

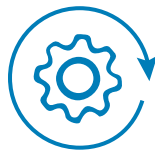


SECURE BY DESIGN

Wyse thin clients with Wyse ThinOS



**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

Why Wyse ThinOS

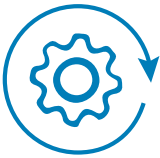
BUILT TO FIT YOUR ENVIRONMENT

Dell's exclusive Wyse ThinOS is the most secure thin client operating system¹ delivering 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 With zero attack surface, an unpublished API and encrypted data, Wyse ThinOS is virus and malware resistant.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 Workspaces² 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.

¹-Based on Dell internal analysis of competitive products, March 2019.

²-Requires Wyse ThinOS with PCoIP version

Meet the Wyse Family

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 WITH THINOS

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 5070 THIN CLIENT



Ultimate configurability: To meet the advanced business needs of collaborative knowledge workers 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 5470 ALL-IN-ONE THIN CLIENT



Get lost in the project on the beautiful 23.8" FHD IPS display with support for a second display at 4K at 60Hz for even more productivity. Make space for the things that matter with a space-saving footprint and multiple stand options, so you can find the position that gets you to peak productivity with optimal comfort. Featuring DisplayPort, RJ-45, six USB ports and Bluetooth 5.0 option, you can benefit from a broad support of peripherals to empower a faster, smarter workflow and seamless collaboration with built-in support for unified communications

WYSE 5470 MOBILE THIN CLIENT



Connect, collaborate and work confidently on the move with the Wyse 5470 mobile thin client. A full HD 14" display, built-in support for unified communications and rich connectivity options deliver a productive user experience and faster and smarter collaboration. With inherent Wyse software security and ultra-manageability, the Wyse 5470 delivers a robust mobile cloud computing experience and keep your data safe in the cloud while you transition confidently from your desk to meetings to remote work.,

WYSE THINOS VERSIONS

Wyse ThinOS version/ broker client

Citrix Receiver 4.x compatible

Microsoft RDP 10 compatible

VMware Horizon client with Blast Extreme

VMware Horizon client with Blast Extreme and PCoIP

ThinOS

✓

✓

✓

-

ThinOS with PCoIP

✓

✓

✓

✓

Features & Technical Specifications

TECHNICAL SPECIFICATIONS

| Feature | Technical Specifications | |
|---|--|---|
| Supported Wyse thin clients | Wyse ThinOS 8.6: Wyse 3040 thin client Wyse 5070 Extended thin client Wyse 5470 AIO thin client Wyse 5470 mobile thin client | Wyse 5070 thin client |
| | Wyse ThinOS 8.6 with PCoIP Wyse 3040 thin client Wyse 5070 thin client | Wyse 5070 Extended thin client Wyse 5470 AIO thin client Wyse 5470 mobile thin client |
| Server OS Infrastructure Support | Citrix Virtual Apps and Desktops (formerly XenDesktop/XenApp) VMware Horizon Microsoft® Windows Terminal Server Amazon Workspaces (requires ThinOS with PCoIP option) | |
| Citrix Receiver 4.X Compatible | <ul style="list-style-type: none">- Native Storefront authentication- HDX Mediastream- HDX Multi-stream- HDX Plug-n-Play- HDX 3D, HDX 3D Pro- HDX Realtime Optimization Pack 2.5- Seamless Windows- Desktop restart (XenDesktop)- Smartcard / proximity card authentication & redirection- Citrix Access Gateway and Citrix Secure Gateway support (direct LDAP or RSA authentication) | <ul style="list-style-type: none">- Session prelaunch and lingering- Optimized 2D drawing- User roaming- Flash- UDP Audio- Bandwidth estimation- Monitor rotation and L-shaped desktop- Local text echo (zero latency click) |
| RDP 10 Compatible Client | <ul style="list-style-type: none">- Multi-stream (simultaneous UDP and TCP connections)- RemoteFX USB redirection- Terminal Server Gateway- Multi Codec (GFX)- Enhanced video playback- VOR (H.264 multimedia redirection)- Windows® Media Player redirection- Support for H.264 decoding & AVC 4:4:4 on RDP 10 to deliver higher quality text rendering without losing benefit of H.264 compression- Personal virtual desktops and virtual desktop pools | <ul style="list-style-type: none">- Multiple monitor support- Bidirectional audio- Copy/paste by files between sessions- RD Connection Broker- Load balancing- Bandwidth estimation |
| VMware Horizon 5.x Client | VMware Blast Extreme and optional PCoIP protocols 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 <ul style="list-style-type: none">- Blast extreme/H.264- Blast Network Condition Settings- Blast High Color Accuracy- PCoIP Relative Mouse- Real-Time Audio-Video Support- USB Redirection- Smartcard Authentication- Multimedia Support (for RDP connection)- Blast UDP/BEAT- SecureID Authentication | |
| Unified Communications support | <ul style="list-style-type: none">- Citrix Realtime Media Engine And Multiple Audio Device Support- VMware Horizon Virtualization Pack for Skype for Business- Cisco Jabber Softphone for VDI (formerly known as Virtualization Experience Media Edition (VXME). Support for Citrix Virtual Apps and Desktops. | |
| ThinOS firmware updates | ThinOS firmware and maintenance release updates are available on Dell eSupport for the respective Wyse thin clients. | |
| Management | Simple file server management Wyse Management Suite | |

Wyse ThinOS 8.6

CITRIX RECEIVER FEATURE MATRIX WITH THINOS

| Feature | | ThinOS 8.6.024 | Windows 4.10 | Linux 13.7 |
|---------|--|-------------------------------|--------------|--------------|
| 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 | N | 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 |

Wyse ThinOS 8.6

CITRIX RECEIVER FEATURE MATRIX WITH THINOS

| Feature | | ThinOS 8.6 | Windows 4.10 | Linux 13.8 |
|------------------------|---|----------------|-------------------|------------|
| 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 | |

Source: <https://support.citrix.com/article/CTX104182>

Wyse ThinOS 8.6

HORIZON CLIENT FEATURE MATRIX WITH THINOS

| | Client Type | ThinOS 8.6_024 | Windows client 4.10 | Linux client 4.10 |
|---|---|----------------|---------------------|-------------------|
| Client Appearance and Workflow | Customer branding | Not Supported | • | - |
| | Kiosk mode | Supported | • | • |
| | In-product help | Not Supported | - | - |
| | Online help | Not Supported | • | • |
| | English, French, German, Japanese, Traditional Chinese Simplified, Chinese localization | Supported | • | • |
| | Korean localization | Not Supported | • | • |
| | Spanish localization | Not Supported | • | • |
| Broker Connectivity | XML-API version | 13 | 15 | 15 |
| | 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 | • | - |
| | Unauthentication access | Supported | • | • |
| Smartcard | 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 & PColP) | Switch desktops | Supported | | • |
| | Multiple Connections | Supported | • | • |
| | App Launch on Multiple end points | Supported | • | • |
| | Auto-Retry | Supported | • | • |
| | Auto-Retry 5+ minutes | Supported | • | • |

Wyse ThinOS 8.6

HORIZON CLIENT FEATURE MATRIX WITH THINOS

| | Client Type | ThinOS 8.6_024 | Windows client 4.10 | Linux client 4.10 |
|---|---|----------------------|---------------------|-------------------|
| | 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 | Blast Supported Only | • | • |
| | 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, RDP 7.x | Supported | • | • |
| | RDP 8.x, 10.x | Supported | • | - |
| | PCoIP | Supported | • | • |
| Protocol Enhancements | RDP-VC Bridge | Blast Supported Only | • | • |
| | Session Enhancement SDK | Not Supported | • | • |
| 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 | 4 | 4 |
| | Maximum Resolution | 3840x2160 | 3840x2160 | 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 | PCoIP Supported Only | • | • |
| | 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 | • | • |

Wyse ThinOS 8.6

HORIZON CLIENT FEATURE MATRIX WITH THINOS

| | Client Type | ThinOS 8.6_024 | Windows client 4.10 | Linux client 4.10 |
|-------------------------------|---|----------------------|---------------------|-------------------|
| Clipboard Services | Clipboard Text | Blast Supported Only | • | • |
| | Clipboard Graphics | Not Supported | • | - |
| | Clipboard memory size configuration | Not Supported | • | • |
| | Drag and Drop | Not Supported | • | - |
| Client Caching | View Agent to Client-side caching | Blast Supported Only | • | • |
| 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 | • | • |
| | 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 | Blast Supported Only | • | • |
| Multimedia Support | Multimedia Redirection (MMR) | Not Supported | • | • |
| | Flash URL Redirection (Unicast/Multicast) | Not Supported | • | • |
| | Flash Redirection | Not Supported | • | |
| | HTML5 Redirection | Not Supported | • | |

Wyse ThinOS 8.6

HORIZON CLIENT FEATURE MATRIX WITH THINOS

| | Client Type | ThinOS 8.6_024 | Windows client 4.10 | Linux client 4.10 |
|------------------------------|---|----------------------|---------------------|-------------------|
| 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 | Blast Supported Only | • | • |
| | Location Based Printing | Blast Supported Only | • | • |
| | Native Driver Support | Not Supported | • | |
| Security | FIPS-140-2 Mode Support | Not Supported | • | • |
| | Imprivata Integration | Supported | • | - |
| | TLS 1.0 | Supported | - | - |
| | TLS 1.1, 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 with VDI, RDS Hosted Desktops and Apps
- Only supported with VDI

Source: <https://kb.vmware.com/s/article/67184>