

Dell Wyse ThinOS 8.6_024 and ThinOS Lite 2.6_024 Maintenance Release 2

Release Notes



Notes, cautions, and warnings

 | **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 | **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 | **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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Contents

1 Release summary	4
Version	4
Release date	4
2 Compatibility	5
Supported platforms	5
Previous versions	5
Packages	6
3 New and enhanced features	7
Updates to ThinOS packages	7
VMware Client updates	7
VMware Horizon Client feature matrix	8
Teradici updates	12
Imprivata updates	12
UI enhancements	13
4 Important notes	14
Tested environment	14
5 Fixed issues	16
6 INI parameters	18
7 Resources and support	19
Accessing documents using the product search	19
Accessing documents using product selector	19
8 Contacting Dell	20

Release summary

Dell Wyse ThinOS software is designed to run on a broad array of Dell Wyse hardware platforms. Patch or add-on releases are created to support the existing hardware platforms, correct defects, make enhancements, or add new features. These releases are tested and supported on shipping hardware platforms.

Version

ThinOS 8.6_024

ThinOS Lite 2.6_024

Release date

June 2019

Compatibility

Supported platforms

Table 1. Supported platforms

Platform	Image file name	BIOS file name	BIOS version
Wyse 3010 thin client with ThinOS (T10)	DOVE_boot	N/A	N/A
Wyse 3010 zero client for Citrix	T00_xen.bin	N/A	N/A
Wyse 3020 thin client with ThinOS (T10D)	T10D_wnos	N/A	N/A
Wyse 3020 zero client for Citrix	T00D_xen	N/A	N/A
Wyse 3030 LT thin client with ThinOS	U10_wnos	U10_bios.bin	1.0G
Wyse 3030 LT thin client with PCoIP	PU10_wnos	PU10_bios.bin	1.0G
Wyse 3040 thin client with ThinOS	A10Q_wnos	A10Q_bios.bin	1.2.5
Wyse 3040 thin client with PCoIP	PA10Q_wnos	A10Q_bios.bin	1.2.5
Wyse 5010 thin client with ThinOS (D10D)	ZD10_wnos	D10G_bios.bin	3.0U
Wyse 5010 thin client with PCoIP (D10DP)	PD10_wnos	PD10G_bios.bin	3.0U
Wyse 5010 zero client for Citrix	ZD00_xen	D10G_bios.bin	3.0U
Wyse 5040 AIO thin client (5212)	ZD10_wnos	AIO10G_bios.bin	3.0U
Wyse 5040 AIO thin client with PCoIP (5213)	PD10_wnos	PAIO10G_bios.bin	3.0U
Wyse 5060 thin client with ThinOS	D10Q_wnos	D10Q_bios.bin	1.0J
Wyse 5060 thin client with PCoIP	PD10Q_wnos	PD10Q_bios.bin	1.0J
Wyse 5070 thin client with ThinOS	X10_wnos	X10_bios.bin	1.1.4
Wyse 5070 thin client with PCoIP	PX10_wnos	X10_bios.bin	1.1.4
Wyse 7010 thin client with ThinOS (Z10D)	ZD10_wnos	Z10G_bios.bin	3.0U

Previous versions

ThinOS 8.6_019

ThinOS Lite 2.6_019

Packages

Table 2. Packages supported

Packages	FR	Horizon	RTME	TCX	JVDI
Version	1.26.53224	5.0.53374	2.7.52738	7.1.41853	12.1.52977
Wyse 3010 Thin Client with ThinOS (T10)	Not supported				
Wyse 3010 Zero Client for Citrix	Not supported				
Wyse 3020 Thin Client with ThinOS (T10D)	Not supported				
Wyse 3020 Zero Client for Citrix	Not supported				
Wyse 3030 LT Thin Client with ThinOS	Supported	Supported	Supported	Supported	Not supported
Wyse 3030 LT Thin Client with PCoIP	Supported	Supported	Supported	Supported	Not supported
Wyse 3040 Thin Client with ThinOS	Supported	Supported	Supported	Supported	Supported
Wyse 3040 Thin Client with PCoIP	Supported	Supported	Supported	Supported	Supported
Wyse 5010 Thin Client with ThinOS (D10D)	Supported	Supported	Supported	Supported	Not supported
Wyse 5010 Thin Client with PCoIP (D10DP)	Supported	Supported	Supported	Supported	Not supported
Wyse 5010 Zero Client for Citrix	Supported	Supported	Supported	Supported	Not supported
Wyse 5040 AIO Thin Client (5212)	Supported	Supported	Supported	Supported	Not supported
Wyse 5040 AIO Thin Client with PCoIP (5213)	Supported	Supported	Supported	Supported	Not supported
Wyse 5060 Thin Client with ThinOS	Supported	Supported	Supported	Supported	Supported
Wyse 5060 Thin Client with PCoIP	Supported	Supported	Supported	Supported	Supported
Wyse 5070 Thin Client with ThinOS	Supported	Supported	Supported	Supported	Supported
Wyse 5070 Thin Client with PCoIP	Supported	Supported	Supported	Supported	Supported
Wyse 7010 Thin Client with ThinOS (Z10D)	Supported	Supported	Supported	Supported	Not supported

New and enhanced features

Updates to ThinOS packages

- Updated the VMware Horizon package to version 5.0.53374.
- Updated the Flash Redirection package to version 1.26.53224.

VMware Client updates

- Updated the VMware Horizon package version from 4.8 to 5.0.
If you are upgrading your thin client to ThinOS version 8.6_024, ensure that the Horizon server or agent version is updated to 7.5 or later to support the latest Horizon Client version 5.0.
- Supports the relative mouse feature in a PCoIP session.
When you enable the relative mouse feature, Horizon Client uses absolute coordinates to transmit data about the mouse pointer movements and improves the mouse performance. To enable the relative mouse feature on a classic desktop, right-click the remote desktop icon on the ThinOS taskbar, and click **Enable Relative Mouse**. To enable the relative mouse feature on a zero desktop, go to the ThinOS connection menu, and click the **A** icon that is displayed after the PCoIP session name.

The relative mouse feature is applicable only for the following PCoIP-enabled thin clients:

- Wyse 3030 LT thin client
- Wyse 3040 thin client
- Wyse 5010 thin client
- Wyse 5040 AIO thin client
- Wyse 5060 thin client
- Wyse 5070 thin client
- Supports the High Color Accuracy feature in a Blast session with H.264 enabled.
This option enables Horizon Client to use a superior color fidelity when H.264 decoding is enabled. To enable the High Color Accuracy feature, go to **Global Connection Settings**, click the **Horizon** tab, and select the **High Color Accuracy** check box.

The High Color Accuracy option is available on the following platforms:

- Wyse 3030 LT thin client
- Wyse 3040 thin client
- Wyse 5060 thin client
- Wyse 5070 thin client

You can also use the INI parameter `SessionConfig=BLAST RemoteDisplay.allowClientH264YUV444=TRUE/FALSE` to enable the High Color Accuracy feature.

- Supports the **Username Hint** option during smart card authentication for the Horizon View broker.
You can enable users to specify the account to be used in the **Username Hint** field when you log in to a Horizon View session using a smart card. To enable the **Username Hint** option, go to the View Administrator Admin console, and select the **Allow smart card user hints** check box when editing the View Server Connection settings. Enabling this option allows you to use a single smart card certificate to authenticate to multiple user accounts.
- Enhanced the reconnect workflow for VMware Horizon View broker using the INI parameter `VMWaitTimer={0-3600}`.

The option `VMWaitTimer` specifies the time remaining in seconds for reconnecting to a Horizon desktop before exiting the desktop. When the connection fails while connecting to a Horizon desktop, a message `Horizon Error- Waiting to recover` is displayed along with the countdown timer.

VMware Horizon Client feature matrix

Table 3. VMware Horizon Client feature matrix

	Client type	ThinOS
Client Appearance and Workflow	Customer branding	Not supported
	Kiosk mode	Supported
	In-product help	Not supported
	Online help	Not supported
	English localization	Supported
	French localization	Supported
	German localization	Supported
	Japanese localization	Supported
	Traditional Chinese localization	Supported
	Simplified Chinese localization	Supported
	Korean localization	Not supported
	Spanish localization	Not supported
Broker Connectivity	XML-API version	13
	SSL	Supported
	SSL certificate verification	Supported
	Disclaimer dialog	Supported
	Security Server compatibility	Supported
	UAG compatibility	Supported
	Multi-broker/Multi-site redirection - DaaS	Not supported
	Client info	Supported
Phonehome	Not supported	
Broker Authentication	Password authentication	Supported
	Password change	Supported
	RSA authentication	Supported
	Radius	Supported
	Integrated RSA SecurID token generator	Not supported
	Single Sign On	Supported
	Log in as current user	Not supported
	Nested log in as current user	Not supported
	Biometric authentication	Not supported

	Client type	ThinOS
	Unauthentication access	Supported
Smart card	x.509 certificate authentication (Smart Card)	Supported
	CAC support	Supported
	.Net support	Supported
	PIV support	Not supported
	Java support	Not supported
	Purebred derived credentials	Not supported
Desktop Operations	Reset	Supported
	Restart	Not supported
	Log off	Supported
Session Management (Blast Extreme and PCoIP)	Switch desktops	Supported
	Multiple Connections	Supported
	App Launch on Multiple end points	Supported
	Auto-Retry	Supported
	Auto-Retry 5+ minutes	Supported
	Fullscreen mode	Supported
	Fullscreen toolbar	Not supported
	Windowed mode	Supported
	Time Zone Synchronization	Supported
	Jumplist integration (Windows 7-Windows 10)	Not supported
Client Customization	Command Line Options	Not supported
	URI Schema	Not supported
	Preference File	Supports only Blast
	Non Interactive Mode	Not supported
	GPO-based customization	Not supported
Protocols supported	Blast Extreme	Supported
	H.264 - HW decode	Supported
	H.265 - HW decode	Not supported
	JPEG/PNG	Supported
	Blast Extreme Adaptive Transportation	Supported
	RDP 6.x	Supported
	RDP 7.x	Supported
	RDP 8.x, 10.x	Supported
	PCoIP	Supported
Protocol Enhancements Protocol Enhancements	RDP-VC Bridge	Supports only Blast
	Session Enhancement SDK	Not supported

	Client type	ThinOS
Features / Extensions Monitors / Displays	Dynamic Display Resizing	Supported
	Multiple Monitor Support	Supported
	External Monitor Support	Supported
	Display Pivot	Supported
	Multiple Aspect Ratio support	Supported
	Number of displays supported	4
	Maximum Resolution	3840x2160
	Video out	Supported
	High DPI scaling	Not supported
	DPI Sync	Supported
	Exclusive Mode	Not supported
	Multiple Monitor Selection	Supported
Input Device (Keyboard / Mouse)	Relative mouse	Supports only PCoIP
	External Mouse Support	Supported
	Local buffer text input box	Not supported
	Keyboard Mapping	Supported
	Unicode Keyboard Support	Not supported
	International Keyboard Support	Supported
	Input Method local/remote switching	Not supported
	IME Sync	Not supported
Clipboard Services	Clipboard Text	Not supported
	Clipboard Graphics	Not supported
	Clipboard memory size configuration	Not supported
	Drag and Drop	Not supported
Client Caching	View Agent to Client-side caching	Supports only Blast
Connection Management	Blast network recovery	Supported
	IPv6 support	Supported
	PCoIP IP roaming	Supported
High-Level Device Redirection	Serial (COM) Port Redirection	Not supported
	Client Drive Redirection/File Transfer	Not supported
	Scanner (TWAIN/WIA) Redirection	Not supported
	x.509 Certificate (Smart Card)	Supported
	Gyro Sensor Redirection	Not supported
Real-Time Audio-Video	Analog in (input)	Supported
	Real-Time Audio-Video	Supported
	Multiple webcams	Not supported
USB Redirection	Generic USB/HID	Supported

	Client type	ThinOS
	Policy: ConnectUSBOnInsert	Supported
	Policy: ConnectUSBOnStartup	Supported
	Connect/Disconnect UI	Not supported
	USB device filtering (client side)	Supported
	Isochronous Device Support	Supported
	Split device support	Supported
	Bloomberg Keyboard compatibility	Not supported
	Smartphone sync	Supported
	USB 3.0	Supported
	USB Redirection USB storage devices	Supported
Unified Communications	Cisco UC Jabber	Not supported
	Avaya UC One-X Desktop	Not supported
	Mitel UCA	Not supported
	Microsoft Lync 2013	Not supported
	Skype for business	Supports only Blast
Multimedia Support	Multimedia Redirection (MMR)	Not supported
	Flash URL Redirection (Unicast/Multicast)	Not supported
	Flash Redirection	Not supported
	HTML5 Redirection	Not supported
Graphics	vDGA	Supported
	vSGA	Supported
	NVIDIA GRID vGPU	Supported
	Intel vDGA	Supported
	AMD vGPU	Supported
Mobile Support	Client-side soft keyboard	Not supported
	Client-side soft touchpad	Not supported
	Full Screen Trackpad	Not supported
	Gesture Support	Not supported
	Multi-touch Redirection	Not supported
	Presentation Mode	Not supported
	Unity Touch	Not supported
Printing	Printer Redirection	Supports only Blast
	Location Based Printing	Supports only Blast
	Native Driver Support	Not supported
	PDF Download	Not supported
Security	FIPS-140-2 Mode Support	Not supported
	Imprivata Integration	Supported

	Client type	ThinOS
	TLS 1.0	Supported
	TLS 1.1	Supported
	TLS 1.2	Supported
	Client Device Authentication	Not supported
Session Collaboration	Session Collaboration	Not supported
	Read-only Collaboration	Not supported
Update	Automatic Updates	Not supported
	App Store update	Not supported
Other	Smart Policies	Not supported
	File Type Association	Not supported
	URL content redirection	Not supported
	Remember credentials	Supported
	Access to Linux Desktop - Blast Protocol	Supported
	Audio Playback	Supported
	Seamless Window	Not supported
	Launching multiple client instances using URI	Not supported
	One-click Install of Client	Not supported
	Parameter pass-through to RDSH apps	Not supported
	Performance Tracker	Supported
	Shortcuts from server	Not supported
Workspace ONE mode	Not supported	

Supported—Both PCoIP and Blast protocols are supported.

Not supported—Both PCoIP and Blast protocols are not supported.

Teradici updates

Supports the Teradici Cloud Access connection broker. Teradici technology enables you to securely access the remote applications using Teradici Cloud Access. You can manage and optimize your PCoIP-enabled clients. You can configure the Teradici Cloud Access broker setup from the **Remote Connections** dialog box.

Imprivata updates

Added support to treat smart card authentications as proximity card authentications.

You can use a smart card as proximity card and authenticate the user. When you insert the smart card into the smart card reader, the Imprivata agent uses the smart card unique serial number as the Unique ID (UID) of the proximity card. To use a smart card as proximity card, go to **Policies > Computer Policy** on the OneSign Administrator console and select the **Treat smart card authentications as proximity card authentications** check box.

UI enhancements

- UI enhancement to capture logs of the application console. To enable the client to log error messages of an application console, select the **Enable Application Console Log** check box in the **Troubleshooting** window. All logs are saved to the **trouble_shoot** folder with the name **TerminalName_proc_name_date_time.log**.
- UI enhancement to select DisplayPorts for DP audio. In the **Audio** tab, you can click either **Port 1** or **Port 2** to select your DisplayPort preference.
- UI enhancement to display Frames Per Second (FPS) in the **Performance Monitor** window. You can use the **Performance Monitor** option to display the CPU usage history with Frames Per Second (FPS), memory usage, and networking information.
- Supports customizing the text color in the lock window using the INI parameter `SignonStatusColor="rrr ggg bbb"`. The option specifies the sign-on status and the unlocking status text color respectively in the RGB string format. The decimal numbers rrr, ggg, and bbb are in the range of 0—255. By default, the status text color is light red ("255 60 60") for ThinOS lite and gray for ThinOS.
- Supports creating a VDI connection by a low-privileged user using the INI parameter `EnableNewConnection={yes,no}`. If the `PRIVILEGE` parameter is set to **Low** and the `EnableNewConnection` parameter is set to **yes**, an option to create a connection is enabled in the **Connect Manager** window on the classic desktop. On the zero desktop, the **Add Connection** button is added.
- Supports a new system variable—\$UMAC—for MAC address in the uppercase format.

NOTE:

- For more information about the ThinOS features, see the latest *Dell Wyse ThinOS Version 8.6 Administrator's Guide* at www.dell.com/manuals.
- For more information about the newly added parameters, see the latest *Dell Wyse ThinOS Version 8.6 INI Reference Guide* at www.dell.com/manuals.

Important notes

Tested environment

The following tables display the testing environment for the respective attributes:

Table 4. Tested environment - General components

Component	Version
Wyse Management Suite	1.4.0
Wyse Device Manager	5.7.3
Imprivata OneSign	5.5
Caradigm	6.3.1
NetScaler	11.1/12.0/12.1
StoreFront	3.15
Web Interface	5.4
SecureMatrix	4.1.0

Table 5. Test environment

	Windows 7	Windows 10	Ubuntu 16	Windows Server 2008 R2	Windows Server 2012 R2	Windows Server 2016	Windows Server 2019	APPs
VMware Horizon 7.0	Tested	Tested	Tested	Tested	Tested	Tested	Tested	Tested
Citrix Virtual Apps and Desktops 5.6	Tested	Not tested						
Citrix Virtual Apps 6.5	Not tested			Tested	Not tested			Tested
Citrix Virtual Apps and Desktops 7.6 and Citrix Virtual Apps 7.6	Tested	Not tested			Tested	Not tested		
Citrix Virtual Apps and Desktops 7.5 and Citrix Virtual Apps 7.15	Tested	Tested	Not tested	Tested	Tested	Tested	Not tested	Tested
Citrix Virtual Apps and Desktops 7.18 and Citrix Virtual Apps 7.18	Tested	Tested	Not tested		Tested	Tested	Not tested	Tested
Tera PCM for Amazon Web Services (AWS) 1.03	Tested*	Not tested						
Tera Cloud Access	Tested*	Not tested						
Amazon Web Services (AWS)	Tested	Tested	Not tested	Tested	Tested	Tested	Not tested	Tested

*AWS Workspace VM Operating System **Windows 7 style** is based on 2008 R2 RDSH.

Table 6. Tested environment - Citrix Virtual Apps and Desktops

Citrix Virtual Apps and Desktops/ Citrix Virtual Apps	Operating System	RTME	Lync client	Skype for Business (SFB) server
7.15	Windows 7	2.7	Skype For Business 2016	Skype For Business 2015
	Windows 10	2.7	Skype For Business 2016	Skype For Business 2015
	Windows 2016	2.7	Skype For Business 2016	Skype For Business 2015
7.18	Windows 7	2.7	Skype For Business 2016	Skype For Business 2015
	Windows 10	2.7	Skype For Business 2016	Skype For Business 2015
	Windows 2016	2.7	Skype For Business 2016	Skype For Business 2015

Fixed issues

Table 7. Fixed issues

Issue number	Summary
THINOS-852	Resolved the issue where the mouse scrolling doubles when using Blast protocol.
THINOS-756	Resolved the issue with the display quality.
THINOS-779	Resolved the Intel wireless issue that results to the occasional session reconnect.
THINOS-781	Resolved the occasional issue that occurs with the audio output when switching between USB audio playback devices.
THINOS-792	Resolved the issue where the mouse cursor disappears when using a VMware PCoIP session.
THINOS-838	Resolved the issue where the Oberthur ID-One PIV v8 cards does not function with certain smart card readers.
THINOS-875, TIR 98995	Resolved the issue where the main display changes from first display to the second after an image update.
THINOS-932	Resolved the issue where the session focus is not correctly after Imprivata login.
THINOS-999	Resolved the issue that occasionally causes reconnect=yes command to fail after a network outage.
THINOS-1031	Reduced DisplayPort audio delays.
THINOS-1032, TIR 99052	Resolved the issue where the mouse cursor is displayed in black and white after hardware cursor is enabled in Blast session.
THINOS-1171	Resolved the issue where the mouse pointer disappears when using PCoIP.
THINOS-1004, THINOS-1127	Resolved the USB device reporting issues when attaching or removing USB devices by improving the reliability.
THINOS-931	Resolved the issue where the system does not wake up from sleep mode after locking it.
THINOS-1390	Resolved the issue that prevents ThinOS to boot when a monitor is not connected.
THINOS-1053	Resolved the issue where pink blotches or blurred text is observed in VM Blast sessions.
THINOS-1240	Improved the quality of Citrix HDX microphone audio.
THINOS-1308	Improved the reliability when using a Belkin Omni F1DN104D KVM.
THINOS-1367	Resolved the issue where the audio could not be played on the internal speaker when multiple devices are attached to the client.

Issue number	Summary
THINOS-1464	Resolved the issue where, enabling wireless twice occasionally causes the firmware to stop responding.
THINOS-1241	Resolved the issue that occurs when using the NEC 27Wmi4 monitor.

INI parameters

The following table provides the list of newly added INI parameter in this release:

NOTE: Every INI option is associated with a corresponding INI parameter. Use these INI options along with the corresponding INI parameter.

Table 8. INI parameters

INI parameters	Description*
[VMWaitTime={0-3600}]	The parameter specifies the time remaining in seconds for reconnecting to a Horizon desktop before exiting the desktop. When the connection fails while connecting to a Horizon desktop, a message <code>Horizon Error- Waiting to recover</code> is displayed along with the countdown timer. The range is 0–3600. After the count down reaches 0, the connection is canceled and you can exit to the ThinOS desktop.
[RemoteDisplay.allowClientH264YUV444={True, false}]	The parameter allows you to enable or disable the High Color Accuracy feature in a Blast session with H.264 enabled.
[EnableNewConnection={yes, no}]	The parameter enables you to create a connection for a low-privileged user. When you set the <code>PRIVILEGE</code> parameter to Low and the <code>EnableNewConnection</code> parameter to yes , an option to create a connection is enabled in the Connect Manager window. In zero mode, the Add Connection button is added along with connection properties.
SignonStatusColor="rrr ggg bbb"	The parameter specifies the sign-on status and the unlocking status text color respectively in the RGB string format. The decimal numbers rrr, ggg, and bbb are in the range of 0—255. By default, the status text color is light red ("255 60 60") for ThinOS lite and gray for ThinOS.

*For detailed descriptions, see the *Dell Wyse ThinOS Version 8.6 INI Reference Guide* at www.dell.com/manuals.

Resources and support

Accessing documents using the product search

- 1 Go to www.dell.com/support.
- 2 In the **Enter a Service Tag, Serial Number, Service Request, Model, or Keyword** search box, type the product name. For example, `Wyse 3040 thin client` or `Wyse ThinOS`.
A list of matching products is displayed.
- 3 Select your product and click the search icon or press Enter.
- 4 Click **Manuals & documents**.

Accessing documents using product selector

You can also access documents by selecting your product.

- 1 Go to www.dell.com/support.
- 2 Click **Browse all products**.
- 3 Click **Thin Clients**.
- 4 Click the desired category, either **Wyse Hardware** or **Wyse Software**.
- 5 Click the desired product.
- 6 Click **Manuals & documents**.

Contacting Dell

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for technical support or customer service issues, see www.dell.com/contactdell.

If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or the product catalog.