



# Dell Wyse R class

Power, expandability  
and display performance



Wyse



For your data, your budgets and your environments  
**Dell Wyse R class. All you need to know. here:**



# Introducing The Dell Wyse R class

Dell Wyse R class cloud clients cater for everything your users need from their desktop PCs. Without the things you don't – Like moving parts, wasted energy, insecure hard drives and excessive unnecessary heat.

Instead we've built in what matters the most to you: Powerful processors, dual monitor support, fast graphics and a host of USB ports for those vital everyday peripherals. Perfect when you need a cloud client desktop capable of voice, data and video.

## Cloud PCs



### Dell Wyse R00L

High performance, slim form factor cloud PC for Dell Wyse WSM.



### Dell Wyse R00LE

High performance, comprehensive expansion options, cloud PC for Dell Wyse WSM.

## Thin clients



### Dell Wyse R10L

High performance paired with simplicity and security, Dell Wyse ThinOS



### Dell Wyse R50L

High performance, slim thin client, Dell Wyse enhanced SUSE Linux.



### Dell Wyse R90L

High performance, slim thin client, Microsoft Windows XP Embedded.



### Dell Wyse R90LW/ Dell Wyse R90L7

High performance, slim thin client, Microsoft Windows Embedded Standard 2009 or 7.



### Dell Wyse R50LE

High performance thin client, comprehensive expansion options, Dell Wyse enhanced SUSE Linux.



### Dell Wyse R90LE

High performance thin client, comprehensive expansion options, Microsoft Windows XP Embedded.



### Dell Wyse R90LEW/ Dell Wyse R90LE7

High performance thin client, comprehensive expansion options, Microsoft Windows Embedded Standard 2009 or 7.



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# Features Dell Wyse R class

## Created with performance and expandability in mind.

The new Dell Wyse R class joins the uniquely integrated range of Dell Wyse Cloud Client Computing hardware and software. Dell Wyse R class features high performance central and graphics processors coupled with full support for multiple screens, and the best PC experience available on a cloud computing platform with the Dell Wyse TCX™ Suite of virtualization software.

Dell Wyse Device Manager supports the Dell Wyse R class with scalable enterprise-wide management including simple deployment, patching and updates and asset management – all with secure end-to-end encrypted communications. Finally, each and every Dell Wyse R class cloud client contributes – quietly and coolly – to lowering your organization's carbon footprint, with power usage and emissions that are a fraction of traditional PC desktops.

Performance



L family Connectivity



LE family Connectivity



Mounting options



Green



Thin client Management



Cloud PC Provisioning



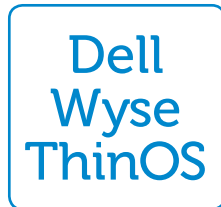
User Experience Optimization



User Experience Acceleration



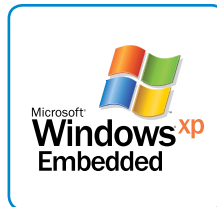
Dell Wyse ThinOS



Dell Wyse Enhanced SUSE Linux



Microsoft Windows XPe



Microsoft Windows Embedded Standard 2009



Microsoft Windows Embedded Standard 7



Take a tour of the Dell Wyse R class



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# Performance

## High performance. Inside and out.

By employing the advanced ATI 690E chipset from AMD, the Dell Wyse R class family of cloud clients provides the best graphics performance in their class.

With a maximum resolution of 2560x1600 on two displays these devices will support any high-end graphics application, with support for dual monitors with standard DVI-I and DVI-D ports. In addition, Dell Wyse R class includes support for Pixel Shader 2.0 that's Windows 7 with Premium Aero GUI compliant, which will be a requirement for running some of the latest and forthcoming technologies from Citrix, Microsoft and VMware.

### AMD Sempron Processor

The advanced technology contained in this CPU from AMD lowers power consumption without compromising performance.

- AMD64 Technology
- PowerNow! technology
- HyperTransport technology
- Built to support Microsoft Windows XP Embedded, as well as Linux



### AMD ATI 690E Windows 7 ready

The most powerful and highly optimized graphics engine in its class.

- Multiple display support
- Built-in support for Full DirectX 9.0
- 3D Acceleration Features
- Support for OpenGL
- Motion Video Acceleration Features (MPEG-2, MPEG-4 and WMV9)



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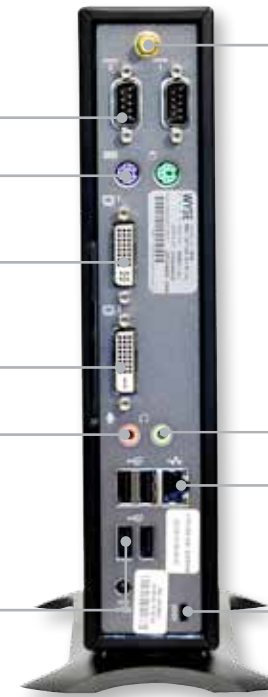
# Connectivity Dell Wyse R class L family

Dell Wyse R00L cloud PC; R10L, R50L, R90LW and R90L7 thin clients



## Well connected

- Two serial ports
- Two PS/2 ports for keyboard and mouse
- One DVI-I port
- One DVI-D port
- Audio In: 1/8-inch mini, 8 bit stereo microphone



- Wi-Fi antenna connector for optional 802.11 b/g/n\*
- Audio out: 1/8-inch mini, 16 bit stereo  
Internal mono speaker
- 10/100/1000 Base-T Gigabit ethernet port
- Kensington lock slot

Six available external USB 2.0 ports (2 front; 4 back)

\* R10L does not currently support "N" wireless band.

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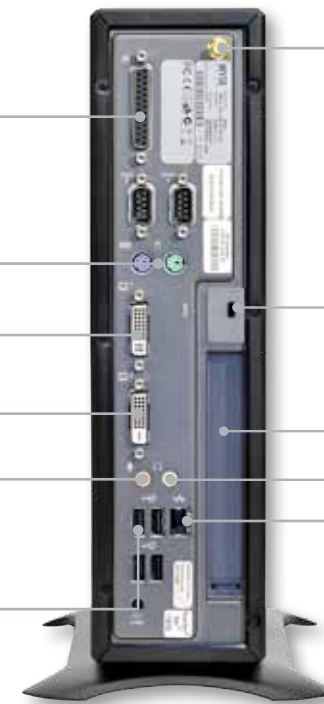
# Connectivity Dell Wyse R class LE family

Dell Wyse R00LE cloud PC; R50LE, R90LE, R90LEW and R90LE7 thin clients



## Well connected

- Two serial ports
- Two PS/2 ports for keyboard and mouse
- One DVI-I port
- One DVI-D port
- Audio In: 1/8-inch mini, 8 bit stereo microphone
- Six available external USB 2.0 ports (2 front; 4 back)



- Wi-Fi antenna connector for optional 802.11 b/g/n
- Kensington lock slot
- One PCIe 1.1a x4 with x16 slot
- Audio out: 1/8-inch mini, 16 bit stereo  
Internal mono speaker
- 10/100/1000 Base-T Gigabit ethernet port

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# Mounting options

## Vertical

Each Dell Wyse R class is supplied as standard with feet for vertical use.



## Back of monitor or wall

An optional VESA mount bracket enables mounting on the back of a monitor or on a wall (this requires the four industry standard mounting points to be free). The same bracket can be used for wall mounting, or in a secure or ruggedized cabinet if required.

## Desktop

Optional feet enable Dell Wyse R class to be used horizontally.



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# Desktop-computing Without compromise



EarthSmart Computing™



## That's Dell Wyse EarthSmart™ computing

Many Dell Wyse R class models are EnergyStar certified, a recognized sign of energy efficiency. Through our EarthSmart computing initiative we are committed to helping organizations implement a greener computing strategy - one that delivers a more efficient and productive computing experience for your users with a positive effect on energy wastage, heat and carbon emissions.

### Green power

Dell Wyse R class cloud clients use between 12 and 15 watts of power in typical use\*. In comparison, a typical PC would use between 70 and 150 watts. Even in sleep mode Dell Wyse R class units draw just 2 watts while being fully remotely managed.

Then, when you include additional power requirements in the data center, a thin computing deployment will deliver power savings of between 50 and 90%.

## More information

Download carbon calculators, fact sheets and white papers from here:  
[www.wyse.com/green](http://www.wyse.com/green)



\*Average power usage with device connected to 1 keyboard, 1 PS/2 mouse, and 1 monitor.

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# Thin Client Management Dell Wyse Device Manager

Dell Wyse Device Manager (WDM) addresses key management requirements for deploying powerful thin clients. With its centralized management and administration WDM helps IT departments deliver more effective remote thin client support while minimizing end user downtime.

**Security is assured with HTTPS based imaging, updates and downloads.**

## WDM delivers organization-wide benefits:

<b>Operations</b>	Centralized management. Collect and organize asset information.
<b>Administration</b>	Health status reports. Automated client settings. Update client firmware and add applications.
<b>End User IT Costs</b>	Easier more effective remote support. Create custom scripts and packages.
<b>Minimize downtime</b>	Restart or reset thin clients in less than a minute. Enforce policies. Minimize user errors.



Dell  
Wyse  
WDM

## At a glance features

- **Security**  
HTTPS Based Imaging / Updates  
Fully Encrypted Network Traffic  
Delegated Admin Access (MS AD) Support
- **No-Hassle Deployment**  
Complete Device Imaging / Patching / Updates  
Bandwidth Throttling for Efficiency / Reliability  
Software Updates and Add-ons
- **Device Administration and Monitoring**  
Device Health Status / Reporting  
Remote Shadowing / Control  
Default Device Configuration
- **Reduce End User IT Costs**  
Reduce energy consumption with scheduled up/down times
- **Scalability**  
Distributed Architecture  
Microsoft SQL Database Support  
Multiple Remote Repository Support
- **Complete Asset Visibility**  
Automated device discovery  
Detailed Hardware Asset information  
Installed Software Asset information

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# Cloud PC Provisioning Dell Wyse WSM

**Enterprise computing from the cloud is here.  
Whatever you want. Wherever you need it.**

That's the thinking behind Dell Wyse WSM. It's a dynamic on-demand streamed computing environment where everyone gets their preferred operating systems, applications, user data and documents: Wherever they are and whenever they need them.

And Dell Wyse WSM goes beyond the traditional VDI model too – with full support for mobile workers and remote branch offices. Dell Wyse WSM effectively changes the rules on what's possible and opens up the benefits of high performance desktops to enterprise users: Wherever they are.



Dell  
Wyse  
WSM

## Better than a PC could ever be

With Dell Wyse WSM users – such as those in the financial or retail industries – are given a fresh computer with their chosen PC operating system, applications and files all preloaded and ready-to-go, every time they sit down and start-up their powerful desktop devices known as Dell Wyse 'cloud PCs'.

Dell Wyse cloud PCs feature powerful processors that enable them to run full PC operating systems and applications locally, while keeping their documents and data secure on central Dell Wyse WSM servers. Enabling existing PC users to continue to use all their familiar operating systems and applications seamlessly - but with greater reliability and better overall performance than a full PC - with the result that many users don't even realize they're using a cloud PC.

And - better still, Dell Wyse WSM features a highly secure, robust and resilient network design that's ideal for remote offices and mission critical deployments such as the defence industry.

**With everything managed, updated, configured remotely and securely, Dell Wyse WSM is everything a PC promises. Minus the headaches.**

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# User Experience Optimization Dell Wyse TCX Suite

with Collaborative Processing Architecture

## Dell Wyse TCX delivers an amazing user experience in one software suite

Dell Wyse TCX Suite of virtualization software enriches the user experience by removing the limitations previously associated with thin clients. It enhances, not replaces, key protocols like ICA/HDX and RDP by adding key features to make each more valuable.



### Multi-display

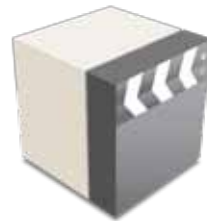
Ensures application windows and dialog boxes are multi-monitor aware when using more than one monitor.



### USB Virtualization

Enables plug and play peripheral support for virtual desktop environments.

- Redirect and use local USB devices in virtual desktops.
- Deploy virtual desktops to knowledge workers with special device access needs.
- Enable a broad set of USB peripherals including webcams and headsets.



### Multimedia acceleration

Streamlines the delivery of video and audio content to the local client for a rich user experience within a thin client computing architecture.

- Accelerates Mpeg1, Mpeg2, WMV, Mpeg4 Part 2, AC3, AAC, MP3, WAV, WMA media types.
- Collaborative Processing Architecture enhances server scalability, and network utilization by off-loading multimedia rendering to the client.



### Flash acceleration

Flash acceleration helps thin client users to experience improved Flash video performance. While the Flash player continues to run server-side, the resulting images are transcoded and redirected to the client for fast rendering. The technology allows for greater control of frame rate and compression and supports enhanced playback of YouTube-style flash videos in Internet Explorer.



### Bi-directional sound

Enables bi-directional audio in virtual desktop environments, enabling solutions such as VOIP, digital dictation or voice recognition to be deployed.

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# Virtualization Software Dell Wyse VDA

## Removing the barriers of network latency.

Dell Wyse Virtual Desktop Accelerator (VDA) enables virtualized desktop and thin computing environments to be deployed to areas where network latency has, to date, presented operational barriers. Now, with Dell Wyse VDA, more users can receive the full benefits of Dell Wyse thin computing – with the best PC experience over virtualized desktops.

Dell Wyse VDA is a software-only solution for Dell Wyse thin clients and supported PCs that delivers the best user experience for the allocated network bandwidth by neutralizing the effects of network latency and packet loss. Making 'thin' suitable for more remote-site, branch, or field-based users.

Dell Wyse VDA works with instead of replacing existing RDP and ICA protocols, accelerating them by up to 20 times on networks faced with latencies up to and beyond 300ms, and at least 768kbps bandwidth.



## At a glance features

- Software-only acceleration of virtual desktops and applications
- Accelerates existing Citrix ICA and Microsoft RDP protocols
- Works on WANs and 'fat, long pipes'
- Accelerates connections to Citrix XenApp, Citrix XenDesktop, VMware View and Microsoft Terminal Server and Microsoft Hyper-V VDI
- Enhances Dell Wyse TCX software suite functionality across wide-area networks
- Enables Dell Wyse Collaborative Processing Architecture across wide-area networks
- Administrator console provides control of maximum bandwidth per connection
- Leverages built-in security of underlying protocols (128-bit encryption for RDP and ICA).

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# Operating Systems Dell Wyse ThinOS 7.1

**Dell Wyse ThinOS is the most secure, management-free solution for cloud and virtual computing environments with built-in support for the latest infrastructures including Citrix, Microsoft, VMware and other vendors.**

## **Fast. Simple. Secure.**

This fast, purpose-built thin computing platform boots up in seconds, updates itself automatically, and provides IT managers with simple, scalable administration to suit their organization's needs. Security is assured too as there's no published API – giving you an environment that's immune from viruses and malware.

Management is simple with time consuming tasks such as software and configuration updates automated via central file servers (ftp, http, and https) where Dell Wyse thin clients can check-in for their updates. So, whether you have 100, 1000, or 10,000 devices, rolling out a new update is as easy as dropping a file onto your file server.

## **New Zero Launchpad optimizes virtual desktop deployments**

By harnessing the power of the Dell Wyse Zero engine, Dell Wyse ThinOS delivers fast and secure virtual desktops with user experiences based upon an individual's access levels.

Logging on is fast and easy too with no double desktop dramas. There's just one screen for inputting credentials before users are immediately presented with their assigned desktop(s). Finally, the Dell Wyse Zero toolbar gives advanced users the option to switch between multiple virtual desktops or modify local settings (e.g. display resolution) – all without leaving their virtual desktop environment.

## **Innovative, user-oriented and productive features**

### **Instant-on, simple access for users**

- The Zero launchpad and Zero toolbar adapt to provide simple and advanced access depending on user privileges.
- With class-leading boot-up times, users are ready to login in seconds.

### **Automated Management**

- Dell Wyse ThinOS enables simple, scalable device management from day one without the need for complex management software.
- For enterprise management Dell Wyse ThinOS features complete integration with Dell Wyse Device Manager.

### **Security**

- Featuring an unpublished API and no local file system, Dell Wyse ThinOS is inherently secure providing maximum security against malware and viruses.
- Secure remote access using Citrix Access Gateway (CSGEE mode) or VMware Security Server, including dual factor authentication with RSA SecureID.

### **Industry best HDX, View, and RDP in a non-windows client**

- Support for latest HDX features including ICA UDP audio, accelerated multimedia playback, USB webcam remoting, new audio codecs for VoIP, dual factor authentication, etc.
- Dell Wyse is the only vendor with an RDP 7.1 compatible client on non-windows OS – other vendors use RDESKTOP (based on RDP 6.x)
- ICA and RDP performance outperforms other non-windows clients by 3x (on comparable hardware).
- Enhance existing protocols further with Dell Wyse TCX (i.e. multicasting, high latency optimization, USB redirection into terminal server, etc)

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# Operating Systems Dell Wyse enhanced SUSE Linux

Dell Wyse enhanced SUSE Linux Enterprise is a simple, secure, and easy to manage platform designed for customers looking for flexibility and support of the latest protocols (ICA, PCoIP, RDP, etc) without the need for a Windows-based thin client.

## Simple “Hands-Off” Management.

Deploying, managing, and updating Dell Wyse enhanced SUSE Linux is easier than any other Thin-Linux distribution, Period. Utilizing Dell Wyse’s proven automatic update and configuration approach, management tasks can be handled centrally and easily without any management software required.

Updating 1 or 1,000 thin clients is as simple as dragging and dropping a file into a folder. For customers that desire a little more hands-on approach (such as asset tracking, reporting, etc) then integration with Dell Wyse Device Manager is built-in.

## Security.

Dell Wyse enhanced SUSE Linux is designed with security in mind. IT Managers are able to provide a locked-down experience, smartcard login to virtual environments, VPN connectivity, and leverage a read-only file system that protects against data loss, theft and virus attacks.



## Enterprise-quality Linux optimized by Dell Wyse

Dell Wyse enhanced SUSE Linux is the only enterprise-quality Linux platform optimized for thin computing, created by combining the security and flexibility of SUSE Linux with Dell Wyse’s cloud client computing leadership and innovation in user experience and simplified management. Additionally, SUSE Linux Enterprise is the only Linux platform to protect customers from potential IP infringement suits as it is jointly indemnified by SUSE Linux and Microsoft.

## Flexible, Multi-Protocol Support.

Being built from a standard enterprise-quality Linux distribution means the Dell Wyse enhanced SUSE Linux supports a wide range of protocols and infrastructures straight-out-of-the-box including Citrix, Microsoft, VMware and Ericom PowerTerm InterConnect Terminal Emulation – allowing you to mix-and-match connections from a single image.

## That’s Dell Wyse enhanced SUSE Linux.

The only enterprise-quality Linux platform optimized by Dell Wyse for thin client computing.

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# Operating Systems Microsoft Windows XP Embedded

Running Microsoft Windows XP Embedded on Dell Wyse thin clients gives IT departments the ability to support Citrix ICA, Microsoft RDP, VMware View, and Ericom PowerTerm WebConnect environments, as well as Ericom PowerTerm Interconnect Terminal Emulation and deploy fully functional desktops with better manageability and significantly lower total cost of ownership than personal computers.

Dell Wyse Enhanced Microsoft Windows XP Embedded-based thin clients can run 32 bit Microsoft Windows applications, either locally or from servers located on the network, with inbuilt flexibility to add and support a host of desktop peripherals with permission from the IT administrator.

## Secure write-protected thin desktops.

This robust and flexible operating system is further enhanced by the Dell Wyse file-based Write Filter that enables you to protect the file system image from accidental changes or user customization. On rebooting, the thin client simply returns to the required file system image state.



## Dell Wyse customized image support

Dell Wyse technicians are able to help you customize Windows XP Embedded to your exact requirements and create bespoke system images for subsequent enterprise-wide deployment, management and update through Dell Wyse Device Manager.

**Contact your Dell Wyse Partner for further details.**



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# Operating Systems Microsoft WES 2009

## Running Windows Embedded Standard (WES) on Dell Wyse thin clients gives IT departments the ability to deploy fully functional desktop clients with better manageability and significantly lower total cost of ownership than personal computers.

Dell Wyse WES 2009-based thin clients can run 32 bit Microsoft Windows applications, either locally or from servers, with the inbuilt flexibility to add and support a host of desktop peripherals with permission from the IT administrator.

Full support is provided for RDP 7.0, Citrix ICA 11.2, VMware View 4.0.1, Ericom PowerTerm WebConnect, Ericom PowerTerm InterConnect Terminal Emulation and Internet Explorer 8.

In addition, all Dell Wyse Windows Embedded Standard 2009 thin clients include support of Windows Embedded Device Manager (WEDM), allowing the device to be managed by Microsoft's central management system for Windows-based devices, System Center Configuration Manager (SCCM)\*.

### Secure write-protected thin client desktops

This robust and flexible operating system is further enhanced by the Dell Wyse file-based Write Filter that enables you to protect the files, folder and/or entire volumes from accidental changes or user customization. On rebooting, the thin client simply returns to its original state thus preventing any possible damaging modification either from users or malware.



## Dell Wyse customized image support

Dell Wyse technicians are prepared to help you customize Windows Embedded Standard 2009 to your exact requirements in order to create custom-built images for subsequent enterprise-wide deployment, management and update through Dell Wyse Device Manager.

### Contact your Dell Wyse Partner for further details

\*WES 2009 support for SCCM-WEDM will be available in April 2012.

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# Operating Systems Microsoft WES 7

**New Windows Embedded Standard 7 (WES 7) delivers a wealth of enhanced deployment, user experience and management benefits to Dell Wyse desktops, mobiles and thin clients deployed across an organization's virtualized network.**

## Richer user experience

Wherever they are – deskbound or mobile – with Microsoft Windows Embedded Standard 7 your users can benefit from the rich user experience of the Aero interface and the power, familiarity and reliability of the Windows 7 operating system in a highly customizable and componentized form.

Full support is provided for Remote Desktop Protocol (RDP) 7.1 with RemoteFX technology to provide seamless connectivity to Windows Server 2008 R2 and virtual desktop infrastructure scenarios. The Dell Wyse-enhanced WES7 platforms include additional features supporting the latest Citrix Online Plug-in and VMware View 4.6 to fit the needs of your most sophisticated users and making it an optimum OS for organizations wanting broad support for Cloud computing and desktop virtualization. Citrix Online Plug-in provides the HDX user experience and View 4.6 provides localization and Virtual Printing.

The platform also features additional Windows technology innovations to drive rich, immersive user experiences, including Internet Explorer 8. There's full support and inbuilt flexibility too, to add and support a host of desktop peripherals with permission from the IT administrator.

In addition, all Dell Wyse Windows Embedded Standard 7 thin clients include support of Windows Embedded Device Manager (WEDM), allowing the device to be managed by Microsoft's central management system for Windows-based devices, System Center Configuration Manager (SCCM).



## Easier to manage and deploy

Now, with WES7, deploying 32-bit capable thin clients is easier and more manageable than ever before and reflects the direct working relationship between Dell Wyse and Microsoft. The support for Domain Join and group policies through Active Directory, help with management and integration of thin clients into existing desktop management infrastructures.

Dell Wyse Configuration Manager delivers unprecedented simplicity to the management of virtual desktops by allowing IT departments to auto-configure thin clients running Dell Wyse-enhanced Windows Embedded Standard. By automating the deployment of WES thin clients throughout a private cloud WCM offers multiple benefits to organizations: reducing the need to do imaging, deploying custom images and faster configuration updates. Client devices are updated with the latest configuration settings for VDI connections (RDP, Citrix, VMware View), device settings and OS configuration automatically when devices startup.

Dell Wyse Device Manager (WDM) addresses key management requirements. With its centralized management and administration, WDM helps IT departments deliver more effective remote thin client support while minimizing end user downtime. In addition, the Dell Wyse USB Firmware Tool allows IT and Customer Service staff to quickly and easily image the devices directly.

## Enterprise-wide consistency

Dell Wyse Embedded Standard 7 and Dell Wyse provide the ideal, cost effective opportunity to deploy a consistent, high performance operating system across Dell Wyse cloud clients.

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# Technical Dell Wyse R class Specifications

The Dell Wyse R class family of cloud clients is available in L and LE configurations. Choose from versions featuring Dell Wyse ThinOS, Dell Wyse Enhanced SUSE Linux, Microsoft Windows XP Embedded, Windows Embedded Standard 2009 and Windows Embedded Standard 7 (RL family only). Provisioned environments are supported with Dell Wyse WSM.

Simply click the icons below.

Dell Wyse R00L cloud PC; R10L, R50L, R90LW and R90L7 thin clients



Dell Wyse R00LE cloud PC; R50LE, R90LE, R90LEW and R90LE7 thin clients



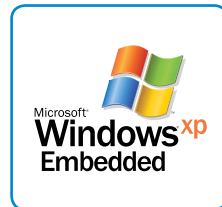
Dell Wyse ThinOS



Dell Wyse Enhanced SUSE Linux



Microsoft Windows XP Embedded



Microsoft Windows Embedded Standard 2009



Microsoft Windows Embedded Standard 7



Cloud PC Provisioning



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# Hardware specifications Dell Wyse R class L family

Processors	1.5 GHz AMD Sempron Processor
Memory	R00L 0/1GB or 0 / 2GB RAM R10L 128MB Flash / 512MB RAM R50L 1GB Flash / 1GB RAM R90L 1GB Flash / 1GB RAM R90LW 2GB Flash / 1GB RAM R90L7 4GB Flash / 2GB RAM up to 4GB Flash / 2 GB RAM
I/O peripheral support	One DVI-I Port One DVI-D Port Two PS/2 ports Two serial ports Six external USB 2.0 ports (2 front; 4 back) One Mic In One Line Out
Included	Optical mouse and PS/2 keyboard
Graphics	AMD ATI 690E Microsoft Windows Vista Premium and Windows 7 ready
Networking/Comm	10/100/1000 Base-T Gigabit Ethernet 802.11 b/g/n and Bluetooth 2.0 (optional)
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate Dual monitor supported* Single: 2560X1600 32 bpp 60Hz Dual: 2560X1600 32 bpp 60Hz
Audio	Out: 1/8-inch mini, 16 bit stereo. Internal Mono speaker. In: 1/8-inch mini, 8 bit stereo microphone.

Factory options	Internal wireless option 802.11 b/g/n** for R10L and R50L Internal wireless and bluetooth option 802.11 b/g/n for R90L, R90LW and R90L7 Fiber Optic-ready Wyse R90LW***
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz. Energy Star® V.5.0 compliant power supply. Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: 14.6 Watts in idle state.
Shipping weight	6.50 lbs. (2.95kg)
Mountings	Vertical or Horizontal (optional), VESA mount.
Security	Built-in Kensington security slot (cable sold separately)
Dimensions	250mm x 225mm x 53mm (9.8 in. x 8.8 in. x 2.1 in.)
Humidity	20% to 80%
Temperature range	Horizontal position: 50 to 95 F (10 to 35 C) Vertical position: 50 to 104 F (10 to 40 C)
Warranty	Three-year hardware warranty. Visit our web site for WyseChoice extensions and upgrades.
Certifications	German EKI-ITB 2000, ISO 9241-3/-8 cULus 60950, TÜV-GS, EN 60950 FCC Class B, CE, VCCI, C-Tick WEEE, RoHS Compliant
	* R10L is 1920 by 1200 32 bpp 60Hz in dual mode. ** R10L does not currently support "N" wireless band. *** Fiber Optic Board not included. Please refer to release notes or your Wyse account manager for supported Fiber Optic Board.



# Hardware specifications Dell Wyse R class LE family

Processors	1.5 GHz AMD Sempron Processor
Memory	R00LE 0 / 1GB or 0 / 2GB RAM R50LE 1GB Flash / 1GB RAM R90LE 1GB Flash / 1GB RAM R90LEW 2GB Flash / 1GB RAM up to 4GB Flash / 2 GB RAM R90LE7 4GB Flash / 2 GB RAM
I/O peripheral support	One DVI-I Port / One DVI-D Port Two PS/2 ports Two serial ports One Parallel port Six External USB 2.0 ports (2 front; 4 back) Four Internal USB 2.0 ports One Mic In / One Line Out
Expansion	One PCIe 1.1a x4 with x16 slot, half card length, full height
Included	Optical mouse and PS/2 keyboard
Graphics	AMD ATI 690E Microsoft Windows Vista Premium and Windows 7 ready
Networking/Comm	10/100/1000 Base-T Gigabit Ethernet 802.11 b/g/n and Bluetooth 2.0 (optional)
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate Dual monitor supported Single: 2560X1600 32 bpp 60Hz Dual: 2560X1600 32 bpp 60Hz

Audio	Out: 1/8-inch mini, 16 bit stereo. Internal Mono speaker. In: 1/8-inch mini, 8 bit stereo microphone.
Factory options	Internal wireless option 802.B/G/N for R50LE Internal wireless and bluetooth option 802.B/G/N for R90LE, R90LEW and R90LE7
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz. Energy Star® V.5.0 compliant power supply. Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: 14.1 Watts in idle state
Shipping weight	8.37 lbs. (3.8kg)
Mountings	Vertical or Horizontal (optional), VESA mount
Security	Built-in Kensington security slot (cable sold separately)
Dimensions	307mm x 225mm x 82mm (12.1 in. x 8.8 in. x 3.2 in.)
Humidity	20% to 80%
Temperature range	Horizontal position: 50 to 95 F (10 to 35 C) Vertical position: 50 to 104 F (10 to 40 C)
Warranty	Three-year hardware warranty. Visit our web site for WyseChoice extensions and upgrades.
Certifications	German EKI-ITB 2000, ISO 9241-3/-8 cULus 60950, TÜV-GS, EN 60950 FCC Class B, CE, VCCI, C-Tick WEEE, RoHS Compliant



# Software specifications Dell Wyse ThinOS 7.1

<b>HDX Ready client ICA 12 Compatible</b>	<ul style="list-style-type: none"> <li>- UDP Audio</li> <li>- Improved media flow control</li> <li>- HDX Plug-n-Play</li> <li>- Flash (server rendered)</li> <li>- Progressive Display</li> <li>- HDX IntelliCache</li> <li>- Session Reliability</li> <li>- Access Gateway Support (direct LDAP or RSA authentication)</li> <li>- Support for L-shaped desktop (and other rotated monitor set up)</li> <li>- Granular control on HDX USB redirected devices</li> </ul>	<ul style="list-style-type: none"> <li>- User roaming</li> <li>- HDX Mediastream</li> <li>- HDX Realtime</li> <li>- HDX Broadcast (Branch Repeater)</li> <li>- Seamless Windows</li> <li>- Desktop Restart (XenDesktop)</li> <li>- Smartcard authentication &amp; redirection</li> </ul>	<b>Dell Wyse TCX Suite</b> Dell Wyse TCX Suite virtualization software works with and enhances HDX and RDP protocols featuring: <ul style="list-style-type: none"> <li>- Multimedia: giving users the power to run rich multimedia files formats</li> <li>- Multi-Display: windows and dialog boxes behave the way users expect across multiple displays.</li> <li>- USB Virtualizer: client attached USB devices are visible to virtual desktops applications, and administrators, even on terminal servers!</li> <li>- Rich Sound – receive and transmit high quality audio without compromise.</li> <li>- Flash Acceleration: helps users to experience improved Flash performance.</li> </ul>
<b>RDP 7.1 Compatible client</b>	<ul style="list-style-type: none"> <li>- Optimized for Windows 7</li> <li>- Rich Multimedia (TS MMR)</li> <li>- Up to 32-bit color depth connections</li> <li>- RDP7 Bi-directional audio</li> <li>- Flash Video support (with TCX)</li> <li>- Broad USB Support (with Dell Wyse TCX)</li> <li>- Smartcard authentication and redirection</li> <li>- WAN Acceleration (with Dell Wyse VDA)</li> </ul>	<ul style="list-style-type: none"> <li>- Support for Microsoft RDS broker (including RemoteApp)</li> <li>- RDP7 Multimedia</li> <li>- True Multi-Monitor Support (incl. rotation)</li> <li>- Network Level Authentication (NLA)</li> </ul>	<b>Dell Wyse Virtual Desktop Accelerator</b> Neutralizes the effects of network latency and packet loss, making 'thin' more suitable for more remote-site, branch, or field-based users by boosting RDP and ICA performance up to 20 times on networks with latencies up to and exceeding 300ms and at least 768kbps bandwidth.
<b>VMware View 4.5 client</b>	<ul style="list-style-type: none"> <li>- Smartcard Authentication</li> <li>- SecureID Authentication</li> <li>- Multimedia Support (with TCX)</li> <li>- Bi-directional Audio (with TCX)</li> <li>- WAN Acceleration (with VDA)</li> </ul>	<ul style="list-style-type: none"> <li>- SSL Tunneling</li> <li>- Restart VM</li> <li>- Broad USB Support (with TCX)</li> <li>- Flash Video Support (with TCX)</li> </ul>	<b>Management made easy</b> Fast booting, scalable administration includes simple drag and drop placement of firmware, automatic updates via file server and full integration with Dell Wyse Device Manager.
<b>Roaming smart card vendor support</b>	Enables smart card users to not only roam from station to station but also access the same virtual environment regardless of which station they are connecting from. Dell Wyse ThinOS provides 'out-of-the-box' smart card support for vendors such as Gemalto .NET, Aladdin, and ActiveIdentity – supported within Citrix, VMware and Microsoft environments. Users benefit from secure login and roaming desktop support so they can access their environments from any suitably equipped Dell Wyse thin computing environment. DoD CAC supported.		
			<b>Security built in</b> <ul style="list-style-type: none"> <li>- With no published API Dell Wyse ThinOS is inherently secure from viruses and malware.</li> <li>- Dell Wyse ThinOS includes robust wired and wireless 802.1x support, with secure encryption for simple installation and management.</li> <li>- DoD CAC supported.</li> <li>- Although there is no local file system, certifications and configuration data can be stored locally. Leveraging AES 128 bit encryption, with a random number generator, any local data will be secure.</li> </ul>
			<b>Server OS Infrastructure support</b> <ul style="list-style-type: none"> <li>- Citrix XenDesktop 4.0 – 5.5</li> <li>- Citrix XenApp 4.5 – 6.5</li> <li>- Citrix Presentation Server</li> <li>- Microsoft Windows Terminal Server 2003 &amp; 2008/R2</li> <li>- VMware View 4.0 – 5.0</li> <li>- Support for other leading VDI brokers (Quest Software, Leostream, etc)</li> </ul>



# Software specifications Dell Wyse enhanced SUSE Linux

<b>Firmware features</b>	<p>Dell Wyse enhanced SUSE Linux based on SLED 11 SP1</p> <p>Automatic Central Configuration (text-based INI's)</p> <p>Automatic Upgrades (FTP, HTTP, HTTPS)</p> <p>Secure, read-only file system with lockdown abilities</p> <p>Dell Wyse RDP client (RDP7 Compatible)</p> <p>Citrix Online Plugin 11.2 client (ICA 11.2) w/ HDX Mediateam, Plug-n-Play, Realtime, etc.</p> <p>VMware View Open Client compatible with View 4.5</p> <p>Ericom PowerTerm InterConnect Terminal Emulation</p> <p>Ericom PowerTerm WebConnect</p> <p>Cisco, Juniper, Nortel, IPSEC VPN Support (Add-ons)</p> <p>Local/Remote Printing support (CUPS, LPR/LPD, Samba, ThinPrint,etc)</p> <p>Web-based applications (Firefox, Flash, JAVA,etc)</p> <p>XDMCP / SSH</p>
<b>Server OS Infrastructure support</b>	<p>Citrix XenApp / Citrix Presentation Server</p> <p>Citrix XenDesktop</p> <p>VMware View</p> <p>Microsoft Windows Terminal Server 2003 &amp; 2008</p>
<b>Keyboard language support</b>	<p>100+ Keyboard Layouts supported locally (English, German, Spanish, French, Italian, Dutch, Chinese, Japanese, Turkish)</p>
<b>Management</b>	<p>Automatic, "hands-off" configuration and upgrading of thin clients without the need for device management software. Optionally, administrators can choose to integrate with Dell Wyse Device Manager (WDM) for more hands-on control:</p> <ul style="list-style-type: none"> <li>- Complete image upgrade</li> <li>- Wake terminal remotely (Wake-on LAN)</li> <li>- Remote screen shadowing of entire desktop (VNC)</li> <li>- Asset management and reporting</li> </ul>

<b>Wireless support</b>	<p>WPA Personal, WPA2 Personal, WPA Enterprise</p> <p>WPA Enterprise Authentication support</p> <p>PEAP/TLS: PAP/MSCHAP/MSCHAPV2 support</p>
<b>Dell Wyse TCX Suite</b>	<p>Advanced support for innovative Dell Wyse TCX Suite virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring:</p> <ul style="list-style-type: none"> <li>- Multimedia acceleration - the power to run rich multimedia files formats utilizing Dell Wyse Collaborative Processing Architecture (CPA) that intelligently redirects the necessary processing tasks between the thin client and the server.</li> <li>- Multi-display - ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.</li> <li>- USB Virtualization - makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.</li> <li>- Bi-directional sound - enables virtual desktops and applications to receive and transmit high quality audio without compromise.</li> <li>- Flash acceleration - helps users of thin clients to experience improved Flash performance.</li> </ul>
<b>Dell Wyse Virtual Desktop Accelerator</b>	<p>Dell Wyse Virtual Desktop Accelerator Delivers the best user experience for the allocated network bandwidth. Dell Wyse Virtual Desktop Accelerator neutralizes the effects of network latency and packet loss, making cloud client computing more suitable for more remote-site, branch, or field-based users – and boosts RDP and ICA up to 20 times on networks with latencies up to and exceeding 300ms and at least 768kbps bandwidth.</p>





# Software specifications Microsoft Windows XP Embedded

<b>Firmware features</b>	Microsoft Windows XP Embedded SP3 Microsoft Internet Explorer 7.0 resident: HTML, JavaScript, XML, Active X Sun JRE, Media Player, Citrix Web Interface RDP 6.0.xx resident Citrix ICA 11 resident VMware View Client Resident Ericom PowerTerm InterConnect Terminal Emulation Ericom PowerTerm WebConnect client Windows Media Player 11, .NET 3.0 SP1
<b>Memory</b>	1GB of flash memory and 1GB of RAM
<b>Server OS Infrastructure support</b>	Citrix XenApp / Citrix Presentation Server / Citrix XenDesktop VMware View Ericom PowerTerm WebConnect Microsoft Windows Terminal Server 2003 & 2008
<b>Keyboard language support</b>	U.S. English (standard), French, German, Spanish, U.K. English, 40 other languages included
<b>Protocol support</b>	TCP/IP, DNS, DHCP, PXE
<b>Management</b>	Remote management, configuration, and upgrades through Dell Wyse Device Manager Complete image upgrade Wake terminal remotely (Wake-on LAN) Terminal configuration (IP information, name, etc.) Remote screen shadowing of entire desktop (Dell Wyse Remote Shadow) Reporting, Asset management SMS Altiris

<b>Wireless support</b>	802.11 b/g/n support with internal wireless adapter WPA-2, WEP, WPA wireless authentication Supports wireless adapters from: Cisco, D-Link, Netgear, US Robotics, Trendware
<b>Plug-ins</b>	Adobe Flash Player / Adobe Shockwave
<b>Dell Wyse TCX Suite</b>	Advanced support for innovative Dell Wyse TCX Suite virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring: <ul style="list-style-type: none"> <li>- Multimedia acceleration - the power to run rich multimedia files formats utilizing Dell Wyse Collaborative Processing Architecture (CPA) that intelligently redirects the necessary processing tasks between the thin client and the server.</li> <li>- Multi-display: ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.</li> <li>- USB Virtualization: makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.</li> <li>- Bi-directional sound: enables virtual desktops and applications to receive and transmit high quality audio without compromise.</li> <li>- Flash acceleration: helps users of thin clients to experience improved Flash performance.</li> </ul>
<b>Dell Wyse Virtual Desktop Accelerator</b>	Neutralizes the effects of network latency and packet loss, making 'thin' more suitable for more remote-site, branch, or field-based users by boosting RDP and ICA up to 20 times on networks with latencies up to and exceeding 300ms and at least 768kbps bandwidth.



# Software specifications Microsoft WES 2009

<b>Firmware features</b>	Microsoft Windows Embedded Standard 2009 Microsoft Internet Explorer 8.0 resident: HTML, JavaScript, XML, Active X Sun JRE, Media Player, Citrix Web Interface RDP 7.0 resident Citrix Online Plugin 11.2 resident (ICA 11.2) VMware View 4.0.1 client resident Ericom PowerTerm InterConnect Terminal Emulation Ericom PowerTerm WebConnect client Windows Media Player 11, .NET 3.5
<b>Server OS Infrastructure Support</b>	Citrix XenApp / Citrix Presentation Server / Citrix XenDesktop VMware View Ericom PowerTerm WebConnect Microsoft Windows Terminal Server 2003 & 2008
<b>Application Framework</b>	.Net 3.5
<b>Security</b>	File Based Write Filter (FBWF) Microsoft Baseline Security Analyzer (MBSA)
<b>Set-up and Configuration</b>	Boot from local flash Microsoft Windows WES7 user interface languages: U.S, Optional add-ons
<b>Keyboard language support</b>	U.S. English (standard), French, German, Spanish, U.K. English, 40 other languages included
<b>Protocol Support</b>	TCP/IP, DNS, DHCP, PXE
<b>Management</b>	Remote management, configuration, and upgrades through Dell Wyse Device Manager Complete image upgrade Wake terminal remotely (Wake-on LAN) Terminal configuration (IP information, name, etc.) Remote screen shadowing of entire desktop (Dell Wyse Remote Shadow) Reporting, Asset management / SMS / Altiris Native WEDM support for management via SCCM*

<b>Wireless support</b>	802.11 a/b/g/n** support with external wireless adapter or internal wireless adapter option WPA-2, WEP, WPA wireless authentication PEAP-GTC wireless authentication protocol with optional Juniper Odyssey Client Supports PC-Card wireless adapters from: Cisco, D-Link, Netgear, US Robotics, Trendware**
<b>Plug-ins</b>	Adobe Flash Player / Adobe Shockwave Microsoft Silverlight
<b>Dell Wyse TCX Suite</b>	Advanced support for innovative Dell Wyse TCX Suite of virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring: <ul style="list-style-type: none"> <li>- Multimedia acceleration - the power to run rich multimedia files formats utilizing Dell Wyse Collaborative Processing Architecture (CPA) that intelligently redirects the necessary processing tasks between the thin client and the server.</li> <li>- Multi-display - ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.</li> <li>- USB Virtualization - makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.</li> <li>- Bi-directional sound - enables virtual desktops and applications to receive and transmit high quality audio without compromise.</li> <li>- Flash acceleration - helps users of thin clients to experience improved Flash performance.</li> </ul>
<b>Dell Wyse Virtual Desktop</b>	Neutralizes the effects of network latency and packet loss, making 'thin' Accelerator more suitable for more remote-site, branch, or field-based users by boosting RDP and ICA up to 20 times on networks with latencies up to and exceeding 300ms and at least 768kbps bandwidth.
	*WES 2009 support for SCCM-WEDM will be available in April 2012 **requires hardware support



# Software specifications Microsoft WES 7

<b>Firmware features</b>	Microsoft Windows Embedded Standard 7 (WES7) Microsoft Internet Explorer 8.0 resident: HTML, JavaScript, XML, Citrix Web Interface Microsoft RDP 6.1 client (Protocol 7.1 Supported) with RemoteFX technology Citrix Online Plugin 12 resident (ICA 12) with HDX Citrix XenDesktop VMware View 4.6 client resident Ericom PowerTerm InterConnect Terminal Emulation Windows Media Player 12
<b>Server OS Infrastructure support</b>	Citrix XenApp / Citrix Presentation Server Citrix XenDesktop VMware View Microsoft Windows Terminal Server 2003 & 2008 R2 MSFT VDI
<b>Security</b>	File Based Write Filter (FBWF)
<b>Set-up and configuration</b>	Boot from local flash Microsoft Windows WES7 user interface languages: U.S, Optional add-ons
<b>Keyboard language support</b>	U.S. English (standard), French, German, Spanish, U.K. English, 40 other languages included
<b>Protocol support</b>	TCP/IP, DNS, DHCP, PXE
<b>Management</b>	Auto-configuration with Dell Wyse Configuration Manager Remote management, configuration, and upgrades through Dell Wyse Device Manager Complete image upgrade Terminal configuration (IP information, name, etc.) Reporting, Asset management Simple USB imaging solution with Dell Wyse USB Firmware Tool Native WEDM support for management via SCCM

<b>Wireless support</b>	802.11 a/b/g/n* support with external wireless adapter or internal wireless adapter option WPA-2, WEP, WPA wireless authentication PEAP-GTC wireless authentication protocol with optional Juniper Odyssey Client Supports PC-Card wireless adapters* from: Cisco, D-Link, Netgear, US Robotics, Trendware
<b>Plug-ins</b>	Adobe Flash Player Microsoft Silverlight
<b>Dell Wyse TCX Suite</b>	Advanced support for innovative Dell Wyse TCX Suite virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring: <ul style="list-style-type: none"> <li>- Multimedia acceleration - the power to run rich multimedia files formats utilizing Dell Wyse Collaborative Processing Architecture (CPA) that intelligently redirects the necessary processing tasks between the thin client and the server.</li> <li>- Multi-display - ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.</li> <li>- USB Virtualization - makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.</li> <li>- Bi-directional sound - enables virtual desktops and applications to receive and transmit high quality audio without compromise.</li> <li>- Flash acceleration - helps users of thin clients to experience improved Flash performance.</li> </ul>
<b>Dell Wyse Virtual Desktop Accelerator</b>	Neutralizes the effects of network latency and packet loss, making 'thin' more suitable for more remote-site, branch, or field-based users by boosting RDP and ICA up to 20 times on networks with latencies up to and exceeding 300ms and at least 768kbps bandwidth.
	*requires hardware support



# Software specifications Dell Wyse WSM

Device hardware requirements	<p>Windows XP Pro</p> <ul style="list-style-type: none"> <li>- Minimum processor speed 800 MHz (1GHz or higher is recommended)</li> <li>- Mind. 256 MB (1GB or higher is recommended)</li> </ul> <p>Vista and Windows 7</p> <ul style="list-style-type: none"> <li>- Minimum processor speed 1 GHz (1.5GHz or higher is recommended)</li> <li>- Mind. 1 GB (2GB or higher is recommended)</li> <li>- Flash size/local storage – none needed. If the device has flash it can be used as a local cache for offline mode.</li> </ul>
Server requirements	<p>Minimum processor speed 1GHz (3GHz or higher is recommended).            Server Operating System: Windows XP Pro SP3, Windows Server 2003, Windows Server 2008 and 2008 R2</p>
Network requirements	<p>Server Lan Speed = Minimum 100Mbps (1Gbps and up is recommended)            Device Lan Speed = Minimum 10Mbps (100 Mbps full duplex is recommended)</p>
Operating systems supported	<p>Microsoft Windows XP            Microsoft Windows Vista            Microsoft Windows 7</p>
Databases supported	<p>Microsoft SQL 2005 and 2008 (Server and Express Editions)</p>
Built-in high availability	<ul style="list-style-type: none"> <li>- Database availability using SQL clustering.</li> <li>- Built-in server high availability through WSM Server Grouping feature.</li> <li>- Server to Server Fail-over Capability.</li> </ul>
Fast and easy installation	<ul style="list-style-type: none"> <li>- Installing Dell Wyse WSM is simply a matter of running a single, graphical installer.</li> <li>- The installer checks for all the prerequisite components before installation.</li> </ul>

Web-based admin console	<ul style="list-style-type: none"> <li>- Allows IT administrators to access Dell Wyse WSM from any browser.</li> <li>- Control the entire installation from a central location.</li> <li>- Dramatically simplifies administration, saving IT time and user downtime.</li> <li>- Wizards to guide the user through specific tasks.</li> </ul>
Operation system and application imaging tools	<ul style="list-style-type: none"> <li>- Imaging tool simplifies the process of creating an OS image for the specific hardware configuration and an application image for all hardware configurations.</li> <li>- All OS and application images are ready for deployment once created, no further modifications needed.</li> </ul>
Application subscription management	<p>Use flexible application deployment methods:</p> <ul style="list-style-type: none"> <li>- Auto-subscribed applications are ready for use when user logs in for the first time.</li> <li>- Manual subscriptions allow users the flexibility to use applications only when needed.</li> <li>- Mandatory subscriptions that cannot be unsubscribed by users.</li> </ul>
Protected System Drive	<ul style="list-style-type: none"> <li>- Allows administrators to protect the system drive from end user initiated updates.</li> <li>- Prevents changes to operating system drive except by administrators, helping stop viruses, spyware, or malware from infecting the device.</li> </ul>



# Software specifications Dell Wyse WSM (continued)

Device hardware streaming	<ul style="list-style-type: none"><li>- Dell Wyse WSM provides an on-demand operating system to Dell Wyse cloud PCs or diskless PCs on the network.</li><li>- Innovative technology makes each Dell Wyse cloud PC or diskless PC think there is a virtual hard disk attached to the device.</li><li>- Only those bits needed for the normal device operation are sent in order to reduce network traffic.</li><li>- Operating-system images can be shared across multiple devices, making management easier.</li></ul>	Modes of operation	Dell Wyse WSM allows administrators to choose modes of operation for the OS: <ul style="list-style-type: none"><li>- Private Mode - for administration of operating system images.</li><li>- Shared Mode - has two additional modes of normal operation:<ol style="list-style-type: none"><li>1) Volatile - returns desktop to pristine state after a device reboot.</li><li>2) Persistent - remembers any user settings after a device reboot.</li></ol></li></ul>
Flexible boot options	<ul style="list-style-type: none"><li>- Each device can boot from four operating system image assignments.</li><li>- Administrators can assign or let users choose which operating system they want to boot.</li><li>- First disk mode for the default OS image to boot from every time device starts up.</li><li>- First available mode to boot from the first responding server in order to balance loads.</li></ul>	Remote servers for scalability	<ul style="list-style-type: none"><li>- IT administrators can deploy multiple remote servers to improve scalability of the overall solution.</li><li>- Central management of remote servers allows easy deployment of the solution across different geographic locations.</li></ul>
Application license management and metering	<ul style="list-style-type: none"><li>- Dell Wyse WSM provides the infrastructure to collect information about the application license-usage across the enterprise. This information allows IT organizations to save money associated with application licenses.</li><li>- Licenses can be stored for all the applications deployed. It also enforces license compliance.</li><li>- Types of licenses that can be controlled include:<ol style="list-style-type: none"><li>1) Time-based licenses (valid for X days).</li><li>2) Number of concurrent users.</li></ol></li></ul>	Comprehensive reporting	<ul style="list-style-type: none"><li>- Easy ad-hoc reporting based on flexible parameters.</li><li>- Reports are delivered through HTML, giving you the flexibility to output in any form.</li><li>- License-metering reports can be used to make proactive purchasing decisions.</li><li>- License-audit reports can be used for compliance purposes.</li></ul>
		Desktop	Dell Wyse WSM works with Dell Wyse C00LE, V00LE, R00L/E, Z00D and X00C family cloud PCs as well as with existing thin clients, diskless PCs and virtual-desktop systems.



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# Contact Dell Wyse

## Dell Wyse

3471 North First Street,  
San Jose,  
CA 95134-1801

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an email to: [sales@wyse.com](mailto:sales@wyse.com)

## Dell Wyse Sales

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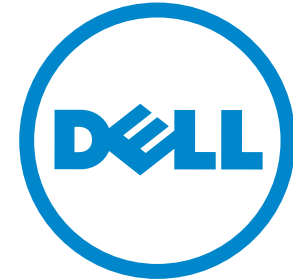
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# Dell Wyse R class

## Everything you need in a cloud client

The Dell Wyse R class family of cloud clients combines power, expandability and display performance with the legendary security, reliability and manageability of Dell Wyse Cloud Client Computing maximising your investment and presents a compelling solution to delivering low cost, low carbon, high-performance desktops.

The family features powerful processors, dual monitor support, fast graphics and a host of USB ports for those vital everyday peripherals. Perfect when you need voice, data and video capabilities.

## High performance central and graphics processors

The Dell Wyse R class features high performance central and graphics processors coupled with full support for multiple screens, and the best PC experience available on a cloud client platform with the Dell Wyse TCX Suite of virtualization software.

## Mounting options

Dell Wyse R class cloud clients are supplied as standard with feet for vertical use, with optional feet for horizontal use. An optional VESA mount bracket enables back of monitor or wall mounting (this requires the four industry standard mounting points to be free). The same bracket can be used in a secure or ruggedized cabinet if required.

## Choice of operating systems

The Dell Wyse R class family of cloud clients is available in L and LE configurations. Choose from versions featuring Dell Wyse thinOS, Dell Wyse Enhanced SUSE Linux, Microsoft Windows XP Embedded, Windows Embedded Standard 2009 and Windows Embedded Standard 7 (RL Family only). Provisioned environments are supported with Dell Wyse WSM.



## At a glance

### Performance

Advanced new generation ATI 690E graphics and AMD Sempron central processors for class-leading computing and graphics performance.

### Connectivity

Featuring future proof connectivity with two DVI outputs and fast 802.11n WiFi.

### Mounting options

The Dell Wyse R class family can be sited vertically or horizontally on desktops, and even fitted to walls and behind monitors.

### Green

Dell Wyse R class cloud clients use between 12 and 15 watts of power in typical use – less than their nearest rivals, saving critical carbon output and vital budget.

### OS and Application Provisioning

Full integration with Dell Wyse WSM provisioning software with the Dell Wyse R00L and R00LE.

### Dell Wyse ThinOS

Maximizes the new Dell Wyse Zero engine to deliver fast and secure desktops with user experiences based on an individual's access levels.

### Dell Wyse Enhanced SUSE Linux

Secure, flexible and market-leading Linux combined with Dell Wyse optimizations in management and user experience.

### Microsoft Windows XP Embedded SP3

This robust and flexible operating system is further enhanced by the Dell Wyse file-based Write Filter that enables you to protect the file system image from accidental changes or user customization.

### Microsoft Windows Embedded Standard 2009 and 7

Take advantage of the power of Windows Embedded Standard 2009 and the rich user experience of Windows Embedded Standard 7.



# Specification Dell Wyse R class thin clients

Processors	1.5 GHz AMD Sempron Processor
Memory	R00L 0/1GB or 0 / 2GB RAM R10L 128MB Flash / 512MB RAM R50L 1GB Flash / 1GB RAM R90L 1GB Flash / 1GB RAM R90LW 2GB Flash / 1GB RAM R90L7 4GB Flash / 2GB RAM up to 4GB Flash / 2 GB RAM
I/O peripheral support	One DVI-I Port / One DVI-D Port Two PS/2 ports / Two serial ports Six external USB 2.0 ports (2 front; 4 back) One Mic In / One Line Out
Included graphics	Optical mouse and PS/2 keyboard AMD ATI 690E Microsoft Windows Vista Premium & Windows 7 ready
Networking/Comm	10/100/1000 Base-T Gigabit Ethernet 802.11 b/g/n and Bluetooth 2.0 (optional)
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate Dual monitor supported* Single: 2560X1600 32 bpp 60Hz Dual: 2560X1600 32 bpp 60Hz
Audio	Out: 1/8-inch mini, 16 bit stereo. Internal Mono speaker. In: 1/8-inch mini, 8 bit stereo mic.
Factory options	Internal wireless option 802.11 b/g/n for R10L and R50L Internal wireless and bluetooth option 802.11 b/g/n** for R90L, R90LW and R90L7 Fiber Optic-ready Dell Wyse R90LW***
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz. Energy Star® V.5.0 compliant power supply. Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: 14.6 Watts in idle state.
Device Security	Built-in Kensington security slot (cable sold separately)
Shipping weight	6.50 lbs. (2.95kg)
Mountings	Vertical or Horizontal (optional), VESA mount.
Dimensions	250mm x 225mm x 53mm (9.8 in. x 8.8 in. x 2.1 in.)
Temperature range	Horizontal position: 50 to 95 F (10 to 35 C) Vertical position: 50 to 104 F (10 to 40 C)
Humidity	20% to 80%
Warranty	Three-year hardware warranty. Visit our web site for Dell WyseChoice extensions and upgrades
Certifications	German EKI-ITB 2000, ISO 9241-3/-8 cULus 60950, TÜV-GS, EN 60950 FCC Class B, CE, VCCI, C-Tick WEEE, RoHS Compliant

\* R10L is 1920 by 1200 32 bpp 60Hz in dual mode.  
\*\* R10L does not currently support "N" wireless band.  
\*\*\* Fiber Optic Board not included. Please refer to release notes or your Dell Wyse account manager for supported Fiber Optic Board.

Processors	1.5 GHz AMD Sempron Processor
Memory	R00LE 0 / 1GB or 0 / 2GB RAM R50LE 1GB Flash / 1GB RAM R90LE 1GB Flash / 1GB RAM R90LEW 2GB Flash / 1GB RAM up to 4GB Flash / 2GB RAM R90LE7 4GB Flash / 2GB RAM
I/O peripheral support	One DVI-I Port / One DVI-D Port Two PS/2 ports Two serial ports One Parallel port Six External USB 2.0 ports (2 front; 4 back) Four Internal USB 2.0 ports One Mic In / One Line Out
Expansion	One PCIe 1.1a x4 with x16 slot, half card length, full height
Included	Optical mouse and PS/2 keyboard
Graphics	AMD ATI 690E Microsoft Windows Vista Premium and Windows 7 ready
Networking/Comm	10/100/1000 Base-T Gigabit Ethernet 802.11 b/g/n and Bluetooth 2.0 (optional)
Display	VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate Dual monitor supported Single: 2560X1600 32 bpp 60Hz Dual: 2560X1600 32 bpp 60Hz
Audio	Out: 1/8-inch mini, 16 bit stereo. Internal Mono speaker In: 1/8-inch mini, 8 bit stereo microphone
Factory options	Internal wireless option 802.11 b/g/n for R50LE Internal wireless and bluetooth option 802.11 b/g/n for R90LE and R90LEW
Power	Worldwide auto-sensing 100-240 VAC, 50/60 Hz. Energy Star® V.5.0 compliant power supply. Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: 14.1 Watts in idle state.
Shipping weight	8.37 lbs. (3.8kg)
Mountings	Vertical or Horizontal (optional), VESA mount.
Device Security	Built-in Kensington security slot (cable sold separately)
Dimensions	307mm x 225mm x 82mm (12.1 in. x 8.8 in. x 3.2 in.)
Temperature range	Horizontal position: 50 to 95 F (10 to 35 C) Vertical position: 50 to 104 F (10 to 40 C)
Humidity	20% to 80%
Warranty	Three-year hardware warranty. Visit our web site for Dell WyseChoice extensions and upgrades
Certifications	German EKI-ITB 2000, ISO 9241-3/-8 cULus 60950, TÜV-GS, EN 60950 FCC Class B, CE, VCCI, C-Tick WEEE, RoHS Compliant



Více informací na [www.edn.cz](http://www.edn.cz), nebo emailem [info@edn.cz](mailto:info@edn.cz)

wyse.com

Dell Wyse  
3471 North First Street  
San Jose, CA 95134-1801

Visit our website at:  
<http://www.wyse.com>  
Or send email to: [sales@wyse.com](mailto:sales@wyse.com)

Dell Wyse Sales  
800 GET WYSE  
(800 438 9973)

Dell Wyse Customer Service Center:  
800 800 WYSE (800 800 9973)

