# **DELL EMC VXBLOCK SYSTEMS**

A converged infrastructure system that delivers an engineered systems experience

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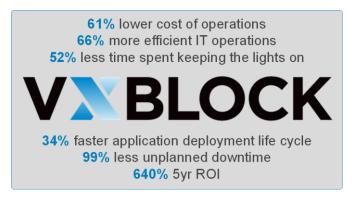
- Simplified IT
- Improved business agility
- Quicker time-to-value
- Less time to maintain
- Increased business responsiveness

# Powering the modern data center

Dell EMC Converged Infrastructure (CI) has helped thousands of global enterprise customers transform their IT environments to become more agile, reliable, and cost-effective. Dell EMC Converged Infrastructure 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 ongoing maintenance of traditional in-house integration approaches.

## Dell EMC Converged Infrastructure overview

Dell EMC VxBlock Systems deliver simple IT solutions from general-purpose workloads to mission-critical use cases, significantly reducing costs, time-to-deploy, and ongoing 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.



Based on a IDC White Paper sponsored by Dell EMC: <u>Modernizing Mission-Critical Applications with VxBlock</u>. Actual results may vary.

#### Unsurpassed simplicity

VxBlock Systems bring together leading technologies from Dell EMC, Cisco, and VMware. 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. Ongoing, 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.

# Fastest and easiest way to modernize your infrastructure

VxBlock Systems are one of the fastest and easiest ways to modernize a data center with all-flash storage, including Dell EMC Unity, and VMAX options. All-flash VxBlock Systems are ideal for mixed-workload consolidation, applications

\* Source: IDC Worldwide 2017 Converged Systems Tracker, published April 2018

#### **#1 FOR A REASON**

Delivering real business results

"The VxBlock has been an enormous plus for us. It gives us time."

Mark Wiseley, Senior Director of IT, Palmer College

"Installing the converged VxBlock System allowed us to make a tenyear step forward in technology with a single purchase. By using the VxBlock System to transform our data centre, we now have the ability to deploy solutions in hours as opposed to weeks"

Ryan Deppe, Network Operations Supervisor, Cianbro Corporation

"Dell EMC listens and responds, and gives us better solutions—month after month, year after year. USD is a world-class Higher Education Experience business supported by a world-class IT infrastructure—and Dell EMC is at the heart of that."

Mike Somerville, NISS Manager – Systems Support & Chief Cloud Evangelist, University of San Diego

"We're now 100 percent responsive to the business."

Michael Tomkins, Chief Technology Officer, Fox Sports Australia

"Every day we've got to do things better than we did the day before and be even more competitive if we're going to thrive in this competitive electric market. Because of that, it has required us to be more agile, bringing cost savings back to the business and investing those in new innovation."

Kevin Chase, Senior VP and Chief Information Officer, Energy Future Holdings Corp that require extreme performance and scale, mission-critical applications, and whenever you are looking for the highest storage density at the lowest operational total cost of ownership (TCO). Hybrid storage is also available on Dell EMC Unity.

# Streamlined deployments

With multivendor solutions, considerable time and resources are devoted to sourcing, integrating, testing, validating, and ongoing maintenance. Using the Logical Configuration Survey (LCS) to customize integration and deployment options, all system elements are pre-integrated, pre-configured, then tested and validated before shipping.

## System sustainability

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

# Converged management and operations

VxBlock Central\* software provides a single unified interface and access point for CI operations. It dramatically simplifies daily administration by providing enhanced CI-level awareness, automation and analytics. VxBlock Central includes Dell EMC launch points to VMware vRealize Orchestrator (vRO) with workflows for automating daily operational tasks and to vRealize Operations (vROPs) for deep VxBlock analytics and simplified capacity management.

# Simple to scale and easy to share resources

Dell EMC Vscale Architecture provides the most flexible and optimal way to scale out data centers and share resources across converged infrastructure systems, hyper-converged systems, and non-converged systems. Through the Dell EMC Vscale Fabric, a scalable spine-leaf network fabric, you can connect multiple systems and modular components to create a shared pool of resources.

#### Single-call support

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.

#### Integrated data protection

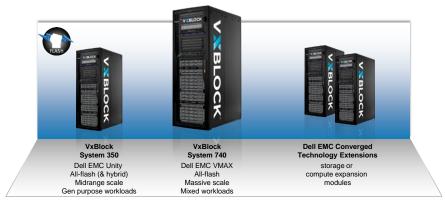
For reliable backup and recovery, your converged systems are built with data protection optimized for your specific needs. Dell EMC offers the most advanced data deduplication, replication, and data protection technologies for achieving your Recover Point Objective (RP.O) and Recover Time Objective (RTO)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

#### Security and compliance

VxBlock 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 the system inventory and software compliance policy, greatly reducing the time needed to pinpoint and eliminate vulnerabilities.

# VxBlock Systems

VxBlock Systems provide a wide range of solutions to meet your requirements for size, performance, and scalability. VxBlock Systems are built with industry-leading compute and networking from Cisco, storage from Dell EMC with Dell EMC Unity and VMAX, and virtual distributed switching from VMware.



The VxBlock Systems 350 and 740 and the Converged Technology Extensions

## Midrange scale for general-purpose, file, and block workloads

The VxBlock System 350 is agile and highly scalable. It's a unified, converged infrastructure that is designed for general-purpose mixed workloads. 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 powerful Dell EMC Unity all-flash and hybrid-flash storage options, these are perfect for general-purpose mixed workloads.

# The advanced data services in a Converged Infrastructure

The VxBlock System 740 is the industry's most advanced intelligent converged system with unmatched performance, scalability, and availability for the most demanding mission-critical applications. Dell EMC VMAX all-flash storage delivers multidimensional scale, high IOPS for extreme levels of performance with low latency. It is ideal for large-scale mixed workload consolidation and mission-critical workloads, such as SAP, Oracle, Microsoft, and VDI.

## Converged Technology Extensions

Dell Converged Technology Extensions provide an innovative way to expand and enhance a converged system quickly and easily by adding compute or storage outside of the original system. They are available for Cisco UCS and Dell EMC storage and support multiarray storage combinations.

Add Dell EMC Unity all flash with inline data reduction and rich data services for mixed workloads like databases, data warehouses, transactional workloads, and virtualization applications.

Add XtremIO X2 all flash for linear growth, massive I/O performance, and workload consolidation. With a scale-out design, it is ideal for data reduction and copy-friendly workflows, such as Virtual Desktop Infrastructure (VDI) and test and development environments.

Add PowerMax to address all your traditional and modern workloads that require tier 0 or tier 1 stroage. PowerMax offeres unmatched performance, efficienciey and availability for all enterprise workloads.

Add VMAX all-flash configurations to support your large-scale data center consolidation, diverse and heavy-transaction workloads, data warehousing, analytics, and mission-critical applications.

#### **#1 FOR A REASON**

Delivering real business results

"First of all, it's saving us on the maintenance and support funding. That allows us to take those remaining investment dollars and actually put them into new innovative investment."

Chad Eckes, Executive Vice President and CFO, Wake Forest Baptist Medical Center

"Our mission to deliver a dynamic and evolving set of core services and innovative technologies essential to the citizens is critical. Dell EMC is helping the City of Virginia Beach achieve this mission by enabling us to develop and implement the best technology solutions to meet those demands."

Matthew Arvay, former CIO, City of Virginia Beach, VA

"It provided us the flexibility we needed for both our revenue-generating mixed workloads and all-flash back end."

Carlos Sotero, IT Director, Insight

"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

"We have a small IT staff and the minimal maintenance time required 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

"Digital transformation starts with setting the right IT foundations. You don't just go straight to a digitally transformed business – it is a continuous journey"

Dickon Smart-Gillf, CIO Bumrungrad International Hospital

Add the new generation 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.

System	VxBlock System 350	VxBlock System 740	Technology Extensions
Compute	Cisco UCS 5108 Blade Server Chassis Cisco UCS B-Series Blade Servers (Cisco UCS B200 M4, B260 M4, B420 M4, B460 M4 and B200 and B480 M5) Cisco UCS C-Series Rack Servers (Cisco USC C220 M4, C220 M5 and C240 M5) Cisco UCS 2204XP and 2208XP Fabric Extenders Cisco UCS 6248UP and 6296UP Fabric Interconnects Cisco UCS Virtual Interface Card (VIC) 1240, 1280, 1340, 1380, 1385 and 1387		Cisco UCS B-Series Blade Servers Cisco UCS C-Series Rack Servers
Min/Max. Chassis	2/64	2/64	
Min/Max. Blades	4/256	2/512	
Network	Cisco Nexus 93180YC-EX Switch Cisco Nexus 3172TQ Switche (management) Cisco MDS 9148S and 9396S Multilayer Switch Cisco MDS 9706 Multilayer Director	Cisco Nexus 5548UP and 5596UP Cisco Nexus 93180YC-EX Cisco Nexus 3172TQ and 3064-T Switch (management) Cisco MDS 9148S and 9396S Multilayer Switch Cisco MDS 9706 Multilayer Director	
Storage	Dell EMC Unity 350F, 450F, 550F and 650F  Dell EMC Unity 300, 400, 500 and 600	Dell EMC VMAX 250F (all-flash) 1-2 engines Dell EMC VMAX 950F (all-flash) 1-8 engines	Dell EMC Unity 350F, 450F, 550F and 650F, 300, 400, 500 and 600  Dell EMC XtremIO X2-S, X2-F Dell EMC PowerMax 2000 and 8000  Dell EMC VMAX 250F and 95  Dell EMC Isilon F800, H600, H500, H400, A200, A2000
Max Drive Count	150 to 1000 drives depending on model	VMAX 250F: 100 VMAX 950F: 1920	
Virtualization	VMware vSphere Enterprise Plus (with VMware vSphere Distributed Switch (VDS)) VMware NSX Virtual Networking VMware vSphere ESXi Dell EMC PowerPath/VE		
Management	Advanced Management Appliance (AMP-3S)  Dell EMC VxBlock Central*  Cisco UCS Manager Cisco Data Center Network Manager  VMware vCenter		

<sup>\*</sup> VxBlock Central availability is expected later in 2018



Learn more about Dell EMC VxBlock Systems



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View more resources









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