



# 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 Series Appliances and XC Core Systems. XC Series Appliances provide a turnkey HCI solution with global hardware and software support through Dell EMC. 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 EMC. 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 hyperconverged 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, 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	XC640-4/ XC640-4i	XC640-10	XC740xd-12	XC740xd-24 <sup>1</sup>	XC740xd-12C XC740xd-12R
Form factor	1U, 1 node	1U, 1 node	2U, 1 node		
Workload	Remote/ branch office, non mission-critical  XC640-4: 3-node cluster deployment  XC640-4i: 1- or 2-node deployment	Compute and performance- intensive VDI, test and development, enterprise cloud, server virtualization	Storage-heavy Microsoft Exchange, SharePoint, data warehouse, big data	Performance- intensive SQL and Oracle OLTP, VDI with GPU	XC740xd-12C: Storage capacity node for any cluster, does not run VMs or VDI XC740xc-12R: Single node replication target (not clustered)
Dell EMC PowerEdge server platform	R640		R740xd		
Hypervisor boot	Boot Optimized Storage Solution - 2x 240GB or 2x 480GB M.2 RAID 1 Mirror, low profile PCIe				
Hypervisor options	Nutanix AHV, VMware® ESXi™ 6.7 and 6.5, Hyper-V 2019 (VL)			Nutanix AHV 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 XC640-4i (single))	Dual only: XC640-4: 4215R, 4210R, 6244, 4208, 4210, 4214, 5215, 5217, 6234, 4215,  XC640-4i (single only): 5218R, 5220R, 6226R, 6230R, 6238R, 6240R, 6242R, 6246R, 6248R, 4210R, 8270, 8260, 8268, 8276, 5218, 5220, 6230, 6240, 6242, 6248, 6252, 6254, 4210, 4214, 4216, 5215, 6222V, 6226, 6238, 6246, 6262V, 4214R, 6258R	Dual only: 5218R, 5220R, 6226R, 6230R, 6238R, 6240R, 6242R, 6246R, 6248R, 4210R, 8270, 8260, 5218, 5220, 6230, 6240, 6242, 6244, 6248, 6252, 6254, 8268, 8276, 4208, 4210, 4214, 4216, 8280, 5215, 5217, 6222V, 6226, 6234, 6238, 6246, 6262V, 4215, 6258R, 4214R, 5215L, 6238L, 6240L, 8260L, 8276L, 8280L	Dual only: 5218R 5220R, 6226R, 6230R, 6238R, 6240R, 6242R, 6246R, 6248R, 4210R, 8270, 8260 5218, 5220, 6230, 6240, 6242, 6244, 6248, 6252, 6254, 8268, 8276, 4208, 4210, 4214, 4216, 8280, 5215, 5217, 6222V, 6226, 6234, 6238, 6246, 6262V, 4215, 6258R, 4214R, 5215L, 6238L, 6240L, 8260L, 8276L, 8280L	Dual only: 4215R, 4210R, 4208, 4210	
Data storage controller	Dell EMC SAS HBA330 mini card		Dell EMC SAS HBA330 low profile		Dell EMC SAS HBA330 mini card

<sup>1</sup> Can be optionally configured with 1 or 2 NVIDIA Tesla M10 GPUs, or with 1, 2, or 3 NVIDIA Tesla M60 or up to 6 T4 GPUs or NVIDIA Tesla V100S. Not compatible with NVMe SSDs

Configurations and features	XC640-4/ XC640-4i	XC640-10	XC740xd-12	XC740xd-24 <sup>1</sup>	XC740xd-12C XC740xd-12R
Drive type	4 x 3.5" drives	10 x 2.5" drives	12 x 3.5" drives	24 x 2.5" drives	12 x 3.5" drives
SSD capacities	SAS/SATA SSDs: 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3,8TB. min/max 2 for hybrid configurations. All flash SAS/SATA configurations available	SAS/SATA SSDs: 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3,8TB. Min 2, max 4 for hybrid configurations. All flash SAS/ SATA and SSD+ NVMe configurations available, NVMe SSDs: 800GB, 1.6TB, 3.2TB	SAS/SATA SSDs: 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3,8TB. Min 2, max 4 for hybrid configurations. All flash SAS/SATA configurations available	SAS/SATA SSDs: 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3,8TB, . Min 4, max 8 for hybrid configurations. All flash SAS/ SATA and SSD+ NVMe configurations available, max 80TB per node. NVMe SSDs: 800GB, 1.6TB, 3.2TB	SAS/SATA SSDs: 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3,8TB. Min 2, max 4 for hybrid configurations. All flash SAS/SATA configurations available max 80TB per node
HDD capacities (max 120TB total per node)	2TB, 4TB, 8TB or 10TB (10TB for XC640-4 only)	1.2TB, 1.8TB, 2.4TB 12Gb SAS	2TB, 4TB, 8TB or 10TB 12Gb SAS with a maximum of 120TB total capacity per node	1.2TB, 1.8TB, 2.4TB 12Gb SAS; minimum of 4 and max 20	2TB, 4TB, 8TB or 10TB, 12Gb SAS with a maximum of 120TB total capacity per node
Self-encrypting drives (SED)	SSD: 1.9TB HDD: 4TB, 8TB	SSD: 1.9TB HDD: 1.2TB, 2.4TB	SSD: 1.9TB HDD: 4TB, 8TB	SSD: 1.9TB HDD: 1.2TB, 2.4TB	SSD: 1.9TB HDD: 4TB, 8TB
DIMMs	4 - 24 16GB and 32GB RDIMMS or 64GB or 128GB LRDIMMS (XC640-4) and 4 - 12 16GB and 32GB RDIMMS (XC640-4i)	8-24 x 16GB and 32GB RDIMMs or 64GB or 128GB LRDIMMs, installed in pairs			4 - 24 x 16GB and 32GB RDIMMs. installed in pairs
Memory configs	64GB - 3TB (XC640-4) and 64GB - 384GB (XC640-4i)	128GB - 3TB (XC640-10, XC740xd-12) 64GB - 3TB (XC740-24)			64GB - 768GB
Networking options	<p>Network daughter cards: Intel X550 4x10GbE-T, Intel X550 2x10GbE-T &amp; i350 2x1GbE-T, Intel X710 2x10GbE SFP+ &amp; i350 2x1GbE-T, Intel i350 4x1GbE-T (XC640-4i only). Broadcom 57416 Dual 10GbE Base-T, Broadcom 57414 2x25GbE SFP28 Mellanox ConnectX-4 LX 2x25GbE SFP28 (Except XC640- 4i, XC740xd-12R)</p> <p>Optional Network Interface Cards (Max 2 for XC640 models, max 4 for XC-740xd models and max 8 for XC940-24): Intel i350 2x1GbE-T, Intel i350 4x1GbE-T (except XC740xd-24, XC740xd-12 and XC740xd-12C), Intel X550 2x10GbE-T, Intel X710 2x10GbE SFP+, Mellanox ConnectX-4 LX 2x25GbE SFP28 (except XC640-4i and XC740xd-12R) Mellanox ConnectX-5 2x100GbE SFP28 (XC740xd and XC940 only) Mellanox ConnectX-5 2x25GbE SFP28</p> <p>Note: 1) Foundation imaging requires 1x 10GbE interface except for XC640-4i 2) Network interface cards are for management and non-CVM traffic only and cannot be used for Foundation imaging.</p>				

<sup>1</sup> Can be optionally configured with 1 or 2 NVIDIA Tesla M10 GPUs, or with 1, 2 or 3 NVIDIA Tesla M60 or up to 6 T4 GPUs or NVIDIA Tesla V100S. Not compatible with NVMe SSDs

Configurations and features	XC940-24	XC6420-6 <sup>2</sup>	XC6515-8	XCXR2 <sup>2</sup>	XC740xd2-24
Form factor	3U, 1 node	2U, up to 4 nodes	1U, 1 node, single socket	1U, 1 node	2U, 1 node
Workload	Memory and performance- intensive Microsoft SQL and Oracle OLTP	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	Dense storage in eHealth, M&E, Gnome sequencing, CoLo, Analytics and Oil & Gas. Specifically for Object and File workloads
Dell EMC PowerEdge server platform	R940	C6420	R6515	OEM XR2	R740xd2
Hypervisor boot	Boot Optimized Storage Solution - 2x 240GB or 2x 480GB M.2 RAID 1 Mirror, low profile PCIe				
Hypervisor options	Nutanix AHV, VMware ESXi 6.7 and 6.5, Hyper-V 2019 (VL)		Nutanix AHV, VMware ESXi 6.7 and 6.5	Nutanix AHV, VMware ESXi 6.7 and 6.5	Nutanix AHV (Object & File workload specific)
Support	Hardware: 1 - 5 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	Quad only: 8260M, 8270, 8260, 5218, 5220, 6230, 6240, 6242, 6244, 6248, 6252, 6254, 8268, 8276, 8276M, 8280M, 8280, 5215, 5215M, 6222V, 6226, 6238, 6238M, 6240M, 6246, 6262V, 5215L, 6238L, 6240L, 8260L, 8276L, 8280L, 6246, 6262V, 5215L, 6238L, 6240L, 8260L, 8276L, 8280L	Dual only: Platinum 8260, 8268, 8270, 8276, 8280 Gold 5215, 5218, 5220, 6230, 6240, 6242, 6244, 6248, 6252, 6254; Silver 4208, 4210, 4214, 4216	Single only: AMD EPYC 7402P, 7502P, 7302P, 7702P	Dual only: 5218, 5220, 6230, 4210, 4214, 4216, 5215, 5217, 6222V, 6226, 6234, 6238, 4215	Dual only: 5218R, 4210R, 5218, 5220, 6230, 4210, 4214, 4216, 5215, 6222V, 6226, 6238, 6262V, 4214R, 5215, 6222V, 6226, 6238, 6262V, 4214R
Data storage controller	Dell EMC SAS HBA330 low profile	Dell EMC SAS HBA330 mini card	Dell EMC SAS HBA330 mini card	Dell EMC SAS HBA330 mini card	Dell EMC SAS HBA330 mini card

<sup>2</sup> Specifications are per node

Configurations and features	XC940-24	XC6420-6 <sup>2</sup>	XC6515-8	XCXR2 <sup>2</sup>	XC740xd2-24
Drive type	24 x 2.5" drives	6 x 2.5" drives <sup>2</sup>	8 x 2.5" drives <sup>2</sup>	8 x 2.5" drives <sup>2</sup>	24x 3.5" drives
SSD capacities	SAS/SATA SSDs: 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3.8TB. Min 4, max 8 for hybrid configurations. All flash SAS/ SATA and SSD+ NVMe configurations available, max 80TB per node. NVMe SSDs: 800GB, 1.6TB, 3.2TB	SAS/SATA SSDs: 480GB, 960GB, 1.9TB, 3.8TB. min 2 for hybrid configurations. All flash SAS/ SATA available	SAS/SATA SSDs: 960GB, 1.9TB, 3.8TB, 7.4TB (min 2 for hybrid configurations. All flash SAS/ SATA available)	SAS/SATA SSDs: 480GB, 800GB, 960GB, 1.6TB, 1.9TB, 3.8TB. min/max 2 for hybrid configurations. All flash SAS/ SATA available,	SAS/SATA SSDs: 960GB, 1.9TB, 3.8TB. Min/max: 4
HDD capacities (max 120TB total per node)	1.2TB, 1.8TB, 2.4TB SAS; minimum of 4 and max 20	1.2TB, 1.8TB, 2.4TB	1.2TB, 2.4TB	1.2TB, 1.8TB, 2.4TB	10TB or 12Gb SAS with a maximum of 240TB total capacity per node for Object and 120TB total capacity per Node for Files
Self-encrypting drives (SED)	SSD: 1.9TB HDD: 1.2TB, 2.4TB	SSD: 1.9TB HDD: 1.2TB, 2.4TB	SSD: 1.9TB, 3.8TB	SSD: 1.9TB HDD: 1.2TB, 2.4TB	SSD: 1.9TB HDD: 12TB
DIMMs	24-48 x 32GB RDIMMs or 64GB or 128GB LRDIMMs installed in pairs	8–16 per node x 16GB or 32GB RDIMMs or 64GB or 128GB LRDIMMs, installed in pairs	8–16 per node x 16GB, 32GB or 64GB RDIMMs installed in pairs	8–16 per node x 16GB or 32GB RDIMMs or 64GB LRDIMMs, installed in pairs	8–16 per node x 16GB, 32GB or 64GB RDIMMs installed in pairs
Memory configs	768GB - 6TB	128GB - 2TB	128 – 1TB	128GB - 1TB	128GB - 1TB
Networking options	Network daughter cards: Intel X550 4x10GbE-T, Intel X550 2x10GbE-T & i350 2x1GbE-T, Intel X710 2x10GbE SFP+ & i350 2x1GbE-T. Mellanox ConnectX-4 LX 2x25GbE SFP28 Optional Network Interface Cards (max 8 for XC940-24): Intel i350 2x1GbE-T, Intel i350 4x1GbE-T, Intel X550 2x10GbE-T, Intel X710 2x10GbE SFP+, Mellanox	Network Interface Cards, 1 max: Intel X550 2x10G-T, Intel X710 2x10G SFP+, Broadcom 57414 Dual Port 10/25GbE SFP28, Broadcom 57416 Dual Port 10GbE BASE-T, Mellanox ConnectX-4 LX 2x25GbE SFP28, Intel XXV710 Dual Port 10/25GbE, Broadcom 57412 Dual Port 10GbE	Network daughter cards: Broadcom 57414 Dual Port 25GbE SFP28, Broadcom 5720 Dual Port 1 GbE, Broadcom 57416 DP 10 GbE SFP+, Broadcom 57416 Dual Port 10 Gb Optional Network Interface Cards: Intel XXV710 Dual Port 10/25GbE, Broadcom 57416 Dual	Optional Network Interface Cards: Intel X550 2x10GbE-T, Intel X520 2x10GbE-T Intel X710 2x10GbE SFP+ Mellanox ConnectX-4 LX 2x25GbE SFP28, Broadcom 57414 2x25GbE SFP28, Broadcom 57416 2x10GbE Base T, Intel 710 4x10GbE Base T, Intel XXV710 2x25GbE	Optional Network Interface Cards: Intel X550 2x10GbE-T, Intel X520 2x10GbE SFP+, Intel X710 2x10GbE SFP+, Intel X710 4x10GbE BaseT, Intel XXV710 Dual Port 10/25GbE SFP28, Mellanox ConnectX-4 LX 2x25GbE SFP28, Broadcom 57414 2x25GbE SFP28,

ConnectX-4 LX 2x25GbE, Mellanox ConnectX-5 2X100GbE SFP28 Notes: 1) Foundation imaging requires 1x 10GbE 2) Network interface cards are for management and non-CVM traffic only and cannot be used for Foundation imaging.	SFP+, Broadcom 57414 Dual Port 25GbE SFP28, Mellanox Connectx-5 2x25GbE SFP28	Port 10GbE BASE-T, Broadcom 57414 Dual Port 10/25GbE SFP28, Intel X710-T2L Dual Port 10GbE BASE-T, Intel X710 Dual Port 10GbE SFP+	SFP28, Broadcom 57412 2x10GbE SFP+, Broadcom 57414 2x25GbE SFP28, Mellanox ConnectX-5 2x25GbE SFP28 Notes: 1) Foundation imaging requires 1x 10GbE 2) Network interface cards are for management and non-CVM traffic only and cannot be used for Foundation imaging.	Broadcom 57416, 2x10GbE BASE-T, Broadcom 57412 2x10GbE SFP+, Broadcom 57414 2x25GbE SFP28, Mellanox ConnectX-5 2x25GbE SFP28 Notes: 1) Foundation imaging requires 1x 10GbE 2) Network interface cards are for management and non-CVM traffic only and cannot be used for Foundation imaging.
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Hypervisor and AOS Support	VMware ESXi 6.5U3, 6.7U3	Nutanix AHV (all versions)	Hyper-V 2019 (VL only)	AOS LTS 5.10 and above
<a href="#">XC640-4, XC-640-4i</a>	X	X	X	X
<a href="#">XC640-10</a>	X	X	X	X
<a href="#">XC740xd-12</a>	X	X	X	X
<a href="#">XC740xd-24</a>	X	X	X	X
<a href="#">XC740xd-12C</a> <a href="#">XC740xd-12R</a>		X		X
<a href="#">XC940-24</a>	X	X	X	X
<a href="#">XC6420-6</a>	X	X	X	X
<a href="#">XC6515</a>	X	X		
<a href="#">XCXR2</a>	X	X		X
<a href="#">XC740xd2-24</a>		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.

