

Product Brief

Dell PowerEdge VRTX Stands Alone Addressing IT Demands of Remote and Small Offices

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Abstract: On June 4, 2013, Dell announced VRTX as a critical piece of IT infrastructure that is poised to alter the way small and midsize businesses consume technology for their remote office and deploy IT infrastructure, while seeking to bring some sanity back into IT management and daily operations. Dell VRTX is ready to stand up to IT and business challenges with an intelligent design and economic advantage that is right-sized for today's needs and for future business initiatives.

IT Transformed

IT organizations deserve massive credit for the incredible job they do given the circumstances that they are often faced with. However, as shown on the left side of Figure 1, they haven't always been able to design, deploy, and maintain an optimal environment. The industry cracks jokes about IT administrators being masters of pulling together hardware and rolling out applications with super glue, duct tape, and bailing wire, and for the most part IT professionals will smile and acknowledge you with a wink. This is unacceptable in business-driven IT and Dell has stepped up and is ready to provide IT the mirror opposite of what they have today with Dell PowerEdge VRTX.

Figure 1. IT Simplified



- Simplified IT
- Reduced management complexity
- Optimized utilization
- Maximized efficiency
- Drive down costs and complexity



Source: Enterprise Strategy Group, 2013.

On June 4, 2013, Dell announced VRTX as a net new server category in the market. It is a critical piece of shared IT infrastructure poised to alter the way IT consumes and deploys infrastructure, while seeking to bring some sanity back into IT management and daily operations for small businesses and branch offices. Dell VRTX may first appear as a sleek-looking tower-based server, but the hardware integration under the sheet metal and its management capabilities are what give this product universal appeal amongst IT buyers. These features include:

- **Systems management:** Shared infrastructure management with Chassis Management Controller (CMC) that reduces complexity by converging management of server nodes, storage, networking, and power into a single tool, presented in a single console. Dell VRTX is also appealing to IT organizations in a one-to-many scenario as it offers a geographical view, which discovers, monitors, manages, and maps VRTX systems across the globe for at-a-glance management.
- **Virtualization ready:** VRTX is designed and built ready for Microsoft Hyper-V or VMware vSphere. Internal virtualization capabilities with networking and shared storage enabling commonly used features like VM mobility, automatic distribution of VMs based on policy, and high availability. Dell also provides customers with data protection from vRanger, firewall and network security with SonicWALL, and WAN optimization through Silver Peak.
- **Time to value:** Avoid the time it takes to assemble separate components that need to be installed and provisioned individually, which results in architectures that are not optimized for use in small and remote offices. PowerEdge VRTX offers space savings, the ability to operate in unconditioned space, compatibility with existing power, and streamlined deployment, all leading to quick implementation time and versatility of deployment. There is less to rack or set up and fewer power cables, networking cables, and storage interconnects that an IT person would traditionally have to deal with in addition to vetting their mapping. VRTX can be unboxed, plugged into a UPS/outlet in the wall along with networking cables, and used to begin building the system.
- **The hardware:** VRTX is a solution ecosystem that combines servers, storage, and networking into a single 5U chassis. Specifically, Dell VRTX includes up to four PowerEdge M-Series Servers (M520 or M560), fully shared SAS-based storage, PCIe flexibility across server nodes, shared DVD, eight PCIe slots, eight 1GbE RJ45 NIC ports, and a locking front cover to keep stray hands away. Dell VRTX is available in both a standalone tower configuration and a 5U rack mount. The non-SAS based storage offers improved economics and considers the lack of IT resources. Also, the holistic management of the chassis with a single tool simplifies the multiple consoles that would be required with traditional architectures to manage storage, servers, and networking.

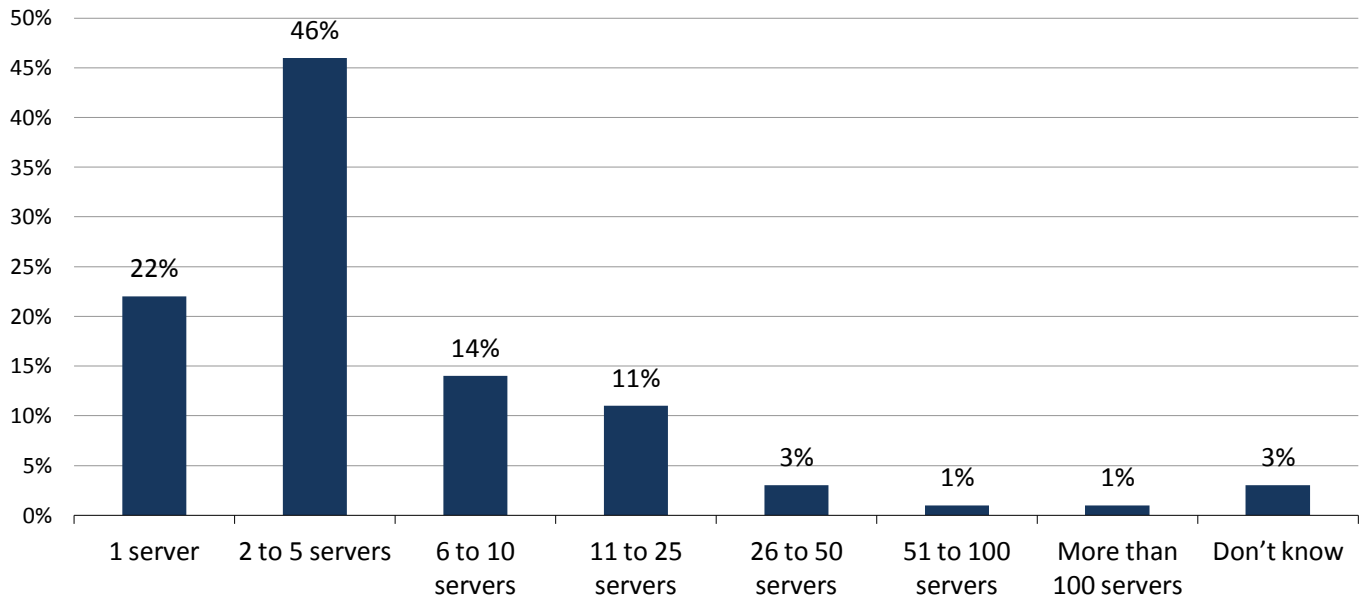
One System, Multiple Use Cases

Organizations that maintain an on-premises IT footprint often find themselves juggling a mix of applications and systems that run the gamut of back office, departmental applications, file shares, and even facility workloads such as swipe card systems and surveillance cameras. ESG research recently discovered that SMB organizations are not only very prone to this scenario, but fit nicely into Dell's strategy with VRTX. As shown in Figure 3, the majority of ESG research respondents with less than 100 employees have five or fewer servers,¹ and hands-on experience has shown that they are often not deployed, maintained, or secured as well as they could be. This scenario creates an ideal landing pad for Dell VRTX to address the existing system management complexities, overcome space constraints, and eliminate hardware compatibility issues.

¹ Source: ESG Research Report, [SMB Storage Market Trends](#), April 2013.

Figure 2. Physical Server Footprint at SMB Organizations

Approximately how many total physical servers does your organization have deployed at its locations? (Percent of respondents, N=320)



Source: Enterprise Strategy Group, 2013.

Dell VRTX is an ideal fit for a number of scenarios, including:

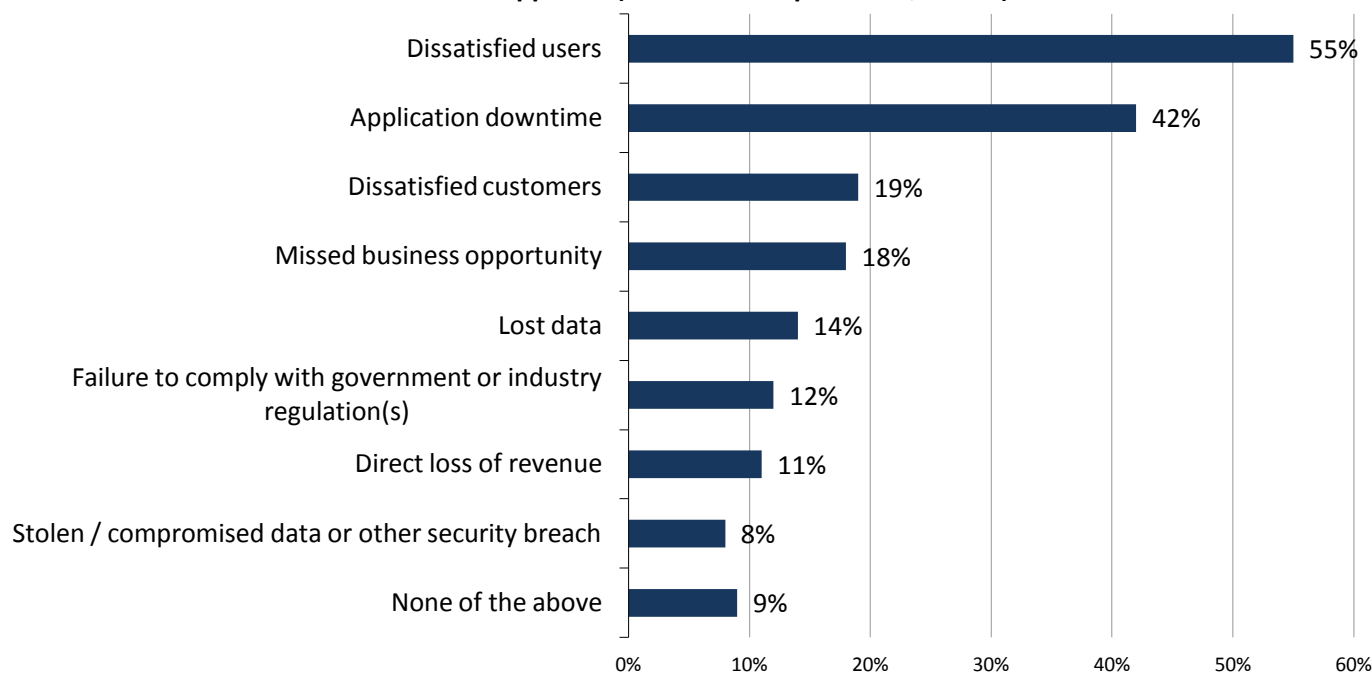
Departmental Data center: This is a dedicated IT infrastructure restricted to a specific department (e.g., HR, small finance, workgroup, manufacturing floor, engineering) within which IT or, more likely, the business is looking to capture an additional level of security and control. The versatility of deployment options that do not require the typical data center infrastructure and the capabilities of Dell VRTX collapse the many pieces of IT into a single system, arming IT with the flexibility it requires to confidently take control and provide a stable platform.

Remote Office/Branch Office (ROBO): The challenges associated with delivering IT services to remote/branch office locations can have adverse business effects. More than half (55%) of ESG research respondents indicated that remote application access challenges have led to dissatisfied users (i.e., ROBO-based employees), while 42% say they have experienced application downtime (see Figure 3).² Although less frequent, organizations' ROBO application delivery challenges have also led to much more serious consequences, such as dissatisfied customers, lost business, and compliance failures. Less than 10% of organizations stated that they have experienced no ill effects from leveraging the centralized application model.

² Source: ESG Research Report, [Remote Office/Branch Office Technology Trends](#), July 2011.

Figure 3. Business Impact of Challenges Delivering Corporate Applications and/or IT Services over the WAN to ROBO Locations

What has been the business impact of the challenges that your organization has experienced in terms of delivering corporate applications / IT services over the WAN to the ROBO locations it supports? (Percent of respondents, N=449)



Source: Enterprise Strategy Group, 2013.

Dell VRTX can help significantly in a ROBO situation, beginning with standardization of hardware across the locations coupled with remote management. This approach helps to alleviate hardware incompatibility and sprawl, and address the aforementioned performance, stability, and end-user dissatisfaction challenges.

Matched to Industry Requirements

In addition to these universal IT use cases, Dell VRTX is an attractive option for some industry-specific applications. These include:

- **Healthcare:** Platform for local electronic medical records, patient billing, image sharing, and virtual desktop infrastructure (VDI) deployment.
- **Law offices:** Immediate capacity for new cases, support for back office applications, and platform for collaboration applications.
- **Military and Rapid Response:** Rapid deployment and teardown of IT infrastructure in a mobile footprint ideal for military and disaster relief agencies.
- **Retail:** Standardization across branch stores, enabling business to run a wide range of workloads including highly available clusters for point of sale applications locally at a remote site while maintaining centralized systems management.
- **Education:** An easy to scale platform to support a school or community college for students to access course materials via their own devices.
- **Other usage cases will no doubt be identified as the PowerEdge VRTX matures in the market.**

Opportunity for Dell Resellers

Dell's go-to-market partners and system integrators have a unique opportunity with Dell VRTX that enables them to bring new ideas as well as some sanity back to their customers with a simple solution that can be quickly deployed.

These partners have often found themselves in the situation of having to pull together multiple pieces of infrastructure to build a solution that piles on to the complexity IT already has on its hands. IT will typically try to squeeze every last drop out of existing systems, but risk incompatibilities, performance degradation, and downtime in doing so. Dell VRTX provides the go-to-market partner with the strategic value of on-premises services that bridge data center capabilities in an efficient package and enable add-on services that the partner can strategically engage and provide guidance to its customers.

The trade publications and venter hype around cloud computing also has go-to-market partners figuring out the exact role they play and what this will mean for them long term. Distributing applications and associated data into the cloud introduces risks that need to be considered, given the cloud's maturity, including security of data, sensitivity of data, latency, performance, understanding options versus needs, etc. In short, setting up cloud services is somewhat ambiguous, service levels and costs vary widely and businesses need to perform a comprehensive due diligence when it comes to where to best run business critical/sensitive applications today. In addition, regulatory and compliance requirements may apply for banking, medical, legal, education, and other regulated industries requiring specific data handling practices where public cloud offerings simply are not viable today. Landing a solution such as the Dell VRTX on a customer's site can first help get his house in order and then enable the partner to work with the customer to assess the application requirements and see which workloads make sense for cloud computing. Dell VRTX can be a means to forestall public cloud consumption and intelligently embrace movement to the cloud based on the right economic and business decisions.

The Bigger Truth

The universal appeal of Dell VRTX with its many deployment options, certified support for major productivity and communication applications, and the multiple matches for business and industry use cases will capture the attention of IT and business professionals. IT is ready for some housekeeping to eliminate the string of wires, consolidate disparate legacy systems, and standardize system design. Businesses strive to eliminate the complexity of IT and confidently adopt new applications, improve collaboration, and gain a competitive advantage. What is needed are systems that are simple to deploy, easy to manage, and built to scale with business requirements. Dell VRTX is poised to stand up to this challenge with an economic advantage that is right-sized for today's needs and future business initiatives.