



XC CORE ADDS LICENSING FLEXIBILITY TO XC FAMILY OF HYPERCONVERGED INFRASTRUCTURE SOLUTIONS

The Dell EMC™ XC Family of hyperconverged appliances integrates our PowerEdge server platform and Nutanix software to provide enterprise-class infrastructure solutions for virtualized environments. Backed by Dell EMC's Global Service and Support organization, these 1U, 2U and 3U appliances with Intel and AMD processor options 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. The XC Family consists of XC Core Systems. XC Core offers customers an additional method to acquire Nutanix software licensing while leveraging the benefits of the Dell EMC XC platform. XC Core uses the same PowerEdge hardware and software as the XC Series Appliances, however, the HCI software is licensed separately and supported directly by Nutanix. Support and service for Dell EMC hardware and system integration software are provided through our ProSupport centers and teams located in 167 countries around the world.

This alternative lets customers buy Nutanix software licenses from authorized partners, and then add the licenses to pre-validated XC Core systems that are configured, built and tested by Dell. It enables license portability across infrastructure components and separate management and support of hardware and Nutanix software lifecycles. Customers also can update the Dell EMC hardware and Nutanix software independently to take full advantage of the latest technology enhancements to the XC Family.

Ideal for virtualized workloads

XC Family solutions are ideal for all enterprise workloads and applications running in virtual environments. Preconfigured options with flexible ratios of compute and storage including all flash configurations, coupled with support for Microsoft® Hyper-V®, Nutanix AHV and VMware® ESXi™, make them ideal for running different applications on the same platform in your data center. They can be easily deployed and support multiple virtualized, business-critical workloads including VDI, private cloud, database, OLTP and data warehouse as well as virtualized big data deployments.

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. It also 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.

Adding value to Nutanix software

Dell EMC has over 12 years of experience integrating hardware and software for appliances built with PowerEdge servers. That expertise helps us design, validate and test the optimal processor, memory and storage configurations for Nutanix software. It also enables us to develop technologies that simplify and streamline common workflows performed throughout the appliance's lifecycle. This starts with factory installation of the hypervisor of choice and pre-configuration of system settings to maximize performance of the Nutanix software. Other examples include one-click BIOS, firmware and software updates, software modules that deliver fast and seamless deployment, rapid factory restore and bare metal recovery, rich in-band hardware monitoring and management capabilities,

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and components developed specifically for HCI to simplify workflow orchestration across a cluster.

Built-in Security

Every XC system is based on a cyber-resilient architecture, with security built into all parts of the server's life cycle. XC Series appliances use these security features so you can reliably and securely deliver the right data wherever it's needed. Dell EMC considers each part of system security, from design to end-of-life, to ensure trust and provide worry-free systems that enable you to:

- Rely on a secure component supply chain to ensure protection from the factory to the data center
- Maintain data safety with cryptographically signed firmware packages and Secure Boot
- Prevent unauthorized or malicious change with Server Lock down
- Wipe all data from storage media including drives and system memory quickly and securely with System Erase

Configurations and features	XC450-4/ XC450-4s	XC650-10/10N	XC750-14	XC750-24	XC750-16N
Form factor	1U, single socket for 450-4s, 1U, 2 socket for 450-4	1U, 2 socket	2U, 2 socket		
Workload	Simple HCI workloads in ROBO and small office settings. 3 node minimum (-4) 1 or 2 node supported (-4S)	VDI, test/dev, private cloud, virtualized apps. GPU and VMD support	Storage heavy Exchange, sharepoint, big data. No GPU support, no VMD	High Performance MSSQL, Oracle	All NVMe w/VDI support
Dell EMC PowerEdge server platform	R450	R650	R750		R750
Hypervisor boot	Boot Optimized Storage Solution - 2 x M.2 internal with Internal BOSS card				
Hypervisor options	Nutanix AHV, VMware® ESXi™ 7.0u2, Hyper-V 2019 (750-14 ONLY)				
Support	Hardware: 1 - 7 year Dell EMC ProSupport or ProSupport One; software support provided by Nutanix				
Intel® Xeon® processors (dual only per node except XC450-4s (single))	Minimum 8 cores Max 34 cores 220W max TDP **24 core limit w/hybrid configs 4309Y, 4310, 4314, 4316, 5315Y, 5317, 5318Y,	Min: 12 cores Max: 40 cores Dual only: 6330, 6330N, 6334, 6338, 6338N, 6346, 6348, 6354, 8358,8368, 8380, , 8352S, 8352V, 8352Y, 8358P, 8360Y, 4310, 4314, 4316, 5317, 5318Y, 5320, 6326, 6342, 6336Y, 4309Y, 5315Y, 8362,8352M	Min: 12 cores Max: 40 core Dual only: 6330, 6330N, 6338, 6338N, 6346, 6348, 6354, 8358,8368, 8380, 8352S, 8352V, 8352Y, 8358P, 8360Y, 4310, 4314, 4316, 5317, 5318Y, 5320, 6334, 8362, 8352M 6326,6342,6336Y,4309Y, 5315Y		
Data storage controller	HBA355		HBA355i	HBA355i	No Controller

Configurations and features	XC450-4/ XC450-4s	XC650-10/10N	XC750-14	XC750-24	XC750-16N
Drive type	4 x 3.5" drives	10 x 2.5" drives	12 x 3.5" drives and 2x2.5" Universal rear	24 x 2.5" drives	16 x 2.5" drives
SSD capacities	SAS/SATA SSDs: 960GB, 1.6TB, 1.9TB, 3.8TB, 7.68TB min/max 2 for hybrid configurations. All flash SAS/SATA configurations available. Qty 2 or 4	SAS/SATA SSDs: 960GB, 1.6TB, 1.9TB, 3.8TB, 7.68TB Min 2, max 4 for hybrid configurations. All flash SAS/ SATA. NVMe only configurations available on 10N 2-10x NVMe SSDs: 750 optane, 800GB, 1.6TB, 3.2TB, 6.4TB, 7.6TB, 15.36	SAS/SATA SSDs: 960GB, 1.6TB, 1.9TB, 3.8TB, 7.68TB Min 2, max 4 for hybrid configurations. All flash SAS/SATA configurations available. Min 4 for AF.	SAS/SATA SSDs: 960GB, 1.6TB, 1.9TB, 3.8TB, 7.6TB, . Min 4, max 8 for hybrid configurations. All flash SAS/ SATA and SSD+ NVMe . NVMe SSDs: 750 optane 800 GB, 1.6TB, 3.2TB, 6.4TB, 7.6TB, 15.36	NVMe SSDs: 1.6TB, 3.2TB, 6.4TB, 7.6TB, 15.36 Min 4
HDD capacities (max 120TB total per node)	8TB, 12TB, 16TB, 18TB, 20TB	1.2TB,2.4TB	4TB, 8TB, 12TB, 16TB, 18TB, 20TB 12Gb SAS with a maximum of 120TB total capacity per node	1.2TB, 2.4TB 12Gb SAS; minimum of 4 and max 20	N/A
Self-encrypting drives (SED)	SSD:960GB, 1.92TB, 3.84TB HDD: 8TB, 12TB	SSD: 960GB, 1.92TB, 2.4TB, 3.84TB	SSD: 960GB 1.92TB, 3.84TB HDD: 2.4TB,4TB 8TB, 12TB	SSD: 960GB, 1.92TB 3.84TB, 7.68TB HDD: 2.4TB,8TB, 12TB	960GB, 3.84TB, 1.92TB, 7.68TB
DIMMs	RDIMMS (16GB, 32GB, 64GB) installed in pairs	RDIMMs (16GB, 32GB, 64GB) LRDIMMs (128GB, 256) installed in pairs			RDIMMs (16GB, 32GB, 64GB) LRDIMMs (128GB, 256GB) installed in pairs
Memory configs	Min 64GB (16x4), Max 1024GB Up to 16 RDIMM	Min 64GB (16x4), Max 8192GB - 32 DIMM slots Up to 32 RDIMM/LRDIMMs			128GB (minimum) to 4096GB (maximum). Support up to 16 DIMMs per processor.
GPU	N/A	Up to 3x Nvidia T4 Up to 3x A2	N/A.	Up to 2x DW (M10, A16, A30, A40, A100) Up to 4x SW (T4) Up to 3xSW (A10) Up to 4 SW (A2) AOS 5.20.1 has A100 & A40 AHV driver support	N/A
Networking options	<p>Network daughter cards: (450, 650, 750, 750xa) Intel X710 Dual Port 10GbE SFP+, Intel E810-XXV Dual Port 10/25GbE SFP28, Intel X710-T2L Dual Port 10GbE BASE-T, Mellanox ConnectX-5 Dual Port 10/25GbE SFP28, Broadcom 57414 Dual Port 10/25GbE SFP28, Broadcom 57416 Dual Port 10GbE BASE-T, Mellanox CX6-LX (25Gb) SFP28 (450, 650, 750), On-Board Broadcom 5720 Dual Port 1Gb LOM (650, 750, 750xa) Intel X710-T4L Quad Port 10GbE BASE-T, Mellanox ConnectX-6 DX Dual Port 100GbE QSFP56 (650, 750) Intel X710 Quad Port 10GbE SFP+ (750) Intel X710 Dual Port 10GbE SFP+, Broadcom 57416 Dual Port 10Gb, Base-T, Broadcom 57414 Dual Port 10/25GbE SFP28, Mellanox ConnectX-5 Dual Port 10/25GbE SFP28, Intel X710-T2L Dual Port 10GbE BASE-T, Intel X710-T4L Quad Port 10GbE BASE-T, Mellanox ConnectX-6 DX Dual Port 100GbE QSFP56, Intel E810-XXV Dual Port 10/25GbE SFP28</p> <p>Optional Network Interface Cards (Max 1 for XC450 model, max 3 for XC650, XC750, XC750xa): (450, 650, 750, 750xa) Intel X710 Dual Port 10GbE SFP+, Intel X710-T2L Dual Port 10GbE BASE-T, Intel E810-XXV Dual Port 10/25GbE SFP28, Mellanox ConnectX-5 Dual Port 10/25GbE SFP28, Broadcom 57416 Dual Port 10GbE BASE-T Adapter, Broadcom 57414 Dual Port 10/25GbE SFP28, Mellanox CX6-LX (25Gb) SFP28 (450, 650, 750) No OCP 3.0 mezzanine NIC card, Blank Filler Only (650, 750, 750xa) Intel X710 Quad Port 10GbE SFP+, Broadcom 57504 Quad Port 10/25GbE,SFP28, Intel E810-CQDA2</p>				

	100GbEQSFP LP (750) Intel E810-CQDA2 100GbEQSFP FH (650, 750) Intel X710-T4L Quad Port 10GbE BASE-T Note: 1) Foundation imaging requires 1x 10GbE interface 2) Network interface cards are for management and non-CVM traffic only and cannot be used for Foundation imaging.			
Configurations and features	XC750xa	XC6520-6/6N	XC7525-12/24	XCXR2
Form factor	2U, 2 socket	2U, up to 4 nodes	2U, 2 socket	1U, 1 node
Workload	High Density with GPU	Rack Dense VDI, service providers, enterprise cloud	High performance, multithread architecture workloads (VDI, database), ROBO	Harsh environments requiring rugged nodes in Oil & Gas, Industrial Automation, Transportation, Military & Defense, Marine, and Telecom industries
Dell EMC PowerEdge server platform	R750xa	C6520	R7525	OEM XR2
Hypervisor boot	Boot Optimized Storage Solution - 2 x M.2 internal with Internal BOSS card			
Hypervisor options	Nutanix AHV, VMware ESXi 7.0			
Support	Hardware: 1 -7 year Dell EMC ProSupport or ProSupport One; software support provided by Nutanix			
Intel® Xeon® processors (dual only per node except XC940 with 4) XC6515 is based on AMD EPYC™ architecture	Min: 12 cores Max: 40 cores Dual only: 6330, 6338, 8358, 8368, 8380, 8352S, 8358P, 4310, 4314, 4316, 5317, 5318Y, 5320, 6326, 6342, 5318S, 8362	Dual only: 6330, 6338, 8352V, 8352Y, 4310, 4314, 4316, 5317, 5318Y, 5320, 6326, 6336Y,	AMD EPYC: 75F3, 74F3, 73F3, 7713, 7543, 7513, 7453, 7443, 7413, 7343, 72F3, 7313 7763, 7643 7473X, 7373X, 7573X, 7773X	Dual only: 5218, 5220, 6230, 4210, 4214, 4216, 5215, 5217, 6222V, 6226, 6234, 6238, 4215,
Data storage controller	HBA355	HBA355i	HBA355i HBA355i Adapter, LP & FH	HBA330 mini card
GPU	Up to 4x DW (A16, A30, A40, A100) Up to 6x SW (T4) Up to 2x DW (M10), Up to 4X SW (A2, A10) AOS 5.20.1 has A100 & A40 AHV driver support.		ONLY FOR XC7525-24 Up to 3x DW (M10, A16, A30, A40, A100) Up to 2x SW (T4) Up to 3x SW (A10)	

² Specifications are per node

Configurations and features	XC750xa	XC6520-6/6N	XC7525-12/24	XCXR2
Drive type	8 x 2.5" drives	6 x 2.5" drives	12 x 3.5" drives 24 x 2.5" drives(w/NVMe)	8 x 2.5" drives
SSD capacities	SAS/SATA SSDs: 960GB, 1.9TB, 3.8TB, 7.68TB Min 2, max 4 for hybrid configurations. All flash SAS/SATA configurations available. Min 2 NVMe SSDs: 1.6TB, 3.2TB, 6.4TB, 7.6TB, 15.36	SAS/SATA SSDs: 960GB, 1.6TB, 1.9TB, 3.8TB, 7.6TB Max 6x 2.5" (min 2 SSD for hybrid & min 2 SSD for AF) NVMe SSDs: 750GB, 1.6TB, 3.2TB, 6.4TB, 15.36TB	SAS/SATA SSD's: 960GB, 1.92TB, 3.84TB, 7.68TB NVMe SSDs: 1.6TB, 3.2TB, 6.4TB, 7.6TB, 15.36TB (max 8 only in 24 drive)	SAS/SATA SSDs: 800GB, 960GB, 1.6TB, 1.9TB, 3.8TB. min/max 2 for hybrid configurations. All flash SAS/ SATA available,
HDD capacities (max 120TB total per node)	1.2TB, 2.4TB SAS Minimum 4, max 6	1.2TB, 2.4TB SAS	4TB, 8TB, 12TB, 16TB, 18TB, 20TB for 3.5" 1.2TB-2.4TB for 2.5"	1.2TB, 1.8TB, 2.4TB
Self-encrypting drives (SED)	SSD: 960GB, 1.92TB, 3.8TB HDD: 2.4TB,	SSD: 960GB, 1.9TB, 3.84TB HDD: 1.2TB, 2.4TB	SSD: 960GB, 1.9TB, 7.68TB, 3.8TB 3.5" HDD: 8TB, 12TB 2.5" HDD: 1.2TB, 2.4TB	SSD: 1.9TB HDD: 1.2TB, 2.4TB
DIMMs	RDIMMs (16GB, 32GB, 64GB) LRDIMMs (128GB) installed in pairs	RDIMMs (16GB, 32GB, 64GB) LRDIMMs 128GB installed in pairs	RDIMMs (16GB, 32GB, 64GB) LRDIMMs 128GB installed in pairs	8-16 per node x 16GB or 32GB RDIMMs or 64GB LRDIMMs, installed in pairs
Memory configs	128GB (minimum) to 4096GB (maximum). Support up to 16 DIMMs per processor	Min 64GB (16x4), Max 8096GB - 32 DIMM slots Up to 32 RDIMM/LRDIMMs		128GB - 1TB

Hypervisor and AOS Support	VMware ESXi 7.0	Nutanix AHV (all versions)	Hyper-V 2019 (VL only)	AOS LTS 5.20.1 and above
XC450-4, XC450-4s	X	X		X
XC650-10, XC650-10N	X	X		X
XC750-14	X	X	X	X
XC750-24	X	X		X
XC750xa	x	X		X
XC750-16N	X	X		X
XC6520-6	X	X		X
XC7525	X	X		
XCXR2	X	X		X

Dell EMC XC Core support and deployment services

XC Core nodes are installed in the customer's data center by certified XC Family deployment engineers. Once deployed, XC Core customers will receive collaborative support from Dell EMC and Nutanix. Hardware and system integration software issues are managed through Dell EMC ProSupport while software-related assistance is provided by Nutanix. If the source is unknown, customers can either call Dell EMC or Nutanix first and both companies will work together through an established process to quickly resolve the issue.

In addition, our automated proactive and predictive tools and technologies, including iDRAC and SupportAssist, help avoid hardware-related issues and enable faster resolution. And, ProSupport experts are always accessible 24x7x365 by phone, email, chat and social media across 167 countries and 55 languages served by more than 1,000 parts distribution centers.

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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