

Dell EMC VxRail

MAKING IT TRANSFORMATION REAL WITH NEW STANDARDS FOR PERFORMANCE, PROTECTION AND DATA CENTER ECONOMICS

VxRail – The Standard in Hyper-converged

- Proven to dramatically reduce OPEX delivering up to 28% TCO advantage over build your own HCI, and a 43% lower cost of serviceability with integrated end-to-end support.
- Based on 14th generation PowerEdge, a server platform that is uniquely designed and optimized for HCI, enables VxRail to deliver the utmost flexibility and millions of configuration options.
- VxRail on 14th gen PowerEdge delivers 2x more IOPS and half the response time – sustained at sub-1ms.
- Supports any HCI use case including file, graphics-intensive VDI, big data and analytics, remote office, and high performance computing.
- Industry-leading enterprise data services, including HCI-native data-at-rest encryption, compression, deduplication, and erasure coding. Replication, backup, and file services make VxRail ready for almost any application or workload.
- Start small, with a few as three nodes. Multi-node scaling, storage capacity expansion, mixed generation PowerEdge clusters, and vSphere license flexibility enable growth that meets business demands.
- Single point of global 24x7 support for both the hardware and software.

Agility is a key element to accelerating IT transformation. Hyper-converged is a key contributor to enabling agility. A recent survey by industry analyst firm ESG illustrates that the vast majority of organizations that have adopted, 87%, say that HCI has made their organization more agile. The result is they are deploying HCI for a wider variety of workloads, with most running 20% or more of their apps on HCI.

Dell EMC VxRail™ accelerates and simplifies IT through standardization and automation. With VxRail, you don't just deploy a server, you transform your infrastructure.



The VxRail Appliance Advantage

Dell EMC VxRail invests in the complete lifecycle, including advanced automation, making it easier for you from day one forward, allowing you to further simplify IT infrastructure and operations. VxRail Appliances on next gen PowerEdge servers are refined, optimized, and robust platforms that help you simplify your entire IT lifecycle – from deployment, to management, to scaling, to maintaining.

With dramatically lower operational expenses, VxRail delivers an up to 28% TCO advantage and a 43% lower cost of serviceability with integrated end-to-end support. In short, VxRail enables you to do more with less and allows your IT staff to focus on more strategic projects that makes your business more competitive.

VxRail is the *only* fully integrated, preconfigured, and tested HCI appliance powered by VMware vSAN™ and is the standard for transforming VMware infrastructures. VxRail provides a simple, cost effective hyper-converged solution that solves a wide range of your challenges and supports almost any use case, including tier-one applications and mixed workloads. Dell EMC enables faster, better, and simpler delivery of virtual desktops, business-critical applications, and remote office infrastructure.

VxRail on 14th Generation PowerEdge Servers – More Powerful and Flexible

The new VxRail is even more advanced offering next-generation technologies that accelerate IT transformation and future proof your infrastructure.

New NVMe cache drives support enhanced performance from fast-caching technology while SATA SSD capacity drives provide a more affordable all-flash entry-point. With the latest Intel® Xeon® Scalable processors including high memory options, VxRail is the most configurable HCI appliance, delivering 2x more memory. When it comes to connectivity, VxRail has options ranging from 1 GbE up to 25 GbE network offering the most aggregate bandwidth in the HCI appliance market and allowing it to integrate into data centers and remote sites easily. For scaling high performance virtual graphics and compute, the new NVIDIA Tesla P40 GPU supports 2x graphics acceleration performance and 50% more users per board.

VxRail based on Dell EMC PowerEdge servers deliver more powerful and predictable performance with utmost flexibility in configuration options to meet any use case and more demanding, mission-critical workloads in VMware environments – up to 2x more IOPS and half the response times that are sustained at sub-1ms (up to 80% IO utilization) than prior generations.

Scalability and Management

VxRail lets you to start small, with as few as three nodes, while delivering the same enterprise features and VMware management alignment. Mixed generations of hardware in the same clusters, non-disruptive scaling and storage capacity expansion provide a simple, predictable, “pay-as-you-grow” approach for future scale up and out as your business and user requirements evolve.

Additionally, enterprise capabilities such as batch node expansion, REST APIs, and flexible object renaming, accelerate growth, save time and ensures VxRail complies with your data center policies.

Day-to-day, all virtualization management is done within the familiar vCenter Server interface. Additional IT and Cloud automation can be provided with optional software like VMware’s vRealize Operations and vRealize Automation allowing you to seamlessly integrate VxRail as the foundation of your data center infrastructure.

Security and Data Services

Enhanced security includes new automated hardening scripts and VxRail Security Technical Implementation Guide (STIG) to harden the storage, virtualization, and networking infrastructure components that VxRail manages for customers who want to comply with DISA STIG requirements, as well as a new VxRail Security Configuration Guide for all customers.

Based on VMware vSphere 6.5 and vSAN 6.6 software, VxRail delivers vSAN encryption at the cluster level. VxRail supports 2-factor authentication (SecurID and CAC), allowing you to avoid limited options and high cost of self-encrypting drives. vSAN encryption is built for compliance requirements and offers simple key management with support for all KMIP compliant key managers. Additionally, all-flash VxRail Appliances still include efficient and in-line deduplication, compression, and erasure coding at no additional cost.

Backup and Recovery

Enhanced stretched clusters with local site protection offers enterprise-level availability. The VxRail cluster can tolerate an entire site failure as well as local component failures with no data loss and zero down time. As always, included VMware Data Protection (VDP), and RecoverPoint for VMs provide simple, efficient, and proven backup and disaster recovery. Optional Data Protection Suite for VMware extends included data protection features with the industry’s broadest capabilities, including backup and recovery, continuous data protection, monitoring and analysis, and search.



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