Dell Wyse V class
Versatility on your desktop.
The Dell Wyse V class family

Offering versatility and performance.

Powerful energy saving CPUs are at the heart of Dell Wyse V class’ expandable but compact size that features a host of connections including DVI for crisp displays and a unique monorail mounting system allowing the device to be mounted under desks, to walls and even to the rear of desktop monitors.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V10LE</td>
<td>Dell Wyse ThinOS for fast boot up times.</td>
</tr>
<tr>
<td>V30LE</td>
<td>Featuring Microsoft Windows CE.</td>
</tr>
<tr>
<td>V50LE</td>
<td>Featuring Dell Wyse Linux v6.</td>
</tr>
<tr>
<td>V90LE</td>
<td>Featuring Microsoft Windows XP embedded.</td>
</tr>
<tr>
<td>V90LEW</td>
<td>Featuring Microsoft Windows Embedded Standard.</td>
</tr>
<tr>
<td>V00LE</td>
<td>Cloud PC for use with Dell Wyse WSM.</td>
</tr>
</tbody>
</table>
The Dell Wyse V class family of versatile cloud clients has been created to combine expandability, power and performance in a compact space-saving desktop device. The family is complemented by the Dell Wyse cloud computing software range that features a fast operating system, provisioning, management and virtualization applications designed to deliver the best PC experience in a cloud computing environment.

The Dell Wyse V class is available with Dell Wyse ThinOS, Dell Wyse Linux v6, Microsoft Windows CE, XP Embedded and Embedded Standard operating systems and a model for use with Dell Wyse WSM.

Learn more. Simply click the Dell Wyse V class feature icons below:

- Performance
- Connectivity
- Mounting options
- Green
- Cloud PC Provisioning
- Thin client Management
- Virtualization Software

Virtualization Software
- Dell Wyse ThinOS
- Microsoft Windows XP Embedded
- Microsoft Windows CE
- Microsoft Windows Embedded Standard 2009

Dell Wyse ThinOS
-Dell Wyse WSM
- Dell Wyse WDM

Take a tour of the Dell Wyse V class range
High Performance


Reflecting the needs of ever changing desktop environments the Dell Wyse V class range has the expandability, power and performance to match. Driven by powerful energy saving Via C7 Eden processors the Dell Wyse V class range of cloud clients present an all-round high performance and versatile desktop computing platform. Adding an extra monitor is simple with built-in dual video. Expanding functionality is straightforward with an optional PC-Card expansion slot. Four operating systems are available – as well as zero client versions that enable you to ‘provision’ your users with their individual choice of operating system and applications.

Choose the WiFi wireless options to deploy the Dell Wyse V class across range of desktop environments without compromising data security.

Adding a second monitor is simple.

To add a second monitor use an optional splitter cable. And, just like all Dell Wyse cloud clients, they don’t have hard drives, so all your users’ data remains safely on the server, eliminating the risks from data loss or malicious viruses.

Via C7 Eden 1.2 GHz

The Via C7 Eden processors inside every Dell Wyse V class deliver excellent performance with low energy use.
Dell Wyse V10LE, V30LE, V50LE, V90LE, V90LEW thin clients and V00LE cloud PC.

Well connected

- Two PS/2 ports
- 10/100 Base-T Ethernet port
- One serial port
- One parallel port
- Kensington lock slot
- Options: Internal smart card reader
- Antenna connection for internal wireless

Front of device

Audio In: 1/8-inch mini jack, 8 bit stereo microphone
Audio Out: 1/8-inch mini jack, 16 bit stereo
Three external USB 2.0 ports (1 front, 2 back)
One DVI-I Port Allows use of 1 or 2 displays (with optional splitter cable)
The Dell Wyse V class family can be placed vertically on desktops, mounted to walls and even behind monitors.

**Mounting options**

**Optional feet**
Dell Wyse V class cloud clients are supplied as standard with feet for vertical use, and optional feet for horizontal use.

**Back of monitor or wall mounting**
An optional VESA mount bracket enables the Dell Wyse V LE Family of cloud clients to be mounted on the back of a monitor (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.
That’s Dell Wyse EarthSmart™ computing

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
The Dell Wyse Xenith family packs a considerable punch with their green credentials. From reduced manufacturing impact and end-of-life recycling waste, to as little as 7 watts energy consumption, deploying Dell Wyse Xenith zero clients will enable your organization to achieve a lighter carbon footprint.

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

More information
Download carbon calculators, fact sheets and white papers from here:
www.wyse.com/green
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.

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.
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:

**Operations**
- Centralized management.
- Collect and organize asset information.

**Administration**
- Health status reports.
- Automated client settings.
- Update client firmware and add applications.

**End User IT Costs**
- Easier more effective remote support.
- Create custom scripts and packages.

**Minimize downtime**
- Restart or reset thin clients in less than a minute.
- Enforce policies. Minimize user errors.

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**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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Continue tour
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.

Continue tour
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).
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.


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)

Continue tour
Dell Wyse Linux v6 is a powerful Linux-based operating system optimized for thin computing. It is ideal for organizations who want to run server-based Microsoft Windows applications, local Linux applications or distributed X Window applications.

Dell Wyse Linux v6* comes with the Firefox web browser to give you a secure internet experience. Plus it offers terminal emulation to give you the ability to run legacy applications.

Secure, flexible access.

Dell Wyse Linux’s hot-desking capabilities allow people to log in to different thin clients without losing their desktop configuration. Dell Wyse Linux is modular too, allowing you to add-on or remove features as necessary to improve your performance and cost advantages. It also offers a secure read-only file system that provides the highest protection against software corruption and virus attacks. In addition the file system is compressed to maximize space for additional software applications.

* Dell Wyse Linux is a powerful Linux-based operating system optimized for Dell Wyse thin computing.

Improved wireless and smart card authentication and support

New with Dell Wyse Linux v6 is improved wireless support (including 802.11 g/b) and authentication, better smart card support and authentication and enhanced localization with doublebyte Asian language support.
Microsoft Windows CE gives you a PC-like experience on the desktop, with local terminal emulation so you can run most legacy applications.

By combining this small and fast operating system with firmware components, Dell Wyse is able to reduce boot times and increase protection against viruses, trojan horses, and other malware.

The result is a simply more secure solution that provides the flexibility to add standard peripherals, from printers to scanners to USB thumb drives. However these peripherals can only be connected under access controlled by the IT administrator.

Small, fast and secure

Dell Wyse-enhanced Microsoft Windows CE is ideal for departments and organizations that want a Microsoft end-to-end solution, and support for Citrix ICA, Microsoft RDP, VMware View, Ericom PowerTerm WebConnect, Ericom PowerTerm InterConnect Terminal Emulation as well as a local browser, plus standard connections to peripherals and add-ons.
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.**
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.

Dell Wyse WES 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.
Dell Wyse V class cloud clients are available across a variety of operating systems featuring the speed, ease and administrative simplicity of Dell Wyse ThinOS, the functionality of Microsoft Windows CE, the versatility of Microsoft Windows XP Embedded, the power of Microsoft Windows Embedded Standard and the robust adaptability of Dell Wyse Linux.

Want to learn more? Simply click the relevant icon.
## Dell Wyse V10LE, V30LE, V50LE, V90LE, V90LEW thin clients and V00LE cloud PC.

### Hardware Specifications

<table>
<thead>
<tr>
<th>Processors</th>
<th>Via C7 Eden 1.2GHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>128MB Flash / 512MB DDR2 RAM (Dell Wyse ThinOS)</td>
</tr>
<tr>
<td></td>
<td>1GB Flash / 1GB RAM - up to 2GB Flash / 1GB RAM (Windows XPe)</td>
</tr>
<tr>
<td></td>
<td>2GB Flash / 1GB DDR2 RAM (Windows Embedded Standard)</td>
</tr>
<tr>
<td></td>
<td>0MB Flash / 1GB RAM (Dell Wyse WSM)</td>
</tr>
<tr>
<td>I/O peripheral support</td>
<td>One DVI-I Port</td>
</tr>
<tr>
<td></td>
<td>One DVI-I Port to VGA (DB-15) Adapter</td>
</tr>
<tr>
<td></td>
<td>Dual-video Support with:</td>
</tr>
<tr>
<td></td>
<td>Optional DVI-I to DVI-D plus VGA-monitor splitter cable (sold separately)</td>
</tr>
<tr>
<td></td>
<td>Enhanced PS/2 keyboard with Windows keys</td>
</tr>
<tr>
<td></td>
<td>PS/2 optical mouse included</td>
</tr>
<tr>
<td></td>
<td>One serial port</td>
</tr>
<tr>
<td></td>
<td>One parallel port</td>
</tr>
<tr>
<td></td>
<td>Three USB 2.0 ports (1 on front, 2 on back)</td>
</tr>
<tr>
<td>Networking</td>
<td>10/100 Base-T Fast Ethernet twisted pair (RJ-45)</td>
</tr>
<tr>
<td></td>
<td>Optional external USB 802.11 b/g wireless adapter</td>
</tr>
<tr>
<td>Factory Options</td>
<td>Internal Smart Card reader</td>
</tr>
<tr>
<td></td>
<td>Internal wireless option eliminates theft of external wireless adapters CardBus / PCMCIA card slot</td>
</tr>
<tr>
<td>Display</td>
<td>VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate</td>
</tr>
<tr>
<td></td>
<td>Single Monitor at 32 bpp color: up to 1920x1200 (Dell Wyse ThinOS), 1920x1440 (Windows CE), 1920x1080 at 23bpp (Linux V6), 1920x1080 at 32 bpp (Windows XPe) Dual Monitors used simultaneously (requires optional monitor splitter cable) at 32 bpp color: up to 1280x1024 @ 24 bpp (Linux V6), 1920x1080 at 32 bpp (Windows XPe)</td>
</tr>
<tr>
<td>Audio</td>
<td>Output: 1/8-inch mini jack full 16 bit stereo, 48KHz sample rate</td>
</tr>
<tr>
<td></td>
<td>Input: 1/8-inch mini jack, 8 bit microphone</td>
</tr>
<tr>
<td>Physical characteristics</td>
<td>Height: 7.9 inches (201mm)</td>
</tr>
<tr>
<td></td>
<td>Width: 1.8 inches (46mm)</td>
</tr>
<tr>
<td></td>
<td>Depth: 7.1 inches (180mm)</td>
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<tr>
<td>Shipping Weight</td>
<td>8 lbs. (3.6kg)</td>
</tr>
<tr>
<td>Mountings</td>
<td>Vertical foot (optional horizontal feet)</td>
</tr>
<tr>
<td></td>
<td>Optional VESA mounting bracket</td>
</tr>
<tr>
<td>Power</td>
<td>Worldwide auto-sensing 100-240 VAC, 50/60 Hz. Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: 13.2 Watts/hour</td>
</tr>
<tr>
<td>Temperature Range</td>
<td>Horizontal position: 50° to 95° F (10° to 35° C)</td>
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<tr>
<td></td>
<td>Vertical position: 50° to 104° F (10° to 40° C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>20% to 80% noncondensing</td>
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<tr>
<td>Security</td>
<td>Kensington Lock Slot</td>
</tr>
<tr>
<td>Safety Certifications</td>
<td>German EKI-ITB 2000, ISO 9241-3/-8 cULus 60950, TÜV-GS, EN 60950 FCC class B, CE, VCCI, C-Tick WEEE, RoHS Compliant</td>
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<tr>
<td>Warranty</td>
<td>Three-year hardware warranty</td>
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</table>
## Software specifications

**Dell Wyse ThinOS 7.1**

### HDX Ready client

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
</table>
| ICA 12 Compatible | - UDP Audio  
| - Improved media flow control  
| - HDX Plug-n-Play  
| - Flash (server rendered)  
| - Progressive Display  
| - HDX IntellieCache  
| - Session Reliability  
| - Access Gateway Support (direct LDAP or RSA authentication)  
| - Support for L-shaped desktop (and other rotated monitor set up)  
| - Granular control on HDX USB redirected devices |

### RDP 7.1 Compatible client

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
</table>
| - Optimized for Windows 7  
| - Rich Multimedia (TS MMR)  
| - Up to 32-bit color depth connections  
| - RDP7 Bi-directional audio  
| - Flash Video support (with TCX)  
| - Broad USB Support (with Dell Wyse TCX)  
| - Smartcard authentication and redirection  
| - WAN Acceleration (with Dell Wyse VDA) |

### VMware View 4.5 client

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
</table>
| - Smartcard Authentication  
| - SecureID Authentication  
| - Multimedia Support (with TCX)  
| - Bi-directional Audio (with TCX)  
| - WAN Acceleration (with VDA)  
| - SSL Tunneling  
| - Restart VM  
| - Broad USB Support (with TCX)  
| - Flash Video Support (with TCX) |

### Roaming smart card vendor support

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.

### Dell Wyse TCX Suite

Dell Wyse TCX Suite virtualization software works with and enhances HDX and RDP protocols featuring:

- **Multimedia**: giving users the power to run rich multimedia files formats
- **Multi-Display**: windows and dialog boxes behave the way users expect across multiple displays.
- **USB Virtualizer**: client attached USB devices are visible to virtual desktops applications, and administrators, even on terminal servers.
- **Rich Sound**: receive and transmit high quality audio without compromise.
- **Flash Acceleration**: helps users to experience improved Flash performance.

### Dell Wyse Virtual Desktop Accelerator

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.

#### Management made easy

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.

#### Security built in

- With no published API Dell Wyse ThinOS is inherently secure from viruses and malware.
- Dell Wyse ThinOS includes robust wired and wireless 802.1x support, with secure encryption for simple installation and management.
- DoD CAC supported.
- 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.

#### Server OS infrastructure support

- Citrix XenDesktop 4.0 – 5.5
- Citrix XenApp 4.5 – 6.5
- Citrix Presentation Server
- Microsoft Windows Terminal Server 2003 & 2008/R2
- VMware View 4.0 – 5.0
- Support for other leading VDI brokers (Quest Software, Leostream, etc)
## Software specifications Dell Wyse Linux v6

### Firmware features
- Dell Wyse-enhanced optimized Linux Kernel 2.6x
- Firefox browser standard
- X11R6 local window manager
- Compressed read-only file system
- NFS and Samba file system support
- LPR/LPD, Ghostscript, and Samba print support for DeskJet and LaserJet
- Browser kiosk support with touch screen
- Citrix ICA 10.x
- RDP 5.1 compatible
- X11R6-compliant X-Windows
- XDMCP
- Ericom PowerTerm InterConnect Terminal Emulation
- Ericom PowerTerm WebConnect client

### Server OS Infrastructure support
- Citrix XenApp / Citrix Presentation Server
- Citrix XenDesktop
- VMware View
- Ericom PowerTerm WebConnect
- UNIX & Linux servers

### Set-up and configuration
- User interface
- Boot from local flash
- User interface languages:
  - U.S. English, French, German, Spanish

### Keyboard language support
- U.S. English, French, German, Spanish, U.K. English, 30 other languages supported

### Protocol support
- PPP, IP, NFS, NTP, DHCP, PXE, SNMP, SSH

### Management
- 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 (VNC)
- Asset management and Reporting

### Wireless support
- WPA/802.11, WPA2, IEEE 802.1X
- Supports wireless adapters from: Cisco, D-Link, Netgear
- Internal WiFi WPA2 supplicant support: WEP40, WEP128, WPA-PSK (TKIP), WPA2-PSK (AES-CCMP), WPA-EAP, WPA2-EAP, MS-CHAP-v2
## Software specifications Microsoft Windows CE 6.0 WFR3

<table>
<thead>
<tr>
<th>Firmware features</th>
<th>1 GHz Via C7 Processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>128MB Flash / 512MB RAM</td>
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</table>

<table>
<thead>
<tr>
<th>Software specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Windows CE 6.0 WFR3</td>
</tr>
<tr>
<td>Microsoft Internet Explorer 6.0 resident:</td>
</tr>
<tr>
<td>HTML, JavaScript, XML, Active X as custom</td>
</tr>
<tr>
<td>Citrix ICA 10.x resident:</td>
</tr>
<tr>
<td>Citrix Web Interface</td>
</tr>
<tr>
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<tr>
<td>VMware View Client Resident:</td>
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<td>CCID compliant Smart Card Readers support</td>
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<tr>
<td>Ericom PowerTerm InterConnect Terminal Emulation</td>
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<tr>
<td>Ericom PowerTerm WebConnect client</td>
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<tr>
<td>Jet cet 5.0</td>
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<tr>
<td>Media Player 9.0</td>
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<td>Terminal Services Advanced Client (TSAC)</td>
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<td>ThinPrint ICA and Thinprint RDP</td>
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<td>Complete image upgrade</td>
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<tr>
<td>Wake terminal remotely (Wake-on LAN)</td>
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<tr>
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<tr>
<th>Protocol support</th>
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<td>smart-card support</td>
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<th>Wireless support</th>
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<tr>
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<td>Cisco, D-Link, Netgear, US Robotics, Trendware</td>
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<table>
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<th>Set-up and configuration</th>
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<tbody>
<tr>
<td>User interface</td>
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<tr>
<td>Boot from local flash</td>
</tr>
</tbody>
</table>
Software specifications

Microsoft Windows XP Embedded

Firmware features
- 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

Memory
1GB of flash memory and 1GB of RAM

Server OS Infrastructure support
- Citrix XenApp / Citrix Presentation Server / Citrix XenDesktop
- VMware View
- Ericom PowerTerm WebConnect

Keyboard language support
- U.S. English (standard), French, German, Spanish, U.K. English,
- 40 other languages included

Protocol support
- TCP/IP, DNS, DHCP, PXE

Management
- 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

Wireless support
- 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

Plug-ins
- Adobe Flash Player / Adobe Shockwave

Dell Wyse TCX Suite
- Advanced support for innovative Dell Wyse TCX Suite virtualization software that both works with and enhances ICA and RDP (instead of replacing them) featuring:
  - 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.
  - Multi-display: ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.
  - USB Virtualization: makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.
  - Bi-directional sound: enables virtual desktops and applications to receive and transmit high quality audio without compromise.
  - Flash acceleration: helps users of thin clients to experience improved Flash performance.

Dell Wyse Virtual Desktop Accelerator
- 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

| Firmware features | 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  |

| Server OS Infrastructure Support | Citrix XenApp / Citrix Presentation Server / Citrix XenDesktop  
|                                 | VMware View  
|                                 | Ericom PowerTerm WebConnect  
|                                 | Microsoft Windows Terminal Server 2003 & 2008  |

| Application Framework | .Net 3.5  |

| Security | File Based Write Filter (FBWF)  
|          | Microsoft Baseline Security Analyzer (MBSA)  |

| Set-up and Configuration | Boot from local flash  
|                         | Microsoft Windows WES7 user interface languages: U.S, Optional add-ons  |

| Keyboard language support | U.S. English (standard), French, German, Spanish, U.K. English, 40 other languages included  |

| Protocol Support | TCP/IP, DNS, DHCP, PXE  |

| Management | 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*  |

### Wireless support
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 PIC-Card wireless adapters from: Cisco, D-Link, Netgear, US Robotics, Trendware**

### Plug-ins
Adobe Flash Player / Adobe Shockwave  
Microsoft Silverlight

### Dell Wyse TCX Suite
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:  
- 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.  
- Multi-display - ensures that windows and dialogue boxes behave the way users expect when using more than one monitor.  
- USB Virtualization - makes thin client-attached USB devices visible to virtual desktops and applications, with full IT control.  
- Bi-directional sound - enables virtual desktops and applications to receive and transmit high quality audio without compromise.  
- Flash acceleration - helps users of thin clients to experience improved Flash performance.

### Dell Wyse Virtual Desktop
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 768kbits bandwidth.  

*WES 2009 support for SCCM-WEDM will be available in April 2012  
**requires hardware support
Dell Wyse offers cloud client computing sales, service and support expertise around the globe. Click for contact details.

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International customers please dial:
00 1 408 473 1200

Dell Wyse Support Portal
Dell Wyse Support Portal provides a fast and accurate way to communicate interactively with Dell Wyse Customer Support, and helps us respond to your requests more quickly.
http://support.wyse.com/selfservice.html

About Dell
Dell Inc. (NASDAQ: DELL) listens to customers and delivers innovative technology and services that give them the power to do more.
For more information, visit www.dell.com
Versatility and performance

Reflecting the needs of ever changing desktop environments the Dell Wyse V class range has the expandability, power and performance to match.

Driven by powerful energy saving Via C7 Eden processors the Dell Wyse V class range of cloud clients present an all-round high performance and versatile desktop computing platform. Adding an extra monitor is simple with built-in dual video support. Expanding functionality is straightforward with an optional PC-Card expansion slot. Five operating systems are available – as well as a Cloud PC version that enables you to ‘provision’ your users with their individual choice of operating system and applications.

Secure desktop computing

Choose the WiFi wireless options to deploy the Dell Wyse V class across range of desktop environments without compromising data security. And, just like all Dell Wyse cloud clients, they don’t have hard drives, so all your users’ data remains safely on the server, eliminating the risks from data loss or malicious viruses. A unique monorail mounting system allows mounting discretely under desks, to walls and even to the rear of desktop monitors.

Provisioning and virtualisation software

The Dell Wyse V class is well suited to take advantage of Dell Wyse WSM provisioning software and the Dell Wyse TCX Suite of virtualization software.

Choice of operating systems

The Dell Wyse V class is available with Dell Wyse ThinOS, Microsoft Windows CE, XP Embedded and Embedded Standard 2009 and Dell Wyse Linux v6 operating systems as well as Dell Wyse WSM configured cloud PC format.

At a glance

Performance Via C7 Eden 1.2GHz processors feature inside every Dell Wyse V class delivering excellent performance with low energy use.

Connectivity The Dell Wyse V class supports fixed and wireless networking, serial, video, sound and smart card connectivity.

Mounting options Supplied with a vertical foot as standard and optional horizontal standing feet. Can also be mounted to walls, under desks and to the rear of monitors.

Green Draws just between 13 to 15 watts of power when connected to one keyboard, PS/2 mouse and monitor.

OS and Application Provisioning Full integration with Dell Wyse WSM Provisioning software with the V00LE.

Management Features Dell Wyse Device Manager (workgroup edition).

Virtualization Delivers the best user experience through full support for the Dell Wyse TCX Suite of virtualized desktop enhancement software and Dell Wyse VDA - acceleration software that reduces the effects of network latency.

Dell Wyse ThinOS Fast booting, easy management, secure and with Smart Card support.

Dell Wyse Linux V6 Powerful Linux-based operating system optimized for thin computing.

Microsoft Windows CE 6.0 WFR3 Ideal for departments and organizations that need simple support for Citrix ICA and Microsoft RDP.

Microsoft Windows XP Embedded Deploy fully functional desktop computers, with better manageability with the ability to create bespoke system images.


Versatility on your desktop
## Specification

**Dell Wyse V10L Dual DVI cloud client hardware**

<table>
<thead>
<tr>
<th>Processors</th>
<th>Via C7 Eden 800MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory</td>
<td>128MB Flash / 512MB DDR2 RAM</td>
</tr>
</tbody>
</table>
| I/O peripheral support | Two DVI-I Ports for direct connection to digital displays  
Enhanced PS/2 keyboard with Windows keys  
PS/2 optical mouse included  
One serial port  
Three USB 2.0 ports (1 on front, 2 on back)  
Factory options:  
Internal Smart Card reader |
| Networking          | 10/100/1000 Gigabit Ethernet |
| Display             | VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate  
Dual Monitors at 32 bpp color or 24 bpp color up to: 1920x1200@60 Hz |
| Audio               | Output: 1/8-inch mini jack, full 16 bit stereo, 48KHz sample rate  
Input: 1/8-inch mini jack, 8 bit microphone |
| Physical characteristics | Height: 7.9” (201mm)  
Width: 1.8” (46mm)  
Depth: 7.1” (180mm) |
| Shipping Weight     | 8 lbs. (3.6kg) |
| Mountings           | Vertical foot (optional horizontal feet)  
Optional VESA mounting bracket |
| Device Security     | Kensington lock slot |
| Power               | Worldwide auto-sensing 100-240 VAC, 50/60 Hz  
Average power usage with device connected to 1 keyboard with 1 PS/2 mouse and 1 monitor: 14.1 Watts |
| Temperature Range   | Horizontal position: 50° to 95° F (10° to 35° C)  
Vertical position: 50° to 104° F (10° to 40° C) |
| Safety 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 |
| Warranty            | Three-year hardware warranty |
### Specifi cation

**Dell Wyse V10LE, V30LE, V50LE, V90LE, V90LEW thin clients and V00LE cloud PC**

<table>
<thead>
<tr>
<th><strong>Processors</strong></th>
<th>Via C7 Eden 1.2GHz</th>
</tr>
</thead>
</table>
| **Memory**     | 128MB Flash / 512MB DDR2 RAM (Dell Wyse ThinOS)  
                  128MB Flash / 512MB DDR2 RAM (Windows CE and Linux V.6)  
                  1GB Flash / 1GB RAM - up to 2GB Flash / 1GB RAM (Windows XPe)  
                  2GB Flash / 1GB DDR2 RAM (Windows Embedded Standard)  
                  0MB Flash / 1GB RAM (Dell Wyse WSM) |
| **I/O peripheral support** | One DVI-I Port  
                                One DVI-I Port to VGA (DB-15) Adapter  
                                Dual-video Support with:  
                                Optional DVI-I to DVI-D plus VGA-monitor splitter cable (sold separately)  
                                Enhanced PS/2 keyboard with Windows keys  
                                PS/2 optical mouse included  
                                One serial port, and one parallel port  
                                Three USB 2.0 ports (1 on front, 2 on back) |
| **Networking** | 10/100 Base-T Fast Ethernet twisted pair (RJ-45)  
                          Optional external USB 802.11 b/g wireless adapter |
| **Factory options** | Internal Smart Card reader  
                           Internal wireless option eliminates theft of external wireless adapters  
                           CardBus /PCMCIA card slot |
| **Display** | VESA monitor support with Display Data Control (DDC) for automatic setting of resolution and refresh rate  
                               Single Monitor at 32 bpp color: up to1920x1200 (Dell Wyse ThinOS), 1920x1440 (Windows CE), 1920x1080 at 23bpp (Linux V6), 1920x1080 at 32 bpp (Windows XPe)  
                               Dual Monitors used simultaneously (requires optional monitor splitter cable) at 32 bpp color: up to 1280x1024 (Dell Wyse ThinOS) 1680x1050 (Windows CE), 1280x1024 @ 24 bpp (Linux V.6), 1920x1080 at 32 bpp (Windows XPe) |
| **Audio** | Output: 1/8-inch mini jack full 16 bit stereo, 48KHz sample rate  
                      Input: 1/8-inch mini jack, 8 bit microphone |
| **Physical characteristics** | Height: 7.9 inches (201mm)  
                                      Width: 1.8 inches (46mm)  
                                      Depth: 7.1 inches (180mm) |
| **Shipping weight** | 8 lbs. (3.6kg) |
| **Mountings** | Vertical foot (optional horizontal feet)  
                     Optional VESA mounting bracket |
| **Power** | Worldwide auto-sensing 100-240 VAC, 50/60 Hz  
                           Average power usage with device connected to  
                           1 keyboard with 1 PS/2 mouse and 1 monitor: 13.2 Watts |
| **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% noncondensing |
| **Security** | Kensington Lock Slot |
| **Safety 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 |
| **Warranty** | Three-year limited warranty |

Learn more: Contact Dell Wyse at sales@wyse.com or call 1-800-GET-WYSE

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800 800 WYSE  (800 800 9973)

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