Wyse vWorkspace®

Simple, flexible, cost-effective desktop virtualization solution only from Dell.

DELL

Learn more. Here:

Why desktop virtualization?

Today's workforce expects the freedom and flexibility to work from anywhere, anytime - using their preferred device. IT is expected to save money and do more with fewer people, and your organization needs to be more productive, efficient and competitive. Desktop virtualization can help achieve this.

Desktop virtualization is a mature technology that already delivers proven benefits to many thousands of organizations around the world. While it is not the right solution for every user, almost every organization can take advantage of its benefits.

Dell offers a spectrum of desktop virtualization solutions for organizations of all sizes. Dell and its partners offer you a choice of virtualization technologies and services: from solutions your organization can implement and manage internally, through to fully managed 'as a service' offerings.

Included in Dell's solution portfolio is a complete desktop virtualization solution — from datacenter to client - based on Wyse vWorkspace software. This interactive document will guide you through all aspects of the solution as well as being able to highlight specific features that address security and mobility requirements.

What are the benefits?

Better productivity for mobile IT users

- Secure access to data and applications from virtually anywhere, at any time, using any endpoint device
- Enable users to work on devices they prefer including tablets and smartphones - whether corporate or user owned (BYOD)
- Enhanced user collaboration

Optimized IT resources and managed costs

- Better utilization of hardware and software resources
- Faster application deployment and improved service delivery
- More precise allocation of computing resources to user needs
- Reduced desktop maintenance freeing resource and budget for new projects
- Reduced energy costs

Improved security, data and application control

- Implement policy-based user access to applications and data
- Minimize the risk of losing data
- Recover faster from disasters
- Monitor risk and meet regulatory requirements

Let's get started

Wyse vWorkspace virtualization software

Wyse vWorkspace is Dell's application and desktop virtualization solution software, also known as a connection broker. vWorkspace lets you deploy a blended model of VDI, OS image streaming, application layering, and terminal server technology – precisely addressing needs of different user groups, while reducing the average cost per user.

vWorkspace HyperCache and HyperDeploy components enable faster provisioning and significant storage savings. In addition, precise load balancing and integrated user-experience monitoring ensure you can deliver the best performance regardless of the client device or software platform.

vWorkspace supports multiple virtualization technologies providing you with a choice of application and desktop delivery mechanisms. You can learn more about these here.

What are the benefits?

Simple to maintain and use

• Operates on familiar hypervisors: Microsoft Hyper-V and VMware vSphere
• Management designed for desktop support personnel
• Automated policy-based deployment and configuration of end user devices
• Centralized, role-based management console

Flexible and scalable

• For organizations of all sizes
• One solution for client and cloud hosted desktop virtualization also supporting legacy Windows versions and Linux VMs
• Fast login using any device, from anywhere, at any time
• Designed for use by customers and service providers, whether you're supporting tens or many thousands of virtual desktops

High performance

• Provision a fully functioning virtual desktop in seconds
• Deploy 4,000 desktops in 40 minutes
• Install or upgrade all of your desktops to a new Windows version in 20 minutes
• Delivers a smooth, high-quality user experience, powered by Microsoft RemoteFX and optimized by Dell
• Integrates powerful unique monitoring, diagnostics and reporting capabilities

Cost effective

• Install up to 345 VDI users or 500 remote desktop sessions on a single Dell PowerEdge R730 server
• Optimized to save on storage requirements
• Persistent VMs can be deployed at the same cost per user as pooled VMs
• Cost effective licensing which includes all key components and avoids additional add-on costs for most deployments
• Get started quickly and easily with the Dell Appliance for Wyse - vWorkspace, starting at under $200 per user for the server hardware, software and licenses.
• Optional 24x7 mission critical support inclusive of software maintenance

Features

Features for IT professionals

Simplified management

vWorkspace offers multiple desktop virtualization options.

- Deploy a blend of hosted VDI, RDSH, OS image streaming, and remote application delivery based on unique user requirements
- Support mobility and BYOD initiatives while also maintaining exceptional levels of flexibility and security
- Support for multiple/legacy OS as well as co-existing Windows and Linux virtual desktops

Integrated Monitoring and Diagnostics

Keep end users happy by fixing problems before they impact users and keep desktop virtualization projects on track.

- Integrated monitoring and diagnostics for both VDI and shared sessions
- Included in vWorkspace licensing and management console
- Single console interface provides clear visibility into:
  - User experience monitoring
  - Infrastructure health
  - Application usage reporting
  - Historical trends
  - Hypervisor performance
  - Bandwidth and latency information
  - What endpoint is being used
  - Profile and print servers

 Learn more here.

Flexible resource assignment

Connect remotely to a physical PC at work, access its data and run applications installed locally on that PC. Can be assigned to users or devices persistently or temporarily.

Co-existence of legacy applications

Support for coexisting, legacy apps and OS such as Windows Server 2003/2008/2012 and Windows XP.

Multi-tenancy

Native multi-tenancy, enabling support to multiple, unrelated Active Directory environments.

Endpoint
Bandwidth
Latency
CPU & memory
Print servers
Hypervisor performance

Continue
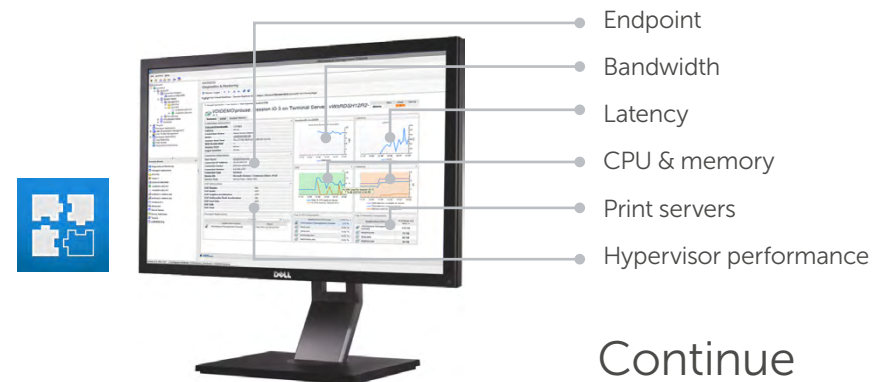
Features for users

Users can now access data and apps from virtually anywhere, at any time on devices they prefer. vWorkspace increases both mobility and agility, tightens security, and enables you to manage a much more flexible workforce. This level of freedom and flexibility fosters greater user satisfaction and increases productivity.

• Support for Unified Communications with Microsoft Lync, Skype, Avaya and Cisco
• Rich end user experience for supporting HD multimedia, 3D imaging, print and USB on WAN
• Excellent mobile user experience
• Compatible with external USB-connected peripherals
• Works seamlessly with local and network printers
• Localized user interface
• Support for session roaming and hot-desking
• Speed up updates and multimedia content across your organization's different devices

Endpoint choices

• Dell Wyse Thin Clients
• Dell Chromebooks
• Microsoft Windows
• Apple Mac and iOS
• Google Chrome OS
• Android
• Linux (multiple choices)
• Devices running HTML5-enabled web browsers

Virtualization Technologies

Virtualization technologies: Flexible delivery options

vWorkspace supports a range of application and desktop virtualization technologies. These enable the optimal delivery mechanism to be used depending on required applications, user location and client device.
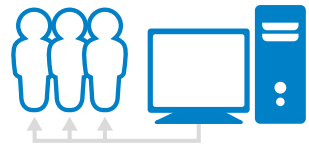
Shared sessions and remote applications

- Remote Desktop Session Host (RDSH): multiple users concurrently share common application image in data center
- Application delivery to sessions and virtual desktops
- Available online and offline
- Minimizes application compatibility issues
- Allows individual published applications to appear as an icon on the user's screen (RDSH or VDI)
- Can be on-premise or in a public cloud like Microsoft Azure with power management functionalities for sessions to save costs
- Most cost effective option
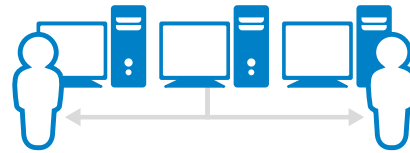
VDI − pooled VMs

- A temporary, non-persistent virtual desktop is dedicated to a single user while in use then returned to the pool at logoff. User settings and persona are preserved
- Applications can be built into gold images or published via Microsoft RemoteApp or vWorkspace Seamless Windows
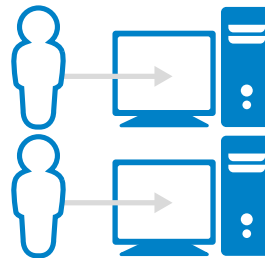
VDI − persistent VMs

- Personal, persistent, 1-to-1 virtual machine (VM) assigned to a specific user or device
- Changes made by the user persist through logoff & reboot
- Truly personalized computing experience
- Supports departmental application layering

Physical desktop

- Connect remotely to a physical PC at work, access its data and run applications installed locally on that work PC
- Can be assigned to users or devices persistently or temporarily
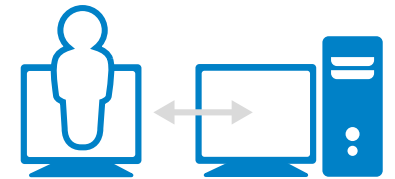
Client-hosted desktop virtualization (vWorkspace WSM)

- OS delivery and application layering to diskless endpoints and cloud desktops
- Formerly Wyse WSM, now integrated into vWorkspace licensing
- Useful for remote branch offices with a potentially poor WAN connection and helpful if you want to run a high-end application using the local processing on the end point
- Supports hot High Availability and centralized site management across multiple WSM sites

Learn about hardware

vWorkspace WSM: client-hosted desktop virtualization

OS delivery and application layering to diskless endpoints and cloud desktops

vWorkspace WSM (formerly known as Wyse WSM) is now part of vWorkspace delivering applications and virtual desktops to users on-demand. At the same time, it helps IT to simplify OS and application management and migrations, maintain compliance, increase security, improve productivity, and drive down both CAPEX and OPEX by leveraging low-cost or already amortized endpoints.

Everything you need from a desktop, without the headaches

vWorkspace WSM makes it easy and cost-effective to deliver and manage desktops, all from a central location. Everything – OS images, applications and user data – is delivered instantly over the network from the data center. All applications run locally on the endpoint, so users experience fast log-in, application consistency and rich performance. Once a user's session is over, all data is safely stored in the datacenter. As there is no hard disk drive on the client, the desktop is clean and ready for the next session.

Use cases

Because it runs over UDP - instead of a standard display protocol like RDP - and the processing is done locally, vWorkspace WSM provides a full-blown PC experience. It is well suited when you need to run specialized or non-virtualized applications, work in an environment with a potentially poor WAN connection, use peripherals that are not adapted for VDI (e.g. VoIP, dongle, face recognition), need the local processing power of the endpoint or want to implement basic desktop virtualization with simplified IT management without a high up-front investment.

This solution is ideal for cost-conscious **school districts** with several campuses as well as **remote branch offices for banks, hotels and in retail.**

Simple and cost-effective

- Deploy Windows 7 or 8 desktops with just a few mouse clicks
- Reuse existing PCs or deploy Wyse cloud desktops to support Green IT
- Small datacenter footprint reduces investments - scale as you grow
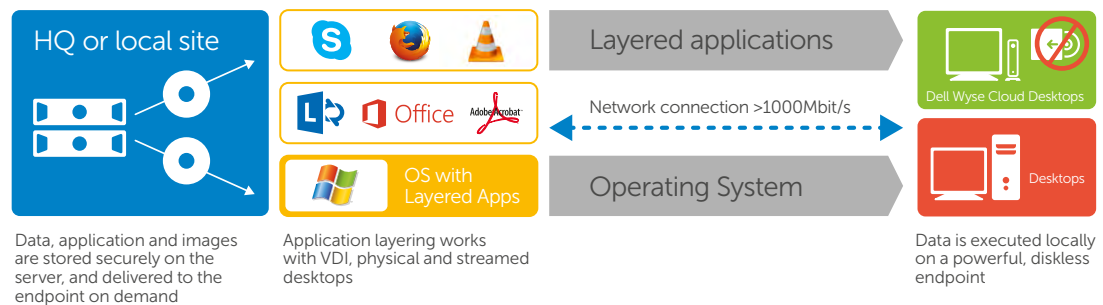- Easy for an IT generalist to setup and manage

Secure

- OS images and applications are stored centrally on the server
- No data or settings stored on the endpoint
- Meet **regulatory compliance**

High performance

- Client-caching reduces server-side storage and network bandwidth requirements
- With **user profile** and **application layering**, individual apps are available for user groups at login time
- Ability to **stream a server OS image** to any targeted physical or virtual server platform
- Hot High Availability and works in off-line mode for mobile users
- Works in single site or across multiple sites including centralized site management

Bridge between physical and virtual desktop computing

HQ or local site

Layered applications

Network connection >1000Mbit/s

Dell Wyse Cloud Desktops

OS with Layered Apps

Operating System

Desktops

Data, application and images are stored securely on the server, and delivered to the endpoint on demand

Application layering works with VDI, physical and streamed desktops

Data is executed locally on a powerful, diskless endpoint

Datacenter Infrastructure

Wyse vWorkspace can be deployed from a range of datacenter architectures, from a single tower server to a highly scalable rack-based infrastructure. Pre-configured infrastructures using converged hardware, and based on a tested and proven reference architecture allow to scale up linearly in a predictable way as deployments grow.

An 'appliance' based approach provides the easiest, fastest and most cost-effective way to get started with VDI.

Dell Appliance for Wyse - vWorkspace

The Dell Appliance for Wyse – vWorkspace is a self-contained server appliance that is the easiest and fastest way to get started with VDI. It is ideal for small and medium sized customers wanting to deploy VDI in a highly cost-effective way, as well as for larger organizations doing a pilot to prove the value prior to expansion leveraging a reference architecture.

- Easiest and fastest way to order and deploy a VDI solution yourself with a single SKU
- The Dell Quick Start Tool makes it easy to deploy vWorkspace without specialized training
- Choice of PowerEdge tower T630 or rack R730 server appliances with fixed configurations, including all software and licensing
- Supports up to 150 persistent virtual desktops or application delivery for up 350 users
- Starts at under $200 per seat
- Great for organizations deploying Chromebook devices and needing to access Windows applications

Learn more here.

Other delivery options:

Tower server

Ideal for pilots, or organizations wanting to implement between 10 and 100 virtual desktops

Dell PowerEdge VRTX

A converged 'datacenter in a box', ideal for remote branch offices to support 50 to 500 users

Dell XC Web-Scale Converged Appliance

Hyper-converged appliance that provides a modular and scalable way to deploy VDI. It is powered by Nutanix, utilizing local server storage, and scales linearly to thousands of users

Dell Wyse Datacenter Reference Architecture

Utilizes standard Dell server, storage and networking, and is able to integrate with existing compatible non-Dell hardware. Provides the most flexible option for any number of seats

Appliance for Wyse: Dell PowerEdge T630 or R730 servers

Microsoft Azure

Available from the Azure Marketplace, run sessions from the public cloud

Learn more here.

Learn about the Clients

Dell Wyse Thin Clients and Dell Endpoints

vWorkspace can be deployed to a very wide range of desktop and mobile clients.
Wyse thin and zero clients offer the lowest deployment, management and power requirements
for any desktop requirement. Dell tablets and Chromebook extend support to mobile users.

Entry-level:
Wyse 3000 series Intel-based thin client

A small form factor thin client delivering very good graphics performance with low power consumption.

- Dual-core Intel® 1.6GHz processor with integrated graphics engine
- USB 2.0 and USB 3.0 connectivity
- Single & Dual display support up to 1920x1200 resolution
- Microsoft Windows Embedded operating system

Tablets
Venue Pro Series – Take the power of Windows 8.1 and MS Office wherever you go.

- 8" or 11" inch HD screen
- Quad-core Intel® Atom™ processor and dual cameras
- 9mm thin
- Availability of optional accessories for the mobile professional

Mid-range:
Wyse 5000 series All-in-One thin client

A powerful thin client built into a stylish display and featuring Wyse ThinOS – Dell's ultra-secure firmware that greatly simplifies IT management and is immune from viruses and malware.

- Dual core AMD 1.4GHz APU with integrated graphics
- 21.5" full HD display and 2nd display support
- USB 2.0 connectivity

Laptop
Dell Chromebook – Manage daily tasks and be productive with an affordable, lightweight laptop that's easy to use.

- 2Gb or 4Gb option
- Up to a 10-hour battery
- Comes ready to use with the best Google apps built-in

High performance:
Wyse 7000 series thin client

Designed to meet requirements for virtual desktop and cloud applications with rich content creation and consumption, HD video, unified communications and 3D graphics.

- Dual 1.65GHz or Quad 2.0GHz core AMD APU with integrated AMD radeon graphics
- Supports 2 or 4 high resolution displays with up to 2560x1600 resolution
- USB 3.0 connectivity, compatible with USB 2.0
- Microsoft Windows Embedded operating system

More about clients

Security and Mobility

Security and Mobility

VDI vastly improves data security

Financial services organizations suffer from additional burdens beyond operational issues. Security, accountability, auditing and other requirements often make non-VDI BYOD scenarios impractical.

But how can you control the security of data that resides on an employee's personal device?

VDI's separation of application from endpoint ensures that data remains inside the datacenter, enabling IT to exercise control over data security, disclosure, access and auditing. When VDI is incorporated into BYOD design, the organization, rather than the user, controls it. Users won't be using personal devices to consume data; rather, each personal device becomes a "window" into virtual desktop-hosted applications.

- By centralizing user data and applications in the datacenter, as opposed to individual systems, your data is far more secure.
- For applications with access to sensitive data, two-factor authentication offers a higher level of industry-standard security.
- Policies make it easy for business to provide the right amount of access, based on their business requirements. You can grant, restrict or deny access to applications and virtual machines based on who, what, where and how a connection is made.
- Virus immune thin clients : you can choose a Wyse thin client that runs the unique Wyse ThinOS. Proprietary ThinOS is inherently virus immune and extremely secure while requiring low to no management overhead.
- Encrypted traffic.

Mobility with preferred devices

Increased mobility, freedom and flexibility fosters greater user satisfaction and increases productivity. Users can now access data and apps from anywhere, at anytime on devices they prefer, like tablets, smartphones, and their own personal PCs. vWorkspace increases both mobility and agility, tightens security, and enables you to manage a much more flexible workforce. Additionally users will have the same user experience as using physical PCs while IT will have more control. vWorkspace supports the use of any type of endpoint including those running: Windows, WES, iOS, MacOS, Android, ChromeOS, Linux, Wyse ThinOS (on Wyse thin clients), ThinShell (for repurposed PCs), Java- and HTML5-enabled modern browers (for Chromebooks and Windows RT devices).

Key uses

- Home office
- Presenting from a tablet
- Office desk / hotdesk
- User owned

Read about use cases

Case Study – How Dell does IT

"One of our biggest challenges in IT is integrating all the new employees from mergers and acquisitions, and the Wyse vWorkspace solution solves that challenge by making the onboarding process faster and more efficient."

Ujjwal Rajbhandari,
IT Director, Dell

Dell IT, Austin, USA

With over 100,000 employees, Dell is in full-on growth mode and regularly acquires new organizations which have their own IT systems, networks, domains and PCs which are not compatible or compliant with the Dell IT infrastructure and security requirements.

The challenge

- Employees from recently acquired organizations lack immediate access to critical Dell corporate information
- Such employees, as well as temporary contract workers, were often given a second laptop just to access the Dell network
- This cost a lot of money and resulted in too many PCs to support

The solution

- Dell IT investigated a range of virtual desktop infrastructure (VDI) solutions
- Dell chose Wyse vWorkspace to give newly onboarded workers and other Dell employees virtual access to the Dell network

- Initially 100 users were part of a pilot. Up to 2,000 will eventually be supported in the US and 8,000 worldwide
- New employees are assigned a VDI session and they can use any device to access the Dell corporate network immediately

The benefits

- Onboarding process for new employees is faster and simpler
- Dell IT saves about $200,000 a year in support costs
- Increased security greatly simplifies IT management
- Centralized management eases support for thousands of users
- Employees are more efficient and more productive
- Close collaboration between Dell IT and vWorkspace product team enhances the solution

Read the full Case Study

Dell Services

Dell Services for cloud client-computing

Dell is widely recognized as a world leader in VDI. We provide a suite of end to end services that allow you to evaluate, design, pilot, implement and manage your desktop virtualization solutions.

Consulting

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

Learn more here.

Implementation

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

Learn more here.

Support

- Pro Support
- L1 EU support
- L2 VDI Support

Learn more here.

Management

- Managed Services
- Availability Monitoring
- Network Management
- Data Management
- Managed Firewall

96% customer satisfaction for end-user deployment	**115+ million** systems supported	**The only end-to-end, single source provider**
80 countries supported **18** languages supported	**60+** countries offering same business day response	**The most comprehensive, partner-validated end-to-end solutions**
~200,000 Engineering hours invested Dell's partner-verified solutions	**5** global command centers	**#1 global leader in thin/zero clients**

Learn more here.

Do it Yourself	Build and Transfer	Build and Operate	Workspace as a service

Dell or Partner helps you do it. **Dell or Partner does it for you.**

Next Steps

Your Next Steps

Speak to Dell or contact a Dell PartnerDirect associate. Both are able to help you with consultancy, planning and advice.

1. Learn

Join a feasibility workshop
Explore your needs and establish your requirements for cloud client computing.

Learn more here.

Download a free trial version of vWorkspace software.

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 or
order a Dell Appliance for Wyse - vWorkspace to get started right away.

Dell Solution Center.

Order an appliance from Dell or a partner.

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.

Get in Touch

Contact Dell cloud client-computing

For detailed information on Dell Wyse vWorkspace, please visit **www.dell.com/wyse/vWorkspace**

Dell cloud client-computing

One Dell Way
Round Rock, TX 78664

Visit our website at:

www.dell.com/wyse

Dell cloud client-computing sales

1-800-438-9973
CCC_sales@dell.com

Contact a Dell expert

https://marketing.dell.com/t2d-wyse

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.

www.dell.com/support/wyse

Dell Inc.

One Dell Way, Round Rock, TX 78664
Telephone: 1-800-456-3355

www.dell.com

Dell cloud client-computing
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: www.dell.com/monitors

Wyse Datacenter for desktop virtualization solutions:
www.dell.com/wyse

Next steps   Dell.com