



Solution Brief

Architect versatile, efficient remote site IT with the Dell PowerEdge VRTX

The Dell PowerEdge VRTX integrated IT solution can help enterprises drive new levels of efficiency and productivity at ROBO sites, through:

- **High density** – purpose-designed integration of blade server, storage and networking into a compact chassis that can be installed directly in workspaces within small offices
- **Simplified management** – single-console infrastructure management that enables a range of administrative views and controls, from granular compute, storage and networking parameters to map-based enterprise-wide configurations of up to 400 PowerEdge VRTX systems
- **Virtualization-ready design** – internal shared storage that enables such hypervisor-based capabilities as live VM workload migration and HA clustering within the VRTX chassis
- **ROBO-optimized innovations** – extremely quiet acoustics and compatibility with standard 100V-240V AC power enable advanced applications support in constrained office spaces
- **Excellent ROI** – high modularity and easy scalability within each VRTX chassis—as well as through expansion with additional VRTX chassis—can help managers optimize ROBO IT lifecycle costs

IT decision makers face myriad challenges in maintaining the fast-expanding mix of enterprise applications. When IT environments traverse multiple sites, these challenges can be exacerbated by numerous factors, including a random mix of platforms and vendors, the data and administrative silos these can create, and few to no local IT support resources.

Yet multi-site IT environments—which can encompass regional headquarters, field sales offices, specialized research and development (R&D) centers, and various back-office sites—often make significant contributions to an organization’s mission. Properly resourced and managed, remote office/branch office (ROBO) operations can help organizations attract localized talent or leverage competitive advantage situations. In-region service teams can improve customer satisfaction, retention, and profitability through follow-the-sun support workflows. Enterprise executives can bring entirely new intellectual capital into the fold by supporting strategic mergers or acquisitions.

All too often, however, IT organizations approach these environments as burdens, instead of as opportunities. When IT managers opt merely to blunt the impact of their multi-site environments—whether by pampering ineffective local systems through end-of-life, by replacing them with inexpensive but inadequate alternatives, or by restricting all administration to HQ-based teams—they may be overlooking the strategic advantage that these environments can offer, and foregoing real prospects for innovation, competitive differentiation and value creation.



Multi-site environments require specialized IT solutions

Because ROBO environments by nature present a mix of special opportunities and unique challenges, they merit specialized IT solutions. Among the challenges, IT teams often need to support IT solutions in offices that fall short on standard data center facilities. They may need to compromise on space normally required for equipment racks; on electrical power densities typically considered adequate to deploy specified IT equipment; and on cooling systems sufficient to maintain warranted temperature ranges. In addition, distance and relative isolation from headquarters can foil the cost-benefit of dedicating IT specialists to ROBO sites, leaving the job of day-to-day administration either to resident generalists or roving specialists.

Ideally, IT solutions architected for ROBO sites should offer exceptional efficiency; efficient use of space, power, cooling, and even disk storage and networking resources can not only reduce the CAPEX and OPEX profiles of remote sites, but—more importantly—better empower the teams based there. To maximize system uptime and help boost IT team productivity, ROBO solutions need to offer extremely simplified management. Finally, to fully empower remote work teams, ROBO solutions should be designed for high application availability and high system performance.

The Dell PowerEdge VRTX: enterprise-class efficiency, manageability, and performance

The Dell™ PowerEdge™ VRTX was designed with the express goal to deliver on the specialized needs of ROBO environments. The PowerEdge VRTX platform converges servers, storage, networking and management into a single, office-optimized chassis the size of a traditional, desk-side tower server. Deployed as part of a ROBO IT solution, the PowerEdge VRTX can help IT teams and remote employees alike attain new levels of productivity and efficiency.

The PowerEdge VRTX integrates innovations from across Dell R&D centers. Organizations can scale each PowerEdge VRTX chassis with up to four PowerEdge M520 or M620 server nodes, deployed in any combination. This scalability allows organizations to deliver four times the number of processors or processor cores offered by two-socket tower servers requiring approximately the same floor space. Redundant PSUs and fans in VRTX chassis help deliver high availability and application uptime. Likewise, scalable, internally shared storage—up to 48TB—on the VRTX can help IT organizations simplify virtualization and application diversity across the enterprise. Moreover, the plug-and-play VRTX design helps relieve IT teams of the burdens of system specification, test and integration at each site.

Organizations can use the Dell OpenManage Essentials (OME) Console to manage VRTX operations, whether from a central location, onsite within a remote office, or from virtually any other location. OME offers IT administrators easy, enterprise-wide visibility to as many as 400 VRTX systems. A map-based interface, the OpenManage Essentials Geographic View, helps make management intuitive through a system of color icons designed to provide instant, at-a-glance assessments of remote system location and health. No matter the administration model best suited for a particular enterprise or site, VRTX management options are numerous, flexible, and easily adapted on the fly to accommodate organizational and other changes.

With these attributes, the PowerEdge VRTX offers exceptional investment protection. Organizations can furnish sites with modestly-configured VRTX chassis as standard configurations, and grow in lock-step with each site's needs, both within the chassis and by adding new chassis. Not only can organizations use limited space more effectively with the density of the PowerEdge VRTX, they can now deploy enterprise-class IT solutions in environments that may not support equipment racks, specialized power systems, HVAC, cabling or labor typically associated with such solutions.

Empower your ROBO operations, strengthen your enterprise

With the PowerEdge VRTX, organizations now have a vehicle for greatly increasing the potential of each remote or branch office site to contribute to the organization as a whole. The ability to deploy a scalable, enterprise-class IT infrastructure with the footprint of a tower server gives organizations the means to leverage employee talents and skills nearly regardless of location. The PowerEdge VRTX is ideal for small-office virtualization, with dual SD slots in PowerEdge M520 and M620 nodes to enable failsafe hypervisors, and internal shared storage designed to enable live VM workload migration and HA clustering within the chassis.

Ultimately, the PowerEdge VRTX was designed to allow enterprises to run virtually any mix of applications—with or without virtualization—in business sites previously considered too remote or understaffed to support them. But with all of its advanced innovations—including support for wall-outlet standard 100V-240V power and a sound profile quieter than many conference-room air conditioners—the PowerEdge VRTX offers organizations a vehicle for radically rethinking IT across the enterprise.

Contact your Softchoice account executive today to learn more about the Dell PowerEdge VRTX, or schedule a live demo.