

Dell EMC XC740xd XC Series Appliance and XC Core System Support Matrix

July 2020

Revisions

Date	Description
July 2020	Updated the following sections: <ul style="list-style-type: none">• Supported components• Memory capability
June 2020	Updated the following sections: <ul style="list-style-type: none">• Supported components• Supported NDCs
May 2020	Updated the following sections: <ul style="list-style-type: none">• Supported components• Supported NDCs• Supported NICs• Supported hypervisor OSS
March 2020	Updated the Supported management software section
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January 2020	Updated Supported NIC section
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June 24, 2019	Added supported CPUs and supported memory
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February 2019	<p>Updated the following sections:</p> <ul style="list-style-type: none"> • Supported NDCs • Supported NICs • Supported Management Software <p>Added Encryption Restrictions section</p>
December 2018	<p>Updated the following sections:</p> <ul style="list-style-type: none"> • Supported components • BIOS and iDRAC versions • Supported networking • Supported hypervisor OS
October 2018	Added GPU platform support.
August 2018	Updated content to include XC Core System.
March 2018	Updated BIOS and firmware versions.
February 2018	Changed BIOS and firmware versions.
January 2018	Updated firmware and Windows version.
December 2017	Updated BIOS, iDRAC, and ESXi versions.
November 2017	Initial release

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Table of contents

Revisions.....	2
Table of contents	4
Introduction	5
1 Supported hardware, firmware and software	6
1.1 Supported components	6
1.2 Supported physical disk drives.....	8
1.2.1 Encryption Restrictions.....	8
1.3 Supported networking.....	9
1.3.1 Supported NDCs.....	9
1.3.2 Supported NICs	10
1.4 GPU platform support.....	10
1.5 Supported management software	11
1.6 Supported hypervisor OS	11
2 Documentation matrix	12
2.1 Dell EMC documentation.....	12
2.2 Nutanix documentation.....	13
3 Contacting Dell EMC	15
3.1 Quick Resource Locator	15

Introduction

The information in this document applies to both, Dell EMC XC Series Appliances as well as the Dell EMC XC Core System offering. Sections or information that apply to only one of the offerings (XC Series or XC Core) will be called out explicitly.

This document provides information about the supported software, firmware, and hardware versions and technical specifications for the Dell EMC XC740xd Series Hyper-Converged Appliance.

NOTE: This Support Matrix contains the latest compatibility and interoperability information. If you observe inconsistencies between this information and other documentation or references, this document supersedes all other documentation.

1 Supported hardware, firmware and software

This chapter provides information about supported software, firmware, and hardware versions for the Dell EMC XC740xd Series Hyper-Converged Appliance.

NOTE: Future updates to this document may remove firmware versions because Nutanix LCM is the prescribed method to update the appliance.

1.1 Supported components

This section provides information about components supported by your hardware.

Table 1 Supported Components

Component	Skylake Model	Cascade Lake Model	Cascade Lake Refresh *L CPUs offered on Core only
CPUs	3106	4208	4210R
	4108	4210	4214R
	4109T	4214	5218R
	4110	4215	5220R
	4112	4216	6226R
	4114	5215	6230R
	4116	5217	6238R
	5115	5218	6240R
	5118	5220	6242R
	5120	6222V	6246R
	5122	6226	6248R
	6126	6230	6258R
	6128	6234	5215L
	6130	6238	6238L
	6132	6240	6240L
	6134	6242	8260L
	6134M	6244	8276L
	6136	6246	8280L
	6138	6248	
	6140	6252	
6140M	6254		
6142	6262		

Component	Skylake Model	Cascade Lake Model	Cascade Lake Refresh
			*L CPUs offered on Core only
	6142M	8260	
	6144	8268	
	6146	8270	
	6148	8276	
	6150	8280	
	6152		
	6154		
	8153		
	8156		
	8158		
	8160		
	8160M		
	8164		
	8168		
	8170		
	8170M		
	8176		
	8180		
	8180M		
BIOS	1.2.11 and later	2.2.11 and later	
iDRAC support	3.15.15.15 or later	3.34.34.34 and later	

Table 2 Memory capability

	Skylake	Cascade Lake	Skylake/Cascade Lake *Will downclock from this to CPU capability
16Gb RDIMM	2666	2933	3200
32Gb RDIMM	2666	2933	3200
64Gb LRDIMM	2666	2666	N/A
64Gb RDIMM	NA	2933	3200
128Gb LRDIMM	2666	2666	3200

Table 3 Support

Shelf	2933 MT/s Support
Platinum-82xx	✓
Gold-62xx	✓
Gold-52xx	
Silver-42xx	

1.2 Supported physical disk drives

This section provides information about disks drives supported by your hardware.

Table 4 Supported Physical Disk Drives

Form Factor	Capacity	Type	Vendor	Chassis
2.5"	1.2 TB	SAS HDD	Dell EMC Supported	-24
2.5"	1.8 TB	SAS HDD	Dell EMC Supported	-24
2.5"	2.4 TB	SAS HDD	Dell EMC Supported	-24
2.5"	480 GB	SATA SSD	Dell EMC Supported	-24, -12
2.5"	800 GB	SATA SSD	Dell EMC Supported	-24, -12
2.5"	960 GB	SATA SSD	Dell EMC Supported	-24, -12
2.5"	1920 GB	SATA SSD	Dell EMC Supported	-24, -12
2.5"	3840 GB	SATA SSD	Dell EMC Supported	-24, -12
2.5"	400 GB	SAS SSD	Dell EMC Supported	-24, -12
2.5"	480 GB	SAS SSD	Dell EMC Supported	-24, -12
2.5"	800 GB	SAS SSD	Dell EMC Supported	-24, -12
2.5"	960 GB	SAS SSD	Dell EMC Supported	-24, -12
2.5"	1600 GB	SAS SSD	Dell EMC Supported	-24, -12
2.5"	1920 GB	SAS SSD	Dell EMC Supported	-24, -12
2.5"	3840 GB	SAS SSD	Dell EMC Supported	-24, -12
2.5"	1920 GB	SAS SED SSD	Dell EMC Supported	-24, -12
3.5"	2 TB	NL-SAS HDD	Dell EMC Supported	-12
3.5"	4 TB	NL-SAS HDD	Dell EMC Supported	-12
3.5"	8 TB	NL-SAS HDD	Dell EMC Supported	-12
3.5"	10 TB	NL-SAS HDD	Dell EMC Supported	-12
3.5"	4 TB	SED HDD	Dell EMC Supported	-12
3.5"	8 TB	SED HDD	Dell EMC Supported	-12

1.2.1 Encryption Restrictions

This section describes encryption restrictions.

- If encryption has never been enabled and you do not plan to use it in the future, secure encrypted drives (SED) can be mixed with unencrypted (non-SED) drives in the same node.
- If encryption was never enabled and remains disabled, encrypted nodes can be mixed with unencrypted nodes in the same cluster.
- Encryption is not supported for NVMe drives.
- All nodes in the cluster must have SED capable drives to use hardware SED encryption.

NOTE: If SED drives are mixed with non-SED drives, the encryption cannot be enabled for that cluster.

NOTE: An encryption key must be removed from the SED drives from Prism before you format (clear) the SED drives.

1.3 Supported networking

This section provides information about networking supported by your hardware and supported NICs.

Intel branded Network Daughter Cards (NDC) and Network Interface Cards (NIC) specify the use of only Intel branded SFP+ optical modules for use with optical cables. When ordering a system with optics, the appropriate Intel branded SFP+ optical modules are included with your order. If you already have SFP+ optical modules, ensure they are the Intel branded modules before inserting into the NDC or NIC. Twinax cables are also the supported network cables for Intel NDC and NIC.

CAUTION: Using any brand of SFP+ module other than Intel during deployment disables the 10 GbE ports. Call Dell EMC Support to recover port functionality.

WARNING: Hot-plugging an unsupported SFP+ module causes ESXi host to fail with purple diagnostic screen. Call Dell EMC Support to recover from this situation.

1.3.1 Supported NDCs

This section specifies the supported NDCs. Broadcom supported with AOS 5.16 and later.

Table 5 Supported NDCs

Name
Intel i350 QP 1Gb NDC
Intel X540 QP 10Gb Base-T NDC
Intel X710 DP 10Gb SFP+ & i350 DP 1Gb NDC
Intel X710 DP 10Gb Base-T & i350 DP 1Gb NDC
Mellanox 25Gb CX4 SFP28 DP NDC
Broadcom 57416 10Gb NDC
Broadcom 57414 25Gb NDC

1.3.2 Supported NICs

Additional NICs	GPU model
	Intel i350 DP 1Gb NIC
	Intel i350 QP 1Gb NIC
	Intel X540 QP 10Gb Base-T NIC
	Intel X710 DP 10Gb SFP+ PCIe NIC
	Intel X710 DP 10Gb Base-T PCIe NIC
	Mellanox 25Gb CX4 SFP28 DP NIC

1.4 GPU platform support

This section provides information about GPU platform support.

Table 6 GPU platform support

Chasis	GPU model	Max # cards supported	Slot priority
XC740xd-24	Nvidia M10	2	1,8
	Nvidia M60	3	1,8,4
	Nvidia P40	3	1,8,4
	Nvidia V100	3	1,8,4
	Nvidia P4	6	1,8,4,2,7,5
	Nvidia T4	6	1,8,4,2,7,5

1.5 Supported management software

This section provides information about components supported by your hardware.

Table 7 Supported management software

Name	AOS version (Skylake)	AOS version (Cascade Lake)
AHV	5.1 or later	5.10.3.2 or later
Windows Server 2016	5.5.0.4 or later	5.10.3.2 or later
ESXi 6.0U3	5.1 or later	5.10.3.2 or later
ESXi 6.5d	5.1 or later	5.10.3.2 or later
ESXi 6.7	5.9 – STS or later/ 5.5.7- LTS or later	5.10.3.2 or later
ESXi 6.7 U1, ESXi 6.7 U2, ESXi 6.7 U3	5.5.9 -LTS or later in 5.5.x branch 5.10.2 – LTS or later in 5.10.x branch	5.10.3.2 or later

1.6 Supported hypervisor OS

This section provides information about the hypervisor Operating Systems (OS) supported by your hardware.

Table 8 Supported hypervisor OS

Name	Minimum version required
VMware	ESXi 6.0 U3 (EOL date 3/12/2020) ESXi 6.5d, 6.5U1, 6.5U2, 6.5U3 ESXi 6.7, 6.7U1, 6.7U2, 6.7U3
Windows Server	Windows Server 2012 R2 Standard Edition Windows Server 2012 R2 Datacenter Edition Windows Server 2016
Acropolis Hypervisor (AHV)	AHV 5.1
Citrix	No Dell EMC support

2 Documentation matrix

The documentation matrix provides information about the documents that you use to configure and deploy the Dell EMC Series hyper-converged appliance solution.

WARNING: See the safety and regulatory information that shipped with your system. Warranty information may be included with this document or as a separate document.

Make sure that you read through any media that ships with your system that provides documentation and tools for configuring and managing your system, including those pertaining to the OS, system management software, system updates, and system components that you purchased with your system.

NOTE: URLs such as Dell.com/support or Dell.com/support/home, are not active because you must type the URL from your location to access your specific language.

For the full name of an abbreviation or acronym used in this document, see the Glossary at Dell.com/support/home.

NOTE: Always read the updates on Dell.com/support/home because they often supersede information in other documents.

NOTE: While upgrading your system, Dell EMC recommends that you download and install the latest BIOS, driver, and systems management firmware on your system from Dell.com/support/home.

2.1 Dell EMC documentation

Dell EMC documentation is either included with your shipment or available at the Dell EMC website at Dell.com/xcseriesmanuals.

Dell EMC documentation for:

- Dell EMC iDRAC is available at Dell.com/idracmanuals.
- Dell EMC OpenManage Essentials is available at Dell.com/openmanagemanuals.

To access Dell EMC documentation:

1. In the Dell EMC Support page, scroll down to **General Support**, and then click **Servers, Storage & Networking**.
2. Click **Engineered Solutions**, click **Manuals**, and select the documentation that you require.

Table 9 Dell EMC reference documentation

To learn about...	Refer to...
Setup instructions of your system, including the technical specifications	<i>Getting Started Guide</i>
Hardware details for your system	<i>Installation and Services Manual</i>
How to install your system in to a rack	<i>Dell Rack Install Guide</i>

To learn about...	Refer to...
How to deploy and set up this solution	<i>Solutions Guide</i>
Setting up and using Dell iDRAC9	<i>Dell iDRAC9 Quick Start Guide</i>
How to deploy an ESXi hypervisor	<i>ESXi Best Practices Guide</i>
How to find important information about your solution	<i>Release Notes</i>
Using OpenManage Essentials to monitor, perform updates, view hardware, and view inventory on your system	<i>Dell OpenManage Essentials User's Guide</i>
Reading up on known issues and workarounds	<i>Release Notes</i>
For best practices on using the ESXi hypervisor	<i>ESXi Best Practices Guide</i>

2.2 Nutanix documentation

Nutanix documentation is found using the Nutanix portal found at <https://portal.nutanix.com/#/page/docs>. To display a complete set of documentation, you must have user credentials to log in.

The required Nutanix documentation is found using various filters or search.

Table 10 Nutanix documentation

To learn about...	<i>Acropolis base document name</i>
Set up instructions for environments with special requirements and restrictions.	<i>Acropolis Advanced Setup Guide</i>
Comprehensive references for Controller Virtual Machine (CVM) utilities, nCLI commands, and Nutanix PowerShell cmdlet	<i>Acropolis Command Reference</i>
Instructions and reference for administering the Nutanix solution software outside the Nutanix Prism UI (such as cluster start/stop, manual upgrade, changing passwords, reconfiguring IP addresses, and troubleshooting tools).	<i>Acropolis Advanced Administration Guide</i>
Managing Nutanix Acropolis AHV hosts that run Nutanix solution software.	<i>Acropolis Hypervisor Administration Guide</i>
Managing VMware ESXi hosts that run Nutanix solution software, including VMware vCenter requirements.	<i>vSphere Administration Guide for Acropolis (using vSphere Client)</i>
Managing Hyper-V hosts that run the Nutanix solution software, including domain requirements.	<i>Hyper-V Administration for Acropolis</i>
Comprehensive references for the Nutanix REST API.	<i>Acropolis API Reference</i>

To learn about...	<i>Acropolis base document name</i>
Distributed VM management services for Nutanix nodes with Acropolis hypervisor (AHV).	<i>Acropolis App Mobility Fabric Guide</i>
Nutanix support of containers through Acropolis Container Services.	<i>Acropolis Container Services Guide</i>
Set up instructions for your solution.	Field Installation Guide
Software instructions for hardware components that are not functioning.	<i>AHV Administration Guide</i>
Software instructions for hardware components that are not functioning.	<i>Hardware Replacement Documentation</i>
Comprehensive instructions and references for the Nutanix UI, including overview information.	<i>Prism Web Console Guide</i>
Monitoring multiple Nutanix cluster through web console.	<i>Prism Central Guide</i>

3 Contacting Dell EMC

Dell EMC provides several online and telephone-based support and service options. If you do not have an active internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell EMC product catalog. Availability varies by country and product, and some services may not be available in your area. To contact Dell EMC for sales, technical assistance, or customer-service issues:

1. Go to Dell.com/support.
2. Select your country from the drop-down menu on the lower right corner of the page.
3. For customized support:
 - Enter your system **Service Tag** in the **Enter your Service Tag** text box.
 - Click **Submit**.
 - The support page that lists the various support categories is displayed.
4. For general support:
 - Select your product category.
 - Select your product segment.
 - Select your product. The support page that lists the various support categories is displayed.
5. For contact details of Dell EMC Global Technical Support:
6. Click **Global Technical Support**.
 - The Contact Technical Support page is displayed with details to call, chat, or e-mail the Dell EMC Global Technical Support team.

3.1 Quick Resource Locator

Use the Quick Resource Locator (QRL) to get immediate access to Dell EMC XC740xd solution information. This information provides access to reference documentation, a link to the Dell EMC support page, and links to hardware-specific QRL pages, which include how-to videos. You can access this information by visiting www.dell.com/QRL or by using your smartphone or tablet and scanning the QR code below. You can also click the image below to go directly to the Dell EMC XC740xd QRL location.

