DELL EMC XC SERIES OF WEB-SCALE CONVERGED APPLIANCES

The Dell EMC™ XC Series of web-scale converged appliances integrates our proven x86 server platform and Nutanix web-scale software to provide enterprise-class, hyper-converged solutions for virtualized environments. Backed by Dell EMC's Global Service and Support organization, these 1U and 2U appliances consolidate compute and storage into a single platform enabling application and virtualization teams to quickly and simply deploy new workloads. This solution enables data center capacity and performance to be easily expanded — one node at a time — delivering linear and predictable scale-out expansion with pay-as-you-grow flexibility.

XC Series appliances incorporate many of the advanced software technologies that power leading web-scale and cloud infrastructures such as Google®, Facebook® and Amazon™ — but are engineered for all enterprises, regardless of size. Key features include:

- Hyper-converged – Seamlessly integrates server and storage resources in a self-healing system
- Software-defined – Delivers all services through software using proven Dell EMC hardware
- Distributed – All data, meta data and operations are distributed across the entire cluster
- Scale-out – Increases performance linearly by adding capacity one node at a time
- Automation and analytics – Extensive automation and rich system-wide monitoring

Designed to simplify IT

XC Series appliances simplify the deployment of virtual machines in any environment. The Nutanix Acropolis Operating System runs in a Controller VM (CVM) on each node, aggregating storage resources (hard disk drives and flash storage) across all nodes. This pooled storage is made available to all hosts through a fault-tolerant architecture. With an unrivaled ability to run VMs out of the box, XC Series appliances deliver an easy, modular approach to building modern data centers.

Ideal for virtualized workloads

XC Series appliances are excellent solutions for many workloads running in virtual environments. Preconfigured appliance options with flexible ratios of compute and storage including all flash configurations, coupled with support for VMware® ESXi™, Nutanix Acropolis Hypervisor (AHV) and Microsoft® Hyper-V®, make them ideal for running different workloads on the same platform in your data center. They can be easily integrated into any data center in less than 30 minutes and can support multiple virtualized, business-critical workloads including VDI, private cloud, database, OLTP and data warehouse as well as virtualized big data deployments. IT and storage administrators no longer have to manage LUNs, volumes or RAID groups. Instead, they can manage their virtual environments at a VM level using policies based on the needs of each workload.

Intuitive and powerful management interface

The Nutanix Prism Central management framework provides a highly intuitive, easy-to-use graphical user interface (GUI). All information is organized and presented through elegant touch points to facilitate easy consumption of operational data. Prism provides the ability to define and manage a complete hyper-converged infrastructure from nearly any device and includes REST APIs for integration with third-party cloud management systems.

Prism Central gives administrators a bird's eye view of resources across multiple clusters running different hypervisors and enables them to manage individual clusters using the GUI or a Windows PowerShell command-line interface. Prism simplifies configuration and management of replication, DR and compression policies, which can be applied to individual VMs. Compute and storage scaling and maintenance are automated through a simple, one-click add-node feature, auto-discovery protocols and a non-disruptive, one-click upgrade of the Nutanix CVM and host hypervisor.

Cluster Health provides comprehensive monitoring of VMs, nodes and disks in the cluster. It proactively flags potential issues in the hyper-converged infrastructure stack and provides the ability to visually navigate issues by grouping and filtering resources at VM, host and disk levels.

Configurations and features	XC630-10	XC730xd-12	XC730xd-24	XC730xd-12C	XC730-16G	XC430-4	XC6320-6
Form factor	1U, 1 node	2U, 1 node			2U, 1 node with 1 or 2 NVIDIA GPU[1]	1U, 1 node	2U, up to 4 nodes
Workload	Compute and performance-intensive VDI, test and development, private cloud, server virtualization	Storage-heavy Microsoft Exchange, SharePoint, data warehouse, big data	Performance-intensive SQL and Oracle OLTP	Storage capacity node for cluster with any supported hypervisor; does not run workload VMs or virtual desktops	VDI for graphics intensive workloads and knowledge workers with image-based applications	Balanced compute and storage for smaller scale virtualized environments	High-density compute and storage environments, service providers, private cloud
Dell EMC PowerEdge server platform	R630	R730xd			R730	R430	C6320
Hypervisor boot	64GB SATADOM						
Hypervisor options	Nutanix AHV, VMware® ESXi™ 5.5 U3 and 6.0 (U1 and U2) Microsoft® Windows Server® 2012 R2 with Hyper-V® Dell EMC OEM Standard or Datacenter Edition Factory Installed			AHV only	Nutanix AHV (except XC730-16G), VMware ESXi 5.5 U3 and 6.0 (U1 and U2) Microsoft Windows Server 2012 R2 with Hyper-V Dell EMC OEM Standard or Datacenter Edition Factory Installed		
License options	Nutanix Starter, Pro and Ultimate License						
Software maintenance	Nutanix 1 -5-year Software Maintenance/Assurance						
Support	1 -5-year coterminus ProSupport (4 hr and NBD) or ProSupport Plus comprehensive XC Series support with Nutanix assist						
Intel® Xeon® processors	Dual processor E5-2620 v4 E5-2630 v4 E5-2643 v4 E5-2650 v4 E5-2660 v4 E5-2667 v4 E5-2680 v4 E5-2690 v4 E5-2695 v4 E5-2697 v4 E5-2698 v4 E5-2699 v4	Dual processor E5-2620 v4 E5-2630 v4 E5-2650 v4 E5-2660 v4 E5-2680 v4 E5-2695 v4	Dual processor E5-2620 v4 E5-2630 v4 E5-2643 v4 E5-2650 v4 E5-2660 v4 E5-2667 v4 E5-2680 v4 E5-2690 v4 E5-2695 v4 E5-2697 v4 E5-2698 v4 E5-2699 v4	Single or dual processor E5-2620 v4	Dual processor E5-2643 v4 ES-2650 v4 E5-2660 v4 ES-2667 v4 E5-2680 v4 ES-2690 v4 E5-2695 v4 E5-2698 v4	Single or dual processor E5-2609 v4 E5-2620 v4 E5-2630 v4 E5-2650 v4 E5-2660 v4 E5-2680 v4 E5-2690 v4 E5-2695 v4	Dual processor[2] E5-2620 v4 E5-2630 v4 E5-2650 v4 E5-2660 v4 E5-2680 v4 E5-2695 v4
Data storage controller	Dell EMC SAS HBA330						LSI 2008
Drive type	10 x 2.5" drives	12 x 3.5" drives	24 x 2.5" drives	12 x 3.5" drives	16 x 2.5" drives	4 x 3.5" drives	6 x 2.5" drives[2]
SSD capacities	min 2X, max 4X 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9 TB, 3.8TB; all-flash version available with 10 x SSDs of the same capacity	min 2X, max 4X 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3.8TB; all flash version available with 12 SSDs of the same capacity	min 2X, max 4X 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9TB. 3.8TB; all flash version available with 24 SSDs of the same capacity	2X 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9TB. 3.8TB ; all flash version available with 12 SSDs of the same capacity	min 2X, max 4X 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9TB. 3.8TB; all flash version available with 16 SSDs of the same capacity	2X 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9TB. 3.8TB; all flash version available with 4 SSDs of the same capacity	2X 400GB, 480GB, 800GB, 960GB, 1.6TB, 1.9TB. 3.8TB; all flash version available with 6X 400GB, 800GB, 1.6TB or 3..8TB SSDs of the same capacity

Configurations and features	XC630-10	XC730xd-12	XC730xd-24	XC730xd-12C	XC730-16G	XC430-4	XC6320-6
HDD capacities (max 60TB total per node)	1TB, 2TB; min 4, max 8	10X 2TB, 4TB, 6TB or 8TB with a maximum of 60TB total capacity per node	1TB, 2TB; minimum of 4 and max 20	10X 2TB, 4TB, 6TB or 8TB with a maximum of 60TB total capacity per node	1TB, 2TB; max 14	2X 2TB, 4TB, 6TB or 8TB	4X 1TB, 2TB
Self-encrypting drives (SED)	SSD: 400GB, 800GB, 1.6TB HDD: 2TB	SSD: 400GB, 800GB, 1.6TB HDD: 4TB	SSD: 400GB, 800GB, 1.6TB HDD: 2TB	SSD: 400GB 800GB, 1.6TB HDD: 4TB	SSD: 400GB, 800GB, 1.6TB HDD: 2TB	SSD: 400GB, 800GB, 1.6TB HDD: 4TB	SSD: 400GB, 800GB, 1.6TB HDD: 2TB
DIMMs	8–24 x 16GB and 32GB RDIMMs or 32GB and 64GB LRDIMMs, DDR4, installed in pairs			4 -12 (single CPU) and 4 - 24 (dual CPU) 16GB and 32GB RDIMMs. x 16GB DIMMs, DDR4, installed in pairs	8–24 x 16GB and 32GB RDIMMs, DDR4, installed in pairs	4–8 (single processor) or 4–12 (dual processor) x 16GB and 32GB RDIMMs, DDR4, installed in pairs	8–16 per node x 16GB, 32GB RDIMMs, installed in pairs
Memory configs	128GB - 1.5TB			64GB - 768GB	128GB - 768GB	64GB–384GB	128GB - 512GB
Integrated networking (maximum 2 per appliance)	Intel X540-T2 Dual Port 10GBASE-T and I350 1GBASE-T daughter card, or Intel X520 Dual Port 10Gb DA/SFP+ and I350 1GBASE Dual Port daughter card					Quad Port 1GbE, option to add Dual Port 10Gb 10GBASE-T or 10Gb DA/SFP+ Server Adapter	Intel X520 (82599ES) Dual Port 10GbE SFP+ LOM[2], 10GbE and 1GbE Dual Port NIC available
Max total Ethernet ports	10	18		10		8	4 per node

[1]1 or 2 NVIDIA GRID K1 768 cores/16GB DDR3, 130W; 1 or 2 NVIDIA GRID K2 3072 cores/8GB DDR5, 225W 1 or 2 NVIDIA Tesla M10, 2560 cores/32GB DDR5, 225W
[2]Per node

Platforms and hypervisors or AOS	VMware ESXi 5.5 U3	VMware ESXi 6.0 (U1 and U2)	Microsoft Windows Server 2012 R2 SE	Microsoft Windows Server 2012 R2 DE	Nutanix AHV	AOS 4.1.2 or later	AOS 4.1.3 or later
XC630-10	X	X	X	X	X	X	
XC730xd-12	X	X	X	X	X	X	
XC730xd-24	X	X	X	X	X	X	
XC730xd-12C					X	X	
XC430-4	X	X	X	X	X		X
XC730-16G	X	X	X	X			X
XC6320-6	X	X	X	X	X		X

End-to-end technology solutions

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell EMC for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell EMC Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services™ has a wide range of options to make technology acquisition easy and affordable. Contact your Dell EMC Sales Representative for more information.

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