Dell EMC XC Series Appliance and XC Core

System Life Cycle Manager Reference Guide

August 2020
Rev. 1.15

DELL EMC

Notes, cautions, and warnings

NOTE: A NOTE indicates important information that helps you make better use of your product.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Revision history

Date	Document revision	Description of changes
August 2020	1.15	Updates for this release: • RIM release- DELL-LCM-1.1 • Updated 14G iDRAC firmware for security fixes • Updated 14G BIOS firmware • Integrated Toshiba HDD firmware for critical updates • Updated section Appendix A with firmware version detail
July 2020	1.14	Updates for this release: • LCM 2.3.2 • PTA 1.9.6 • iSM 3.5.1 • New Hypervisor support- HyperV 2019, AHV el7 • New platform support- XC740xd2 CORE • Firmware updates • Bug Fixes
May 2020	1.13	Updated section 1.3 with minimum recommended version support for LCM Updated Section 2.3 Update steps Updated section 3 with Inventory Post update section Updated section 4.6 with Backplane SEP versions
April 2020	1.12	Updated platform support Updated procedure to verify iDRAC version
March 2020	1.11	Updates for this release: • LCM 2.3.1 • PTA 1.9.4 • iSM 3.5 • Firmware updates
February 2020	1.10	Updated the Hypervisor support section
December 19, 2019	1.9.1	Removed section 4.6: LCM requires two update passes for the backplane or SSD update
December 12, 2019	1.9	Updates for this release: • Bug fixes • AOS 5.11 support • Hyper-V 2012R2 support deprecated
November 2019	1.8	Updated the following sections: • Before you update LCM • Stopping the Foundation Service
September 2019	1.7	Updates include: • 14th generation BIOS firmware version changed from 2.1.8 to 2.2.11

Date	Document revision	Description of changes
		• Hyperlink change in Dell.com/XCSeriesmanuals to point to dell.com/xcseriesmanuals
July 2019	1.6	Update for this release: • 14th generation BIOS firmware
June 2019	1.5	Updates for this release: • LCM 2.2 • PTAgent 1.9 • iSM 3.4 • NVMe PM1725a firmware • Firmware updates • Bug fixes
April 2019	1.4	Firmware updates
March 2019	1.3	• Added ESXi 6.7 • Updated Hyper-V • Added SSD support • Added Release Content
December 2018	1.2	Updated the following sections: • Introduction • Support statements • Running LCM update
June 2018	1.1	Updated the following sections: • Support statements • Definitions and support requirements • Known behaviors and troubleshooting
May 2018	1.0	Initial release

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Introduction

The purpose of this guide is to assist you with the best possible experience using Life Cycle Manager (LCM) along with the XC Series 13th generation and the 14th generation appliances using an ESXi, AHV, and Hyper-V. This document contains recommendations and support statements.

LCM is a new framework that was introduced in the Nutanix Acropolis Operating System (AOS) 5.0 timeframe.

NOTE: The AOS 4.7.x Branch is not supported.

Dell EMC provides the payload for the XC Series appliance. LCM automates the software and firmware updates for your XC Series clusters. You can upgrade the LCM framework incrementally as part of your AOS upgrade and it provides integrated automation of your appliance hardware entity updates. LCM uses iDRAC and industry standard protocols to perform updates while maintaining your highly available production environment with no perceived end-user downtime.

The goal of LCM is to run cluster-aware hardware entity updates with ease using an automated framework. The framework eliminates the manual steps necessary to update Dell EMC XC Series appliances and saves hours of an administrator's valuable time. LCM performs cluster-aware, rolling updates one XC Series appliance at a time. PowerTools Agent (PTAgent) automatically installs and configures the iDRAC Service Module (iSM) allowing out-of-band iDRAC Lifecycle Controller updates with no production cluster downtime. LCM provides the following turnkey capabilities:

- Enables automated inventory and update of software and firmware versions of hardware entities in the cluster:
  - BIOS
  - Backplane
  - SAS controllers
  - Network Adapter
  - iDRAC
  - SATADOM (13G)

    NOTE: Provided by Nutanix
  - BOSS (14G)
  - SSDs
  - NVME
  - PTAgent
  - ISM
- Schedule and check availability for recent updates automatically
- Automigration of VMs streamlines automation process
- Supports *dark* sites with LCM locality settings
- Leverages rich standards-based APIs offered by iDRAC Lifecycle Controller (WS-MAN, Redfish, IPMI, and RACADM CLI)
- NCC health check validates the health of a cluster prior to performing the updates
- Prism Tasks tab enables Entity update status

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Prerequisites

About this task

The prerequisites help you to prepare for the XC Series for the LCM update. This section includes the pre update considerations and tasks, environmental set-up and database set-up.

Verify environmental recommendations

Use the following environmental recommendations:

1. Turn off nonessential virtual machines.
2. Do not run LCM during peak production hours.
3. Check iDRAC virtual console on each node to be updated for connected virtual media and detach.

Verify support requirements

About this task

Use the following information to understand what AOS, hypervisor, and platforms are supported:

NOTE: For LCM 2.x AOS support, refer to the Nutanix Support Portal located here .

Table 1. Hypervisor support statement

OS Version	Support Statement
ESXi 5.5, 6.0	Not supported
ESXi 6.5, 6.7	Supported
AHV el6, el7	Supported
Hyper-V 2012R2	Not Supported
Hyper-V 2016, 2019	Supported

Table 2. Platform support

Platform Generation	Product	Support Statement
13th Generation	XC430, XC630,XC730, XC730xd, and XC6320	Supported
14th Generation	XC640, XC740xd,XC940, XC6420, XC740XD2 and XCXR2 **NOTE: If deployed as single node then it is not supported.**	Supported
14th Generation	XC640-4i, XC740xd-12R	No LCM support

Verify hardware requirements

Dell EMC hardware payload includes BIOS, iDRAC, backplane, network card, BOSS, and HBA support.

NOTE: The firmware versions that are listed in the LCM payload or documentation may be lower than the firmware that is delivered from the Dell EMC factory due to the date of shipment versus date of LCM block release. Effectively, the

documented firmware and driver versions are the minimal supported versions and are not a baseline for support under Nutanix. The LCM process itself implements a Greater or Equal (GEQ) operator to ensure that firmware is not downgraded or reinstalled using the LCM process.

NOTE: Verification of updates is performed with updates from n-1 and n-2 to current LCM release.

This section provides information about minimum recommended software, firmware, and versions for the Dell EMC XC Series and Core Hyper-Converged Appliance with LCM.

Table 3. Supported Hardware and versions for 13th Generation Platforms

Name	Version
XC430, XC630, XC730, XC730xd, XC6320	13G
BIOS	2.4.3 or later **NOTE: Less than or equal to payload version**
13G iDRAC 8 Version	2.52.52.52 or later **NOTE: Less than or equal to payload version**

Table 4. Supported Hardware and versions for 14th Generation Platforms

Name	Version
XC640, XC740xd, XC940, XC6420, XCXR2, XC740XD2	14G
BIOS	2.1.8 or later **NOTE: Less than or equal to payload version**
14G iDRAC 9 Version	3.30.30.30 or later **NOTE: Less than or equal to payload version**

Table 5. Supported Software versions for 13th and 14th Generation Platforms

Name	Version
PTAgent	1.9 or later **NOTE: Less than or equal to payload version**
iSM	3.4.0 or later **NOTE: Less than or equal to payload version**

NOTE: Nutanix LCM is the prescribed method to update the appliance. The versions listed above are to be considered as being a minimum recommended supported version with LCM. If at a lower than minimum revision, the prescribed update method will be to manually update the node to the version greater than or equal to minimum version and less than the LCM payload version.

If iDRAC version is below the minimum supported version that is listed in Table 3 and Table 4, LCM currently performs step-up update of iDRAC firmware to the minimum version listed in the table before updating iDRAC to latest firmware.

Check NCC Health and Foundation Services

About this task

The steps that are outlined in this section are a suggested outline of how to update an XC Series cluster effectively using LCM. From one CVM, run the following commands:

Steps

1. NCC Health checks, which is a Nutanix Cluster Health Check. Run it to resolve failure errors and warnings.

Example of the command:

```
$ncc health_checks run_all
```

2. Check that the Foundation Service is `not running` on the CVMs. From any CVM, run:

   ```
   $allssh "genesis status | grep foundation"
   ```

   Foundation should not be running, but if it is, the output looks like:

   ```
   ================== 10.xx.xx.xxx
   =================
   foundation: [ ]
   ================== 10.xx.xx.xxx
                                              =================
   foundation: [ ]
   ================== 10.xx.xx.xxx
                                              =================
   foundation: [ ]
   ================== 10.xx.xx.xxx
                                              =================
   foundation: [ ]
   ```

   NOTE: If Foundation is running, see the *Stopping the Foundation Service* section.

Clear job queues

You must clear all job queues in iDRAC from all hosts. This task removes pending and failed jobs and ensures that there are no pending jobs that could interrupt the LCM process.

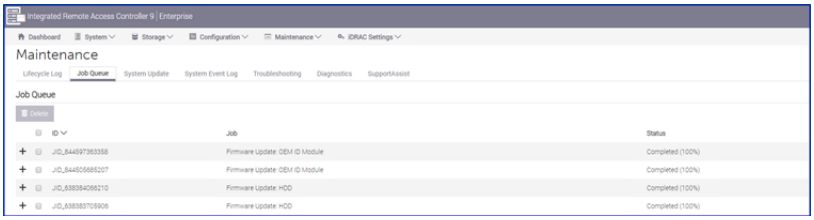
About this task

Repeat this step on every node in the cluster. Job queues are found in the iDRAC web console, or alternatively, you can run from a command prompt that has access to the iDRACs. For more information, contact Dell EMC Support.

To clear all job queues:

Steps

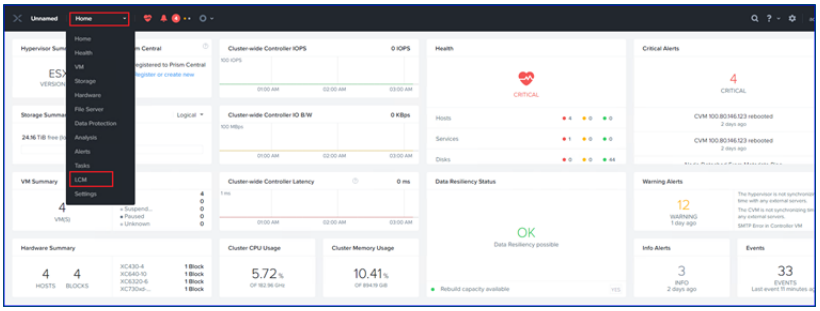
1. Log into the iDRAC web interface.
2. On the **Job Queue** tab, select all jobs and then delete them.



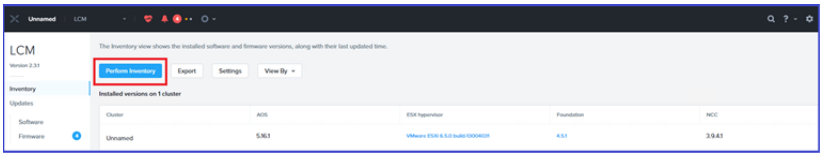
   Optionally, you can delete job queues by running this script from RACADM. You can accomplish this from a management system in the same environment.

   ```
   racadm -r ip address -u user name -p password jobqueue delete -i JID_CLEARALL_FORCE
   ```

3. In Prism, from the **Home** drop-down menu, select **LCM**.



4. On the **Inventory** tab, click **Perform Inventory**.



Verify iDRAC version

To verify the iDRAC version, check the host for the iDRAC version. After the LCM update, verify that the Dell EMC payloads have taken place.

About this task

To apply iDRAC 4.00.00.00 version of firmware, the iDRAC must be at firmware version 3.30.30.30 or later.

You can find the KB solution details here.

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Update LCM

About this task

After the verifications of the environments, support requirements, iDRAC version you must run the LCM update and verify the same.

Run LCM update

Run the LCM update by following these steps. This is an example of updating the Cluster Software component.

About this task

This process requires choosing the available updates and saving the selection. After the selection is saved, **Update Selected** and **Apply All Updates**. Use this same process on all updates. Perform Inventory once again to see the next available update.

For example:

Steps

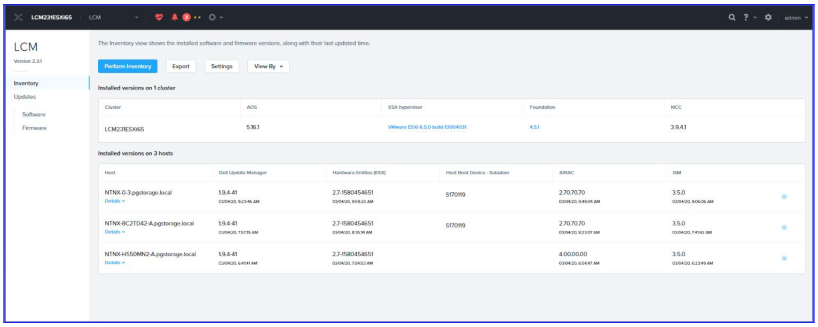
1. After Perform Inventory, select **Firmware** tab, click **Check Selection for update** and then click **Update**.
2. Under **Review** page, review the nodes and components which will be scheduled for an update, and click **Apply Updates**. Updates are initiated.
3. Upon applying updates, the following update steps are processed in order:
   a. Upgrade of **Cluster Software Component**: This updates LCM to 2.3.2.x or the latest.
   b. Update of **ISM and Dell Update Manager**: This step updates the pieces required for communication between Life Cycle Manager and the XC Series hardware.
   c. Update of **Hardware Entities**: This updates the Dell EMC XC Series payload. Only apply the **Hardware Entities** update after the successful update of LCM, ISM updates, Dell Update Manager & iDRAC.
4. Monitor LCM Update.

NOTE: For representational stepwise update refer https://portal.nutanix.com/page/documents/details?targetId=Life-Cycle-Manager-Guide-v2_3%3ALife-Cycle-Manager-Guide-v2_3.

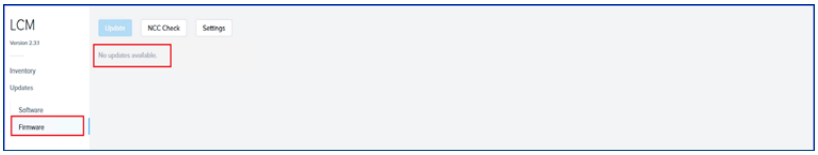
Verify LCM update

About this task

This screen is an example after LCM has been updated and an Inventory performed after update:



After the LCM Update is completed successfully, there should be **No updates listed under Firmware**.



NOTE: If any component has not been updated, re-run the LCM firmware upgrade.

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Troubleshoot LCM update

The following is a list of LCM known behaviors. See the Nutanix portal for additional information.

Inventory failure

About this task

Dell EMC recommends stopping the Foundation Service that is still running. Not doing so can cause inventory to fail. If you find the Foundation Service is running, from a shell, run the following command:

```
genesis stop foundation
```

LCM update failure

Running Nutanix Foundation Service causes the LCM to fail.

This behavior is expected as the LCM process should not be run during a cluster expansion.

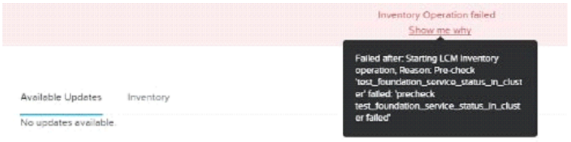
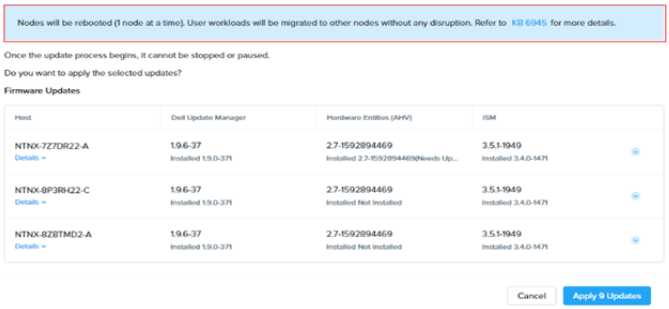


Figure 2 Do not run LCM during a cluster expansion.

Action required for updates in Power cycle host

This is a pre-warning, which is cosmetic and gives you information that a reboot is needed before applying these updates. No customer interaction is required.



Scratch partition errors

Full scratch partitions on the ESXi Hypervisor can cause Inventory performance issues. For more information see, VMware article about the scratch partition. And scratch partition must be on persistent storage. Persistent storage is needed for proper LCM operation.

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Appendix

Version and severity details of firmware components

NOTE: This is a single firmware payload update. Dell EMC recommends that if any component is listed in the column as Urgent, the customer must update.

Component Name	Component Type	XC Server Generation	F/W version	Criticality
13G XC6320 BIOS	BIOS	13G	2.11.0	Urgent
13G XC430 BIOS	BIOS	13G	2.11.0	Urgent
13G XC630 BIOS	BIOS	13G	2.11.0	Urgent
13G XC730 BIOS	BIOS	13G	2.11.0	Urgent
13G XC730XD BIOS	BIOS	13G	2.11.0	Urgent
14G XC6420 BIOS	BIOS	14G	2.7.7	Recommended
14G XC640 BIOS	BIOS	14G	2.7.7	Recommended
14G XC740XD BIOS	BIOS	14G	2.7.7	Recommended
14G XC740XD2 BIOS	BIOS	14G	2.7.7	Recommended
14G XC940 BIOS	BIOS	14G	2.7.7	Recommended
14G XCXR2 BIOS	BIOS	14G	2.7.7	Recommended
14G XC6420 BOSS-S1 Adapter	BOSS	14G	2.6.13.3022	Recommended
14G XC640/XC740XD/ XC740XD2/XC940/XCXR2 BOSS-S1 Adapter	BOSS	14G	2.5.13.3022	Recommended
13G XC Server Backplane Expander	Expander	13G	3.35	Urgent
14G XC Server Backplane Expander	Expander	14G	2.46	Urgent
13G Non-expander Storage Backplane (SEP)	Backplane SEP	13G	2.25	Optional
14G XC640/XC740XD/ XC740XD2/ XC6420/ XC940/XCXR2 Non-expander Storage Backplane (SEP)	Backplane SEP	14G	4.35	Optional
Dell HBA330 Adapter	HBA	14G	16.17.00.05	Recommended
Dell HBA330 Mini	HBA	13G & 14G	16.17.00.05	Recommended
13G XC6320 iDRAC	iDRAC	13G	2.70.70.70	Recommended
13G XC430 iDRAC	iDRAC	13G	2.70.70.70	Recommended

Component Name	Component Type	XC Server Generation	F/W version	Criticality
13G XC630 iDRAC	iDRAC	13G	2.70.70.70	Recommended
13G XC730 iDRAC	iDRAC	13G	2.70.70.70	Recommended
13G XC730XD iDRAC	iDRAC	13G	2.70.70.70	Recommended
14G XC6420 iDRAC	iDRAC	14G	4.20.20.20	Recommended
14G XC640 iDRAC	iDRAC	14G	4.20.20.20	Recommended
14G XC740XD iDRAC	iDRAC	14G	4.20.20.20	Recommended
14G XC740XD2 iDRAC	iDRAC	14G	4.20.20.20	Recommended
14G XC940 iDRAC	iDRAC	14G	4.20.20.20	Recommended
14G XCXR2 iDRAC	iDRAC	14G	4.20.20.20	Recommended
Broadcom Ethernet NetXtreme NIC Family	NIC	13G & 14G	21.60.2	Recommended
Intel Ethernet NIC Family I350, I354, X520, X540, and X550	NIC	13G & 14G	19.5.12	Recommended
Intel Ethernet NIC Family X710, XXV710, and XL710	NIC	14G	19.5.12	Recommended
Dell Express Flash NVMe PM1725a	NVMe	14G	1.1.2	Urgent
Dell Express Flash NVMe PM1725b	NVMe	14G	1.0.0	Recommended
Dell Express Flash NVMe P4500/P4600	NVMe	14G	QDV1DP15	Urgent
Dell Express Flash NVMe P4510/P4610	NVMe	14G	VDV1DP23	Recommended
PERC H730 Mini	PERC	14G	25.5.6.0009	Recommended
HGST HUSMM1616ASS205 1.6TB 12Gbps 512n SAS 2.5 SSD (PN:NF76W, CID:104028)	SAS SSD	13G & 14G	K326	Recommended
HGST HUSMM1680ASS205 800GB 12Gbps 512n SAS 2.5 SSD (PN:265TH, CID:104027)	SAS SSD	13G & 14G	K326	Recommended
SAMSUNG MZILS1T6HEJH0D3 1.6TB 12Gbps 512e SAS 2.5 SSD (PN:W5PP5, CID:105456)	SAS SSD	13G & 14G	DWL7	Recommended
SAMSUNG MZILS400HEGR0D3 400GB 12Gbps 512e SAS 2.5 SSD (PN:MFC6G, CID:105454)	SAS SSD	13G & 14G	DWL7	Recommended
SAMSUNG MZILS800HEHP0D3 800GB 12Gbps 512e SAS 2.5 SSD (PN:HF06W, CID:105455)	SAS SSD	13G & 14G	DWL7	Recommended
SAMSUNG MZILT1T6HAJQ0D3 1.6TB	SAS SSD	13G & 14G	DWF8	Recommended

Component Name	Component Type	XC Server Generation	F/W version	Criticality
12Gbps 512e SAS 2.5 SSD (PN:DR0HX, CID:106905)				
SAMSUNG MZILT3T8HALS0D3 3.84TB 12Gbps 512e SAS 2.5 SSD (PN:X8F87, CID:106902)	SAS SSD	13G & 14G	DSF8	Recommended
SAMSUNG MZILT800HAHQ0D3 800GB 12Gbps 512e SAS 2.5 SSD (PN:D9NCK, CID:106904)	SAS SSD	13G & 14G	DWF8	Recommended
TOSHIBA PX02SMB160 1.6TB 12Gbps 512n SAS 2.5 SSD (PN:G4V45, CID:102244)	SAS SSD	13G & 14G	A3B3	Recommended
TOSHIBA PX02SSB080 800GB 12Gbps 512n SAS 2.5 SSD (PN:PG19T, CID:102240)	SAS SSD	13G & 14G	A4B3	Recommended
TOSHIBA PX02SSF020 200GB 12Gbps 512n SAS 2.5 SSD (PN:CV6W8, CID:102238)	SAS SSD	13G & 14G	A4B3	Recommended
TOSHIBA PX02SSF040 400GB 12Gbps 512n SAS 2.5 SSD (PN:2H9WV, CID:102239)	SAS SSD	13G & 14G	A4B3	Recommended
TOSHIBA PX04SVB048 480GB 12Gbps 512n SAS 2.5 SSD (PN:N5Y85, CID:104359)	SAS SSD	13G & 14G	AM07	Recommended
TOSHIBA PX04SVB096 960GB 12Gbps 512n SAS 2.5 SSD (PN:YYC10, CID:104360)	SAS SSD	13G & 14G	AM07	Recommended
TOSHIBA PX04SVB192 1.92TB 12Gbps 512n SAS 2.5 SSD (PN:4XC39, CID:104361)	SAS SSD	13G & 14G	AM07	Recommended
TOSHIBA PX04SVB384 3.84TB 12Gbps 512n SAS 2.5 SSD (PN:GYMY9, CID:104362)	SAS SSD	13G & 14G	AM07	Recommended
TOSHIBA PX05SMB040Y 400GB 12Gbps 512n SAS 2.5 SSD (PN:5VHHG, CID:105625	SAS SSD	13G & 14G	AS10	Recommended
TOSHIBA PX05SMB080Y 800GB 12Gbps 512n SAS 2.5 SSD (PN:CN3JH, CID:105626)	SAS SSD	13G & 14G	AS10	Recommended
TOSHIBA PX05SMB160Y 1.6TB 12Gbps 512n SAS 2.5 SSD (PN:GVTYD, CID:105627)	SAS SSD	13G & 14G	AS10	Recommended

Component Name	Component Type	XC Server Generation	F/W version	Criticality
TOSHIBA PX05SRB384Y 3.84TB 12Gbps 512n SAS 2.5 SSD (PN:XCRDV, CID:105621)	SAS SSD	13G & 14G	AS10	Recommended
TOSHIBA PX05SVB048Y 480GB 12Gbps 512n SAS 2.5 SSD (PN:43PCJ, CID:105735)	SAS SSD	13G & 14G	AS10	Recommended
TOSHIBA PX05SVB096Y 960GB 12Gbps 512n SAS 2.5 SSD (PN:503M7, CID:105622)	SAS SSD	13G & 14G	AS10	Recommended
TOSHIBA PX05SVB192Y 1.92TB 12Gbps 512n SAS 2.5 SSD (PN:V0K7V, CID:105623)	SAS SSD	13G & 14G	AS10	Recommended
TOSHIBA PX05SVQ096B 960GB 12Gbps 512n SAS 2.5 SSD (PN:3RVN4, CID:106232)	SAS SSD	13G & 14G	AX09	Recommended
TOSHIBA PX05SVQ192B 1.92TB 12Gbps 512n SAS 2.5 SSD (PN:1N61H, CID:106233)	SAS SSD	13G & 14G	AX09	Recommended
INTEL SSDSCKJB120G7R 120GB 6Gbps 512n SATA M.2 SSD (PN:GKJ0P, CID:106081)	SAS SSD	13G & 14G	DL43	Recommended
INTEL SSDSCKJB240G7R 240GB 6Gbps 512n SATA M.2 SSD (PN:919J9, CID:106083)	SATA M.2 SSD	14G	DL43	Recommended
INTEL SSDSCKJB480G7R 480GB 6Gbps 512n SATA M.2 SSD (PN:WCP9P, CID:106084)	SATA M.2 SSD	14G	DL43	Recommended
MICRON MTFDDAV240TCB 240GB 6Gbps 512e SATA M.2 SSD (PN:TC2RP, CID:106864)	SATA M.2 SSD	14G	E012	Recommended
MICRON MTFDDAV480TCB 480GB 6Gbps 512e SATA M.2 SSD (PN:GPGC0, CID:106863)	SATA SSD	13G & 14G	E012	Recommended
INTEL SSDSC2BA200G4R 200GB 6Gbps 512n SATA 2.5 SSD (PN:2THX8, CID:104189)	SATA SSD	13G & 14G	DL2E	Recommended
INTEL SSDSC2BA400G4R 400GB 6Gbps 512n SATA 2.5 SSD (PN:7C7FK, CID:104190	SATA SSD	13G & 14G	DL2E	Recommended
INTEL SSDSC2BB160G4R 160GB 6Gbps 512n SATA 2.5 SSD (PN:PX9CC, CID:101122)	SATA SSD	13G & 14G	DL16	Recommended

Component Name	Component Type	XC Server Generation	F/W version	Criticality
INTEL SSDSC2BB240G7R 240GB 6Gbps 512n SATA 2.5 SSD (PN:NH81W, CID:105339)	SATA SSD	13G & 14G	DL43	Recommended
INTEL SSDSC2BB300G4R 300GB 6Gbps 512n SATA 2.5 SSD (PN:DYFP9, CID:101123)	SATA SSD	13G & 14G	DL16	Recommended
INTEL SSDSC2BB480G4R 480GB 6Gbps 512n SATA 2.5 SSD (PN:CFPWY, CID:101124)	SATA SSD	13G & 14G	DL16	Recommended
INTEL SSDSC2BB480G6R 480GB 6Gbps 512n SATA 2.5 SSD (PN:01D31, CID:104194)	SATA SSD	13G & 14G	DL2E	Recommended
INTEL SSDSC2BB480G7R 480GB 6Gbps 512n SATA 2.5 SSD (PN:64TMJ, CID:105341)	SATA SSD	13G & 14G	DL43	Recommended
INTEL SSDSC2BB480H4R 480GB 6Gbps 512n SATA 2.5 SSD (PN:5V299, CID:103966)	SATA SSD	13G & 14G	DL16	Recommended
INTEL SSDSC2BB800G4R 800GB 6Gbps 512n SATA 2.5 SSD (PN:4FR9D, CID:101125)	SATA SSD	13G & 14G	DL16	Urgent
INTEL SSDSC2BB800G7R 800GB 6Gbps 512n SATA 2.5 SSD (PN:K49V9, CID:105342)	SATA SSD	13G & 14G	DL43	Recommended
INTEL SSDSC2BX016T4R 1.6TB 6Gbps 512n SATA 2.5 SSD (PN:4H94X, CID:103979)	SATA SSD	13G & 14G	DL2E	Recommended
INTEL SSDSC2BX800G4R 800GB 6Gbps 512n SATA 2.5 SSD (PN:C2GJT, CID:103965)	SATA SSD	13G & 14G	DL2E	Urgent
INTEL SSDSC2KB038T7R 3.84TB 6Gbps 512e SATA 2.5 SSD (PN:3RRN8, CID:106367)	SATA SSD	13G & 14G	DL5A	Urgent
INTEL SSDSC2KG019T7R 1.92TB 6Gbps 512e SATA 2.5 SSD (PN:MWKF2, CID:106361)	SATA SSD	13G & 14G	DL5A	Recommended
INTEL SSDSC2KG480G7R 480GB 6Gbps 512e SATA 2.5 SSD (PN:P7KTJ, CID:106359)	SATA SSD	13G & 14G	DL5A	Urgent
INTEL SSDSC2KG480G8R 480GB 6Gbps 512e SATA 2.5 SSD (PN:6JGT5, CID:107327)	SATA SSD	13G & 14G	DL65	Recommended

Component Name	Component Type	XC Server Generation	F/W version	Criticality
INTEL SSDSC2KG960G7R 960GB 6Gbps 512e SATA 2.5 SSD (PN:TR3MY, CID:106360)	SATA SSD	13G & 14G	DL5A	Urgent
INTEL SSDSC2KG960G8R 960GB 6Gbps 512e SATA 2.5 SSD (PN:X31G3, CID:107329)	SATA SSD	13G & 14G	DL65	Recommended
SAMSUNG MZ7KM1T9HAJM00D3 1.92TB 6Gbps 512n SATA 2.5 SSD (PN:KNT26, CID:104539)	SATA SSD	13G & 14G	GB55	Urgent
SAMSUNG MZ7KM1T9HMJP0D3 1.92TB 6Gbps 512n SATA 2.5 SSD (PN:K5P0T, CID:105240)	SATA SSD	13G & 14G	GD57	Urgent
SAMSUNG MZ7KM480HAHP00D3 480GB 6Gbps 512n SATA 2.5 SSD (PN:2VH3F, CID:104537)	SATA SSD	13G & 14G	GB55	Urgent
SAMSUNG MZ7KM480HMHQ0D3 480GB 6Gbps 512n SATA 2.5 SSD (PN:2RGGR; CID:105238)	SATA SSD	13G & 14G	GD57	Recommended
SAMSUNG MZ7KM960HAHP00D3 960GB 6Gbps 512n SATA 2.5 SSD (PN:3RDJV; CID:104538)	SATA SSD	13G & 14G	GB55	Urgent
SAMSUNG MZ7KM960HMJP0D3 960GB 6Gbps 512n SATA 2.5 SSD (PN:DD4G0; CID:105239)	SATA SSD	13G & 14G	GD57	Recommended
SAMSUNG MZ7LM1T9HCJM00D3 1.92TB 6Gbps 512n SATA 2.5 SSD (PN:VWR2N; CID:103758)	SATA SSD	13G & 14G	GA3A	Recommended
SAMSUNG MZ7LM3T8HCJM00D3 3.84TB 6Gbps 512n SATA 2.5 SSD (PN:W9GHD; CID:103759)	SATA SSD	13G & 14G	GA3A	Recommended
SAMSUNG MZ7LM960HCHP00D3 960GB 6Gbps 512n SATA 2.5 SSD (PN:3D6WK; CID:103757)	SATA SSD	13G & 14G	GA3A	Recommended
SAMSUNG MZ7LM960HMJP0D3 960GB 6Gbps 512n SATA 2.5	SATA SSD	13G & 14G	GC5B	Recommended

Component Name	Component Type	XC Server Generation	F/W version	Criticality
SSD (PN:T2G0Y; CID:104945)				
TOSHIBA PX04SVB096 960GB 12Gbps 512n SAS 2.5 SSD (PN:YYC10, CID:104360)	SAS HDD	14G	EI07	Urgent
TOSHIBA MG06SCA800EY 8TB 12Gbps 512e SAS 3.5 HDD (PN:FV725, CID:106229)	SAS HDD	14G	EH08	Urgent

Technical support and resources

- Dell.com/XCSeriesmanuals is focused on meeting customer needs with proven services and support.
- Dell EMC Technical Resource Center on DellEMC.com provides expertise that helps to ensure customer success on Dell EMC XC Series platforms.
- Dell EMC XC Series Hyper-Converged Appliances on DellEMC.com provides marketing materials and the latest product information on the XC Series Family.
- Nutanix Bible: http://nutanixbible.com/
- Nutanix blog: http://longwhiteclouds.com/

Related information

Articles provided by Nutanix:

- Life Cycle Manager: https://portal.nutanix.com/page/documents/details?targetId=Life-Cycle-Manager-Guide-v2_3:Life-Cycle-Manager-Guide-v2_3
- LCM: List of pre-checks https://portal.nutanix.com/page/documents/kbs/details/?targetId=kA032000000bmvzCAA
- *NCC Reference Guide* : https://portal.nutanix.com/page/documents/details?targetId=NCC-Guide-NCC-v39:NCC-Guide-NCC-v39
- Nutanix Release Notes 2.x. https://portal.nutanix.com/page/documents/details/?targetId=Release-Notes-LCM:lcm-Release-Notes-LCM-intro-2x-r.html

Articles provided for the Dell EMC XC Series appliance:

- iDRAC 8 https://www.dell.com/support/home/in/en/indhs1/product-support/product/idrac8-lifecycle-controller-v2.70.70.70/docs
- iDRAC 9 https://www.dell.com/support/home/in/en/indhs1/product-support/product/idrac9-lifecycle-controller-v4.x-series/docs
- *iDRAC 8 RACADM Guide* https://topics-cdn.dell.com/pdf/idrac8_2_70_racadm_en-us.pdf
- *iDRAC 9 RACADM Guide* https://topics-cdn.dell.com/pdf/v4_00_cliguide_en-us.pdf