

A winning solution with Citrix

Best in show...

Dell DVS Enterprise was recognized with the 'Best of Synergy' award for 2013. With an innovative approach which supports a range of 50 to 1,000 users in a pooled VDI environment this innovative compute, storage, and networking infrastructure has a total cost of less than \$200 per user.



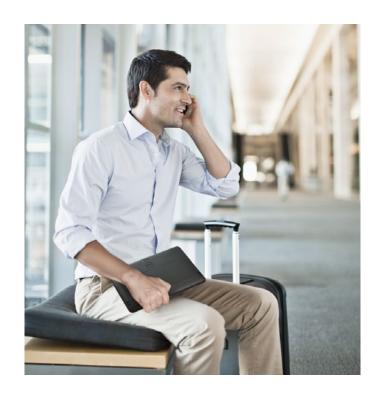
Joint innovation	Solution innovation	Customer experience
VDI solutions Dell's industry-leading product portfolio is an ideal match for Citrix mobile workforce software	Agile Open & heterogeneous architecture; built for now & the future.	#1 In customer satisfaction for IT Service & Support (TBR)
End -to-end From the data center to the endpoint device, optimize your Citrix VDI environment with the best of Dell infrastructure components	Efficient From reference architectures to pre-configured stacks, Dell DVS adjusts to your unique needs	95% Customer satisfaction with Dell ProSupport service
Partnership Dell was the first to market with an appliance-based solution for Citrix VDI-in-a-Box®	High quality End-to-end solutions & services paired with unified support ensures the best performing solution, fit to your specific requirements	42k+ Dedicated services professionals active in 90 countries

Dell and Citrix: Better Together

Dell and Citrix better together

What Dell and Citrix mean to your VDI implementation

- Leadership in Cloud Client Computing solutions that support your mobile workforce. Dell's mobile computing vision and industry-leading product portfolio for Citrix mobile workforce software maximizes performance with advanced security and centralized management while maintaining an optimized user experience.
- Reduced complexity with complete end-to-end solutions. From the data center to the endpoint device, our jointly developed solutions integrate features and functionality from both the Dell and the Citrix portfolios.
 Leverage integrated solution stacks for fast, standardized deployment, or use the Dell Services process to design a program that fits your specific requirements.
- Accelerated time-to-value with Dell and Citrix jointly-engineered architectures. Based upon the latest
 Citrix releases, choose from multiple infrastructures, deployment options and services to fit your workloads.
 Our cross-trained sales teams help you select the solution that meets your needs today and smartly grow
 with an architecture that flexes as your needs change.
- A partnership driven by continuous innovation. Ongoing engineering alignment between Dell and Citrix mean that Dell is able to match Citrix release-for-release to provide infrastructure stacks and Dell Wyse client solutions that are optimized for Citrix.



Continue to Solutions

Dell and Citrix Solutions for Desktop Virtualization

DVS Simplified Appliance

with Citrix VDI-in-a-Box™

Offers all of the benefits of virtual desktops in an integrated appliance, including improved security and simplified management and a rich end user experience, but with faster deployment and simplified operation.

Provides a practical and affordable route to Desktop Virtualization. Ideal for organizations with between 50 and 1000 users that would benefit from desktop virtualization but do not have expert IT resources to deploy and maintain a more complex enterprise VDI solution.

Learn more here.



DVS Enterprise

for Citrix XenDesktop®

Ideal for organizations with a sophisticated IT environment and IT resources that are interested in robust, flexible and highly scalable desktop virtualization which provides the optimal price/performance ratio for their workload.

Based upon industry standards, the solution is available with 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. DVS Enterprise simplifies the deployment of virtualized desktops for environments ranging from 50 and scaling to 50,000+ users.





DVS Enterprise Active Infrastructure

for Citrix XenDesktop®

Best suited for organizations with a sophisticated IT environment and IT resources whose requirements place a high priority on efficient deployment and management of their VDI infrastructure.

Uses Dell purpose-designed reference architectures and template-based automation to speed time-to-value and streamline day-to-day operations and management. Provided with a choice of stacks which support 50 to 50,000+ users, these solutions deliver desktop virtualization as an IT service to meet dynamic business needs and maximize efficiency by improving the utilization of staff and infrastructure.

Learn more here.



DVS Simplified Appliance with Citrix VDI-in-a-Box[™]

Simple, practical and affordable route to VDI

DVS Simplified Appliance helps you eliminate the complexities of installing desktop virtualization by consolidating the latest generation 12G PowerEdge servers with factory-installed Citrix VDI-in-a-Box software and Dell support. Wizard-driven setup and configuration enables you to deploy DVS Simplified Appliance in as little as four hours.

At a glance

- Designed for simple VDI environments with factoryinstalled software and pre-configured hardware and customized services
- Serves from as few as 50 to as many as 1,000 users
- Centralizes management of desktops and images for reduced operational cost
- Dell and Citrix joint development help ensure an optimized 'better together' solution that's fast to deploy - in as little as 4 hours - and simple to operate
- Complete end-to-end solution, including servers, storage, networking, applications, services and your choice of endpoints for 'better together' operation.

Benefits

- All in one integrated server-based VDI appliance design simplifies operation while enabling modular scaling without disruption through 50 and 100 user configurations
- Centralized updates and management of desktops and images reduces cost through management of a few templates instead of hundreds of individual desktops
- Open architecture and protocol-agnostic design provides interoperability, making it fit neatly into existing infrastructure
- Leverages **purpose-designed Dell Services** for jumpstart training, installation and customization
- Fully integrated Citrix HDX technology helps deliver an optimized and rich user experience virtually.

Components

- Factory-installed Citrix VDI-in-a-Box®
- Choice of Citrix XenServer[®], Microsoft[®] Hyper-V[®] or Vmware vSphere hypervisors
- Dell PowerEdge R720 or T620 12th generation servers
- Grid server architecture to auto load-balance user workloads
- Configurations which support 50 or 100 standard workload users
- Dell ProSupport comprehensive 3-year hardware and software support, including access to experts 24x7x365.



ROI/TCO Calculator

Continue

DVS Enterprise for Citrix XenDesktop™

Optimized price/performance

Ideal for organizations with sophisticated IT environments who are seeking a robust, configurable and scalable desktop virtualization solution with a broad range of component choice. Simplifies the deployment of virtualized desktops for environments ranging from 50 to 50,000 users, supported by reference architectures and services which speed time-to-value.

At a glance

- Designed as a cost-effective starting point for enterprise-class VDI, enabling efficient scaling as adoption increases
- Unique internal storage option starts at less than \$200/user for infrastructure
- Works with an array of thin/zero clients including Dell Wyse zero clients optimized and verified for Citrix XenDesktop
- Broad available range of Dell Services helps maximize the value of your VDI investments
- Complete end-to-end solution, including servers, storage, networking, services and your choice of endpoints for 'better together' operation.

Benefits

- Configurable VDI infrastructure leverages industry standards-based hardware and software components for the optimal balance of performance and cost per user
- **Protects your IT existing investment** by supporting select compatible non-Dell components within the architecture
- Scalable and flexible high-performance infrastructure rapidly deploy pilots in just a few days, and expand to full deployment with one solution that scales from 50 to 50,000 users
- Optional support for high availability (HA) and redundancy
- Includes a choice of PowerEdge blade or rack server configurations and storage options
- Supports high end graphics/3D visualization, with HDX3DPro enabling virtualized graphics for OpenGL applications in pass-through configuration using NVIDIA K1/K2 cards (optional)
- Provides unified communications and collaboration (UCC) support for Microsoft Lync 2010, leveraging Citrix HDX™ 3D Pro RealTime Optimization Pack for scalable real-time audio and video conferencing
- Available Dell Services for DVS Enterprise include design/ deployment, infrastructure managed services, remote monitoring management, and virtual desktop management.

Components

- Citrix XenDesktop, choice of VMware vSphere or Microsoft Hyper-V hypervisors
- Dell PowerEdge rack or blade servers
- Dell EqualLogic, Compellent, or internal storage
- Dell Networking converged fabric
- Virtualized 3D graphics NVIDIA GRID K1/K2
- Unified communications, MS Lync 2010
- Dell ProSupport 3yr, 24x7.

Design Your Solution.*





*Related Videos - link to the Dell Cloud Client Computing Advisor Continue

DVS Enterprise Active System[™] for Citrix XenDesktop[™]

Fast deployment and efficient management

Solutions for the enterprise customer with 50 to 50,000 users who focuses on time-to-value and control of operating costs through rapid deployment and efficient infrastructure management. Pre-cabled, pre-racked and configured solutions available in a range of sizes streamline deployment, while templates help reduce time for day-to-day management of the VDI infrastructure.

Learn more here.



At a glance

- Powered by Dell's Active System converged infrastructure integrated with Citrix XenDesktop
- Blade-based server infrastructure optimizes IT resources by simplifying management of the data center infrastructure for VDI
- Incorporates Active System Manager (ASM) which uses templates to automate redundant operations, reducing routine operational costs
- Requires only one tool to configure server, network, and storage.

Benefits

- Pre-cabled and pre-configured solutions **speed deployment by a factor of six** as compared to standard assemble-and-deploy methods
- ASM's built in templates and orchestrations make it possible to deploy
 a production-ready environment in about 99% fewer steps than doing
 it manually
- **26 to 45% better performance-per-watt** than HP or Cisco with Dell's purpose-built design
- Scale the number of blade servers in the same rack to support additional users without re-cabling or rebuilding, while gaining up to a 34% decrease in power consumption per user.

Components

- Citrix XenDesktop, choice of VMware vSphere or Microsoft Hyper-V hypervisors
- Dell PowerEdge rack or blade servers
- Dell EqualLogic and Compellent storage
- Dell networking converged fabric
- Dell Active System Manager (ASM) integrated management software
- Dell ProSupport 3yr, 24x7.

Active System portfolio:

- Active System 1000 large enterprise, highly scalable bladeserver based system, offering advanced Fibre Channel storage, for mission critical application needs and very large DVS Enterprise deployments
- Active System 800 enterprise, highly scalable system for business critical application needs. It is an excellent choice for large DVS Enterprise deployments
- Active System 200 intermediate, scalable system for medium DVS Enterprise deployments
- Active System 50 converged fabric.

Continue

Key features and benefits by platform

	DVS Simplified Appliance with Citrix VDI-in-a-Box	DVS Enterprise for Citrix XenDesktop	DVS Enterprise Active System for Citrix XenDesktop
Infrastructure	Appliance, pre-configured for simple deployment	Modular, highly customizable infrastructure	Dell converged pre-integrated infrastructure, pre-cabled and pre-racked for faster deployment
Modular, scalable architecture?	Yes, add additional appliances	Yes, add additional modules	Yes, grow within the rack or add additional units
Dell Active Systems Manager	Not used	Not used	Yes
Windows 7 - # of user VMs supported	Standard workload – Up to 100 seats per appliance	Based upon configuration per Dell Advisor. Typically one module with two Dell rack servers (plus storage and networking) supports up to 95 Premium (knowledge worker) or up to 145 Basic workers	Varies between Rack and Blade, but the range is Basic Workload: 140-150 / Standard Workload: 115-120 / Premium Workload: 95-100
Windows 8 - # of user VMs supported	Available 2H2013	Based upon configuration per Dell Advisor	Varies between Rack and Blade, but the range is Basic Workload: 160-170 / Standard Workload: 120-130 / Premium Workload: 105-120
Dell management tools/software	Not applicable	Dell EqualLogic SAN HeadQuarters / Dell openManage Essentials / iDRAC7 Enterprise for Blades	Dell EqualLogic SAN HeadQuarters / Dell openManage Essentials / iDRAC7 Enterprise for Blades
Hypervisors	Microsoft® Hyper-V®, VMware® vSphere or Citrix XenServer	Microsoft® Hyper-V® or VMware® vSphere	Microsoft® Hyper-V® or VMware® vSphere
Dell compute and storage platforms	Dell PowerEdge R720 or T620 12th generation servers with internal Tier 1 storage; Grid server architecture to auto loadbalance user workloads	Dell PowerEdge rack or blade servers; Dell EqualLogic, Compellent or internal storage; suport for external storage	Dell PowerEdge rack or blade servers; Dell EqualLogic, Compellent or internal storage
Dell Networking	Not available	Dell Networking Converged Fabric	Dell Networking Converged Fabric
3rd party storage	Not available	Yes, based upon industry standards	Not available
3rd party networking	Not available	Yes, based upon industry standards	Not available
Solution Reference Architectures	Yes	Yes	Yes
Dell Wyse zero clients	Yes, optimized for Xenith 2 and Xenith Pro 2	Yes, optimized for Xenith 2 and Xenith Pro 2	Yes, optimized for Xenith 2 and Xenith Pro 2
Persistence	Not available	Configurable to include persistence	Yes
High Availability (HA)	Yes, with deployment of second appliance	Yes	Yes
Virtualized Graphics (3D)	Not available	GRID support with pass-through for NVIDIA K1/K2 cards	Not available
Unified Communications (UCC)	Lync 2010 with Citrix HDX	Lync 2010 with Citrix HDX	Lync 2010 with Citrix HDX
Dell ProSupport	Comprehensive 3-year hardware and software support, including access to experts 24x7x365	Comprehensive 3-year hardware and software support, including access to experts 24x7x365	Comprehensive 3-year hardware and software support, including access to experts 24x7x365
Dell Professional Services	Optional consulting, design and deployment with purpose- designed 'jumpstart' services to speed time to value	Optional consulting & design services / initial hardware deployment services with optional VDI software deployment / Managed services for efficient operations	Optional consulting & design services / Pre-integrated, pre-cabled initial hardware deployment services with optional VDI software deployment / Managed services for efficient operations
Dell Cloud Client Computing Advisor	Yes	Yes	In place for AS800; others being added 2H 2013

Dell Wyse cloud client solutions optimized for Citrix

Purpose built for Citrix

The Dell Wyse® Xenith™ series is the first available zero client designed specifically for Citrix XenDesktop environments:

- A Wyse Xenith zero client runs three times faster than comparable devices and enables users to be up and running in just six seconds
- Dell Wyse Xenith clients deliver the Citrix HDX experience with zero delays, management or security risks — and almost-zero energy use
- The Dell Wyse TCX suite integrates seamlessly within Citrix® XenApp, Citrix® XenDesktop and other environments to enhance the user experience with breakthrough multimedia and audio capabilities.

Xenith 2

- Ultimate performance: Optimized for Citrix HDX and Citrix XenDesktop; supports dual HD 'L shaped' screen rotation
- Super secure: No attack surface for viruses and malware
- **Instant-on:** Powers on in just 6 seconds; goes from standby to on in 2 seconds
- **Zero management:** Plug-n-play operation with auto discovery and zero configuration, and hands-off management
- Well-connected: Connect to LAN, WAN and Wi-Fi network; adapts to the latest network security and protocols
- **Green:** Draws less than 7 Watts of power in operation
- Flexible mounting: Mount horizontally or vertically on or under your desk, on the wall or behind your display.

Learn more here.



Xenith Pro 2

- Excellent performance: Optimized for Citrix XenDesktop, HDX 3D and HDX 3D Pro
- Super secure: No attack surface for complete immunity to viruses and malware
- Green: Draws less than 9 watts of power in operation
- Rich User Experience: Exceptional computing power and performance combined with Citrix HDX technology to provide dazzling multimedia and exceptional unified communications; supports dual-digital, high-resolution, 'L shaped' screen rotation.

Learn more here.

Learn about Dell services

Dell Services for Citrix

Dell is a leader in cloud client computing and desktop virtualization, providing a suite of end-to-end services to evaluation, design, pilot and implement Citrix-based desktop virtualization solutions.

Dell Professional Services

Increasing your success with VDI

Given the investment required to deploy an Enterprise-class desktop virtualization solution, some customers are naturally concerned about achieving the right combination of hardware and software to serve their specific business needs.

Our Workshops and Blueprint services help you identify how to maximize the benefits from your Citrix desktop virtualization investment. Dell experts work with your team to target user groups and measure their required computing resources. The results of these meetings and the Blueprint data allow us to collaborate and define the exact solution that fits your business needs. If a pilot is needed, we can often deploy a 50 to 500 user pilot in just a few days.

And once you're ready to implement desktop virtualization, Dell can help with purpose-designed services for Citrix solutions, including:

- Jumpstart training, installation and customization for DVS
 Simplified Appliance with Citrix VDI-in-a-Box;
- Complete suite of services for DVS Enterprise for Citrix to handle deployment at your site
- Managed services, delivered remotely and at your site which help you get the most from your Citrix infrastructure.

Dell ProSupport

Anytime, everywhere protection for your investment

Dell ProSupport provides comprehensive hardware and software support for three years. This means your team spends less time focused on problem resolution and they have more time to focus on critical business initiatives to improve organizational productivity. From live support to email ticket submission and online status notification, all the bases are covered to help you resolve any issue quickly and effectively. Dell ProSupport provides your team with remote assistance and deployment of updates and patches for VDI software and hypervisors.

Dell Support, included in all DVS solutions

Single point of accountability with access to highly trained experts, 24x7x365.

Learn more here.

500,000+ Integration processes per day with Dell Boomi - over 3x more than our nearest competitor.	42,000+ Dedicated Services professionals, active in 90 countries.	35B security events processed daily by Dell SecureWorks, the #1 managed security services provider.
150M Lines of code re-architected across industries.	4B+ Diagnostic image objects managed by Dell in the cloud.	111M Systems supported.
1300+ Application re-hosting installations worldwide.	100+ Countries and 55 languages catered for.	

Learn about typical Use Cases

Case studies

LA Unified School District

Challenge

Limited tech support staff with over 186 schools to support and a large region to cover.

Solution

DVS Simplified Appliance.

Business Impact

- Deploy a complete lab in a single day
- Remote support of computer labs
- Decreased number of support calls.



Seattle Children's Hospital

Challenge

Improve system responsiveness, simplify management of IT infrastructure and reduce IT costs without impacting business performance.

Solution

DVS Enterprise with Citrix XenDesktop and XenApp with Wyse Xenith zero clients.

Business Impact

- Accelerated system connectivity and responsiveness
- Near elimination of desktop technical issues
- \$1.2 million of IT staff time saved over five-year period
- Achieved three-fold increase in desktop performance and \$6 million cost avoidance
- Estimated annual energy savings of \$300,000.

Essex Industries

Challenge

Reduce hardware and support costs while enhancing service quality for end users and customers.

Solution

Dell provided an end-to-end infrastructure for the virtualization project, including servers, storage arrays and network switches. This provides native support for Citrix® XenDesktop™, Essex's chosen desktop virtualization software.

Business Impact

- Data-center hardware costs cut by 90 percent
- Desktop hardware costs reduced by \$50,000 a year
- Labor savings of \$60,000 a year
- End-to-end support delivered by Dell
- Global desktop access delivered on any device.

Your next steps

Next steps in your journey

Speak to Dell or contact your Dell PartnerDirect partner. Both will be able to offer consultancy, planning and advice.

1. Learn

Join a feasibility workshop

Explore your needs and establish your requirements for cloud client computing.

Learn more here.





2. Discover

Get hands on

Nothing beats seeing everything in action for yourself. Take advantage of a one-to-one demonstration at a Dell Solution Center.

Dell Solution Center.

3. Engage

Plan for success

Meet with Dell or your Dell PartnerDirect partner who'll help you plan, execute and activate your strategy.

Get in touch.

Find a partner.





For detailed information on Dell Desktop Virtualization Solutions, please visit

www.dell.com/virtualdesktops

For general information on Dell cloud client computing and the full end-to-end solution please visit

www.dell.com/cloudclientcomputing

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