Dell Cloud Client-Computing

Interactive overview
Welcome to Dell Cloud Client-Computing

Dell offers a complete spectrum of virtual desktop and app solutions and service delivery models including both pre-configured and customized options, on-premise infrastructure options, hosted and managed services offerings, cloud-based client, and desktop virtualization hardware and software components.

Why Dell for Desktop and Application Virtualization?

Use cases
Matching use cases to technologies

Dell EMC Ready Solutions for VDI
End-to-end infrastructure solutions for desktop virtualization that include datacenter components, services, software, endpoints and Dell EMC Professional Services to simplify desktop management and scale effortlessly as your business grows

Wyse endpoints & software
An integrated portfolio of endpoint clients, software and services designed for optimal delivery of applications and virtual desktops

Dell.com
Dell Cloud Client-Computing is comprised of an integrated portfolio of end-to-end client virtualization components including endpoint devices, software and services. Dell EMC Ready Solutions for VDI consist of datacenter and infrastructure hardware and Hyper-Converged Infrastructure (HCI) appliances, combining the latest virtualization and management technologies with Dell EMC’s industry leading integrated servers, storage, networking, and Dell EMC professional services, paired with leading virtualization software, to simplify desktop and app management and scale effortlessly as your business grows.

Most importantly, Dell’s Cloud Client-Computing portfolio is designed to deliver a personalized high fidelity experience for end users across a wide variety of devices.

Benefits of our solutions and Dell and Dell EMC differentiators

- Accelerate time to value with pre-configured, pre-engineered solutions for Citrix® and Microsoft® and VMware®
- Flexible delivery models that include starter kits, mid-range and full rack systems and hyper-converged infrastructure (HCI) appliances to address the realities of your environment
- Variety of professional services that enhance your capabilities: consulting, support, implementation and management
- Vertical solutions to address industry-specific challenges including healthcare, government and education
- One single point of service for the entire solution
- A wide variety of delivery options including desktop virtualization, application streaming, terminal services and cloud-based client virtualization
- Solutions that match the size and needs of your organization
- Secure financial options through Dell Financial Services
Desktop and application virtualization typical use cases

<table>
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<tr>
<th>Vertical</th>
<th>User types</th>
<th>Drivers &amp; benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>Doctors</td>
<td>Fewer help-desk calls/more employee uptime, Improved regulatory compliance (Sarbanes-Oxley, state laws, PCI, HIPAA, etc.), Heightened data security, Reliability and business continuity, Employee work-life balance</td>
</tr>
<tr>
<td>Government</td>
<td>Nurses, Clinical technicians</td>
<td>Secure environments, Training facilities, Mobility, Remote work</td>
</tr>
<tr>
<td>Education</td>
<td>Computer labs, Mobile and commuter students, Test Administration</td>
<td>Improved application access and performance, Standardized images, applications and support, Fewer logins through session portability, Better customer care, Enable an increasingly mobile workforce</td>
</tr>
<tr>
<td>Financial services</td>
<td>Customer service reps, Business continuity, Global scale, Trading floors, Field branch offices</td>
<td>- Point of sale, Manager’s terminals, Public presentation, - 3D graphic intensive, Manufacturing, Energy and exploration, Entertainment</td>
</tr>
<tr>
<td>Retail</td>
<td>- Point of sale, Manager’s terminals, Public presentation</td>
<td>- 3D graphic intensive, Manufacturing, Energy and exploration, Entertainment</td>
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<td>Industry</td>
<td>- 3D graphic intensive, Manufacturing, Energy and exploration, Entertainment</td>
<td>- 3D graphic intensive, Manufacturing, Energy and exploration, Entertainment</td>
</tr>
</tbody>
</table>
Dell Client Virtualization Solutions

VDI Datacenter benefits
Where simplicity meets performance

Ready Solutions for VDI
- Hyper-converged Appliances
- VDI Reference Architectures

Dell EMC Services
Dell ProSupport and Professional Services
Today's workforce expects the freedom and flexibility to work from anywhere, anytime — using their preferred device(s). IT is expected to save money and do more with fewer people, and your organization needs to be more productive, efficient and competitive. But how do you get there?

Dell Cloud Client-Computing lets any user access any application on any device — personal or corporate-owned — while keeping your organization's systems and data secure, manageable and reliable.

Dell and Dell EMC offer a complete spectrum of virtual desktop and application solution and service delivery models, including both pre-configured and customizable options, managed service offerings and subscription based solutions.
Dell EMC Ready Solutions for VDI: Datacenter Portfolio Overview

Your choice of datacenter hardware, that scales with your needs

Citrix®, Microsoft® or VMware® based software platforms*

*Dell EMC Ready System for VDI on XC Series, powered by Nutanix

Dell EMC Ready Bundles for VDI (For traditional 3-tier infrastructure)

Dell EMC Ready System for VDI on VxRail

Hyper-converged Appliances

Dell EMC Ready Nodes for VDI, with:
- VMware vSAN
- Microsoft Storage Spaces Direct

Dell EMC Ready System for VDI on XC Series, powered by Nutanix

Dell EMC VDI Complete Solutions

Full racks and modular options

Learn more

Continue
Hyper-converged Appliances

Easy to purchase and deploy for the fastest time to value

While the advantages of desktop and application virtualization are clear, these projects can seem complex for some enterprises. Facing design, planning, procurement, and implementation decisions, many businesses seek the benefits of desktop virtualization, but lack the time or resources to effectively build such an infrastructure. For our customers seeking rapid time-to-value, we propose Ready Systems for VDI and Ready Nodes for VDI, a comprehensive line of hyper-converged appliance solutions simplifying and accelerating any desktop virtualization initiative. Whether you’re a lean SMB looking to implement a client virtualization solution, or a large enterprise wanting to reliably pilot and scale, Dell and Dell EMC's appliances offer easy deployments and procurement. Converged and hyper-converged infrastructure appliances are also available, creating an unmatched lineup of desktop and application virtualization appliances for a diversity of use cases.

Each appliance is integrated with Dell EMC’s industry-leading PowerEdge servers and storage. Designed to optimize client virtualization workload performance with products and applications from our strategic partners including Citrix, Microsoft, VMware, NVIDIA and Nutanix, there’s an appliance to match your organization’s every need: from powerful workstation-grade user workspaces to thousands of user workspaces that cater to knowledge workers.

- Learn about Dell EMC VDI Complete Solutions
- Learn about Dell EMC Ready System for VDI on VxRail
- Learn about Dell EMC VMware vSAN Ready Nodes for VDI
- Learn about Dell EMC Ready System for VDI on XC Series with Nutanix
- Learn about Dell EMC Microsoft Storage Spaces Direct Ready Nodes for VDI

VDI Reference Architectures

Maximum choice and flexibility for your specific needs

Ready Bundles for VDI are reference architectures for traditional 3-tier infrastructure which are pre-tested, certified desktop virtualization infrastructure configurations designed to help you create the best solution for your needs. Backed by thousands of hours of in-lab testing, these Reference Architectures are ideal for organizations with a sophisticated IT environment and IT resources that require robust, flexible and highly scalable desktop and application virtualization.

Supporting a broad range of graphics, local and virtual storage, and collaboration capabilities, these reference architectures provide the optimal price/performance ratio for their workload.

Based upon industry standards, the solution is available for blade or rack mount server architectures. It enables a high degree of choice through an array of pre-qualified components, while still pre-engineered to speed time-to-value. The Reference Architectures for the Ready Bundles for VDI simplify the deployment of virtualized desktops for environments starting from 50 and scaling to 50,000+ users.

- Learn about Ready Bundles for VDI Reference Architectures
- Learn more
Dell EMC VDI Complete Solutions
Powered by Horizon

Breaking down the barriers for desktop transformation

Everything. Together.
VDI Complete is an all-in-one pre-validated solution that is discounted across the entire stack and supported end-to-end by Dell. It features the Dell EMC VxRail appliance and vSAN Ready Nodes, market-leading VMware Horizon and Horizon Apps as well as optional add-ons such as NVIDIA Tesla graphics cards and Dell Wyse thin clients. The solution is optimized to allow you to get a full desktop or app virtualization environment up and running faster and streamline your day-to-day operations.

One company is all you need.
VDI Complete Solutions are fully validated, infrastructure to endpoint, to deliver the utmost in VDI performance and reliability. With an integrated support model, there's only one company to call for hardware and software support, which provides you with a low-risk way to get the help you need, every step of the way.

Mobilize your workforce quickly, delivering desktops and apps in minutes.
VMware Horizon - recognized as an industry leader by IDC - provides end users with access to all of their virtual desktops and applications through a single digital workspace in a few simple clicks. It’s a streamlined approach to managing desktop and application delivery while containing costs and ensuring that end users can work anytime, anywhere, across any device, securely.

At a glance

• **Simplified VDI:** VDI Complete provides fully validated, fully supported end-to-end solutions. You can rest assured that your entire environment is optimized to deliver the best experience possible. Build your own solution with vSAN Ready Nodes, buy hyper-converged with VxRail, or let a Dell EMC expert design and build your environment for you.

• **Ease of Management:** Efficient, centralized management of user workspaces and endpoints.

• **Reduced CapEx/OpEx:** VDI Complete Solutions can be purchased outright or financed at a low cost per user per month. With over 200 automated configuration tasks and workflows, 1 click to shut down a VM cluster and 5 minutes to scale up by adding a new appliance, VDI Complete solutions reduce the operating burden in building, managing and scaling a virtual desktop and application environment.

• **Single vendor support:** When you are in need of support, customers benefit from having Dell as a single point of contact for any need.

• **Speed & Flexibility:** Rapid and predictable deployment with the freedom to scale up or down as business needs change.

• **High-performance:** Deliver rich high-performance desktops and applications to your users virtually. Through a number of Dell EMC hardware optimizations and the optional inclusion of NVIDIA Tesla graphics cards, users will experience a native experience for almost any type of workload while benefiting from the mobility and security that a virtualized environment offers.

Components

![Image of components]

Learn more here
Dell EMC Ready System for VDI on VxRail

A full suite of capabilities to meet business needs

Dell EMC Ready System for VDI on VxRail is built on our industry-leading Dell EMC VxRail V- and E-Series servers. This true hyper-converged infrastructure (HCI) appliance provides performance, flexibility and scale for desktop and application virtualization environments.

Dell EMC VxRail includes a wide range of software, tools and resources from Dell EMC and VMware. The VMware hyper-converged software is vSphere Ready and based on vSAN Software-Defined Storage (SDS). The Dell EMC deployment and support tools integrate the software management within VxRail Manager. Finally, data protection and replication are included and can support either hybrid or all flash storage configurations.

The VxRail is unique in that all nodes in an appliance must be the same but the appliances within a given cluster do not need to match, with the exception that the storage and network levels cannot be mixed. In other words, once an initial appliance is deployed, nodes can be added one at a time and can be different types and different numbers for each appliance. Our solution easily handles peak performance requirements including boot, login and read/write storms. Scale is linear with predictable performance and cost.

Benefits

- **Flexibility and scalability:** Multiple configurations are available on the Dell EMC PowerEdge server platform. The desktop virtualization configuration include options from small businesses and remote offices to large enterprise class environments. The days of over provisioning or under resourcing are gone.
- **Reduce time-to-value:** Streamlined order management, simplified deployment and integrated tools drastically shorten the time to have the appliance up and running.
- **Simplified management:** The VxRail integrates management into a single pane of glass for the entire appliance. IT resources with the knowledge of vCenter can intuitively manage the Dell EMC management software.
- **Improved user experiences for digital workspaces:** With the inclusion of high performance virtualized graphics, all users benefit from rich graphical functionality. Power users and engineers benefit from workstation grade graphics without performance degradation or lag time.

Components

- Based on Dell EMC PowerEdge servers, storage and networking.
- VMware Horizon or Citrix XenDesktop connection brokers.
- VMware vSphere hypervisor and vSAN SDS.
- Entire cluster must be hybrid or all flash storage and 1G or 10G networking.
- 3 like node requirement for initial deployment for hybrid appliance.
- 4 like node requirement for initial deployment for all flash appliance.
- Streamlined ordering process.
- Integrated and simplified deployment.
- Integrated management plane.
- Linear scale with predictable performance and cost per seat.
- Includes deduplication, high availability and disaster recovery.
- VMware Horizon certified and integration into management pane.
- Certified for NVIDIA GRID enhanced virtualized graphics.

Learn more here
100% VMware powered Software Defined Solutions from Dell and Dell EMC

Dell EMC VMware vSAN™ Ready Nodes for VDI deliver simplified software-defined-storage (SDS) solutions for virtual desktops and applications. Our vSAN with Horizon solutions end-to-end are 100% VMware stack solutions built on Dell EMC PowerEdge servers and are delivered through Reference Architectures for the “Build your own” customers, vSAN Ready Nodes and vSAN Ready Nodes Factory Installed.

All allow IT administrators to provision VMware vSphere®-embedded, enterprise ready storage solutions, all through VMware vCenter™ tools. Dell EMC Solutions for vSAN provide high-performance, low-cost datastore (virtualized storage segments for specific user pool) SDS environments optimized for Horizon virtual desktops and apps. They give Horizon deployments granular, elastic storage capacity with linear scale, predictive performance and simplified management. vSAN is included in VMware Horizon Advanced and Enterprise editions.

**At a glance**

- **Simplified storage for desktops and apps:**
  - **Predictability:** You can set automated storage policies at the VM level, allowing storage to self-tune to balance storage resources to align with desktop and application user demands, ensuring predictable performance.
  - **Pay-as-you-grow and linear scale:** These solutions allow you to add additional storage capacity in small, manageable increments for gradual scale affordably. If your virtual storage needs grow quickly, simply add another vSAN node to add the necessary capacity.

- **Improved performance and user experience:**
  - You are able to adjust your desktop and app storage capacity dynamically and avoid expensive physical storage systems or the common practice of over-provisioning for IOPS which can be very expensive. Additionally, with the self-tuning capabilities and balancing of integrated storage policies, these solutions deliver storage performance critical to ensuring virtual desktops and apps meet the expectations of users accustomed to physical devices.

- **Streamlined procurement:** You are able to purchase pre-defined, pre-configured vSAN Ready Nodes through the Ready Nodes HCL that determines the proper bill of materials or converged appliance to fit your needs.

- **Virtualized Graphics:** Enhanced user graphics are essential to many client virtualization environments and are incorporated into the Dell EMC PowerEdge R740xd vSAN Ready Nodes solutions.

**Benefits**

- **Reduce cost and complexity:** Our solutions simplifies managing and automated storage by eliminating traditional, purpose-built storage systems. vSAN management is incorporated into vCenter, a tool that IT staff are familiar with and allowing IT resources to be proactive rather than reactive. vSAN integrates storage policies into VM-creation workflow, ensuring each VM has the storage it needs.

- **Improved performance and user experience:** You are able to adjust your desktop and app storage capacity dynamically and avoid expensive physical storage systems or the common practice of over-provisioning for IOPS which can be very expensive. Additionally, with the self-tuning capabilities and balancing of integrated storage policies, these solutions deliver storage performance critical to ensuring virtual desktops and apps meet the expectations of users accustomed to physical devices.

- **Streamlined procurement:** You are able to purchase pre-defined, pre-configured vSAN Ready Nodes through the Ready Nodes HCL that determines the proper bill of materials or converged appliance to fit your needs.

- **Licensing:** VMware vSAN licenses are included in Horizon Advanced or Enterprise licenses.

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Learn more here
Dell EMC Ready System for VDI on XC Series
for Client Virtualization, powered by Nutanix®

Scale predictably and efficiently

Dell EMC Ready System for VDI on XC Series runs on the Dell EMC XC Series Hyper-Converged Appliance, an HCI solution powered by Nutanix Software Defined Storage (SDS) technology on a variety of Dell EMC servers. Simplify desktop virtualization and application through easy to order appliance-based configurations with predictable per-seat scaling costs to fit a broad range of use cases, and a combination of native tools and a powerful UI which allows users to deploy and manage virtual desktops and application more easily. Perfect for virtual desktop environments of any size, the XC Series for VDI is ideal for organizations looking for a virtualization solution that deploys rapidly and scales easily.

At a glance

• Converged Infrastructure Appliance: An appliance architecture built around the Dell EMC XC Series Hyper-Converged Appliances, delivering simple, rapid deployment and predictable, efficient scaling
• Developed with Nutanix: The Dell XC was developed with Nutanix, an industry leader in converged infrastructure based, software-defined data center solutions
• Choice of configuration: Offered in prescriptive configurations for client virtualization based on user type
• Storage-focused features: High availability, dedupe, compression and data tiering
• Endpoint Compatible: Works with an array of thin/zero clients including Wyse zero clients optimized and verified for Citrix, VMware, and Microsoft
• Also for SMB customers: A particular version, the Dell XC Xpress, has been optimized for SMB organizations wanting to virtualize 100-350 seats with 3 or 4 nodes only. Customers can deploy and manage easily, with Microsoft Azure backup option

Benefits

• Predictable cost: Avoid ‘step function’ infrastructure costs through a converged infrastructure with compute and storage for a specific number of users*
• Predictable scaling & performance: Add additional nodes to increase the number of users or increase performance
• Rapid Time-to-value: Preset configurations packaged for the right blend of price and performance make ordering client virtualization as easy as purchasing a Dell laptop
• Faster deployment: Save costs by configuring and deploying virtual desktops in hours, not days
• Easier to manage: Monitor and manage through Nutanix Prism single pane of glass management console
• Citrix Cloud managed environments can be easily deployed on XC Series for VDI using the Citrix Workspace Appliance integration

Components

• Citrix XenDesktop, VMware Horizon
• Choice of VMware ESXi, Nutanix Acropolis or Microsoft Hyper-V hypervisors
• Based on Dell EMC PowerEdge, XC640 and XC740xd with NVIDIA GPU options
• Dell EMC XC Series Hyper-Converged Appliance for VDI architecture document
• Nutanix Prism management application
• Nutanix 3 or 5 year SW Maintenance/Assurance
• Dell EMC ProSupport 3 or 5 year comprehensive XC series support with Nutanix assist

*Number of users varies with the broker selected and the type of appliance used. Check with Dell for more exact sizing information.
Microsoft-certified building blocks
Dell EMC Microsoft Storage Spaces Direct (S2D) Ready Nodes for VDI are pre-configured and validated building blocks, using Microsoft and Dell EMC certified components only, that simplify ordering, reduce deployment risks, and provide a superb customer support experience for implementations of Microsoft’s Software-Defined Storage (SDS) technology coming with Windows Server 2016 Datacenter edition, at no additional cost.

Microsoft Storage Spaces Direct uses industry-standard servers with local-attached drives to create highly available, highly scalable SDS at a fraction of the cost of traditional SAN or NAS arrays. Its hyper-converged architecture radically simplifies procurement and deployment, with features like caching, storage tiers, and erasure coding, together with the latest hardware innovation coming with Dell EMC PowerEdge servers, like RDMA networking and NVMe drives.

This solution is ideal for customers who want to deploy HCI VDI solutions based on Microsoft Hyper-V 2016.

Benefits
Confidence – Convenience – Customer Support
- Reliable, easy-to-deploy and easy-to-order VDI solution on Microsoft-certified building blocks
- Pre-configured, tested and certified components take the guesswork out of building Storage Spaces Direct clusters
- Defined set of configuration options with Ready Nodes
- Support for both pre-installed and bring-your-own licensing
- Certified Login VSI testing
- Choice of deployment: self, Dell EMC Services, Microsoft-certified partner
- World-class support from Dell EMC Services for deployment and support
- Dell EMC is the only vendor to offer certified Ready Nodes on Microsoft Storage Spaces Direct

Components
- Dell EMC PowerEdge R640 (1U) and R740 (2U) servers
- Windows Server 2016 Hyper-V, Datacenter edition
- Supported on Microsoft RDS and Citrix XenDesktop
- Hybrid or All Flash storage
- Up to 220 task users per server
- Available from 2 to 16 nodes per cluster
- Dell EMC Services, including ProSupport, ProDeploy and Consulting Services
- Dell EMC Financial Services

Learn more here
### Optimized price & performance
Dell EMC Ready Bundles for VDI consist of core Reference Architectures (RA) for traditional 3-tier infrastructure, providing fully integrated on-premise solutions. It is ideal for organizations with sophisticated IT environments seeking a robust, configurable and scalable client virtualization solution with a broad range of component choice. Simplifies the deployment of virtualized desktops and applications for environments ranging from 50 to 50,000 users, supported by Dell services which speed time-to-value.

### At a glance
- **Predictability and lowered TCO:** Designed to deliver cost-effective, enterprise-class virtual desktops and applications, enabling efficient scaling as adoption increases
- **Storage features:** Available SANless option reduces cost of storage and supports high I/O requirements via SSD hard drives
- **Virtualized Graphics Capability:** GPU for HDX, HDX 3D Pro, PCoIP, Blast Extreme
- **Endpoint compatible:** Works with an array of thin/zero clients including Wyse zero clients optimized and verified for Citrix, VMware, and Microsoft
- **End-to-end solutions:** The Wyse family includes services and your choice of endpoints for streamlined operation

### Benefits
- **Configurable virtual desktop infrastructure:** Leverage industry standards-based hardware and software components for the optimal balance of performance and cost per user
- **Protect your existing IT investment:** Supports select compatible non-Dell components within the architecture
- **Scalable and flexible:** Rapidly deploy pilots in just a few days, and expand to full deployment with one solution that scales from 50 to 50,000 users
- **Choice of form factor:** Includes a choice of Dell EMC PowerEdge blade or rack server configurations
- **Flexible graphics support:** Support for a spectrum of graphics models that range from ultra-high performance based on dedicated GPU (pass-through) to high user density based on shared GPU (vGPU)
- **Communication-enabled:** Provides unified communications and collaboration (UCC) support for Microsoft Skype for Business, leveraging Citrix HDX™ 3D Pro RealTime Optimization Pack for scalable real-time audio and video conferencing
- **Dell Services:** Includes design/deployment, infrastructure managed services, remote monitoring management, and virtual desktop management
- **Optional support:** For high availability (HA) and redundancy

### Components
- Citrix XenDesktop, VMware Horizon, Microsoft Windows Server RDS
- Choice of hypervisor: VMware vSphere, Microsoft Hyper-V, Citrix XenServer (depending on selected broker)
- Dell EMC PowerEdge rack or blade servers
- Dell EMC XtremeIO, hybrid or all flash, internal or virtual storage
- Dell EMC Networking converged fabric
- True vGPU virtualized graphics with NVIDIA GRID and Tesla M10/M60/P40
- VMware Blast Extreme 4K and 3D graphics and enhanced user experience with Blast protocol
- Unified communications, Skype for Business
- Dell EMC ProSupport 3yr, 24x7
- Support for Software Defined Storage (SDS) technologies with VMware vSAN and Microsoft Storage Spaces Direct on certified PowerEdge Ready Nodes servers

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Learn more here
Dell Cloud Client-Computing solutions leverage Dell EMC Support & Deployment Services giving you a single point of contact for the entire solution lifecycle.

ProSupport provides a suite of support services to align with your organization’s specific needs and its ever-evolving IT and business requirements. With available tech-to-tech support for IT professionals and 24x7 end-user support for organizations with limited or no IT staff, Dell offers support services that are flexible so you can select the right service for your specific environment’s needs. From the desktop to the data center, Dell EMC ProSupport enables you to define the support model that is right for your organization, be it hardware-, software- or system-related.

Professional Services can help you transform your IT landscape through a unique consulting methodology. Developed from proof-of-concept testing in our solution centers and backed by real-world experience in supporting a wide range of environment implementations, our proven approach helps you:
- Understand the implications of new technologies through workshops
- Assess your infrastructure to identify opportunities for improvement
- Design a customized plan to address your organization’s specific needs
- Implement market-leading solutions that help you grow and thrive
- Manage the complete functionality of the entire engagement

Maximize the value of your IT investments today and shape an efficient, effective and scalable infrastructure through our IT consulting and services.

Consulting
- VDI Architecture
- Blueprint Assessment
- Network Optimization
- Remote Consulting

Implementation
- Image Creation
- Application Packaging
- Procurement
- Deployment Services
- Configuration
- 360 Integration Design
- Pilot & Testing

Support
- ProSupport
- L1 EU support
- L2 VDI Support

Management
- Managed Services
- Availability Monitoring
- Network Management
- Data Management
- Managed Firewall
Wyse endpoints and software products

Integration
Which client for which environment?

Wyse cloud client portfolio
- Wyse zero clients
- Wyse ThinOS™ thin clients
- Wyse ThinLinux thin clients
- Wyse Windows Embedded Standard thin clients
- Virtualization software
- Management software
## Which client for which environment?

<table>
<thead>
<tr>
<th>Citrix</th>
<th>Microsoft</th>
<th>VMware</th>
</tr>
</thead>
</table>
| Citrix XenApp™  
Citrix XenDesktop™ | Microsoft® Hyper-V™  
Remote Desktop Services/Terminal Server | VMware® Horizon™ |
| Citrix ICA® / HDX™ Win32/64 client | RDP-RemoteFX Win32/64 client | Horizon client, Win32/64 client  
Blast Extreme, PCoIP & RDP |

**Thin Clients with Windows Embedded (WES7/WES7P):** Wyse 3030, 5010, 5020, 5060, 7010, 7020, 7040*  
**Thin Clients with Windows 10 IoT:** Wyse 5020, 5060, 5070, 7020

<table>
<thead>
<tr>
<th>Citrix ICA® / HDX™ non-Windows client</th>
<th>RDP-RemoteFX non-Windows client</th>
<th>Teradici chipset (PCoIP)</th>
</tr>
</thead>
</table>
| Thin Clients with ThinOS  
• 3040  
• 5010  
• 5060  
• 5070  
• 7010  
Thin Clients with ThinLinux  
• 3040  
• 5070  
All-in-One with ThinOS  
• 5040 AIO | Thin Clients with ThinOS  
• 3040  
• 5010  
• 5060  
• 5070  
• 7010  
Thin Clients with ThinLinux  
• 3040  
• 5070  
All-in-One with ThinOS  
• 5040 AIO | Zero Clients for VMware  
• 5030 PCoIP zero client  
• 7030 PCoIP zero client  
Horizon Client, non-Windows  
Blast Extreme, PCoIP and RDP  
Thin Clients with ThinOS  
• 3040, 5010, 5060, 5070, 7010, 5040 AIO  
Thin Clients with ThinOS and PCoIP  
• 3040, 5010, 5060, 5070, 5040 AIO  
Thin Clients with ThinLinux  
• 3040, 5070 |

* Available in select countries only
Zero clients
Secure and purpose-built for VMware

Wyse ThinOS® thin clients
Optimized for maximum thin client security and performance

Wyse ThinLinux thin clients
Versatile and multi-functional

Wyse Windows Embedded Standard thin clients
Scalable & highly flexible

Data Protection Security
Ultimate endpoint and VDI security, and Dell softwares

Thin client management and conversion softwares
Software that enables easy device configuration, management, and scalability

Wyse portfolio
A wide choice of advanced, innovative client firmware options available

Take a portfolio tour
Wyse PCoIP zero clients
Secure and purpose-built for VMware

5000 series for VMware
Extremely compact and energy efficient, the 2-display Wyse 5000 series are fully functional VMware Horizon endpoints that deliver a true PC-like experience and offer the full benefits of an efficient and secure centralized computing environment, like multimedia playback, HD audio and four USB peripheral ports.

7000 series for VMware
Created for VMware Horizon users, the 4-display 7000 series PCoIP zero clients deliver the highest level of display performance available for advanced applications, including CAD, 3D solids modeling, video editing and more.

Wyse PCoIP zero clients
For virtual desktop or blade PC environments, the Wyse 5000 series and 7000 series PCoIP zero clients for VMware and Amazon WorkSpaces deliver workstation-level performance.

Secure centralized computing environment.
No locally-embedded OS, resulting in "zero attack surface" making them resistant to viruses or malware.

Zero administration.
As true zero clients, these devices require zero configuration and management.
## Wyse ThinOS thin clients

Optimized for maximum thin client security and performance

<table>
<thead>
<tr>
<th>3000 series</th>
<th>5000 series</th>
<th>5000 series all-in-one thin client</th>
<th>7000 series</th>
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<tbody>
<tr>
<td>Offers an excellent Citrix, Microsoft, and VMware VDI user experience on a budget.</td>
<td>Versatile, compact and efficient. Dual and quad core thin clients capable of delivering 3D graphics and HD multimedia.</td>
<td>Secure all-in-one, delivers an excellent virtual desktop experience, with extreme ease of use &amp; management.</td>
<td>Powerful dual core thin clients made for the most demanding applications.</td>
</tr>
</tbody>
</table>

**3040**

**5010**
**5060**
**5070**

**5040 AIO**
**5040 AIO w/ PCoIP**

**7010**

### Wyse ThinOS

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

**Maximum Security**

Be virus and malware resistant with an unpublished API and zero attack surface.

**Unified Communications**


**Speed and user experience**

Boot in under 10 seconds while delivering outstanding HDX, RDP Remote FX and Blast Extreme experiences.

**Hands-off management**

Eliminate the need for your IT staff to touch physical devices.

**Flexibility**

Scale to over 100,000 managed devices with Wyse Management Suite.
Cloud client-computing endpoints
A wide choice of advanced, innovative cloud client-computing options available

Wyse ThinLinux thin clients
Versatile and multi-functional

3000 series
Offers an excellent web, Citrix, Microsoft, and VMware client virtualization user experience on a budget.

5000 series
Versatile, compact and efficient. Quad core thin clients capable of delivering 3D graphics and HD multimedia.

* 3040  Learn more
* 5070  Learn more

Wyse ThinLinux
Wyse ThinLinux operating system delivers high performance, security and easy management when accessing virtual desktops with broad peripheral support from the open source community, hardened for Enterprise class customers. It also features a local browser and supports local applications within a Linux environment.

High performance
Get more power from advanced multi-core thin clients while accessing applications locally or from virtual desktops.

Security
With no local hard disk on the thin client, key apps and content are kept safely in the datacenter. Content protection and application control become much easier.

Flexibility
Run your legacy or customized apps locally or via a VPN connection at the same time as accessing your virtual desktop within a Citrix®, Microsoft® or VMware® environment.
Cloud client-computing endpoints
A wide choice of advanced, innovative cloud client-computing options available

**Wyse Windows Embedded thin clients**
Scalable & highly flexible with Windows Embedded 7 and Windows 10 IoT Enterprise

<table>
<thead>
<tr>
<th>Intel-based 3000 series</th>
<th>5000 series</th>
<th>7000 series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact, highly flexible thin client features a powerful dual core Intel-based processor.</td>
<td>Versatile, compact and efficient. Dual and quad core thin clients capable of delivering 3D graphics and HD multimedia.</td>
<td>Powerful and expandable thin clients made for the most demanding rich media and graphics-intensive applications.</td>
</tr>
</tbody>
</table>

- 3030
- 5010
- 5020
- 5060
- 5070
- 7010
- 7020
- 7040

**Windows Embedded and Windows 10 IoTE**
Experience the performance, reliability and flexibility of Windows® Embedded. Windows 10 IoTE is a skinny OS version that leverages the same peripheral drivers, run Windows applications locally and enable unified communications.

**Ultimate usability**
Leverage graphics-intensive applications with a multi-core accelerated processing unit and connect to a broad range of Windows applications and peripherals.

**Security you can count on**
Optional Advanced Threat Protection is available in the form of Dell Threat Defense, for proactive malware protection on both virtual desktops and WES-endpoints.

**Easy, scalable management**
Manage your endpoints centrally with Wyse Management Suite. Scale as you grow – from just a handful to tens of thousands of thin clients. Alternatively, use your existing Microsoft SCCM software.

Dell.com Portfolio
Dell Data Security Software Solutions

Maintaining security of data and applications as well as compliance is one of the top three IT concerns in organizations of all sizes. Mobile office trends and BYOD initiatives mean that more devices and sensitive data are out of direct IT control, increasing the risk for data theft, virus, malware and ransomware attacks. In addition, traditional antivirus (AV) solutions can't keep up with the number of new malware created daily. Non-security IT specialists find security and compliance complex.

Even though they are intrinsically very secure, thin clients also need adequate protection against advanced viruses and commodity malware. Dell offers a comprehensive set of security from the datacenter all the way to the endpoint, whether a physical PC running Windows, a Mac OS X system, or a thin client running Windows Embedded Standard (WES). These solutions protect WES-based thin clients against cyber threats, including zero-day attacks.

Using a revolutionary, preventive AV technology, Dell’s Advanced Threat Protection (ATP) uses dynamic mathematical models and artificial intelligence to provide extremely high efficacy. It stops attacks before they execute, proactively preventing 99% of malware, far above the average 50% of threats identified by traditional, signature-based AV solutions.*

In addition, it has a very low impact on resources, doesn't affect end user productivity, doesn't require frequent updates or an internet connection, as it runs locally.

The two leading security solutions are:

Dell Endpoint Security Suite Enterprise

Protects physical desktops (Dell and non-Dell) from advanced threats and commodity malware. With Endpoint Security Suite Enterprise, ATP is embedded in a full Dell suite that also includes data encryption and hardened authentication. The single agent can be installed or physical desktops running full client versions of Windows. It comes with an on-premise management console, making it easy for IT admins to manage physical PC security and to create compliance reports, all from a single pane of glass.

Dell Threat Defense

Protects WES thin clients (Dell Wyse and non-Dell) as well as physical Windows desktops, Mac OS X systems and Windows servers from advanced threats and malware, solely using the Advanced Threat Protection feature. It uses only 1-3% CPU and ~40Mb RAM, thus having no impact on end users using thin clients: this is an important differentiator compared to traditional AV solutions. Threat Defense uses a cloud-based management console to provide simplified management for organizations that may not have dedicated IT staff or security expertise in-house.

Learn more here

*Results from Cylance Unbelievable Demo Tour, Austin, Dallas and Houston, Texas, May 2015. Also based on Dell internal testing, November 2016.
Wyse Software

Wyse Management Suite™
Flexible management solution to configure, monitor, manage and optimize Wyse thin clients, from only a few to thousands.
Wyse Management Suite allows organizations to adopt a hybrid model and 'float' their licenses between on-premises and cloud, giving IT the flexibility to manage their thin clients in a way that works best for them.

• Configure and manage Wyse thin clients from anywhere
• Secure, HTTPS-based imaging, updates and downloads
• No-touch deployment – policy engines support automated rollout
• Monitor user devices, track asset and application inventory and enforce policy compliance
• Review real-time alerts, troubleshooting and audit trails
• Enable administrators to organize devices in multi-level groups and delegate role-based access control to manage each category
• Advanced app policy and reporting
• Enhanced security through two-factor identification and active directory authentication for role-based administration
• Mobile app allows IT to view critical alerts, notifications and send commands in real time
• Tight integration and management of Wyse Easy Setup and Wyse Converter for PCs within Wyse Management Suite
• Simplified trouble shooting with Remote shadow functionality
• Support for MySQL databases for streamlined setup with advanced installer
• WDM import tool to enable existing customers to migrate to Wyse Management Suite

Learn more here

Wyse Converter for PCs
Convert your PCs to thin clients seamlessly.
Wyse converter for PCs enables organizations to convert any Windows 7 or Windows 10 PC into a thin client device. This software can be remotely downloaded and installed manually for small deployments or with Microsoft SCCM for larger deployments of 1000s of PCs.
Experience the desktop virtualization for a small annual license fee without investing significant capital in thin client hardware. The device retains Windows software assurance, adding to the savings while letting users access productivity applications like Skype for Business uninterruptedly.

• Vendor agnostic: Any Windows 7 or 10 PC can be converted for a thin client-like experience irrespective of the manufacturer, reflecting the current heterogeneous IT environment
• Familiarity of Windows: The system acts and feels like a Windows operating system after conversion, keeping the user experience unchanged
• Broker of your choice: Get the flexibility of connecting to any broker from VMware, Citrix and Microsoft in a few clicks
• Value added features: The conversion license comes with the benefits of Wyse Management Suite pro, software maintenance and Pro support included for peace of mind
• Easy rollback: Get the flexibility of easy rollback, if you want to return your PC back to full functionality
• Wyse Management Suite Pro: Configure, maintain and manage converted thin clients with industry's premier thin client management software. Use WMS for all your thin client management needs. Managing and tracking tens of thousands of converted endpoints has never been easier with a single, dedicated tool

Learn more here
Dell EMC Support & Deployment Services
for Wyse thin clients

Benefits
• Maximize productivity with rapid deployment and 24x7 support
• Minimize disruption with full replacement of damaged clients
• Gain efficiency leveraging Dell EMC scale, business insight and expertise
• Reduce risk with deployment and support expertise

Experts
• 24x7 access to ProSupport engineers
• Single source for hardware and software
• Technicians know business IT and provide deep, broad experience

Deployment Services
Simple, fast and accurate deployment.
Deployment Service is an end to end service designed to speed deployment time, save money, provide comprehensive planning and project management to support your IT staff. We will load your company images, configure BIOS settings, apply asset tags, and install new systems into your environment. Benefits to customers include:
• Minimized disruption so you can focus your resources on innovation
• Improved efficiency, saving time and resources by leveraging expertise
• Maximizing resources, managed every step of the process

ProSupport
Comprehensive IT support.
ProSupport gives you 24x7 direct access to support experts, a single resource for hardware and software problems, and next business day Advanced Exchange1 to help resolve issues quickly and minimize downtime.
Dell ProSupport is the smart, easy way to extend your IT resources and better support your users. With ProSupport you can:
• Get fast issue resolution with round the clock access to ProSupport engineers and next business day Advanced Exchange1
• Increase efficiency with single source support for hardware and software issues
• Maximize productivity by leveraging Dell EMC scale and skill
• Focus your resources on strategic IT while Dell EMC takes care of day-to-day business

Insights
• Project managers plan, implement and manage deployment processes for your business needs
• End-to-end management of the deployment process

Ease
• Quick response, replacement for accidental damage
• Easy return options for repairs
• Simplified deployment and support with knowledge and experience

Accidental Damage Service
Ideal for high-risk environments.
Accidental Damage Service covers hardware systems exposed to high-risk usage and situations where end users are in high risk environments, shared workspaces, retail, or classroom settings.
Ideal for high-risk environments.
Examples of damage where the hardware unit would be repaired or replaced are:
• Liquid spilled on or in unit
• Drops, falls, and other collisions
• Damaged/broken LCD due to a drop or fall
• Electrical surge

1 Next business day Advanced Exchange available on select Wyse products. Availability varies by region.

Learn more here

Learn more here

Learn more here

Learn more here
Any user. Any app. Any device. Build or buy a custom or proven, pre-tested solution from Dell.

With Dell Cloud Client-Computing you're covered from the data center to the end user device. For additional Dell products and solutions that complement your Wyse cloud clients, visit:

- **Dell monitors**: Dell.com/monitors
- **Client virtualization solutions**: Dell.com/wyse Dellemc.com/VDI

Contact Dell Cloud Client-Computing

For sales, service and support expertise around the globe

**Dell Cloud Client-Computing**
One Dell Way, Round Rock, TX 78682

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1-800-438-9973

Find a Dell partner
Dell.force.com/partner

**Dell Cloud Client-Computing support**
The Dell support portal provides a fast and accurate way to communicate interactively with Dell customer support for Wyse products, and helps us respond to your requests more quickly.

Dell.com/support/wyse

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Dell.com

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Some features require support by server operating system and protocol.

Final approved 30 April 2018.

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