POWERING THE MODERN DATA CENTER

Dell EMC Converged Systems have helped thousands of global enterprise customers transform their IT environments to become more agile, reliable, and cost-effective. Dell EMC Converged Systems integrate enterprise-class technologies—including compute, network, storage, virtualization, and management—into one engineered system, that is engineered, manufactured, managed, supported, and sustained as one. These systems eliminate the slow, complex, and costly process of procuring, assembling, and the on-going maintenance of traditional in-house integration approaches.

DELL EMC CONVERGED SYSTEMS OVERVIEW

Dell EMC VxBlock and Vblock Systems deliver simple IT solutions for a broad range of use cases, significantly reducing costs, time-to-deploy, and on-going management/maintenance-time, enabling your IT staff to spend more time focused on business outcomes and on new initiatives than on managing the IT infrastructure and keeping the lights on.

Unsurpassed Simplicity

VxBlock and Vblock Systems bring together technologies from leaders like Dell EMC, Cisco, VMware, and more. All system elements are pre-integrated, pre-configured, then tested and validated before shipping. Seamless integration allows you to operate and manage your system as a single product, rather than as individual, siloed components. On-going, component-level testing, and qualification result in drastically simplified updates and maintenances. The end result is significant time and resource savings throughout the systems life cycle.

All Flash

VxBlock and Vblock Systems enable you to create a modern data center with all-flash storage, including Dell EMC Unity, XtremIO, and VMAX options. All-flash VxBlock and Vblock Systems are ideal for mixed-workload consolidation, applications that require extreme performance and scale, mission-critical applications, and where you are looking for the highest storage density at the lowest operational total cost of ownership (TCO).

Streamlined Deployment

With multivendor solutions and reference architectures, considerable time and resources are devoted to sourcing, integrating, testing, validating, and on-going maintenance. VxBlock and Vblock Systems can be delivered within 60 days of order—for the fastest time-to-value.

Rely on the Dell EMC Release Certification Matrix (RCM) to streamline software release planning and on-going configuration management across all converged infrastructure components. Dell EMC quality assurance tests for interoperability of hardware and software to ensure that your system and data center dramatically reduce downtime due to updates and scheduled maintenance. This unique experience spans across all VxBlock and Vblock Systems for an unmatched customer experience.

Dell EMC Vision Intelligent Operations is health and life cycle management software at its best. Its intelligence, automation, and visualization facilitate standardized, repeatable IT processes—making it easier to keep your data center/hybrid-cloud environment healthy, stable, optimized, and secure. The software manages compute, network, storage, and virtualization components together as a single system and multiple systems as a single pool of resources. Functions include health, RCM compliance, and security compliance management.

Dell EMC Vsacle Architecture enables scale-up and scale-out data centers by combining a modular grow-as-needed architectural design with the flexibility to add resources incrementally through compute and storage technology extensions. Through the Dell EMC Vsacle Fabric, a scalable spine-leaf network fabric, you can connect multiple systems and modular components to create a shared pool of resources.

“Vblock is generally regarded as the benchmark for blade-/SAN-based IIS solutions; the technology is well-proven across multiple vertical industries, use cases and geographies — a status it has achieved since its launch in 2009.”

— Gartner Group, MQ for Integrated Systems, Oct 2016

Dell EMC delivers fully integrated, 24/7 support with a single phone call. There’s never any finger-pointing between vendors, and you can always rely on our fully cross-trained team for a fast resolution to any problem.

For reliable backup and recovery, your converged systems are built with data protection optimized for your specific needs. Dell EMC offers the most advanced data deduplication, replication, and data protection technologies for achieving your Recover Point Objective (RPO) and Recover Time Objective (RTO) requirements.

VxBlock and Vblock Systems are engineered to ensure the highest levels of security and are built to simplify complicated compliance requirements. All components and software are tested and validated to eliminate security vulnerabilities and to enhance performance and integrity. In addition, Vision software automates the inspection and other time-consuming aspects of system security and software compliance policy, greatly reducing the time needed to pinpoint and eliminate security vulnerabilities.
#1 FOR A REASON

Delivering real business results

“We chose a Dell EMC Vblock System 540. It provided us the flexibility we needed for both our revenue-generating mixed workloads and all-flash back end. We’ve already seen the benefits from having XtremIO on the floor.”
— Carlos Sotero, IT Director, Insight

“The Vblock System is a single integrated solution, not a mix of components. It’s pre-built and pre-tested, and offered us high availability, scalability, and automation to make provisioning new services faster and more efficient.”
— Jonas Esko, IT Architect Manager, LKAB

“Since moving to Vblock Systems, we're now 100 percent responsive to the business.”
— Michael Tomkins, Chief Technology Officer, Fox Sports Australia

“We have a small IT staff and the minimal maintenance time required for Vblock Systems allows us to work on projects that help grow our business rather than just “keep the lights on.””
— Tom Nollan, Director of IT, Old Dutch Foods

“There’s no doubt that running compute-as-a-service—the core engine of any cloud service—on a Vblock System lowers total cost of ownership.”
— Simon Hansford, Chief Technology Office, Skyscape

VXBLOCK AND VBLOCK SYSTEMS

Dell EMC Converged Systems portfolio of VxBlock and Vblock Systems provide a wide range of solutions to meet your requirements for size, performance, and scalability. Both VxBlock and Vblock Systems are built with enterprise class compute and networking from Cisco and storage from Dell EMC, while VxBlock Systems offers increased flexibility in network virtualization solutions with support for VMware VDS and a choice between Cisco Application-Centric Infrastructure (ACI) and VMware NSX.

Enterprise-Class Performance for General, File, and Block Workloads

Dell EMC VxBlock System 350 and Vblock System 350 are agile and highly scalable, unified, converged infrastructures designed for general-purpose mixed workloads. They allow for rapid rollout or expansion of a virtualized data center, cloud environment, or service-provider solutions. These systems can be easily tailored to meet specific workload or SLA requirements, like VDI, Microsoft Exchange, Oracle, and SAP while minimizing risks and costs. Available with the powerful Dell EMC Unity all-flash or hybrid-flash storage option, these are perfect for mixed workloads.

Industry’s Leading, Most Efficient, All-Flash Converged Infrastructure

Dell EMC VxBlock System 540 and Vblock System 540 are all-flash-based converged systems for high-performance/low-latency workloads and emerging third-platform applications. Leveraging Dell EMC XtremIO storage, with in-line efficiencies, these systems deliver scale-out performance at ultralow latency. Additionally, combined with Dell EMC Converged Technology Extensions for Isilon, and these systems are an ideal platform for big data analytics and end-user computing.

The Most Advanced Data Services in a Converged Infrastructure

Dell EMC VxBlock System 740 and Vblock System 740 are the industry’s most advanced intelligent converged systems with unmatched performance, scalability, and availability for the most demanding mission-critical applications. With a choice of Dell EMC VMAX all-flash or hybrid-storage options, these systems deliver multidimensional scale, high IOPS for extreme levels of performance with low latency, and are ideal for large-scale, mission-critical workloads, such as SAP, Oracle, Microsoft, and VDI.

CONVERGED TECHNOLOGY EXTENSIONS

As your business needs change, Dell EMC Converged Technology Extensions enable you to easily extend and enhance VxBlock and Vblock Systems by adding additional compute and/or, storage resources to your environment without operational risk. Choose from multiple configuration options, including Dell EMC storage and Cisco UCS compute, to meet any workload requirement.

Converged Technology Extensions with Cisco UCS Compute

Cisco UCS compute easily extends the computing system within VxBlock or Vblock Systems to achieve operational and architectural consistency between blade servers and rack-optimized servers in an easy, integrated fashion. Use cases include transaction processing, end-user computing, VDI, digital media transcoding, medical image processing, and EMR/EHR applications.

Converged Technology Extensions with Dell EMC Storage

Dell EMC Converged Technology Extensions with multiarray storage combinations from Dell EMC storage are available for Unity all flash or hybrid, XtremIO, VMAX all flash or hybrid, VNX hybrid, and Isilon options.

Add Unity all flash with in-line compression, rich data services, for mixed workloads like databases, data warehouses, transactional workloads, and virtualization applications.

Add XtremIO all flash for linear growth, massive I/O performance, 40 G connectivity, and workload consolidation. With a scale-out design, it is ideal for performance-centric database applications, large scale VDI, and test/development environments.
Add VMAX all-flash or hybrid-flash configurations to support your data center consolidation, diverse and heavy-transaction workloads, data warehousing, analytics, and mission-critical applications.

Add VNX2 and VMAX3 hybrid to grow, and cost-effectively manage multiprotocol file/block systems. These arrays are ideal for VxBlock 540 and Vblock 540 customers (XtremiO) who want to extend their storage with hybrid configurations.

Add Isilon for scale-out Network Attached Storage (NAS) capacity to address the increased performance and scaling needs for file-based and data-driven applications. It’s optimized for large-scale, unstructured data, including videos, pictures, audios, texts, and genomic/mobile data.

### VxBlock and Vblock Systems Specifications

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<th>SYSTEM</th>
<th>240</th>
<th>340</th>
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<th>540</th>
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<td><strong>COMPUTE</strong></td>
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<td>Cisco UCS C220 M4 Rackmount Servers</td>
<td>Cisco UCS Server Chassis</td>
<td>Cisco UCS B-Series Blade Servers</td>
<td>Cisco UCS 2204XP/2208XP Series Fabric Extenders (540 also supports the UCS 2304XP)</td>
<td>Cisco UCS 6246/6296UP Fabric Interconnects (540 also supports the UCS 6332-16UP)</td>
<td>Cisco USC Virtual Interface Card 1227, 1240, 1280, 1340 and 1380 (540 also supports the 1387)</td>
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<td>Cisco UCS Virtual Interface Card (VIC) 1227</td>
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<td><strong>MIN/MAX SERVERS</strong></td>
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<td><strong>MIN/MAX CHASSIS</strong></td>
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<td><strong>MIN/MAX BLADES</strong></td>
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<td>2/128</td>
<td>2/256</td>
<td>2/256</td>
<td>2/512</td>
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<td><strong>NETWORK</strong></td>
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<td>Nexus 5548UP – Fibre Channel &amp; Ethernet</td>
<td>Nexus 9396</td>
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<td>Nexus 1000V Advanced Edition</td>
<td>Nexus 5548UP or 5596UP</td>
<td>Nexus 93180YC-EX</td>
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<td>VxBlock Systems also support VMware VDS and NSX 6.2</td>
<td>MDS 9148S Multilayer Fabric Switch or MDS 9396S or MDS 9706 Multilayer Director</td>
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<td><strong>DELL EMC STORAGE</strong></td>
<td>VNX 5200</td>
<td>VNX 5400, 5600, 5800, 7600, 8000</td>
<td>Unity 300F, 400F, 500F, 600F (all flash)</td>
<td>XtremiO 1, 2, 4, 6, or 8 X-Brick Cluster</td>
<td>VMAX 250F/FX, 450F/FX and 850F/FX (all flash)</td>
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<td><strong>STORAGE CAPACITY</strong></td>
<td>Up to 500 TB</td>
<td>Up to 6 PB</td>
<td>Up to 10 PB raw (15 PB effective)</td>
<td>1.6 PB (effective)</td>
<td>Up to 4 PB</td>
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<td><strong>VIRTUALIZATION</strong></td>
<td>VMware vSphere 5.5 and 6.0</td>
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<td><strong>MANAGEMENT</strong></td>
<td>Dell EMC Vision Intelligent Operations 3.5</td>
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### ABOUT DELL EMC

Dell EMC is the world market leader in converged infrastructure and converged solutions. Through VCE Converged Infrastructure and Solutions, Dell EMC accelerates the adoption of converged infrastructure and cloud-based computing models that reduce IT costs while improving time to market. Dell EMC delivers the industry’s only fully integrated and virtualized cloud infrastructure systems, allowing customers to focus on business innovation instead of integrating, validating, and managing IT infrastructure. VCE solutions are available through an extensive partner network.

For more information, go to dellemc.com/ci.

To learn more, contact your local representative or authorized reseller.