



# Wyse thin clients with Wyse ThinOS

SECURE BY DESIGN



SECURE, TRUE  
THIN CLIENT EXPERIENCE



INTELLIGENT, UNIFIED  
MANAGEMENT



SMARTER, FASTER  
END-USER EXPERIENCES

Experience optimized performance with Wyse thin clients and software designed to enhance your digital workspaces with ultimate security and intelligent unified management. The new generation of Wyse thin clients powers your organization with a more efficient and effective digital experience.

Learn More at [Dell.com/Wyse](https://Dell.com/Wyse)

# Why Wyse ThinOS

## BUILT TO FIT YOUR ENVIRONMENT

Wyse ThinOS is a highly secure, virus resistant thin operating system that delivers a zero client experience with the latest high performance desktop virtualization protocols and a rich array of connectivity options to keep users at their productive best.



### SECURE, TRUE THIN CLIENT EXPERIENCE

End to end security starts at the end point. With zero attack surface, an unpublished API and encrypted data, Wyse ThinOS is virus and malware resistant. Unlike Windows® and Linux, ThinOS was created just for virtual desktops with patented technology from Dell, the thin client leader with over 220 patents in this area. Wyse ThinOS is certified with Citrix®, Microsoft®, VMware®, and other ecosystem partners. Zero themes for Citrix and VMware brokers provide a seamless connectivity experience for the end users.



### INTELLIGENT, UNIFIED MANAGEMENT

Wyse ThinOS requires zero external management software to configure, operate, and update, eliminating the need for IT to visit or touch the physical devices. As the number of devices grows, Wyse Management Suite offers process automation, insight, and helps lower costs for large deployments of Wyse endpoints. With secure, HTTPS-based communications and active directory authentication for role based administration, Wyse Management Suite keeps Wyse endpoints always up to date and the mobile app allows IT to view critical alerts, notifications on the dashboard and send real time commands with one tap at any time.



### SMARTER, FASTER END-USER EXPERIENCES

Ready to connect to Citrix®, Microsoft®, VMware® and Amazon Workspaces\* environments, this light weight firmware base about the size of a digital photograph has minimal overhead and a boot time of less than 10 seconds for a shorter time to productivity. Support for leading unified communications solutions enables clear, crisp high-definition audio/video calls in an optimized architecture and delivers a rich user collaboration experience.

\* requires Wyse ThinOS with PCoIP version

# Why Wyse ThinOS

## SECURE BY DESIGN



### BASE OS

#### Base Operating System

With no facility to run or invoke external applications nor any ability to store user data on the device, Wyse ThinOS has practically no opportunity to execute typical security exploits. As virtual desktop infrastructures centrally store and manage all data and applications on a server, utilizing thin clients with Wyse ThinOS help organizations to further prevent the loss and/or theft of sensitive information and assist organizations in their efforts to remain compliant with privacy regulations by protecting the end points from attack.



### PROTECTION

#### Vulnerability Protection

Virus programmers often target the largest OS communities where there is more to gain (notoriety, theft of data, etc.). Many vulnerabilities, viruses, and malware are transferred via internet browsers, email attachments, or by opening infected files in the local storage devices. These types of vulnerabilities are prevented in Wyse ThinOS, as users do not have access to a local browser and there is no run-time system for malware to latch onto or be executed. All internet and email applications are delivered via the centrally managed desktop virtualization environment where threats can be intercepted and managed without risks introduced via attacks on the edge device.



### SECURITY

#### Security Policy Statement

Dell is dedicated to help our customers comply with regulations such as Sarbanes Oxley, HIPAA, and others. Should a new update become available from Dell or our technology partners that further enhances protection or alleviates a security concern, customers will be notified and directed to properly packaged firmware that can then be easily propagated to currently deployed thin clients.

# Meet the Wyse Family

## WYSE THIN CLIENTS AND SOFTWARE



### WYSE 3040 THIN CLIENT

**At the top of its class.** Designed around Intel® quad-core processors, Wyse 3040 delivers business-class performance for virtual workspaces. Native support for dual display and robust connectivity including USB 3.1 Gen 1 for speedy data transfer provide convenient, confident connectivity and collaboration. Ideal for space-constrained environments, several custom designed mounting solutions help maximize work space set up and deliver an all-in-one experience with the behind-the-monitor mounting solution for Dell displays.



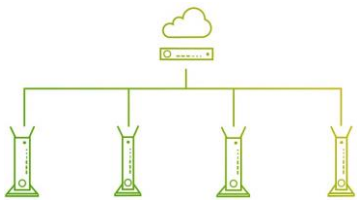
### WYSE 5040 ALL-IN-ONE THIN CLIENT

**Elegant and ultra-secure space-saving design.** The Wyse 5040 All-in-One (AIO) operates on Dell's exclusive highly secure Wyse ThinOS firmware solution and delivers a zero client experience for extreme ease of use and management. This sleek, thin all-in-one won't clutter users' desks and the elegant design perfectly complements any customer-facing or business space.



### WYSE 5070 THIN CLIENT

**Ultimate configurability:** To meet the advanced business needs of collaborative knowledge worker and graphics-intensive power users, the Wyse 5070 delivers high-speed processing with the latest-gen Intel quad-core processors. The Wyse 5070 boosts user productivity with a high level of configurability and twenty-one ports and slots options. Features like True 4K graphics, multiple DisplayPort interfaces, USB-C, several network connection options, and integrated CAC/SmartCard reader option help ensure an extended, productive user experience day after day.



### WYSE MANAGEMENT SUITE

Efficient hybrid cloud management solution to centrally configure, monitor, manage and optimize up to one million Wyse endpoints. Optimized for an out-of-box experience with less than 5 minutes for installation\*, Wyse Management Suite is the only thin client management solution that comes with a mobile app, allowing IT users to view critical alerts, notifications, and send real time commands instantly.

### WYSE THINOS VERSIONS

Wyse ThinOS version/ broker client	ThinOS	ThinOS with PCoIP
Citrix Receiver 4.x compatible	✓	✓
Microsoft RDP 10 compatible	✓	✓
VMware Horizon client with Blast Extreme	✓	✓
VMware Horizon client with Blast Extreme and PCoIP	-	✓

\* Based on Dell internal analysis, May 2017

# Wyse ThinOS 8.6

## Technical Specifications

<b>Supported Wyse thin clients</b>	<b>Wyse ThinOS 8.6:</b> Wyse 3040 thin client Wyse 5040 AIO thin client Wyse 5070 thin client Wyse 7010 thin client <b>Wyse ThinOS 8.6 with PCoIP</b> Wyse 3040 thin client Wyse 5040 AIO thin client Wyse 5070 thin client	Wyse 5010 thin client Wyse 5060 thin client Wyse 5070 Extended thin client  Wyse 5010 thin client Wyse 5060 thin client Wyse 5070 Extended thin client
<b>Server OS Infrastructure Support</b>	Citrix Virtual Apps and Desktops (formerly XenDesktop/XenApp) VMware Horizon Microsoft® Windows Terminal Server Amazon Workspaces (requires ThinOS with PCoIP option)	
<b>Citrix Receiver 4.X Compatible</b>	<ul style="list-style-type: none"><li>- Native Storefront authentication</li><li>- HDX Mediatream</li><li>- HDX Multi-stream</li><li>- HDX Plug-n-Play</li><li>- HDX 3D, HDX 3D Pro</li><li>- HDX Realtime Optimization Pack 2.5</li><li>- Seamless Windows</li><li>- Desktop restart (XenDesktop)</li><li>- Smartcard / proximity card authentication &amp; redirection</li><li>- Citrix Access Gateway and Citrix Secure Gateway support (direct LDAP or RSA authentication)</li></ul>	
<b>RDP 10 Compatible Client</b>	<ul style="list-style-type: none"><li>- Session prelaunch and lingering</li><li>- Optimized 2D drawing</li><li>- User roaming</li><li>- Flash</li><li>- UDP Audio</li><li>- Bandwidth estimation</li><li>- Monitor rotation and L-shaped desktop</li><li>- Local text echo (zero latency click)</li></ul>	
<b>VMware Horizon 4.8 Client</b>	<ul style="list-style-type: none"><li>- Multi-stream (simultaneous UDP and TCP connections)</li><li>- RemoteFX USB redirection</li><li>- Terminal Server Gateway</li><li>- Multi Codec (GFX)</li><li>- Enhanced video playback</li><li>- VOR (H.264 multimedia redirection)</li><li>- Windows® Media Player redirection</li><li>- Support for H.264 decoding &amp; AVC 4:4:4 on RDP 10 to deliver higher quality text rendering without losing benefit of H.264 compression</li><li>- Personal virtual desktops and virtual desktop pools</li></ul>	
<b>Unified Communications support</b>	<ul style="list-style-type: none"><li>- Multiple monitor support</li><li>- Bidirectional audio</li><li>- Copy/paste by files between sessions</li><li>- RD Connection Broker</li><li>- Load balancing</li><li>- Bandwidth estimation</li></ul>	
<b>ThinOS firmware updates</b>	VMware Blast Extreme protocol support ensures high quality video and graphics via an onboard GPU acceleration of H.264 video content and up to Full HD (1920 x 1200) resolution	
<b>Management</b>	<ul style="list-style-type: none"><li>- Blast extreme/H.264</li><li>- Smartcard Authentication</li><li>- Multimedia Support (for RDP connection)</li><li>- Blast UDP/BEAT</li><li>- SecureID Authentication</li></ul>	
	<ul style="list-style-type: none"><li>- <b>Citrix Realtime Media Engine And Multiple Audio Device Support</b> (version 2.5)</li><li>- <b>VMware Horizon Virtualization Pack for Skype for Business</b></li><li>- <b>Cisco Jabber Softphone for VDI</b> (formerly known as Virtualization Experience Media Edition (VXME). Support for Citrix Virtual Apps and Desktops.</li></ul>	
	ThinOS firmware and maintenance release updates are available on <a href="#">Dell eSupport</a> for the respective Wyse thin clients.	
	Simple file server management Wyse Management Suite	

# Wyse ThinOS 8.6

## Citrix Receiver Feature Matrix with ThinOS

Feature		ThinOS 8.6	Windows 4.10	Linux 13.8
Content	XenApp Applications	Y	Y	Y
	XenDesktop Desktops	Y	Y	Y
	Follow Me Apps / Subscriptions	Y	Y	Y
	Offline Apps (App V)	n/a	Y	Y
	File Open In Receiver	n/a	Y	Y
	Desktop Viewer/Toolbar	N	Y	Y
	Multi-tasking	Y	Y	Y
	Follow Me Sessions (Workspace Control)	Y	Y	Y
	URL Redirection	Y (Limitation to HTML5)	Y	Y
HDX	Audio Playback	Y	Y	Y
	UDP Audio	Y	Y	Y
	Bidirectional Audio (VoIP)	Y	Y	Y
	Web Cam (Video Chat)	Y	Y	Y
	Video Playback	Y	Y	Y
	Flash Redirection	Y (x86 only)	Y	Y (x86 only)
	Skype for business Optimization pack	Y (x86 only)	Y	Y (x86 only)
	Cisco Jabber UC Optimizations	Y (x86 only)	Y	Y
	Windows Multimedia Redirection	Y	Y	Y
	Local Printing	Y	Y	Y
	H.264-enhanced SuperCodec	Y	Y	Y
	Adaptive Transport	Y (DTLS audio limitation)	Y	Y
	Framehawk	N	Y	
	Client hardware acceleration	Y(Limitation to HW platform)	Y	Y
	Desktop Composition redirection	N	Y	
	3DPro Graphics	Y	Y	Y
	Remote FX	N	Y	
	Location Based Services	N	Y	
	Client drive mapping / File Transfer****	Y	Y	Y
	Generic USB redirection	Y	Y	Y
	SDWAN Support	To be verified	Y	Y
	Local App Access	n/a	Y	
	Multi-touch	N	Y	
	Mobility Pack	n/a	Y	
	HDX Insight	Y	Y	Y
	Experience Metrics	Y	Y	Y
	External Monitor	Y	Y	Y
	Session Sharing, Session Reliability	Y	Y	Y
Auto Client reconnect	Y	Y	Y	
Multi-port ICA	Y	Y	Y	
Security/Communication	Receiver for Web Access	n/a	Y	Y
	Remote Access via NetScaler Gateway	Y	Y*StoreFront only	Y
	NetScaler Full VPN	Y	Y	Y
	RSA Soft Token	Y		
	Challenge Response SMS	Y	Y	
	User Cert Auth via NetScaler Gateway	Y	Y	
	Smart Card (CAC,PIV Etc.)	Y	Y	Y
	Proximity/Contactless Card (Fast Connect)	Y	Y	Y
	Pass Through Authentication	Y	Y	
	SAN Cert	To be verified	Y	Y
	SHA2 Certs	Y	Y	Y
	TLS 1.1/1.2	Y	Y	Y
	AES & 3DES Encryption	Y	Y	Y
	Smart Access	Y	Y	Y
IPV6	Y	Y	Y	
Update	Auto Discovery/Configuration	N	Y	Y
	App Store Updates/Citrix update	N	Y	

# Wyse ThinOS 8.6

## Horizon Client Feature Matrix with ThinOS

	Client Type	ThinOS 8.6	Windows client 4.8	Linux client 4.8
<b>Client Appearance and Workflow</b>	Customer branding	N	Y	
	Kiosk Mode	Y (1)	VDI only	VDI only
	Localization (EN, FR, DE, JP, CH, KR, SP)	Y (1)	Y	Y
<b>Broker Connectivity</b>	XML - API Version	14	14	14
	SSL, SSL Certificate Verification	Y (1)	Y	Y
	Disclaimer Dialog	Y (1)	Y	Y
	Security Server compatibility	Y (1)	Y	Y
	Multi Broker/Multi Site Redirection -DaaS	N	Y	Y
	Client Info	Y (1)	Y	Y
	Phonehome	n/a	Y	Y
	USB Phonehome	n/a	Y	-
<b>Broker Authentication</b>	Password Authentication, Password Change	Y (1)	Y	Y
	RSA Authentication	Y (1)	Y	Y
	Radius	Y (1)	Y	Y
	Integrated RSA SecurID token generator	Y (1)	-	-
	Log in as current user, Nested log in as current use	N	Y	-
	Biometric authentication	N	-	-
	Unauthentication Access	Y (1)	Y	-
<b>Smartcard</b>	x.509 Certificate Authentication (Smart Card)	Y (1)	Y	Y
	CAC support, .Net support	Y (1)	Y	Y
	PIV support	Y (1)	Y	-
	Derived Credentials	N	Y	-
<b>Desktop Operations</b>	Reset, Restart	Y (1)	VDI only	VDI only
	Log Out	Y (1)	Y	Y
<b>Session Authentication</b>	Smart Card	Y (1)	Y	Y
	Single Sign On	Y (1)	Y	Y
<b>Session Management (Blast Extreme &amp; PCoIP)</b>	Switch desktops	Y (1)	Y	Y
	Auto-Retry	Y (1)	Y	Y
	Fullscreen mode, Fullscreen toolbar	Y (1)	Y	Y
	Windowed mode	Y (1)	Y	Y
	Time Zone Synchronization	Y (1)	Y	Y
	Jumplist integration (Windows 7 - Windows 10)	N	Y	-
<b>Client Customization</b>	Command Line Options	N	Y	Y
	URI Schema	N	Y	Y
	Preference File	N	Y	Y
	Non Interactive Mode	N	Y	Y
	GPO - based customization	N	Y	-
<b>Protocols supported</b>	Blast Extreme	Y (1)	Y	Y
	H.264 -HW decode	Y (1)	Y	Y
	JPEG / PNG	Y (1)	Y	Y
	Blast Extreme Adaptive Transportation	Y (1)	Y	Y
	RDP 6.x, RDP 7.x	Y (1)	VDI only	VDI only
	RDP 8.x, 10.x	Y (1)	VDI only	-
	PCoIP		Y	Y
<b>Protocol Enhancements</b>	RDP - VC Bridge	Y (1)	Y	Y
	Session Enhancement SDK	N	Y	Y
<b>Monitors / Displays</b>	Dynamic Display Resizing	Y (1)	Y	Y
	Multiple Monitor Support, Multiple Monitor Selection	Y (1)	Y	Y
	External Monitor Support	n/a	Y	Y
	Display Pivot	Y (1)	Y	Y
	Multiple Aspect Ratio support	Y (1)	Y	Y
	Number of displays supported	4	4	4
	Maximum Resolution	3840x2160	3840x2160	3840x2160
	High DPI scaling, DPI Sync	Y (1)	Y	Y
<b>Input Device (Keyboard / Mouse)</b>	Relative mouse	N	Y	Y
	Keyboard Mapping, International Keyboard Support	Y (1)	Y	Y
	Unicode Keyboard Support	N	-	-
	Input Method local/remote switching	N	Y	-
	IME Sync	N	Y	Y
<b>Clipboard Services</b>	Clipboard Text	Y (1)	Y	Y
	Clipboard Graphics	N	Y	-
	Clipboard memory size configuration	N	Y	Y
<b>Client Caching</b>	View Agent to Client - side caching	N	Y	Y

(1) Supported with VDI, RDS Hosted Desktops and applications.

# Wyse ThinOS 8.6

## Horizon Client Feature Matrix with ThinOS

	Client Type	ThinOS 8.6	Windows client 4.8	Linux client 4.8
<b>Connection Management</b>	Blast network recovery	Y (1)	Y	Y
	IPv6 support	Y (in Blast session)	Y	-
	PCoIP IP roaming	Y (1)	Y	Y
<b>High - Level Device Redirection</b>	Serial (COM) Port Redirection	N	VDI only	-
	Client Drive Redirection/File Transfer	Y (1)	Y	Y
	Scanner (TWAIN/WIA) Redirection	N	Y	-
	x.509 Certificate (Smart Card)	Y (1)	Y	Y
<b>Real-Time Audio-Video</b>		Y (1)	Y	Y
<b>USB Redirection (Generic USB/HID)</b>		Y (1)	Y	Y
<b>Unified Communications</b>	Cisco UC Jabber	N	VDI only	VDI only
	Avaya UC One-X Desktop	N	VDI only	VDI only
	Microsoft Lync 2013	N	Y	-
	Skype for business	Y (in Blast session)	Y	Y
<b>Multimedia Support</b>	Multimedia Redirection (MMR)	N	Y	Y
	Flash URL Redirection (Unicast/Multicast)	N	VDI only	VDI only
	Flash Redirection	N	Y	-
<b>Graphics</b>	vDGA, vSGA, Intel vDGA, AMD vGPU	n/a	VDI only	VDI only
	NVIDIA GRID vGPU	n/a	Y	Y
<b>Printing</b>	Printer Redirection, Location Based Printing	Y (in Blast session)	Y	Y
<b>Security</b>	FIPS-140-2 Mode Support	n/a	Y	Y
	Imprivata Integration	Y (1)	Y	-
	TLS 1.0, TLS 1.1, TLS 1.2	Y (1)	Y	Y
	Client Device Authentication	N	Y	-

(1) Supported with VDI, RDS Hosted Desktops and applications.

Source: [https://kb.vmware.com/servlet/fileField?entityId=ka134000000SZ1CAAW&field=Attachment\\_1\\_Body\\_s](https://kb.vmware.com/servlet/fileField?entityId=ka134000000SZ1CAAW&field=Attachment_1_Body_s)