies whether to enable ping. For nonpublished application connections, the thin client sends an ICMP ping to the host server before connecting to verify that the host is reachable. Default is yes.
Port=string	Specifies a port number other than the default. Default port is 80 or, if you enable UseSSL, the default port is 443.
Useallmonitors={**no**, yes}	Specifies whether to enable a session to display on all connected monitors. Default is no. Requires Fullscreen=yes.
Username={username, $SN, $MAC, $IP, $UN, $PW, $TN}	Specifies the name for login to the application server. You can specify either a conventional login name or a variable. **Variable and Description** username—Conventional login name $SN—Serial number $MAC—MAC address $IP—IP address $UN—Sign-on name $PW—Sign-on password $TN—Terminal name
UseSSL={**no**, yes}	Specifies whether to enable a secure connection (HTTPS). Default is no.

APPENDIX B

Printer Parameters: Options

This appendix provides the options that you can use for the following supported printer parameters:

Tip You can use supported printer parameters in wlx.ini and $MAC.ini files.

Tip In the following tables, default values appear in bold.

JetDirectPrinter

Table B-1 describes the supported options you can use for the JetDirectPrinter parameter.

The JetDirectPrinter command line defines a printer that is served by an HP JetDirect print server.

Caution Only the Name option is required for all supported printer parameters; other options you can use for the printer parameter are optional.

Example:

JetDirectPrinter=host common parameters

Table B-1 JetDirectPrinter Options

Parameter	Description
[Default={yes, no}]	Specifies whether the option block defines the default printer for the thin client. If you specify this option on more than one printer definition in the INI file, the last instance you specify (with Default=yes) is the default.
[Description=text]	Offers a short, human-readable description of the printer being defined. If the description includes blank spaces, you must enclose the full description in quotation marks.
[Enable={yes, no}]	Specifies whether the printer is available for use.
[EnableLPD={yes, no}]	This parameter is retained for backward compatibility; otherwise, it is ignored.
[ModelID=Linux driver name]	Identifies the printer for the purpose of choosing a Linux printer driver (for example, “HP LaserJet 4”). Usually this parameter is not specified for all locally attached printers; it is used for LPR printers on the network.
Name=printer name	Specifies both the name that is given in the local printers list and the internal name of the local print queue. Name must be between 1 and 16 characters, starting with a letter and composed entirely of letters, digits, underscores, and dashes. **Note** This parameter is mandatory (all other common parameters are optional).
[PrinterID=Windows driver]	Identifies the printer for the purpose of choosing a Windows printer driver (for example, “Brother MFC-420CN Printer”). Specify this parameter if you are forwarding the printer access to a Citrix or RDESKTOP connection.
[printers.autolocate={**no**, yes}]	Specifies whether to automatically locate and register available printers. Default is no.
[PPD=PPD name]	Directly specifies a Postscript Printer Definition filename for use as a local printer driver. **Note** The PPD option can be useful when you attach a local printer for which you already have a Common UNIX Printing System (CUPS) configuration on another system.
ThinPrintClass= PrinterName1=Class1[;PrinterName2=Class2]	Sets the class name for a printer. Example: ThinPrintClass=LaserJet-Series=PCL5;DeskJet-S eries=PS

NetworkPrinter

Table B-2 describes the supported options you can use for the NetworkPrinter parameter.

The NetworkPrinter command line defines a printer that uses traditional UNIX Line Printer Daemon protocols.

Caution Only the Name option is required for all supported printer parameters; other options you can use for the printer parameter are optional.

Example:

NetworkPrinter=LPD Queue=printer-queue-name-on-server

Table B-2 NetworkPrinter Options

Parameter	Description
[Default={yes, no}]	Specifies whether the option block defines the default printer for the thin client. If you specify this option on more than one printer definition in the INI file, the last definition you specify (with Default=yes) is the default.
[Description=text]	Offers a short, human-readable description of the printer being defined. If the description includes blank spaces, you must enclose the full description in quotation marks.
[Enable={yes, no}]	Specifies whether the printer is available for use.
[EnableLPD={yes, no}]	This parameter is retained for backward compatibility; otherwise, it is ignored.
[ModelID=Linux driver name]	Identifies the printer for the purpose of choosing a Linux printer driver (for example, “HP LaserJet 4”). Usually this parameter is not specified for all locally attached printers; it is used for LPR printers on the network.
Name=printer name	Specifies both the name that is given in the local printers list and the internal name of the local print queue. Name must be between 1 and 16 characters, starting with a letter and composed entirely of letters, digits, underscores, and dashes. **Note** This parameter is mandatory (all other common parameters are optional).
[PrinterID=Windows driver]	Identifies the printer for the purpose of choosing a Windows printer driver (for example, “Brother MFC-420CN Printer”). Specify this parameter if you are forwarding the printer access to a Citrix or RDESKTOP connection.
[printers.autolocate={**no**, yes}]	Specifies whether to automatically locate and register available printers. Default is no.
[PPD=PPD name]	Directly specifies a Postscript Printer Definition filename for use as a local printer driver. **Note** The PPD option can be useful when you attach a local printer for which you already have a Common UNIX Printing System (CUPS) configuration on another system.
ThinPrintClass= PrinterName1=Class1[;PrinterName2=Class2]	Sets the class name for a printer. Example: ThinPrintClass=LaserJet-Series=PCL5;DeskJet-S eries=PS

Printer

Table B-3 contains the supported options you can use for the Printer parameter.

The Printer command line defines a locally attached printer connected through the noted interface.

Caution Only the Name option is required for all supported printer parameters; other options you can use for the printer parameter are optional.

Example:

Printer={[USB][USB1][USB2][USBLPT1][USBLPT2][USBSER1][USBSER2] [COM1][COM2]} common parameters

Table B-3 Printer Options

Parameter	Description
[Default={yes, no}]	Specifies whether the option block defines the default printer for the thin client. If you specify this option on more than one printer definition in the INI file, the last definition you specify (with Default=yes) is the default.
[Description=text]	Offers a short, human-readable description of the printer being defined. If the description includes blank spaces, you must enclose the full description in quotation marks.
[Enable={yes, no}]	Specifies whether the printer is available for use.
[EnableLPD={yes, no}]	This parameter is retained for backward compatibility; otherwise, it is ignored.
[ModelID=Linux driver name]	Identifies the printer for the purpose of choosing a Linux printer driver (for example, “HP LaserJet 4”). Usually this parameter is not specified for all locally attached printers; it is used for LPR printers on the network.
Name=printer name	Specifies both the name that is given in the local printers list and the internal name of the local print queue. Name must be between 1 and 16 characters, starting with a letter and composed entirely of letters, digits, underscores, and dashes. **Note** This parameter is mandatory (all other common parameters are optional).
[PrinterID=Windows driver]	Identifies the printer for the purpose of choosing a Windows printer driver (for example, “Brother MFC-420CN Printer”). Specify this parameter if you are forwarding the printer access to a Citrix or RDESKTOP connection.
[printers.autolocate={no, yes}]	Specifies whether to automatically locate and register available printers. Default is no.
[PPD=PPD name]	Directly specifies a Postscript Printer Definition filename for use as a local printer driver. **Note** The PPD option can be useful when you attach a local printer for which you already have a Common UNIX Printing System (CUPS) configuration on another system.
ThinPrintClass= PrinterName1=Class1[;PrinterName2=Class2]	Sets the class name for a printer. Example: ThinPrintClass=LaserJet-Series=PCL5;DeskJet-S eries=PS

PrinterURI

Table B-4 contains the supported options you can use for the PrinterURI parameter.

The PrinterURI command line defines a printer using a URI that is supported by the Common UNIX Printing System (CUPS). This command is useful when you want the thin client to access a printer for which you already have a working CUPS client because you can simply copy the URI from the /cups/printers.conf file on the existing client.

Caution Only the Name option is required for all supported printer parameters; other options you can use for the printer parameter are optional.

Example:

PrinterURI=[ipp://[user[:password]@host[:port]/path
[http://[user[:password]@host[:port]/path
[socket://host[:port]
[lpd://host/queue
[smb://[user[:password]@[workgroup/]
server[:port]/sharename
[usb:/dev/usb/lpunit
[parallel:/dev/lpunit
[serial:/dev/ttySunit?baud=speed

common parameters

Tip Additional protocols beyond those listed here (for example, FTP and TFTP) may be supported by the CUPS system on the thin client.

Table B-4 PrinterURI Options

Parameter	Description
[Default={yes, no}]	Specifies whether the option block defines the default printer for the thin client. If you specify this option on more than one printer definition in the INI file, the last definition you specify (with Default=yes) is the default.
[Description=text]	Offers a short, human-readable description of the printer being defined. If the description includes blank spaces, you must enclose the full description in quotation marks.
[Enable={yes, no}]	Specifies whether the printer is available for use.
[EnableLPD={yes, no}]	This parameter is retained for backward compatibility; otherwise, it is ignored.
[ModelID=Linux driver name]	Identifies the printer for the purpose of choosing a Linux printer driver (for example, "HP LaserJet 4"). Usually this parameter is not specified for all locally attached printers; it is used for LPR printers on the network.
Name=printer name	Specifies both the name that is given in the local printers list and the internal name of the local print queue. Name must be between 1 and 16 characters, starting with a letter and composed entirely of letters, digits, underscores, and dashes. **Note** This parameter is mandatory (all other common parameters are optional).
[PrinterID=Windows driver]	Identifies the printer for the purpose of choosing a Windows printer driver (for example, "Brother MFC-420CN Printer"). Specify this parameter if you are forwarding the printer access to a Citrix or RDESKTOP connection.
[printers.autolocate={**no**, yes}]	Specifies whether to automatically locate and register available printers. Default is no.

Table B-4 PrinterURI Options (continued)

Parameter	Description
[PPD=PPD name]	Directly specifies a Postscript Printer Definition filename for use as a local printer driver. **Note** The PPD option can be useful when you attach a local printer for which you already have a CUPS configuration on another system.
ThinPrintClass= PrinterName1=Class1[;PrinterNa me2=Class2]	Sets the class name for a printer. Example: ThinPrintClass=LaserJet-Series=PCL5;DeskJet-S eries=PS

SMBPrinter

Table B-5 contains the supported options you can use for the SMBPrinter parameter.

The SMBPrinter command defines a network printer shared using the Windows Server Message Block protocols.

Caution Only the Name option is required for all supported printer parameters; other options you can use for the printer parameter are optional.

Example:

SMBPrinter=host[username=username][password=password] [domain=Windows domain] common parameters

Table B-5 SMBPrinter Options

Parameter	Description
[Default={yes, no}]	Specifies whether the option block defines the default printer for the thin client. If you specify this option on more than one printer definition in the INI file, the last definition you specify (with Default=yes) is the default.
[Description=text]	Offers a short, human-readable description of the printer being defined. If the description includes blank spaces, you must enclose the full description in quotation marks.
[Enable={yes, no}]	Specifies whether the printer is available for use.
[EnableLPD={yes, no}]	This parameter is retained for backward compatibility; otherwise, it is ignored.
[ModelID=Linux driver name]	Identifies the printer for the purpose of choosing a Linux printer driver (for example, “HP LaserJet 4”). Usually this parameter is not specified for all locally attached printers; it is used for LPR printers on the network.
Name=printer name	Specifies both the name that is given in the local printers list and the internal name of the local print queue. Name must be between 1 and 16 characters, starting with a letter and composed entirely of letters, digits, underscores, and dashes. **Note** This parameter is mandatory (all other common parameters are optional).

Table B-5 SMBPrinter Options (continued)

Parameter	Description
[PrinterID=Windows driver]	Identifies the printer for the purpose of choosing a Windows printer driver (for example, “Brother MFC-420CN Printer”). Specify this parameter if you are forwarding the printer access to a Citrix or RDESKTOP connection.
[printers.autolocate={**no**, yes}]	Specifies whether to automatically locate and register available printers. Default is no.
[PPD=PPD name]	Directly specifies a Postscript Printer Definition filename for use as a local printer driver. **Note** The PPD option can be useful when you attach a local printer for which you already have a CUPS configuration on another system.
ThinPrintClass= PrinterName1=Class1[;PrinterNa me2=Class2]	Sets the class name for a printer. Example: ThinPrintClass=LaserJet-Series=PCL5;DeskJet-S eries=PS

APPENDIX C

TimeZone Parameter Values

Table C-1 contains the supported values that you can use for the TimeZone parameter.

Tip You can use the TimeZone parameter in wlx.ini and $MAC.ini files.

Caution The TimeZone parameter must be followed by the ManualOverride=true option.

Example:

TimeZone="US/Pacific" ManualOverride=true \

Table C-1 TimeZone Values for wlx.ini files

Continent/Country	Value
Africa	The following values must be preceded with Africa/. For example, Africa/Abidjan is the value for the Abidjan time zone. Abidjan, Accra, Addis_Ababa, Algiers, Asmara, Asmera, Bamako, Bangui, Banjul, Bissau, Blantyre, Brazzaville, Bujumbura, Cairo, Casablanca, Ceuta, Conakry, Dakar, Dar_es_Salaam, Djibouti, Douala, El_Aaiun, Freetown, Gaborone, Harare, Johannesburg, Kampala, Khartoum, Kigali, Kinshasa, Lagos, Libreville, Lome, Luanda, Lubumbashi, Lusaka, Malabo, Maputo, Maseru, Mbabane, Mogadishu, Monrovia, Nairobi, Ndjamena, Niamey, Nouakchott, Ouagadougou, Porto-Novo, Sao_Tome, Timbuktu, Tripoli, Tunis, Windhoek The following values can be used without being preceded with Africa/: Egypt, Libya

Table C-1 TimeZone Values for wlx.ini files (continued)

Continent/Country	Value
Americas (see also Brazil, Canada, Chile, Mexico, United States)	The following values must be preceded with America/. For example, America/Adak is the value for the Adak time zone. Adak, Anchorage, Anguilla, Antigua, Araguaina, Argentina/Buenos_Aires, Argentina/Catamarca, Argentina/ComodRivadavia, Argentina/Cordoba, Argentina/Jujuy, Argentina/La_Rioja, Argentina/Mendoza, Argentina/Rio_Gallegos, Argentina/San_Juan, Argentina/San_Luis, Argentina/Tucuman, Argentina/Ushuaia, Aruba, Asuncion, Atikokan, Atka, Bahia, Barbados, Belem, Belize, Blanc-Sablon, Boa_Vista, Bogota, Boise, Buenos_Aires, Cambridge_Bay, Campo_Grande, Cancun, Caracas, Catamarca, Cayenne, Cayman, Chicago, Chihuahua, Coral_Harbour, Cordoba, Costa_Rica, Cuiaba, Curacao, Danmarkshavn, Dawson, Dawson_Creek, Denver, Detroit, Dominica, Edmonton, Eirunepe, El_Salvador, Ensenada, Fort_Wayne, Fortaleza, Glace_Bay, Godthab, Goose_Bay, Grand_Turk, Grenada, Guadeloupe, Guatemala, Guayaquil, Guyana, Halifax, Havana, Hermosillo, Indiana/Indianapolis, Indiana/Knox, Indiana/Marengo, Indiana/Petersburg, Indiana/Tell_City, Indiana/Vevay, Indiana/Vincennes, Indiana/Winamac, Indianapolis, Inuvik, Iqaluit, Jamaica, Jujuy, Juneau, Kentucky/Louisville, Kentucky/Monticello, Knox_IN, La_Paz, Lima, Los_Angeles, Louisville, Maceio, Managua, Manaus, Marigot, Martinique, Mazatlan, Mendoza, Menominee, Merida, Mexico_City, Miquelon, Moncton, Monterrey, Montevideo, Montreal, Montserrat, Nassau, New_York, Nipigon, Nome, Noronha, North_Dakota/Center, North_Dakota/New_Salem, Panama, Pangnirtung, Paramaribo, Phoenix, Port-au-Prince, Port_of_Spain, Porto_Acre, Porto_Velho, Puerto_Rico, Rainy_River, Rankin_Inlet, Recife, Regina, Resolute, Rio_Branco, Rosario, Santiago, Santo_Domingo, Sao_Paulo, Scoresbysund, Shiprock, St_Barthelemy, St_Johns, St_Kitts, St_Lucia, St_Thomas, St_Vincent, Swift_Current, Tegucigalpa, Thule, Thunder_Bay, Tijuana, Toronto, Tortola, Vancouver, Virgin, Whitehorse, Winnipeg, Yakutat, Yellowknife The following values can be used without being preceded with America/: Cuba, Jamaica, Navajo
Asia (see also Mideast)	The following values must be preceded with Asia/. For example, Asia/Aden is the value for the Aden time zone. Aden, Almaty, Amman, Anadyr, Aqtau, Aqtobe, Ashgabat, Ashkhabad, Baghdad, Bahrain, Baku, Bangkok, Beijing, Beirut, Bishkek, Brunei, Calcutta, Choibalsan, Chongqing, Chungking, Colombo, Dacca, Damascus, Dhaka, Dili, Dubai, Dushanbe, Gaza, Harbin, Ho_Chi_Minh, Hong_Kong, Hovd, Irkutsk, Istanbul, Jakarta, Jayapura, Jerusalem, Kabul, Kamchatka, Karachi, Kashgar, Katmandu, Kolkata, Krasnoyarsk, Kuala_Lumpur, Kuching, Kuwait, Macao, Macau, Magadan, Makassar, Manila, Muscat, Nicosia, Novosibirsk, Omsk, Oral, Phnom_Penh, Pontianak, Pyongyang, Qatar, Qyzylorda, Rangoon, Riyadh, Riyadh87, Riyadh88, Riyadh89, Saigon, Sakhalin, Samarkand, Seoul, Shanghai, Singapore, Taipei, Tashkent, Tbilisi, Tehran, Tel_Aviv, Thimbu, Thimphu, Tokyo, Ujung_Pandang, Ulaanbaatar, Ulan_Bator, Urumqi, Vientiane, Vladivostok, Yakutsk, Yekaterinburg, Yerevan The following values can be used without being preceded with Asia/: Hongkong, Iran, Israel, Japan, Singapore, Turkey

Table C-1 TimeZone Values for wlx.ini files (continued)

Continent/Country	Value
Australia	The following values must be preceded with Australia/. For example, Australia/ACT is the value for the ACT time zone. ACT, Adelaide, Brisbane, Broken_Hill, Canberra, Currie, Darwin, Eucla, Hobart, LHI, Lindeman, Lord_Howe, Melbourne, NSW, North, Perth, Queensland, South, Sydney, Tasmania, Victoria, West, Yancowinna
Brazil	The following values must be preceded with Brazil/. For example, Brazil/Acre is the value for the Acre time zone. Acre, DeNoronha, East, West
Canada	These values are preceded by Canada/. For example, Canada/Atlantic is the value for the Atlantic time zone. Atlantic, Central, East-Saskatchewan, Eastern, Mountain, Newfoundland, Pacific, Saskatchewan, Yukon
Chile	Chile/Continental, Chile/EasterIsland
Europe	The following values must be preceded with Europe/. For example, Europe/Amsterdam is the value for the Amsterdam time zone. Amsterdam, Andorra, Athens, Belfast, Belgrade, Berlin, Bratislava, Brussels, Bucharest, Budapest, Chisinau, Copenhagen, Dublin, Gibraltar, Guernsey, Helsinki, Isle_of_Man, Istanbul, Jersey, Kaliningrad, Kiev, Lisbon, Ljubljana, London, Luxembourg, Madrid, Malta, Mariehamn, Minsk, Monaco, Moscow, Nicosia, Oslo, Paris, Podgorica, Prague, Riga, Rome, Samara, San_Marino, Sarajevo, Simferopol, Skopje, Sofia, Stockholm, Tallinn, Tirane, Tiraspol, Uzhgorod, Vaduz, Vatican, Vienna, Vilnius, Volgograd, Warsaw, Zagreb, Zaporozhye, Zurich The following values can be used without being preceded with Europe/: Eire, GB, GB-Eire, Greenwich, Iceland, Poland, Portugal
Mexico	Mexico/BajaNorte, Mexico/BajaSur, Mexico/General
New Zealand	NZ, NZ-CHAT
United States	The following values must be preceded with US/. For example, US/Alaska is the value for the Alaska time zone. Alaska, Aleutian, Arizona, Central, East-Indiana, Eastern, Hawaii, Indiana-Starke, Michigan, Mountain, Pacific, Samoa
Universal	UTC, ZULU

APPENDIX D

Keyboard.layouts Parameter Values

Table D-1 contains the values that you can use for the Keyboard.layouts parameter (to designate the keyboard type).

Tip You can use the Keyboard.layouts parameter in wlx.ini and $MAC.ini files.

Caution All values that are listed in Table D-1 work on the thin client locally. However, for ICA and RDP connections, only the values marked with an x are supported on those connections. In addition, values that are listed in the Notes column that are marked with an asterisk (*) are legacy values that are supported by ICA or RDP (as marked).

Example:

Keyboard.layouts=us \

Table D-1 Keyboard.layouts Values

Country	ICA	RDP	Value	Notes
Albania			al	
Armenia			am_phonetic	Phonetic
Arabic	x	x	ara	*Arabic (Egypt)
			ara_azerty	Azerty
			ara_azerty_digits	Azerty\digits
			ara_digits	Digits
			ara_qwerty_digits	
Azerbajian			az_cyrillic	Cyrillic
Bangladesh			bd_probhat	
Belarus			by	
			by_winkeys	Winkeys
			by_latin	Latin
Belgium	x		be	*Belgian French
			be_nodeadkeys	Eliminate dead keys

Table D-1 Keyboard.layouts Values (continued)

Country	ICA	RDP	Value	Notes
			be_iso-alternate	ISO alternate
			be_sundeadkeys	Sun dead keys
Bhutan			bt	
Bosnia			ba_unicode	Use Bosnian digraphs
			ba_alternatequotes	Use guillemets for quotes
			ba_unicodeus	U.S. keyboard with Bosnian digraphs
			ba_us	U.S. keyboard with Bosnian letters
Brazil	x	x	br	*Brazilian
			br_nodeadkeys	Eliminate dead keys
Bulgaria			bg_phonetic	
Cambodia			kh	
Canada	x	x	ca	*Canadian English (Multilingual)
			ca_fr	*Canadian French
			ca_multi-2gr	Multilingual, second part
		x	ca_fr-dvorak	French Dvorak
	x		ca_fr-legacy	French (legacy)
			ca_ike	Inuktitut
	x	x	ca_multi	Multilingual, first part
		x	ca_multix	Multilingual
Croatia	x	x	hr	*Croatian
Denmark	x	x	dk	*Danish
			dk_nodeadkeys	Eliminate dead keys
Estonia			ee_dvorak	Dvorak
			ee_nodeadkeys	Eliminate dead keys
Faroe			fo_nodeadkeys	Eliminate dead keys
Finland	x	x	fi	*Finish
			fi_smi	Northern Saami
			fi_nodeadkeys	Eliminate dead keys
France	x	x	fr	*French
			fr_dvorak	Dvorak
			fr_nodeadkeys	Eliminate dead keys
			fr_latin9	Alternative
			fr_latin9_nodeadkeys	Alternative, eliminate dead keys
			fr_latin9_sundeadkeys	Alternative, Sun dead keys
			fr_sundeadkeys	Sun dead keys
Georgia			ge_ru	Russian

Table D-1 Keyboard.layouts Values (continued)

Country	ICA	RDP	Value	Notes
Germany	x	x	de	*German
	x	x	de_CH	*Swiss German
			de_deadacute	Dead acute
			de_deadgraveacute	Dead grave acute
			de_dvorak	Dvorak
			de_nodeadkeys	Eliminate dead keys
			de_ro	Romanian keyboard, German letters
			de_ro_nodeadkeys	Romanian keyboard, German letters, eliminate dead keys
Greece			gr_polytonic	Polytonic
			gr_nodeadkeys	Eliminate dead keys
			gr_extended	Extended
Hungary	x	x	hu	*Hungarian
			hu_standard	Standard
			hu_qwerty	Qwerty
			nodeadkeys	Eliminate dead keys
			hu_101_qwerty_comma_dead	101/qwerty/comma/dead keys
			hu_101_qwerty_comma_nodead	101/qwerty/comma/Eliminate dead keys
			hu_101_qwerty_dot_dead	101/qwerty/dot/dead keys
			hu_101_qwerty_dot_nodead	101/qwerty/dot/Eliminate dead keys
			hu_101_qwertz_comma_dead	101/qwertz/comma/dead keys
			hu_101_qwertz_comma_nodead	101/qwertz/comma/Eliminate dead keys
			hu_101_qwertz_dot_dead	101/qwertz/dot/dead keys
			hu_101_qwertz_dot_nodead	101/qwertz/dot/Eliminate dead keys
			hu_102_qwerty_comma_dead	102/qwerty/comma/dead keys
			hu_102_qwerty_comma_nodead	102/qwerty/comma/Eliminate dead keys
			hu_102_qwerty_dot_dead	102/qwerty/dot/dead keys
			hu_102_qwerty_dot_nodead	102/qwerty/dot/Eliminate dead keys
			hu_102_qwertz_comma_dead	102/qwertz/comma/dead keys
			hu_102_qwertz_comma_nodead	102/qwertz/comma/Eliminate dead keys
			hu_102_qwertz_dot_dead	102/qwertz/dot/dead keys
			hu_102_qwertz_dot_nodead	102/qwertz/dot/Eliminate dead keys
Iceland	x	x	is	*Icelandic
			is_nodeadkeys	Eliminate dead keys
			is_sundeadkeys	Sun dead keys
India			in_ben	Bengali

Table D-1 Keyboard.layouts Values (continued)

Country	ICA	RDP	Value	Notes
			in_ben_probhat	Bengali Probhat
			in_guj	Gujarati
			in_guru	Gurmukhi
			in_kan	Kannada
			in_mal	Malayalam
			in_ori	Oriya
			in_tam	Tamil
			in_tam_tab	Tamil TAB Typewriter
			in_tam_tscii	Tamil TSCII Typewriter
			in_tam_unicode	Tamil Unicode
			in_tel	Telugu
			in_urd	Urdu
Iran			ir_keypad	Keypad
			ir_pro	Pro
			ir_pro_keypad	Pro Keypad
Ireland			ie_unicodeexpert	UnicodeExpert
			ie_clogaelach	CloGaelach
			ie_ogam	Ogham
			ie_ogam_is434	Ogham IS434
Israel			il_si1452	si1452
			il_lyx	lyx
			il_phonetic	Phonetic
Italy	x	x	it	*Italian
			it_nodeadkeys	Eliminate dead keys
Japan	x	x	jp	*Japanese
Kazakhstan			kz_kazrus	Kazakh with Russian
			kz_ruskaz	Russian with Kazakh
Korean	x	x	ko	*Korean
Latin			latam_nodeadkeys	Eliminate dead keys
			latam_sundeadkeys	Sun dead keys
			lv_tilde	Tilde (~) variant
Latin American	x	x	latam	*Latin American
Netherlands	x	x	nl	*Dutch
Norway	x	x	no	*Norwegian
			no_smi_nodeadkeys	Northern Saami, eliminate dead keys
			no_dvorak	Dvorak

Table D-1 Keyboard.layouts Values (continued)

Country	ICA	RDP	Value	Notes
			no_nodeadkeys	Eliminate dead keys
			no_smi	Northern Saami
Pakistan			pk	
Poland	x	x	pl	*Polish (Programmers)
			pl_qwertz	qwertz
			pl_dvorak	Dvorak
			pl_dvorak_altquotes	Dvorak, Polish quotes on key "1/!"
			pl_dvorak_quotes	Dvorak, Polish quotes on quotemark key
Portugal	x	x	pt	*Portuguese
			pt_nodeadkeys	Eliminate dead keys
			pt_sundeadkeys	Sun dead keys
Romania			ro_std	Standard
			ro_winkeys	Winkeys
Russia	x	x	ru	*Russian
			ru_phonetic	Phonetic
			ru_typewriter	Typewriter
			ru_winkeys	Winkeys
Serbia			cs_yz	Z and ZHE swapped
			cs_latin	Latin
			cs_latinyz	Latin qwerty
			cs_latinunicode	Latin Unicode
			cs_latinunicodeyz	Latin Unicode qwerty
			cs_latinalternatequotes	Latin with guillemets
			cs_alternatequotes	With guillemets
			cs_yz	Z and ZHE swapped
Slovakia			si_alternatequotes	Use guillemets for quotes
			si_unicode	Use Slovenian digraphs
			si_unicodeus	U.S. keyboard with Slovenian digraphs
			si_us	U.S. keyboard with Slovenian letters
Slovenia	x	x	si	*Slovenian
Spain	x	x	es	*Spanish
			es_sundeadkeys	Sun dead keys
			es_dvorak	Dvorak
Sri Lanka			lk_tam_tab	Tamil TAB typewriter
			lk_tam_unicode	Tamil Unicode
Sweden	x	x	se	*Swedish

Table D-1 Keyboard.layouts Values (continued)

Country	ICA	RDP	Value	Notes
			se_dvorak	Dvorak
			se_nodeadkeys	Eliminate dead keys
			se_smi	Northern Saami
			se_rus	Russian phonetic
			se_rus_nodeadkeys	Russian phonetic, eliminate dead keys
Switzerland	x	x	ch_de_nodeadkeys	Swiss-German, eliminate dead keys
	x	x	ch_de_sundeadkeys	Swiss-German, Sun dead keys
			ch_fr	*Swiss-French
	x	x	ch_fr_nodeadkeys	Swiss-French, eliminate dead keys
	x	x	ch_fr_sundeadkeys	Swiss-French, Sun dead keys
			de_ch	*Swiss-German
	x	x	fr_ch	*Swiss-French
Syria			sy_syc	Syriac
			sy_syc_phonetic	Syriac phonetic
Tajikistan			tj	
Thailand	x	x	th	*Thai
			th_pat	Pattachote
			th_tis	TIS-820.2538
Turkey	x	x	tr	*Turkish (Q)
			tr_alt	Alt-Q
	x	x	tr_f	*Turkish (F)
Ukraine			ua_phonetic	Phonetic
			ua_rstu	Standard RSTU
			ua_rstu_ru	Standard RSTU on Russian layout
			ua_typewriter	Typewriter
			ua_winkeys	Winkeys
U.K.	x	x	gb	*British English
			gb_intl	International (with dead keys)
			gb_dvorak	Dvorak
U.S.	x	x	us	*U.S. English
			us_alt-intl	Alternative international (former us_intl)
	x	x	us_dvorak	*U.S.-Dvorak
	x	x	us_intl	*U.S.-International (with dead keys)
		x	us_rus	Russian phonetic
Uzbekistan			uz	
Vietnam			vn	