

# Release Notes for Cisco UCS C-Series Software, Release 2.0(13)

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## Cisco UCS C-Series and S-Series Servers

Cisco UCS C-Series and S-Series Servers deliver unified computing in an industry-standard form factor to reduce total cost of ownership and increase agility. Each product addresses varying workload challenges through a balance of processing, memory, I/O, and internal storage resources.

### About the Release Notes

This document describes the new features, system requirements, open caveats and known behaviors for Cisco UCS C-Series and S-Series Servers software release 2.0(13) including Cisco Integrated Management Controller software and any related BIOS, firmware, or drivers. Use this document in conjunction with the documents listed in the [Related Documentation](#) section.



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**Note** We sometimes update the documentation after original publication. Therefore, you should also refer to the documentation on Cisco.com for any updates.

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### Support for Web UI Interface on Cisco UCS M3 Rack Server Software Post Flash Deprecation

The Cisco Cloud and Compute organization at Cisco expects that the Web UI interface of UCS M3 Standalone Rack Server Software – Cisco IMC – will not be accessible on future versions of web browsers that are going to deprecate support for Flash Player based content.

Cisco started shipping UCS C-Series and S-Series M3 Servers in 2012 and announced in 2015 and 2016 the EOL of all M3 rack server models, before Adobe announced the EOL of Flash Player support in July 2017. While we will continue to provide applicable service and support such as critical security fixes via patch releases for M3 servers through the End of Support date in December 2021, we do not plan to retrofit UCS C-Series and S-Series M3 platforms with HTML5-based Web UI interface for Cisco IMC.

Impacted customers can consider below alternatives for managing their M3 Rack Servers:

1. Use CLI interface of IMC Software to control and configure the standalone M3 rack platforms
2. Use a web browser that will not be deprecating support for Flash
3. Keep web browser on the last version that supports Flash and disable update to future version in order to continue using Web UI to manage M3 rack servers
4. Attach the M3 rack servers to Fabric Interconnects in order to use HTML5-based Web UI interface of a corresponding UCS Manager release

5. Access vKVM through the XML API in case Web UI is not available

## Revision History

Revision	Date	Description
L0	September 25, 2020	Added notice: <i>Support for Web UI Interface on Cisco UCS M3 Rack Server Software Post Flash Deprecation</i>
K0	August 13, 2019	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>• Updated the Resolved Caveats section.</li> <li>• Updated the HUU versions to 2.0(13q). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>
J0	June 25, 2019	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>• Updated the Resolved Caveats section.</li> <li>• Updated the Security Fixes section.</li> <li>• Updated the HUU versions to 2.0(13p). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>

Revision	Date	Description
I0	April 08, 2019	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>• Security fixes were applied in this release.</li> <li>• Updated the HUU versions to 2.0(13o). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>
H0	June 22, 2017	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>• Added the Security Fixes section.</li> <li>• Updated the HUU versions to 2.0(13n). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>
G0	March 14, 2017	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>• Manufacturing issues related to the C220 M4 servers were resolved in this release.</li> <li>• Updated the HUU versions of the C220 M4 servers to 2.0(13k). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>

Revision	Date	Description
F0	March 09, 2017	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>• Manufacturing issues related to the 3260 servers were resolved in this release.</li> <li>• Updated the HUU versions of the 3260 servers to 2.0(13k). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>
E0	February 22, 2017	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>• Manufacturing issues related to the 3260 servers were resolved in this release.</li> <li>• Updated the HUU versions of the 3260 servers to 2.0(13j). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>
D0	January 27, 2017	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>• Updated the Supported Hardware section.</li> <li>• Updated the Resolved Caveats section.</li> <li>• Updated the HUU versions to 2.0(13i). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>

Revision	Date	Description
C0	December 05, 2016	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>Updated the Supported Hardware section.</li> <li>Updated the Product ID Catalog section.</li> <li>Updated the Resolved Caveats section.</li> <li>Updated the HUU versions to 2.0(13h). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>
B0	October 10, 2016	<p>Following changes were made:</p> <ul style="list-style-type: none"> <li>Updated the Resolved Caveats section.</li> <li>Updated the HUU versions to 2.0(13f). The firmware files in Cisco Host Upgrade Utility for individual releases are available at: <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a></li> </ul>
A0	September 17, 2016	Created release notes for Release 2.0(13e).

## Supported Platforms in this Release

### Overview of Cisco UCS 3260 Rack Servers

The Cisco UCS 3260 is a modular, dense storage server with single or dual M3 or M4 server nodes, optimized for large datasets used in environments such as big data, cloud, object storage, and content delivery.

The UCS 3260 chassis is a modular architecture consisting of the following modules:

- Base chassis: contains four redundant, hot-pluggable power supplies, eight redundant, hot-pluggable fans, and a rail kit.
- Server Node: one or two M3 or M4 server nodes, each with two CPUs, 128, 256, or 512 GB of DIMM memory, and a pass-through controller or a RAID card with a 1 GB or 4 GB cache.

- System I/O Controller (SIOC): one or two System I/O Controllers, each of which includes an integrated 1300-series virtual interface capability.
- Optional Drive Expansion Node: Large Form Factor (LFF) 3.5-inch drives in a choice of capacities.
- Solid State Drives: Up to 14 solid-state disks (SSDs) of 400GB, 800 GB, 1.6TB, and 3.2 TB capacities. These replace the previously supported top-loading LFF HDDs.
- Solid-State Boot Drives: up to two SSDs per M3 or M4 server node. On the M4 server node, boot drives support hardware RAID connected to the RAID controller on the server node.
- I/O Expander: provides one storage mezz slot with two PCIe expansion slots and up to two NVMe SSDs.

The enterprise-class UCS 3260 storage server extends the capabilities of Cisco's Unified Computing System portfolio in a 4U form factor that delivers the best combination of performance, flexibility, and efficiency gains.



**Note** An M3 Server Node has Intel E5-2600 V2 CPUs and DDR-3 DIMMs. An M4 Server Node has Intel E5-2600 v4 CPUs and DDR-4 DIMMs

## Overview of Cisco UCS C3160 Rack Servers

The Cisco UCS C3160 Rack Server is a modular, high-density server ideal for service providers, enterprises, and industry-specific environments. The Cisco UCS C3160 addresses the need for highly scalable computing with high-capacity local storage. Designed for a new class of cloud-scale applications, it is simple to deploy and excellent for unstructured data repositories, media streaming, and content distribution.

Extending the capability of the Cisco UCS portfolio, the new Cisco UCS C3160 Rack Server is an advanced, modular rack server with extremely high storage density. Based on the Intel Xeon processor E5-2600 v2 series, it offers up to 360 TB of local storage in a compact 4-rack-unit (4RU) form factor.

Because all its hard-disk drives are individually hot-swappable, and with its built-in enterprise-class Redundant Array of Independent Disks (RAID) redundancy, the Cisco UCS C3160 helps you achieve the highest levels of data availability.

Unlike typical high-density rack servers that require extended depth racks, the Cisco UCS C3160 has no such requirement and can comfortably fit in a standard-depth rack, such as the Cisco UCS R42610.

The Cisco UCS C3160 uses a modular server architecture which, taking advantage of our blade technology expertise, allows you to upgrade the compute or network nodes in the system without requiring a data migration from one system to another. It delivers:

- Up to 60 large-form-factor (LFF) drives, plus two solid-state drive (SSD) boot drives
- Up to 256 MB memory
- Support for 12-Gbps serial-attached SCSI (SAS) drives
- A modular LAN-on-motherboard (mLOM) slot on the system I/O controller for installing next-generation Cisco virtual interface card (VIC) or third-party network interface card (NIC)
- High reliability, availability, and serviceability features with tool-less server nodes, system I/O controller, easy-to-use latching lid, and hot-swappable and hot-pluggable components

The Cisco UCS C3160 is deployed as a standalone server in both bare-metal or virtualized environments. Its modular architecture reduces TCO by allowing you to upgrade individual components over time and as use cases evolve, without having to replace the entire system.

## Overview of Cisco UCS C460 M4 Rack Servers

The Cisco UCS® C460 M4 Rack Server provides the performance and reliability to run mission-critical applications and virtualized workloads that require intensive computation processing and very high memory capacity. Applications that are memory-bound (for example, large-scale virtualization, massive database applications, and server consolidation) will benefit from the increased performance and memory footprint of the Cisco UCS C460 M4.

The Cisco UCS C460 M4 is a four-rack-unit (4RU) rack server supporting the Intel® Xeon® E7-4800 v2/v3 and E7-8800 v2/v3/v4 processor families. Product highlights include:

- Up to 6 terabytes (TB) of double-data-rate 3 (DDR3) memory in 96 DIMM slots or double-data-rate 4 (DDR4) memory in 96 DIMM slots
- Up to 12 Small Form Factor (SFF) hot-pluggable SAS, SATA, or SSD disk drives
- Abundant I/O capability with 10 PCI Express (PCIe) Generation 3 (Gen 3) slots supporting the Cisco UCS virtual interface cards (VICs). An internal slot is reserved for a hard-disk drive array controller card
- Two Gigabit Ethernet LAN-on-motherboard (LOM) ports, two 10-Gigabit Ethernet ports, and a dedicated out-of-band (OOB) management port that provides additional networking options

The Cisco UCS C460 M4 Rack Server offers industry-leading performance and advanced reliability well suited for the most demanding enterprise and mission-critical workloads, large-scale virtualization, and database applications. Whether the Cisco UCS C460 M4 is used as a standalone system or in a Cisco Unified Computing System™ (Cisco UCS) deployment, customers gain the benefits of the server's high-capacity memory when very large memory footprints such as the following are required:

- SAP workloads
- Database applications and data warehousing
- Large virtualized environments
- Real-time financial applications
- Java-based workloads

## Overview of Cisco UCS C240 M4 Rack Servers

The enterprise-class Cisco UCS C240 M4 server extends the capabilities of the Cisco UCS portfolio in a 2RU form factor. Based on the Intel® Xeon® processor E5-2600 v3 and v4 series, it delivers an outstanding combination of performance, flexibility, and efficiency. In addition, the Cisco UCS C240 M4 offers outstanding levels of internal memory and storage expandability with exceptional performance. It delivers:

- Up to 24 DDR4 DIMMs for improved performance and lower power consumption
- Up to 6 PCI Express (PCIe) 3.0 slots (4 full-height, full-length)
- Up to 24 small-form factor drives or 12 large form-factor drives, plus two (optional) internal SATA boot drives
- Support for 12-Gbps SAS drives

- A modular LAN-on-motherboard (mLOM) slot for installing a next-generation Cisco virtual interface card (VIC) or third-party network interface card (NIC) without consuming a PCIe slot
- Supports two double-wide Nvidia graphics processing units (GPUs), providing a graphics-rich experience to more virtual users
- Excellent reliability, availability, and serviceability (RAS) features with tool-free CPU insertion, easy-to-use latching lid, hot-swappable and hot-pluggable components, and redundant Cisco® Flexible Flash (FlexFlash) SD cards.

The Cisco UCS C240 M4 Rack Server with the Intel Xeon processor E5-2600 v3 and v4 series product family is well suited for a wide range of storage and I/O-intensive applications such as:

- Big data
- Collaboration
- Small and medium-sized business (SMB) databases
- Virtualization and consolidation
- Storage servers
- High-performance appliances

The Cisco UCS C240 M4 can be deployed as standalone servers or as part of the Cisco Unified Computing System, which unifies computing, networking, management, virtualization, and storage access into a single integrated architecture that enables end-to-end server visibility, management, and control in both bare-metal and virtualized environments. Within a Cisco UCS deployment, the Cisco UCS C240 M4 takes advantage of Cisco's standards-based unified computing innovations, which significantly reduce customers' total cost-of-ownership (TCO) and increase business agility.

## Overview of Cisco UCS C220 M4 Rack Servers

The enterprise-class Cisco UCS C220 M4 server extends the capabilities of the Cisco UCS portfolio in a 1RU form factor. It incorporates the Intel® Xeon® processor E5-2600 v3 and v4 series product family, next-generation DDR4 memory with a supported speed of upto 2400 MHz, and 12-Gbps SAS throughput, delivering significant performance and efficiency gains. The Cisco UCS C220 M4 rack server delivers outstanding levels of expandability and performance in a compact 1RU package:

- Up to 24 DDR4 DIMMs for improved performance and lower power consumption
- Up to 8 Small Form-Factor (SFF) drives or up to 4 Large Form-Factor (LFF) drives and PCIe SSDs
- Support for 12-Gbps SAS Module RAID controller drives in a dedicated slot; leaving remaining two PCIe Gen 3.0 slots available for other expansion cards
- A modular LAN-on-motherboard (mLOM) slot that can be used to install a Cisco UCS virtual interface card (VIC) or third-party network interface card (NIC) without consuming a PCIe slot
- Two embedded 1 Gigabit Ethernet LAN-on-motherboard (LOM) ports

The Cisco UCS C220 M4 Rack Server with the Intel Xeon processor E5-2600 v3 and v4 series product family is excellent for a wide range of enterprise workloads, including:

- IT and web infrastructure
- High-performance virtual desktops



- High-performance virtual desktops
- Middleware
- Collaboration
- Public cloud

Cisco UCS C220 M4 can be deployed as standalone servers or in an UCS-managed environment. When combined with Cisco UCS, the Cisco UCS C220 M4 brings the power and automation of unified computing to enterprise applications, including SingleConnect technology that drastically reduces switching and cabling requirements. Cisco UCS Manager with service profiles enables rapid deployment and end-to-end server visibility, management, and control in both virtualized and bare-metal environments. The Cisco UCS C220 M4 is the most versatile general-purpose enterprise infrastructure and application server in the industry.

## Overview of Cisco UCS C220 M3 and C240 M3 Rack Servers

The Cisco UCS C220 M3 Rack Server is designed for performance and density over a wide range of business workloads, from web serving to distributed databases. The enterprise-class Cisco UCS C220 M3 server extends the capabilities of the Cisco UCS portfolio in a 1RU form factor with the addition of the Intel® Xeon® processor E5-2600 product family. In addition, the Cisco UCS C220 M3 server offers up to two Intel® Xeon® Processor E5-2600 product family, 16 DIMM slots, eight disk drives, and two 1 Gigabit Ethernet LAN-on-motherboard (LOM) ports.

The Cisco UCS C240 M3 Rack Server is designed for both performance and expandability over a wide range of storage-intensive infrastructure workloads, from big data to collaboration. The enterprise-class Cisco UCS C240 M3 server further extends the capabilities of the Cisco UCS portfolio in a 2RU form factor with the addition of the Intel® Xeon® processor E5-2600 product family. The Cisco UCS C240 M3 offers up to two Intel® Xeon® processor E5-2600 product family, 24 DIMM slots, 24 disk drives, and four 1 Gigabit Ethernet LOM ports.

The Cisco UCS C220 M3 and the Cisco UCS C240 M3 interfaces with Cisco UCS using the Cisco UCS Virtual Interface Card (VIC); 1225. The Cisco UCS VIC is a virtualization-optimized Fibre Channel over Ethernet (FCoE) PCI Express (PCIe) 2.0 x8 10-Gbps adapter designed for use with Cisco UCS C-Series servers. The VIC is a dual-port 10 Gigabit Ethernet PCIe adapter that can support up to 256 (1225) PCIe standards-compliant virtual interfaces, which can be dynamically configured so that both their interface types-network interface card (NIC) or host bus adapter (HBA) and identity (MAC address and worldwide name (WWN))-are established using just-in-time provisioning.

## Overview of Cisco UCS C22 M3 and C24 M3 Rack Servers

The Cisco UCS C22 M3 Rack Server is an entry-level UCS server designed for both performance and density over a wide range of business workloads, including enterprise web/file/print server and HPC. The enterprise-class Cisco UCS C22 M3 server extends the capabilities of the Cisco UCS portfolio in a 1RU form factor with the addition of the Intel Xeon E5-2400 product family. In addition, the Cisco UCS C22 M3 server offers up to two Intel® Xeon® Processor E5-2400 product family processors, 12 DIMM slots, 8 disk drives, and two 1 Gigabit Ethernet LAN-on-motherboard (LOM) ports.

You can order the server in two different versions, each with one of two different front panel and back plane configurations:

- Cisco UCS C22 M3, small form-factor (SFF) drives with 8-drive backplane
- Holds up to eight 2.5-inch hard drives or solid state drives
- Cisco UCS C22 M3, large form factor (LFF) drives, with 4-drive backplane)

- Holds up to four 3.5-inch hard drives

The Cisco UCS C24 M3 Rack Server is designed for both performance and expandability over a wide range of storage-intensive infrastructure workloads, from big data to collaboration. The enterprise-class Cisco UCS C24 M3 server further extends the capabilities of the Cisco UCS portfolio in a 2RU form factor with the addition of the Intel® Xeon® processor Intel Xeon E5-2400 product family. The Cisco UCS C24 M3 offers up to two Intel® Xeon® E5-2400 processors, 12 DIMM slots, 24 disk drives, and two 1 Gigabit Ethernet LAN-on-motherboard (LOM) ports.

You can order the server in three different versions, each with one of three different front panel/backplane configurations:

- Cisco UCS C24 - small form-factor (SFF) drives, with 24-drive backplane and expander
- Holds up to twenty-four 2.5-inch hard drives or solid state drives.
- Cisco UCS C24 - small form-factor (SFF) drives, with 16-drive backplane, and no expander
- Holds up to sixteen 2.5-inch hard drives or solid state drives and enables embedded RAID to be used in the server.
- Cisco UCS C24 - large form-factor (LFF) drives, with 12-drive backplane and expander
- Holds up to twelve 3.5-inch hard drives

The Cisco UCS C22 M3 and the Cisco UCS C24 M3 interfaces with Cisco UCS using the Cisco UCS Virtual Interface Card (VIC); 1225. The Cisco UCS VIC is a virtualization-optimized Fibre Channel over Ethernet (FCoE) PCI Express (PCIe) 2.0 x8 10-Gbps adapter designed for use with Cisco UCS C-Series servers. The VIC is a dual-port 10 Gigabit Ethernet PCIe adapter that can support up to 256 (1225) PCIe standards-compliant virtual interfaces, which can be dynamically configured so that both their interface types-network interface card (NIC) or host bus adapter (HBA) and identity (MAC address and worldwide name (WWN))-are established using just-in-time provisioning.

## Cisco IMC and Cisco UCS Manager Release Compatibility Matrix

Cisco UCS C-Series and S-Series Rack-Mount Servers are managed by built-in standalone software—Cisco IMC. However, when a Rack-Mount Server is integrated with Cisco UCS Manager, the Cisco IMC does not manage the server anymore.

The following table lists the supported platforms, Cisco IMC releases, and Cisco UCS Manager releases for Rack-Mount Servers:

**Table 1: Cisco IMC and UCS Manager Software Releases for Rack Mount Servers for Cisco IMC 3.0(1) Release**

Cisco IMC Release	Cisco UCS Manager Release	Rack-Mount Servers
3.0(1d)	No Support  <b>Note</b> We support discovery and upgrade or downgrade functions with Cisco UCS Manager.	All M3/M4 except C420 M3
3.0(1c)	No Support	All M3/M4 except C420 M3

Cisco IMC Release	UCS Manager Release	Rack Mount Servers
2.0(13e)	3.1(2b)	All M3/M4 except C420 M3
2.0(10b)	3.1(1g)	C220 M4/C240 M4 only
2.0(9c)	3.1(1e)	All other M3/M4
2.0(9f)	2.2(7b)	For all other M3/M4
2.0(10b)	2.2(7b)	C220 M4/C240 M4 only
1.5(9d)	2.2(7b)	C420-M3, C260-M2, C460-M2 only
1.5(9d)	2.2(8f)	C420-M3, C260-M2, C460-M2 only
2.0(9c)	2.2(8f)	For all other M3/M4
2.0(10b)	2.2(8f)	C220 M4/C240 M4 only
2.0(12b)	2.2(8f)	C460 M4 only
1.5(8a)	2.2(6g)	C420 M3, C260 M2, C460 M2 only
2.0(8d)	2.2(6c)	For all other M3/M4
1.5(7f)	2.2(5b)	C420 M3, C260 M2, C460 M2 only
2.0(6d)	2.2(5a)	For all other M3/M4
1.5(7a)2	2.2(4b)	C420 M3, C260 M2, C460 M2 only
2.0(4c)	2.2(4b)	For all other M3/M4
1.5(7c)1	2.2(3b)	C420 M3, C260 M2, C460 M2 only
2.0(3d)1	2.2(3a)	For all other M3/M4

## System Requirements

The management client must meet or exceed the following minimum system requirements:

- Sun JRE 1.8.0\_92 or later (Till 1.8.0\_121)
- HTML based interfaces are supported on:
  - Microsoft Internet Explorer 10.0 or 11
  - Mozilla Firefox 30 or higher
  - Google Chrome 38 or higher
  - Safari 7 or higher



**Note** If the management client is launched using an unsupported browser, check the help information from the *For best results use supported browsers* option available in the login window for the supported browser versions.

- For Classic View - all browsers must have Adobe Flash Player 11 plug-in or higher. Supported browsers are:
  - Microsoft Internet Explorer 11 or higher
  - Mozilla Firefox 54 or higher
  - Google Chrome 61 or higher
  - Safari 11 or higher
- Microsoft Windows 7, Microsoft Windows XP, Microsoft Windows Vista, Microsoft Windows 10, Apple Mac OS X v10.6, Red Hat Enterprise Linux 5.0 or higher operating systems
- Transport Layer Security (TLS) version 1.2.

## Hardware and Software Interoperability

For detailed information about storage switch, operating system and adapter, see the *Hardware and Software Interoperability Matrix* for your release located at:

[http://www.cisco.com/en/US/products/ps10477/prod\\_technical\\_reference\\_list.html](http://www.cisco.com/en/US/products/ps10477/prod_technical_reference_list.html)



**Note** Connectivity is tested between the server and the first connected device. Further connections, such as to storage arrays after a switch are not listed in the Cisco UCS Hardware Compatibility List though they may be highlighted in the vendor support matrix for those devices.

For details about transceivers and cables that are supported on VIC cards, see the [Transceiver Modules Compatibility Matrix](#)

You can also see the VIC data sheets for more compatibility information: [Cisco UCS Virtual Interface Card Data Sheets](#)

## Transceivers Specifications

The Cisco UCS C-Series servers supports a wide variety of 10 Gigabit Ethernet connectivity options using Cisco 10GBASE SFP+ modules.

**Table 2: Controllers and SFP+ Twinax Transceivers Support Matrix**

Controllers (LOM and PCIe)	10GBASE-CU SFP+ Cable 1 Meter, passive	10GBASE-CU SFP+ Cable 3 Meter, passive
	SFP-H10GB-CU1M	SFP-H10GB-CU3M

Cisco UCS Virtual Interface Cards	x	x
Intel x520		
Broadcom 57712	x	x

Controllers (LOM and PCIe)	10GBASE-CU SFP+ Cable 5 Meter, passive	10GBASE-CU SFP+ Cable 7 Meter, active	10GBASE-CU SFP+ Cable 10 Meter, active
	SFP-H10GB-CU5M	SFP-H10GB-ACU7M	SFP-H10GB-ACU10M
Cisco UCS Virtual Interface Cards	x	x	x
Intel x520			
Broadcom 57712	x	x	x

**Table 3: Controllers and SFP+Optical Transceivers Support Matrix**

Controllers (LOM and PCIe)	Intel SR Optics	JDSU (PLRXPL-SC-S43-22-N) SFP+	Cisco SFP-10G-SR
Cisco UCS Virtual Interface Cards	NA	NA	x
Intel x520	x	NA	NA
Broadcom 57712	NA	x	x

## Internal Dependencies

The following sections provide information on the interdependencies between Cisco UCS hardware and versions of Cisco IMC.

### Supported Servers and Recommended Versions

Servers	Minimum Version	Recommended Version
C3260 M4	2.0(13)	2.0(13)
C3260 M3	2.0(7)	2.0(13)
C3160 M3	2.0(2)	2.0(13)
C460 M4	1.5(6)	2.0(13)
C220 M4	2.0(3)	2.0(13)
C240 M4	2.0(3)	2.0(13)
C220 M3	1.4(4)	2.0(13)
C240 M3	1.4(4)	2.0(13)

Servers	Minimum Version	Recommended Version
C22 M3	1.4(5)	2.0(13)
C24 M3	1.4(5)	2.0(13)

#### Supported Adapters and Recommended Versions

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
LOM	Intel Ethernet I350-T4 Onboard Controller	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
LOM	X540 Dual Port 10 Gigabit Ethernet Onboard Controller	2.0(3)	2.0(13)	C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	Intel Ethernet I350-mLOM 1 Gbps Network Controller	2.0(3)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C3X60 M3
CNA	UCS VIC 1227 10Gbps 2 port CNA SFP+	2.0(3)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C3X60 M3
CNA	UCS VIC 1227T 10-Gbase-T 2 port CNA	2.0(3)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C3X60 M3
CNA	P81E Dual Port 10-Gbps Ethernet to PCIe Virtual Interface Card	1.3(3)	2.0(9)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
CNA	UCS VIC 1225 10-Gbps 2 port CNA SFP+	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4



Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
CNA	UCS VIC 1225T 10-Gbase-T 2 port CNA	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
CNA	UCS VIC 1285 40G QSFP+ 2 port CNA	2.0(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
CNA	UCS VIC 1385 40G QSFP+ 2 port CNA	2.0(4)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
CNA	UCS VIC 1387 40G QSFP+ 2 port CNA	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C3X60 M3
CNA	UCSC-C3260-SIOC	2.0(7)	2.0(13)	C3X60 M3, C3X60 M4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
CNA	Emulex OCE14102 Dual Port 10G CNA	2.0(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
CNA	Emulex OCE14102B Dual Port 10G CNA	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
CNA	OneConnect OCe11102-FX Dual Port 10-Gbps Ethernet to PCIe Converged Network Adapter	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
CNA	QLE8242 Dual Port 10-Gbps Ethernet to PCIe Converged Network Adapter	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
CNA	QLE8362 Dual Port 10-Gbps Ethernet to PCIe Converged Network Adapter	2.0(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
CNA	X520 Dual Port 10 Gigabit Ethernet PCIe Adapter	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4, C3X60 M4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	X540 Dual Port 10 Gigabit Ethernet PCIe Adapter	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
NIC	NetXtreme II 57712 SFP+ Dual Port 10 Gigabit Ethernet PCIe Adapter	1.4(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	Broadcom 57810 10 GbE SFP+ CNA Gigabit Ethernet PCIe Adapter	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
HBA	SANblade QLE2462 4-Gbps Fibre Channel to PCI Express Host Bus Adapter	1.4(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4



Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
HBA	SANblade QLE2562 8-Gbps Fibre Channel to PCI Express Host Bus Adapter	1.4(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4, C3X60 M4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
HBA	SANblade QLE2672 16-Gbps Fibre Channel to PCI Express Host Bus Adapter	1.5(5)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4, C3X60 M4
NIC	QLE8442 10G BaseT Dual Port 10 Gigabit Ethernet PCIe Adapter	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	QLE8442 SFP+ Dual Port 10 Gigabit Ethernet PCIe Adapter	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
HBA	LightPulse LPe11002 4-Gbps Fibre Channel PCI Express Host Bus Adapter	1.4(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
HBA	LightPulse LPe12002 8-Gbps Fibre Channel PCI Express Host Bus Adapter	1.4(2)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
HBA	LightPulse LPe16002 16-Gbps Fibre Channel PCI Express Host Bus Adapter	1.5(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4, C3X60 M4
NIC	SFN6122F Dual-Port 10G SFP+	2.0(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	SFN7122F Dual-Port 10G SFP+	2.0(3)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2
NIC	SFN7322F Dual-Port 10G SFP+	2.0(4)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2
NIC	ConnectX-3 EN 10 Gigabit Ethernet	2.0(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3
NIC	ConnectX-3 PRO 40 Gigabit Ethernet	2.0(8)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3
NIC	ConnectX-4 MCX416A-BCAT EN 40 GbE dual-port QSFP+ Network Adapter	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	ConnectX-4 MCX416A-CCAT EN 100 GbE dual-port QSFP+ Network Adapter	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3
NIC	ConnectX-4 MCX4421A-ACAN EN 25 GbE dual-port QSFP+ Network Adapter	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3
NIC	Cisco(R) Ethernet Converged NIC X710-DA4	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
NIC	Cisco(R) Ethernet Converged NIC XL710-QDA2	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	Cisco(R) Ethernet Converged NIC X710-DA2	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
NIC	Intel Ethernet Server Adapter I350-T4	1.5(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4, C3X60 M4



Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	NetXtreme II 5709 Quad Port Gigabit Ethernet PCIe Adapter	1.4(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C240 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NIC	NetXtreme II 5709 Dual Port Gigabit Ethernet PCIe Adapter	1.4(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M3(SFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4
NIC	Broadcom 57712 10G BaseT Dual Port 10 Gigabit Ethernet PCIe Adapter	1.4(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C220 M3(SFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
Storage	MegaRAID 9240-8i PCIe RAID Controller	1.4(6)	2.0(13)	C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2
Storage	LSI 9266-8i MegaRaid SAS HBA, LSI 9266CV-8i MegaRaid SAS HBA	1.4(7)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2
Storage	Cisco UCSC RAID SAS 2008M-8i	1.4(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2
Storage	LSI Embedded SWRAID (MegaSR)	1.5(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C3X60 M3

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
Storage	LSI 9265CV-8i MegaRaid SAS HBA	1.4(6)	2.0(13)	C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2
Storage	LSI 9220-4i MegaRaid SAS HBA	1.4(6)	2.0(13)	C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2
Storage	LSI 9220-8i MegaRaid SAS HBA	1.4(6)	2.0(13)	C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2
Storage	LSI 9270CV-8i MegaRaid SAS HBA	1.5(3)	2.0(13)	C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2
Storage	LSI 9271CV-8i MegaRaid SAS HBA	1.5(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3 NEBS(SFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
Storage	LSI 9286CV-8e MegaRaid SAS HBA	1.5(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C22 M3(SFF) w/E5 Series, C22 M3(LFF) w/E5 Series, C24 M3(SFF) w/E5-Series, C24 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C22 M3(SFF) w/E5-Series v2, C22 M3(LFF) w/E5-Series v2, C24 M3(SFF) w/E5-Series v2, C24 M3(LFF) w/E5-Series v2
Storage	LSI 9285CV-8e MegaRaid SAS HBA	1.4(7)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2
Storage	LSI Nytro MegaRaid 8110-4i SAS HBA	1.5(7)	2.0(13)	C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
Storage	LSI 9361-8i MegaRAID SAS HBA	2.0(3)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4
Storage	Cisco 12G SAS HBA	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
Storage	Cisco 12G SAS Modular Raid Controller	2.0(3)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4
Storage	Cisco RAID controller for UCS C3X60 Storage Servers	2.0(2)	2.0(13)	C3X60 M3
Storage	Cisco 12G SAS Modular Raid Controller for C460	2.0(3)	2.0(13)	C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
Storage	Cisco 9300-8e 12G SAS HBA	2.0(3)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
Storage	Cisco 12G Modular SAS Pass through Controller (UCSC-SAS12GHBA)	2.0(4)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4
Storage	Cisco 12G Modular SAS Passthrough Controller (UCSC-PSAS12GHBA)	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4
Storage	UCS 3x60 12G SAS Pass through Controller	2.0(4)	2.0(13)	C3X60 M3

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
Storage	Cisco UCS C3000 RAID controller for M4 servers	2.0(13)	2.0(13)	C3X60 M4
Storage	Intel Embedded SWRAID (RSTe)	1.5(3)	2.0(13)	C220 M3(LFF) w/E5-Series
Storage	Intel 6-port SATA AHCI Controller	2.0(3)	2.0(13)	C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C3X60 M3
Flash	Virident FlashMAX II 2.2TB	2.0(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
Flash	HGST FlashMAX III 1.1TB / 2.2TB	2.0(1)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series
Flash	UCS ( 365GB / 785GB / 1.2TB / 3.0TB ) MLC Fusion ioDrive2	1.5(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
Flash	UCS 1.6 TB Fusion IoScale 2	2.0(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
Flash	UCS ( 1TB / 1.3TB / 2.6TB / 5.2TB ) MLC Fusion ioMemory3	2.0(1)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2
Flash	UCS ( 1TB PX/1.3TB PX/2.6TB PX/5.2TB PX/3.2 TB SX/6.4 TB SX ) MLC Fusion ioMemory3	2.0(3)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C3X60 M4
Flash	UCS ( 1.3TB / 1.6TB / 3.2TB / 6.4TB ) SanDisk ioMemory SX350	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C3X60 M4
NVMe PCIe SSD	Cisco UCS (SN100) 800GB/1.6TB 2.5 in NVMe based PCIe SSD	2.0(9)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
NVMe PCIe SSD	Cisco UCS (SN150) HHHL 1900GB/3800GB NVMe based PCIe SSD	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4



Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
NVMe PCIe SSD	Cisco UCS (P3700) 400GB/800GB 2.5 in NVMe based PCIe SSD	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
NVMe PCIe SSD	Cisco UCS (P3600) 800GB/1600GB 2.5 in NVMe based PCIe SSD	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
NVMe PCIe SSD	Cisco UCS (P3700) HHHL 800GB/1600GB NVMe based PCIe SSD	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
NVMe PCIe SSD	Cisco UCS (P3600) HHHL 1200GB/2000GB NVMe based PCIe SSD	2.0(13)	2.0(13)	C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C220 M4(SFF) w/E5-Series v4, C220 M4(LFF) w/E5-Series v4, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
GPU	Nvidia GRID K1 P2401-502, PLX BA Stepping	2.0(1)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2
GPU	Nvidia GRID K2 P2055-552, PLX BA stepping	2.0(1)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
GPU	Nvidia GRID K1 P2401-502, PLX CA stepping	2.0(1)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3
GPU	Nvidia GRID K2 P2055-552, PLX CA stepping	2.0(1)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3
GPU	Nvidia TESLA K10 P2055-202	2.0(3)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
GPU	Nvidia TESLA K20m 5GB P2081-208	1.5(3)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
GPU	Nvidia TESLA K20Xm 6GB P2081-200	1.5(3)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
GPU	Nvidia TESLA K40m P2081-202	2.0(3)	2.0(13)	C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
GPU	Nvidia TESLA K8024G P2080-200 GPU	2.0(6)	2.0(13)	C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4
GPU	Nvidia M60 PG402-060 Passive R2L 225W/300W	2.0(9)	2.0(13)	C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3, C460 M4 w/E7-Series v4

Adapter Type	Adapter	Initial Supported Release	Recommended Version	Supported Platforms
Flash	APEX2800	1.5(3)	2.0(13)	C220 M3(SFF) w/E5-Series, C220 M3(LFF) w/E5-Series, C240 M3(SFF) w/E5-Series, C240 M3(LFF) w/E5-Series, C220 M3(SFF) w/E5-Series v2, C220 M3(LFF) w/E5-Series v2, C240 M3(SFF) w/E5-Series v2, C240 M3(LFF) w/E5-Series v2, C220 M4(SFF) w/E5-Series v3, C220 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C460 M4 w/E7-Series v2, C460 M4 w/E7-Series v3
GPU Expander	01-08003-00 – Magma x16 Gen3 host interface card	2.0(4)	2.0(13)	C240 M4(SFF) w/E5-Series v3, C240 M4(LFF) w/E5-Series v3, C240 M4(SFF) w/E5-Series v4, C240 M4(LFF) w/E5-Series v4

## Product ID Catalog

The Cisco UCS C-Series servers Product ID (PID) Catalog is a set of tunable parameters, strings, and rules. Cisco UCS uses the catalog to update the display and configurability of components such as newly qualified DIMMs and disk drives for servers.

The PID Catalog is embedded in IMC firmware, but at times it is also released as a single image file to make updates easier.

PID catalog for release 2.0(13e):

Hardware Component	PID	Supported Platforms	Minimum Software Version
Seagate Thunderbug 300GB 10K	UCS-HD300G10K12G	C22 M3, C24 M3, C220 M3, C240 M3, C220 M4, C240 M4, C460 M4 Supported Platforms	2.0(13e)
Seagate Thunderbug 300GB 10K	UCS-HD600G10K12G	C22 M3, C24 M3, C220 M3, C240 M3, C220 M4, C240 M4, C460 M4	2.0(13e)
Samsung PM863A 480GB SFF Enterprise Performance	UCS-SD480GBKS-EV	C220 M4, C240 M4	2.0(13e)

Hardware Component	PID	Supported Platforms	Minimum Software Version
Samsung PM863A 1.9TB SFF Enterprise Performance	UCS-SD19TKSS-EV	C220 M4, C240 M4	2.0(13e)
Samsung PM863A 240GB SFF	UCS-SD240GBKS4-EV	C22 M3, C24 M3, C220 M3, C240 M3, C220 M4, C240 M4, C460 M4	2.0(13e)
Samsung PM863A 960GB SFF	UCS-SD960GBKS4-EV	C22 M3, C24 M3, C220 M3, C240 M3, C220 M4, C240 M4, C460 M4	2.0(13e)
Samsung PM863A 3.84TB SFF	UCS-SD38TBKS4-EV	C220 M4, C240 M4, C460 M4	2.0(13e)
Samsung 64G 2H TSV RDIMM 2133	UCS-MR-1X648RU-A	C220 M4, C240 M4	2.0(13e)
Toshiba Tomcat-R 2TB 12G SAS 7.2K RPM LFF HDD Third		C22 M3, C24 M3, C220 M3, C240 M3, C220 M4, C240 M4, C460 M4	2.0(13e)

For instructions to upload and activate the PID catalog, see [Cisco IMC GUI or CLI Configuration Guides](#).

## Firmware Upgrade Details

### Firmware Files

The C-Series software release 2.0(13) includes the following software files:

CCO Software Type	File name(s)	Comment
Unified Computing System (UCS) Server Firmware	ucs-c3260-huu-2.0.13.iso ucs-c3160-huu-2.0.13.iso ucs-c240m4-huu-2.0.13.iso ucs-c220m4-huu-2.0.13.iso ucs-c460m4-huu-2.0.13.iso ucs-c220-huu-2.0.13.iso ucs-c240-huu-2.0.13.iso ucs-c2x-huu-2.0.13.iso  For release specific ISO versions, see <a href="#">Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 2.0</a>	Host Upgrade Utility

Unified Computing System (UCS) Drivers	ucs-cxxx-drivers.2.0.13.iso	Drivers
Unified Computing System (UCS) Utilities	ucs-cxxx-utils-efi.2.0.13.iso ucs-cxxx-utils-linux.2.0.13.iso ucs-cxxx-utils-vmware.2.0.13.iso ucs-cxxx-utils-windows.2.0.13.iso	Utilities

**Note**

Always upgrade the BIOS, the Cisco IMC and CMC from the HUU ISO. Do not upgrade individual components (only BIOS or only Cisco IMC or CMC), since this could lead to unexpected behavior. If you choose to upgrade BIOS, the Cisco IMC and the CMC individually and not from the HUU ISO, make sure to upgrade both Cisco IMC, BIOS and CMC to the same container release. If the BIOS, CMC and the Cisco IMC versions are from different container releases, it could result in unexpected behavior. Cisco recommends that you use the Update All option from the Host Upgrade Utility to update the firmware versions of Cisco IMC, BIOS, CMC and all other server components (VIC, RAID Controllers, PCI devices, and LOM) together.

## Host Upgrade Utility

The Cisco Host Upgrade Utility (HUU) is a tool that upgrades the Cisco UCS C-Series firmware.

The image file for the firmware is embedded in the ISO. The utility displays a menu that allows you to choose which firmware components to upgrade. For more information on this utility see:

[http://www.cisco.com/en/US/products/ps10493/products\\_user\\_guide\\_list.html](http://www.cisco.com/en/US/products/ps10493/products_user_guide_list.html)

For details of firmware files in Cisco Host Upgrade Utility for individual releases, see [Cisco UCS C-Series Integrated Management Controller Firmware Files, Release 3.1](#)

## Updating the Firmware

Use the Host Upgrade Utility to upgrade the C-Series firmware. Host Upgrade Utility can upgrade the following software components:

- BIOS
- Cisco IMC
- CMC
- SIOC
- Cisco VIC Adapters
- LSI Adapters
- LAN on Motherboard Settings
- PCIe adapter firmware
- HDD firmware
- SAS Expander firmware

All firmware should be upgraded together to ensure proper operation of your server.



**Note** We recommend that you use the **Update All** option from the Host Upgrade Utility to update the firmware versions of Cisco IMC, BIOS and all other server components (VIC, RAID Controllers, PCI devices, and LOM) together. Click **Exit** once you deploy the firmware.

For more information on how to upgrade the firmware using the utility, see:

<http://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-c-series-rack-servers/products-user-guide-list.html>

## Supported Features

### Supported Software Features

The following new software features are supported in Release 2.0(13e):

- **LDAP CA Certificate**— Support for LDAP client to validate a directory server certificate against an installed CA certificate or chained CA certificate during an LDAP binding step. This feature is introduced in the event where anyone can duplicate a directory server for user authentication and cause a security breach due to the inability to enter a trusted point or chained certificate into the Cisco IMC for remote user authentication.
- **Product ID Catalog**— Support for PID catalog to be updated independently, without having to update the Cisco IMC or container. You can download a signed PID update package using FTP, TFTP, SFTP, HTTP, and SCP. The product ID catalog is available on Cisco.com.
- **OOB Management of SAS HBA Pass Through Controllers**—Cisco IMC allows Out Of Band management of UCSC-SAS12GHBA, UCSC-PSAS12GHBA SAS HBA controllers on C240 M4 and C220 M4 platforms. UCSC-3X60-HBA controllers supported in UCS C3X60M3 also support the OOB management.
- **OOB Management of NVMe Based PCIe SSD**— Cisco IMC manages various HGST, Intel NVMe based HHHHL and 2.5" SSDs.
- **Setting a Virtual Drive as Transport Ready**— Support for setting a virtual drive as Transport Ready, which means you can set a virtual drive in a state where it can be moved from one MegaRAID controller to another. This allows all the pending IOs of the virtual drive to complete their activities, hide the virtual drive from the operating system, flush cache, pause all the background operations, and save the current progress in disk data format, allowing you to move the drive.
- **Power Management** — Effective with this release, this feature is available on the C3260 M4 servers. It supports power characterization of the chassis based on hardware configuration and allows you to configure power profiles using the power capping feature. You can use the power characterization range appropriately for the different power profiles.  
  
The power profiles available on the C3260 M4 servers are automatic, custom, and thermal which can be configured to allocate power budget accordingly.
- **Selective Power Characterization**— Support for running power characterization only on the CPU and DIMM configuration changes. This feature is available only on the C220 M4, C240 M4 and C3260 M4 servers.

- **Power Save Mode**— This allows you to put a hard drive on a power save mode when not in use or is in unassigned state. This feature is available on UCS C3X60 M3 and M4 servers.
- **Secure Adapter Update**— Support to enable or disable this option to ensure only the secure firmware is updated. This feature is available only on the C220 M4, C240 M4, and C460 M4 servers.
- **SAS Expander Firmware Update**— Support to install and activate SAS expander firmware. Effective with this release this feature was available on C220 M4, and C240 M4 servers.
- **SNMP Engine ID Configuration**— Added support for configuring user defined engine ID values. The SNMP engine ID is a unique string used to identify the device for administration purposes.
- **IO Expander BIOS Tokens**— Added new BIOS tokens for IO expander configuration. This feature is available only on the C3260 M4 servers.
- **Smart Access: Serial**—The Smart Access: Serial allows offline configuration of C-series servers using the command line interface (CLI) through serial connection. With this setup, you are not required to connect the Cisco IMC to the network in order to access the command line interface.
- **Consistent Device Naming (RHEL)** — Allows ethernet interfaces to be named consistently in order to effectively manage network connections with server configuration changes.
- **Self Encrypting Drives (SED)**— Cisco IMC supports self encrypting drives (SED). A special hardware in the drives encrypts incoming data and decrypts outgoing data in real-time. This feature is also called Full Disk Encryption (FDE).The data on the drive is encrypted on its way into the drive and decrypted on its way out. However, if you lock the drive, no security key is required to retrieve the data. Effective with this release this feature was available on C240 M4 servers.
- **NVMe Boot**— Boot support for NVMe drives when enabled from BIOS for the C220 M4 and C240 M4 servers. This is available only in the standalone mode.

**Important**

In order to enhance security, effective with the next major release, support for Transport Layer Security (TLS) versions 1.0 and 1.1 will be removed. Only TLS 1.2 will be supported.

## Supported Hardware

### Supported Hardware Release 2.0(13i)

The following new hardware is supported in Release 2.0(13i):

- Intel® Xeon® Processor E5-2640 v4 for 3260 M4 servers—UCS-CPU-E52640E
- Intel® Xeon® Processor E7-8894 for C460 M4 servers—UCS-CPU-E78894E
- NVIDIA® Tesla® M10 for C240 M4 servers—UCSC-GPU-M10

### Supported Hardware Release 2.0(13e)

The following new hardware is supported in Release 2.0(13e):

- Cisco UCS C3X60 M4 server node based on the Intel® Xeon® v4 Series processor. It is available in two variants - single height and dual height. The dual height server node supports an additional RAID controller, two NVMe solid state drives (SSD) or SAS SSD, and two PCIe slots on the IO expander board. However, for this release, only 2x PCIe slots are enabled.



- The following NVMe based SSDs are available in two variants - the 2.5 inches 800 GB and 1.6 TB drives:

- UCS-PCI25-8003
- UCS-PCI25-16003
- UCS-PCI25-40010
- UCS-PCI25-80010




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**Note** In order to receive OOB support for these drives, you need to have a minimum firmware version of 2.0(13e) or later.

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- Cisco UCS 12G SAS Modular HBA—UCSC-PSAS12GHBA
- X710-DA4 Intel® 4x10GB SFP+ PCIe adapter—UCSC-PCIE-I404NIC
- X710-DA2 Intel® 2x10GB SFP+ PCIe adapter—UCSC-PCIE-ID10GF
- X710-QDA2 Intel® 2x40GB QSFP+ PCIe adapter—UCSC-PCIE-1402NIC
- The following Intel® NVMe HHL cards:
  - UCSC-F-H38001
  - UCSC-F-I80010
  - UCSC-F-I160010
- The following HGST SSD cards:
  - UCS-SDHPCIE38TB
  - UCSC-F-H19001
  - UCSC-F-H38001

### Supported Hardware Release 2.0(13h)

The following new hardware is supported in Release 2.0(13h):

- Intel® Xeon® CPU E5 2699A for C220 M4 and C240 M4 servers—UCS-CPU-E52699AE
- NVIDIA® Tesla® P100 GPU for C240 M4 servers (Chassis only)—UCSC-GPU-P100-16G
- SanDisk Lightning® SSD 400GB—UCS-SD400G12S4-EP
- SanDisk Lightning® SSD 1.6TB—UCS-SD16TB12S4-EP

## Software Utilities

The following standard utilities are available:

- Host Update Utility (HUU)
- BIOS and Cisco IMC Firmware Update utilities

- Server Configuration Utility (SCU)
- Server Diagnostic Utility (SDU)

The utilities features are as follows:

- Availability of HUU, SCU on the USB as bootable images. The USB also contains driver ISO, and can be accessed from the host operating system.

## Supported Platforms

This section lists the supported platforms for the following releases:

- UCS-C3X60 M4
- UCS-C3260 M3
- UCS-C3160 M3
- UCS-C460 M4
- UCS-C240 M4
- UCS-C220 M4
- UCS-C220 M3
- UCS-C240 M3
- UCS-C22 M3
- UCS-C24 M3

## SNMP

The supported MIB definition for this release and later releases can be found at the following link:

<ftp://ftp.cisco.com/pub/mibs/supportlists/ucs/ucs-C-supportlist.html>



### Note

The above link is incompatible with IE 9.0.

## Security Fixes

### Security Fixes

#### Security Fixes in Release 2.0(13p)

The following Security Fixes were added in Release 2.0(13p):

Release	Defect ID	CVE	Symptom
2.0(13p)	CSCvp34790 CSCvp34799	<ul style="list-style-type: none"> <li>• CVE-2018-12126</li> <li>• CVE-2018-12127</li> <li>• CVE-2018-12130</li> <li>• CVE-2019-11091</li> </ul>	<p>Cisco UCS C-Series and S-Series M4 servers are based on Intel® Xeon® Processor E7 v2, v3, and v4 Product Family processors that are vulnerable to variants of exploits that use Microarchitectural Data Sampling (MDS) to gain access to data being processed in the CPU by other applications.</p> <ul style="list-style-type: none"> <li>• CVE-2018-12126 (Microarchitectural Store Buffer Data Sampling) affects store buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2018-12127 (Microarchitectural Load Port Data Sampling) affects load buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2018-12130 (Microarchitectural Fill Buffer Data Sampling) affects line fill buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2019-11091 (Microarchitectural Uncacheable Data Sampling) affects the uncacheable memory buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> </ul> <p>This release includes BIOS revisions for Cisco UCS M4 generation servers. These BIOS revisions include the updated microcode that is a required part of the mitigation for these vulnerabilities.</p>

Release	Defect ID	CVE	Symptom
2.0(13p)	CSCvp34786	<ul style="list-style-type: none"> <li>• CVE-2018-12126</li> <li>• CVE-2018-12127</li> <li>• CVE-2018-12130</li> <li>• CVE-2019-11091</li> </ul>	<p>Cisco UCS C-Series and S-Series M4 servers are based on Intel® Xeon® Processor E5 v3 and v4 Product Family processors that are vulnerable to variants of exploits that use Microarchitectural Data Sampling (MDS) to gain access to data being processed in the CPU by other applications.</p> <ul style="list-style-type: none"> <li>• CVE-2018-12126 (Microarchitectural Store Buffer Data Sampling) affects store buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2018-12127 (Microarchitectural Load Port Data Sampling) affects load buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2018-12130 (Microarchitectural Fill Buffer Data Sampling) affects line fill buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2019-11091 (Microarchitectural Uncacheable Data Sampling) affects the uncacheable memory buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> </ul> <p>This release includes BIOS revisions for Cisco UCS M4 generation servers. These BIOS revisions include the updated microcode that is a required part of the mitigation for these vulnerabilities.</p>

Release	Defect ID	CVE	Symptom
2.0(13p)	CSCvp34795	<ul style="list-style-type: none"> <li>• CVE-2018-12126</li> <li>• CVE-2018-12127</li> <li>• CVE-2018-12130</li> <li>• CVE-2019-11091</li> </ul>	<p>Cisco UCS C-Series and S-Series M3 servers are based on Intel® Xeon® Processor E5 v2 processors that are vulnerable to variants of exploits that use Microarchitectural Data Sampling (MDS) to gain access to data being processed in the CPU by other applications.</p> <ul style="list-style-type: none"> <li>• CVE-2018-12126 (Microarchitectural Store Buffer Data Sampling) affects store buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2018-12127 (Microarchitectural Load Port Data Sampling) affects load buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2018-12130 (Microarchitectural Fill Buffer Data Sampling) affects line fill buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> <li>• CVE-2019-11091 (Microarchitectural Uncacheable Data Sampling) affects the uncacheable memory buffers in the CPU, and is addressed by applying the updated microcode included in the UCS Cisco IMC release as well as the relevant Operating System and Hypervisor patches from the appropriate vendors.</li> </ul> <p>This release includes BIOS revisions for Cisco UCS M4 generation servers. These BIOS revisions include the updated microcode that is a required part of the mitigation for these vulnerabilities.</p>

#### Release 2.0(13n)

The following Security Fixes were added in Release 2.0(13n):

Release	Defect ID	CVE ID	Symptom
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2.0(13n)	CSCve48825	CVE-2017-6619	Privilege Escalation vulnerability in Cisco Integrated Management Controller (Cisco IMC) was addressed.
	CSCve48785	CVE-2017-6618	Cross-site scripting vulnerability in Cisco Integrated Management Controller (Cisco IMC) was addressed.
	CSCve48833	CVE-2017-6616	Remote command execution vulnerability in Cisco Integrated Management Controller (Cisco IMC) was addressed.

## Resolved Caveats

The following section lists resolved caveats.

### Resolved Caveats in Release 2.0(13q)

The following caveat was resolved in Release 2.0(13q):

**Table 4: BMC**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCvq83392	Added support for new upgrade or downgrade rules for Adopter BU.	2.0(13p)	2.0(13q)

### Resolved Caveats in Release 2.0(13p)

The following caveat was resolved in Release 2.0(13p):

**Table 5: BMC**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCvp41543	SSH clients fail to establish a connection to Cisco IMC. This happens when the SSH clients use diffie-hellman-group14-sha1 as default KEX algorithm as support for this KEX algorithm has been removed from Cisco IMC.  Update the SSH clients to the latest version that uses stricter KEX algorithms to establish SSH sessions.	2.0(13e)	2.0(13p)

### Resolved Caveats in Release 2.0(13i)

The following defects were resolved in release 2.0(13i):

**Table 6: External Controllers**

Defect ID	Symptom	First Affected Release	Resolved in Release
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CSCvb20365	Infrequently, on the Cisco UCS C3x60 server nodes, during the booting of the host, and when the host fails to boot to an OS, the controller becomes unresponsive.  This happens because Cisco IMC fails to keep the controller functional.	2.0(13e)	2.0(13i)
CSCvc00250	When you try to configure the Cisco UCS UCSC-SAS-12G-HBA controller on the ESXi OS, it displays a PSOD diagnostic screen when the virtual machine is powered on.	2.0(13e)	2.0(13i)
CSCvb26014	Occasionally, if you boot to HUU and wait for approximately 40 minutes, at the "License Agreement" screen, several entries about currently missing devices are written to the system log (and filtered to the OBFL).	2.0(13e)	2.0(13i)
CSCva30813	On the C240 M4 server, occasionally, after a system power cycle, only a partial list of inventory is reported on the management station.	2.0(13e)	2.0(13i)
CSCvb63893	On the C220 M4 server, occasionally, after a system power cycle, only a partial list of inventory is reported on the management station.	2.0(13e)	2.0(13i)
CSCvc26023	On the C3260 server, occasionally, backing up large amount of data on the MegaRaid controller results in the system becoming unresponsive.	2.0(13e)	2.0(13i)

## Resolved Caveats in Release 2.0(13h)

The following defects are resolved in release 2.0(13h):

**Table 7: CMC**

Defect ID	Symptom	First Affected Release	Resolved in Release
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CSCvb82478	The C3X60 M4 server node does not work as expected once it is hot plugged into the chassis. This occurs when the CMC is already powered on and fully operational.	2.0(13e)	2.0(13h)
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**Table 8: BMC**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCva09595	On C460 M4 servers, power supply units (PSUs) do not appear in the command line or Web UI inventory (however, all PSU status LEDs are displayed as green). Low-level firmware updates may fail, and the PCH IPMI temperature sensor does not function along with all of the other voltage or PSU-related sensors.	2.0(13e)	2.0(13h)
CSCvc05572	<p>Cisco IMC DNS server logs display queries for the following:</p> <ul style="list-style-type: none"> <li>• A /var/run/ntpd.pid</li> <li>• AAAA /var/run/ntpd.pid</li> <li>• A var/run/ntpd.pid.example.com</li> <li>• AAAA var/run/ntpd.pid.example.com</li> </ul> <p>The phrase "example.com" here implies DHCP provided DNS search area.</p> <p>This issue is seen when the DNS server is configured and NTP enabled.</p>	2.0(13e)	2.0(13h)
CSCvb27291	<p>After performing a factory reset and configuring the static IP on the C240 M4 server, user is unable to log on to Cisco IMC using the default username and password.</p> <p>While you activate BIOS, if the board is powered on, and the activation does not complete, the persistent storage fills to capacity with debug logs, resulting in failure of the 'reset to default' command.</p>	2.0(8f)	2.0(13h)

**Table 9: HUU**

Defect ID	Symptom	First Affected Release	Resolved in Release
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CSCvb25746	Boot drive settings are lost after updating the Cisco UCS 12G SAS Modular HBA storage controller firmware on the HUU.	2.0(13e)	2.0(13h)
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**Table 10: Storage**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCva27512	On the Cisco UCS UCSC-SAS-12G-HBA controller, drives are not visible during a hot plug removal or insertion on the Cisco IMC storage page. This happens when the removal or insertion action is conducted without a time interval.	2.0(13e)	2.0(13h)

**Table 11: Security Fix**

Defect ID	CVE ID	Symptom
CSCvb56137	CVE-2016-7406 CVE-2016-7407 CVE-2016-7408 CVE-2016-7409	A vulnerability in SSH has been addressed.

**Resolved Caveats in Release 2.0(13f)**

The following defect was resolved in release 2.0(13f):

**Table 12: HDD Firmware**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCux11611	Hard drives spinning idly for a long time are prone to failure. This occurs when the drives continue to spin in a powered system without an OS installed, or in a JBOD configuration without any read or write activity.	2.0(9f)	2.0(13f)

## Resolved Caveats in Release 2.0(13e)

The following defects are resolved in release 2.0(13e):

**Table 13: BIOS**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCva82009	The operating system on UCS servers, running Intel E5 Xeon version 4 CPUs, crashes indicating internal parity errors such as Page Fault (PF), Graphics Drawing (GD), or invalid opcode (UD) exceptions.  However, the server hardware logs do not show any evidence of hardware failure.	2.0(10b)	2.0(13e)
CSCuy45141	When a TPM operation is triggered from OS, it results in a server reboot. During the reboot, the BIOS prompt message is truncated; and the "F12" keyword is not visible.	2.0(10b)	2.0(13e)
CSCuv41113	The Windows server 2012 R2 is unresponsive when you install or boot a pre-installed image on a TXT enabled C460 M4 server. This happens only when TXT is enabled using BIOS.	2.0(7)	2.0(13e)
CSCut07986	OS fails to boot with max VD count (i.e 64) created in LSI controllers. This issue would happen with the Servers configured with max number of VD count in LSI controller.	2.0(4c)	2.0(13e)
CSCuv82922	You cannot disable the drive security from the Human Interface Infrastructure (HII) of MSM on the C220 M4 BIOS. This happens with the self-encrypting drives on the C220 M4.	2.0(8)	2.0(13e)
CSCuy66649	On servers with VIC devices and vNICs mapped, precision boot order for more than two PXE devices does not work as expected.	2.0(13e)	2.0(13e)
CSCuq35131	Correctable error is sometimes displayed in SEL after installing the device driver for the Nvidia K40 adapters.	2.0(3d)	2.0(13e)

**Table 14: BMC**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCux19735	On the C3160 server, the HDD LEDs on the left hand side of the server do not function as expected.	2.0(8)	2.0(13e)

CSCux31845	The Web UI is unresponsive when you swap a virtual drives physical drive with an external physical drive more than once.	2.0(9c)	2.0(13e)
CSCut36603	An error message stating that the Supercap has degraded is displayed during a transparent learn cycle. This issue occurs when the server contains a RAID controller using a SuperCap and is running a Cisco IMC firmware lower than 2.0(4c). Additionally, the Supercap in the learn cycle has a low charge.	2.0(1b)	2.0(13e)

Table 15: Cisco IMC

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCue00749	When a RAID controller cannot load its drive configuration, no fault is generated.	1.5(1)	2.0(13e)
CSCuj63232	Certain long running operations may show erroneous data. This may indicate that an operation is currently running when it is not. For example, the consistency check operation shows 0% progress and is stuck at that status. This problem can occur at any time, but commonly it has been seen after doing a CIMC upgrade.	2.0(4c)	2.0(13e)

Table 16: CMC

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCux55063	On the C3260 server, the Fault History and System Event Log may contain entries incorrectly indicating that all chassis fans were removed, then reinstalled several seconds later. This issue might occur during a CMC reboot or CMC failover event.	2.0(8)	2.0(13e)

Table 17: External Controller

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCuz01268	HDD firmware update using Mode 5 fails from the OS, displaying the following error message "firmware image too large". This happens due to file size constraints while using Mode 5.	2.0(10b)	2.0(13e)
CSCux96072	During heavy input or output (I/O) operations, Cisco 12G Modular RAID controller may go offline with the "Storage Controller SLOT HBA inoperable" message logged in Cisco IMC event logs. This happens when the Cisco 12G SAS Modular RAID controller is running on UCS versions: 2.0(8), 2.0(9), and 2.0(10).	2.0(8g)	2.0(13e)
CSCuv45574	On C220/C240 M3 systems with LSI 9271-8i controller, after downgrading the firmware to Release 2.0(3f) or lower with HUU update all, the virtual machines running on the ESXi OS become inaccessible. SUSE operating systems are also impacted and will not boot after upgrade.	2.0(4c)	2.0(13e)
CSCux26754	On the C240 M3 server, the Nvidia graphics processing unit firmware fails to upgrade with the Nvidia K40 adapter. This issue occurs when the adapter is placed into slot number 5 with the auto install feature enabled.	2.0(9c)	2.0(13e)
CSCux53224	An error occurs and the virtual drive controller resets when you create or remove virtual drives with RAID 5 and RAID 6 controller combination.	2.0(10b)	2.0(13e)
CSCux05183	Enabling the "Pause for password at boot time" feature when enabling controller Security to support SED drives (self encrypting drives) feature from LSI host applications such as MSM or StorCli results in the boot time password to be entered multiple times when the system is rebooted.	2.0(9c)	2.0(13e)
CSCuw83402	Unable to install the <b>be2iscsi</b> drivers using shell script on SUSE Linux Enterprise 11 Service Pack 4.	2.0(9c)	2.0(13e)
CSCun63438	If the host I/Os are at high loads with continuous write access to the drives, the completion time for the background operations exceeds a month.	2.0(2c)	2.0(13e)

CSCup19648	You may see intermittent I/O timeout when the virtual drives are configured in Cached-IO mode. This is limited to virtual RAID volumes created in Cached-IO mode to take full advantage of the RAID Cache and to reduce the drive speed overhead and keep using slow drives. When the virtual drives are created in the Cached-IO mode set, and since the virtual drives are inconsistent, background initialization happens to make the virtual drives consistent. At this time, if the host I/Os are issued to load the drives and RAID cache in full load, the I/Os are blocked for short intervals which exceed the host OS expectations of the I/O time and they timeout.	2.0(2c)	2.0(13e)
CSCux60889	Two messages are displayed on MSM when the system reboots while reconstruction or migration is in progress: "reconstruction started" and "reconstruction resumed".	2.0(10b)	2.0(13e)
CSCuw24325	When a specific drive becomes bad, due to usage over a period of time, LSI controller crashes due to IO timeout when used in single-drive RAID0 configuration.	2.0(7a)	2.0(13e)
CSCva67909	Corrosion on Seagate hard drives leads to timeouts as recorded by the logs. The corrosion on the serial ports produced intermittent commands that slowed down the firmware or stopped servicing the data.	2.0(7d)	2.0(13e)
CSCur36216	On the C240 M4 servers, HII may not work on the 9300-8e and 9300-8e controllers and may result in changing the OpROM settings when one of the controller's slot is set to UEFI Only mode and the other to Enabled or Legacy mode.	2.0(3f)	2.0(13e)

Table 18: Hardware

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCuz33677	You may see an SEL event indicating a processor is missing when the system is in running condition. A corresponding fault summary entry is also displayed. A deassertion SEL event may occur after a few moments as the processor is detected again.	2.0(9c)	2.0(13e)
CSCux50056	The C220 M4 and C240 M4 frequently report power supply input loss with the UCSC-PSU1-770W PSUs.	2.0(6d)	2.0(13e)

**Table 19: Utilities**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCuv66222	On the C3260 server, the running CMC firmware version is not activated after a firmware update when the HUU firmware update is running on both server nodes.	2.0.(7d)	2.0(13e)

**Table 20: VIC**

Defect ID	Symptom	First Affected Release	Resolved in Release
CSCuw26987	On the C3260 server, the "Connector Present" and "Connected Supported" parameters fail with a warning message. The command line output displays 'NA'.	2.0(7d)	2.0(13e)
CSCuv71938	On the C3260 server, the VIC adapter may not be discovered by HUU if the HUU is booted simultaneously on both server nodes.	2.0(7d)	2.0(13e)
CSCux78046	On the C3260 server, the link state of the SIOC Ethernet port is shown as DOWN when the LR4 or SR-BiDi cables are used.	2.0(9d)	2.0(13e)
CSCuv49700	While using RoCE on a Cisco VIC interface, other features such as VMQ, NVGRE, VxLAN, and usNIC should not be configured on the same VIC interface in order to avoid hardware resource conflict.	2.0(7d)	2.0(13e)
CSCuy23450	On a UCS C-Series server managed using Cisco IMC standalone (not managed by UCS Manager), network connections to Cisco IMC may fail because the IP address assigned to Cisco IMC is not reachable on the IP network. This problem affects servers when a Cisco UCS VIC adapter 1385 or 1387 is used to access Cisco IMC (NIC mode: "Cisco Card") and the VIC adapter uplinks are configured in NIV mode.	2.0(10b)	2.0(13e)
CSCuy79306	When the C-Series servers with the VIC 1225 or VIC 1227 cards are directly connected to N9K switches after making a large changes on a switch, ports will either go off and on, or show down on the switch but are up on the server.	2.0.7(d)	2.0(13e)

## Open Caveats

The following section lists open caveats.

## Open Caveat in Release 2.0(13i)

The following defect is open in release 2.0(13i):

**Table 21: BMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCvc84146	While attempting a secure shell (SSH) login to Cisco IMC, an additional delay is observed in the authentication process, during the initial handshake (stronger key exchange), before the password prompt is displayed. This delay is approximately 25 to 30 seconds more compared to earlier releases.	None.	2.0(13h)

## Open Caveat in Release 2.0(13h)

The following defect is open in release 2.0(13h):

**Table 22: Cisco IMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCva96401	On the C220 M4 and C240 M4 servers, installed with 1227, 1387 or 1385 VIC adapters, intermittently, upon rebooting the server, the VIC adapters get mapped out.  <b>Note</b> The VIC adapter is rediscovered in a subsequent host reboot.	None.	2.0(13h)

## Open Caveats in Release 2.0(13e)

The following defects are open in release 2.0(13e):

**Table 23: BIOS**

Defect ID	Symptom	Workaround	First Affected Release
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CSCuz72477	On the C460 M4 servers, the <b>Device Type</b> field is occasionally displayed incorrectly. For example, an SD card might be displayed as 'Device Type: USB'. This happens when you do not specify a boot order explicitly with the device's order.	Specify a boot order with the device's order.	2.0(13e)
CSCva35700	<p>On the C460 M4 servers, the firmware version for HGST NVMe devices is not shown in the WebUI and CLI.</p> <p>This happens when one or more of the following devices is installed in the system:</p> <ul style="list-style-type: none"> <li>• Cisco UCS(SN150) HHHL 3800 GB NVMe based PCIe SSD</li> <li>• Cisco UCS(SN150) HHHL 1900 GB NVMe based PCIe SSD</li> <li>• Cisco UCS 3.8 TB 2.5 in NVMe based PCIe SSD</li> <li>• Cisco UCS 1.6 TB 2.5 in NVME based PCIe SSD</li> </ul>	Boot to the Host Upgrade Utility to see and update the firmware version.	2.0(13e)



CSCva57433	<p>The Intel Ethernet Converged Network Adapter X710-DA2 PCI Card is unable to launch the legacy iSCSI option ROM for Port 2. You can view this by searching the SEL log for the warning message:</p> <p>Not enough memory available to shadow a legacy option ROM.</p> <p>This happens when the system is configured for legacy boot, and the Intel Ethernet Converged Network Adapter X710-DA2 PCI Card is configured to the iSCSI boot. The card consumes extra runtime Option ROM memory space, and is able to load the Option ROM for only Port 1. Once the Option ROM for Port 1 is loaded, the remaining available Option ROM memory space is insufficient to load the Option ROM for Port 2.</p>	Use Port 1 for the legacy iSCSI boot with the X710-DA2 PCI card and disable the Option ROM for the rest of the slots and the LOMs.	2.0(13e)
CSCva62857	<p>On the C460 M4 servers, the product description for some HGST devices need to be updated.</p> <p>This happens when one or more of the following devices is installed in the system:</p> <ul style="list-style-type: none"> <li>• Cisco UCS(SN150) HHHL 3800 GB NVMe based PCIe SSD</li> <li>• Cisco UCS(SN150) HHHL 1900 GB NVMe based PCIe SSD</li> <li>• Cisco UCS 3.8 TB 2.5 in NVMe based PCIe SSD</li> <li>• Cisco UCS 1.6 TB 2.5 in NVME based PCIe SSD</li> </ul>	None.	2.0(13e)

CSCva67765	On the C460 M4 servers, after you change the VLAN settings using the Cisco IMC F8 configuration menu, the VLAN settings are correctly applied, but do not display completely on the configuration menu.	Wait for two minutes or more before pressing the <b>F5</b> button to refresh the screen.	2.0(13e)
CSCva69003	On the C240 M4 servers, no warning message is displayed in a dual VGA setup during the BIOS posting. This happens when the Off board VGA is set as primary or On board VGA is disabled.	None.	2.0(13e)
CSCva38014	On the C220 M4 and C240 M4 servers, the system could become unresponsive during BIOS posting, at the 'Configuring and Memory' stage, and logs the following warning:  A warning has been logged! Warning Code = 0x30, Minor Warning Code = 0x13, Data = 0x10100	<ol style="list-style-type: none"> <li>1. AC power off the server</li> <li>2. Unplug the cable</li> <li>3. Swap the CPUs</li> <li>4. Re-seat the DIMMs and then power the server back on.</li> </ol>	2.0(13e)
CSCuz94596	DIMMs are mapped out while testing the reboot process. This issue occurs only when Intel Xeon v4 processors and Montage DIMMs are used, where the DIMM round trip time is greater than expected for the DIMM.	None.	2.0(13e)
CSCuz75739	The system does not boot in the UEFI mode, when the OS is installed on SED enabled drives. This occurs when the system boots from these drives.	Press <b>F6</b> during system boot, and in the UEFI Shell, go to the partition which contains the OS EFI system partition. Boot the .efi bootloader file from this location.	2.0(13e)
CSCux47767	The C220 M4 and C240 M4 servers might become unresponsive during BIOS posting while configuring the platform hardware.  This happens when one of the PCIe devices stops responding due to Option ROM shadowing.	Soft-boot the server from the KVM console.	2.0(13e)

CSCva96780	A server with multiple adapters may fail to boot and appears in the BIOS setup menu. This happens on the first boot up after the placement policy is changed (when the vNIC placement policy is changed between the adapters).	Perform a warm reboot.	2.0(13e)
CSCuz66965	On C460 M4 servers, TPM version 1.2 fails to initialize after installing ESXi OS, and enabling and activating TPM and TXT.	None.	2.0(12b)
CSCvb11910	M3 servers may become unresponsive during system BIOS POST at the 'Configuring platform Hardware' stage with a CATERR error in the system event log.	Enable the Fault Resilient Booting (FRB) timeout for an automatic recovery, or DC power cycle the server to revive the server.	2.0(13e)

Table 24: BMC

Defect ID	Symptom	Workaround	First Affected Release
CSCuz15634	When the C460 M4 servers are used in a 2-CPU configuration, any NVMe drive FrontPCIe9 slot is not visible.	None.	2.0(13e)
CSCuy92283	LDAP user authentication fails when you download the CA Chain certificate to Cisco IMC, and certificate binding is enabled.	Convert the CA Chain certificate, which is in the .p7b format, to the PEM format before downloading to Cisco IMC.	2.0(13e)
CSCuz82915	When Redhat Linux is in the UI mode, and you enable the scroll key, it is not displayed on the KVM window.	None. Scroll lock is not supported by Redhat in the UI mode.	2.0(13e)
CSCuz43263	On the C240 M4 servers, the HDDs hosted by the Cisco HBA controllers are displayed a little late in the <b>pidump</b> output. This occurs immediately after the blades are powered on.	Wait for two minutes for the HDDs to display.	2.0(13e)
CSCvb12936	On the C460 M4 server, after an HUU firmware update, an NVME drive may not be found in the out-of-band storage configuration.	Reboot the server.	2.0(13e)

CSCuz61163	After upgrading the server firmware to 2.0(13e), the P1_THERMTRIP & P2_THERMTRIP sensors assertion critical events and deassertion events might be seen in the System Event Log. These are events are not valid and can be ignored.	None.	2.0(13e)
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Table 25: External Controllers

Defect ID	Symptom	Workaround	First Affected Release
CSCvb34628	<p>On rare occasions, while updating the firmware of the storage controller, it fails with a "Flash Programming error" resulting in a failed controller requiring Return Material Authorization (RMA).</p> <p>This only happens when the firmware update is issued while there is a battery super capacitor relearn in progress and the relearn completes before the flash write is complete.</p>	<p>If this issue occurs, do the following:</p> <ol style="list-style-type: none"> <li>1. Check the status of the battery/super capacitor learn cycle and wait for it to complete.</li> <li>2. Ensure that the "Next learn time" is not anytime in the next hour before issuing the firmware update.</li> </ol>	2.0(13e)
CSCuw55009	<p>On the C3260 servers, while upgrading to or downgrading from SAS firmware supporting 240 VD firmware, these issues are seen:</p> <p>During an upgrade, <i>auto-rebuild</i> does not get initiated, and during a downgrade, consistency check and secure erase operations do not resume.</p>	None.	2.0(9)
CSCux87057	<p>On the C3260 servers, the SAS expander firmware update occasionally displays the error message on the host if MSM is installed:</p> <p>Communication Lost on enclosure X.</p> <p>A similar error message is also seen in the storage log, in the standalone Cisco IMC web UI.</p>	None.	2.0(9h)

CSCuy05774	<p>On the C3X60 M4 server, when you attempt to shut down the server on the RedHat Linux OS 7.2, by default the OS boots to the web UI mode (Ctrl+Alt+F7), and the <b>power shutdown</b> command from BMC puts the system to sleep. Any action on the keyboard or the mouse brings the system back to life.</p> <p>The same behavior is observed when the user logs in as root.</p>	Use the shell prompt interface (Ctrl+Alt+F2) and log in as root.	2.0(13e)
CSCva82566	The Intel X520 network adapter may not display the vNIC path in the web UI or command line interface after service profile association.	None.	2.0(13e)
CSCuy16602	Resetting the storage controller during an ongoing I/O operation results in a BSOD.	None.	2.0(13e)
CSCuy37152	On the C220 M4 server, the OMB drive is not marked Bad by the Cisco UCSC-P-12Gbps SAS HBA controller after it fails discovery.	None.	2.0(13e)
CSCuz21377	On the C240 M4 servers, the Web UI and command line interface display only one connector display view (CN0) in the expander attached cases.	<p>See the storage logs and watch out for these strings:</p> <ul style="list-style-type: none"> <li>• BBBB BBBB000000 000000000000</li> <li>• BBBB0000000000 000000000000</li> </ul>	2.0(13e)
CSCva59776	<p>On the C240 M4 servers, a recently inserted drive's LED blinks even when another drive is issued a Locate LED command.</p> <p>This is observed with any operation with consecutive Locate LED commands, after a drive has been inserted.</p>	Note down the physical slot of drive before performing drive removal operation.	2.0(13e)

CSCva44733	When Option ROM is disabled in the PCI slot configuration, storelib library is unable to inventory the disks.	Keep the Option ROM enabled.	2.0(13e)
CSCva76667	On the C3X60 M4 server, the DHSP in transport ready state, after a server reboot, recognizes the DHSP as a foreign configuration.  This could occur when drive groups with DHSP are set to transport ready state, and the system reboots with the drives still connected.	Manually clear the foreign configuration on the DHSP drive using the storcli command line tool or the Storage Manager Web UI, or through the Cisco Management Web UI.	2.0(13e)
CSCva89367	On the C3X60 M4 server, the amber LED light switches on when the SSD boot drive in the rear is not present.	None.	2.0(13e)
CSCva93943	Foreign configuration import fails when a drive group is set to transport ready state and a partial set of drives are removed from the system and re-inserted back into the same system, followed by a system reboot.	Manually create or recreate the foreign configuration.	2.0(13e)
CSCva90939	On the 3260 server, the physical and logical sectors of physical drives in a MegaRAID Storage Manager (MSM) are shown incorrectly when drives are unzoned from one server and rezoned onto another server on the 3260 server node configurations.	Refresh the MegaRAID Storage Manager (MSM) screen. This displays the physical drive information correctly.  Alternatively, you can use the Cisco IMC storage page to view the physical drive's physical and logical information.	2.0(13e)
CSCuz79359	On the C460 M4 servers, the OS crashes when you use the NVIDIA GRID K1 P2401-502 graphics card, and the device may reboot or a PSOD diagnostic screen may appear. This happens when the system is running on the ESXi 6.0 update 2 and an APEX2800 PCoIP device.	Reboot the system.	2.0(13e)

CSCux20272	On the C240 M4 servers, Redhat Enterprise Linux OS version 6.5 fails to boot after installation. This happens when you install the OS using a PXE or DVD image.	During the OS installation, do not select the <b>Desktop Packages</b> option.	2.0(10b)
CSCva53443	Qlogic 8442T ISCSI LUN is not visible during SLES 12.1 Installation. This happens when the LUN has an inbox driver (version 2.7.6.2) for ISCSI.	None.	2.0(13e)
CSCva55926	Redhat Enterprise Linux OS version 7.2 fails to install on Qlogic 8442T ISCSI LUN with an 'Unknown error occurred' message.	None.	2.0(13e)
CSCva61443	On the C3260 server, the disk inventory occasionally shows incorrect slot or disks from the server storage inventory during the zoning operations.	Reboot the CMC or AC cycle the chassis.	2.0(13e)
CSCva95526	On the C3260 servers, while updating drive firmware for more than 20 drives, an IPC receive error message <b>Error Rcv</b> is displayed in the log. This issue is seen only when the number of drives exceeds 20, because the update takes more than two minutes to process.	None.	2.0(13e)
CSCva28947	On the C3260 server, when a drive is in Power-save mode and you try to update the drive firmware, it fails with an IMAGE_BAD_MISMATCH error.	Change power-policy to "Active" mode and reboot the host (if the drive is assigned and in power-save mode).	2.0(13e)
CSCva80462	The Intel X710 adapter MAC address is displayed as "000000000000". This happens when the system has two Intel X710 cards, one Intel i350 mLOM adapter, and one Intel i350 LOM, and you enable OptionROMs for all these adapters.	Disable the OptionROM for the Intel i350 LOM or Intel i350 mLOM adapter cards.	2.0(13e)

CSCvb24327	When more than 20 drives are zoned to a server while the server is online, it takes a long time (a maximum of 7 minutes) for the drives to be discovered and displayed.	None.	2.0(13e)
CSCva61275	<p>On activating the firmware on SSDs, the following critical error is displayed:</p> <pre>Controller X on server X is inoperable. Reason: CIMC didn't detect storage controller</pre> <p>This happens when you activate the following following models of HGST NVMe SSDs:</p> <ul style="list-style-type: none"> <li>• UCSC-F-H38001</li> <li>• UCS-PCI25-38001</li> </ul> <p>This issue occurs because the active slot firmware on the NVMe SSD reverts to the firmware present on the read-only slot. If the firmware on the read only slot does not support Out-Of-Band, this NVMe is not reported in the Out-Of-Band inventory stage and results in the Cisco IMC becoming unresponsive.</p>	None.	2.0(13e)
CSCvb00471	Windows OS crashes with a Blue Screen Of Death due to heavy IO. Multi-bit ECC errors found in the logs.	None.	2.0(13e)
CSCvb20238	12G SAS Controller encounters an error and resets, which causes the server to become unresponsive.	None.	2.0(8d)

Table 26: External OS

Defect ID	Symptom	Workaround	First Affected Release
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CSCuz28948	On the C460-M4 servers, due to ESXi vFlash on the SSD LSI driver issue, the RedHat Enterprise Linux virtual machine crashes. This happens when several IOs are running with backup software.	Disable the vFlash.	2.0(13e)
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Table 27: VIC Firmware

Defect ID	Symptom	Workaround	First Affected Release
CSCuu59408	On the Nexus 7018 switch version 7.2.0 (where the fabric extender N2232PP uplink is connected to only one F2 Module port, and the host interface connected to the physical host UCS is shared with the storage virtual device), reloading the F2 module post the module uplink to the host interface results in the DCBX PDU acknowledgment getting lost.	In the owner virtual device of Nexus 7018 switch, flap the host interface (HIF) port of fabric extender so that the DCBX exchange is initialized.	2.0(6d)
CSCuz73539	On the C460 M4 server, the Cisco UCS VIC 1385 adapter is not accessible when usNIC is enabled. This occurs in the following scenarios: <ul style="list-style-type: none"> <li>• The usNIC is enabled on vNICs configured on the Cisco UCS VIC 1385 adapter</li> <li>• The VIC adapter card is placed in a PCIe x8 slot (Slot 4 on the C460 M4 server)</li> <li>• The vNICs have <b>pci-link</b> as the default configuration on Cisco IMC</li> </ul>	Set the <b>pci-link</b> value to 0 in each vNIC configured on the Cisco IMC.	2.0(13e)

**Table 28: Web Management**

Defect ID	Symptom	Workaround	First Affected Release
CSCuz39581	You cannot launch a Java based KVM on a browser having Java 8 Update 77.	Use the latest Java version available, which is Java8 Update 92 or 91. Or use Java 8 Update 45 or below.	2.0(13e)
CSCuz69464	On the C3X60 M4 server, Cisco IMC web UI and HTML KVM console crash when you use the Google Chrome web browser.	Use a different web browser.	2.0(13e)
CSCvb14184	On the C3X60 M4 server, using the Microsoft Internet Explorer, the power profile table cannot be enabled or disabled on the <b>Power Management</b> page.	Use a different web browser.	2.0(13e)
CSCuz27779	On the C240 M3 server, the security scanning tool recognizes the Transport Layer Security (TLS) version 1.0 as a vulnerability.	Switch off TLS 1.0 on the browser.	2.0(3f)

**Open Caveats in Release 2.0(10b)**

The following defects are open in release 2.0(10b):

**Table 29: VMware**

Defect ID	Symptom	Workaround	First Affected Release
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CSCux87650	On servers with VMware ESXi 5.5.0 or later, the storecli is able to identify the adapter but unable to communicate with the storage controller.	<p>Disable the affected module from the ESXi command line and use the following command to communicate with the controller:</p> <ol style="list-style-type: none"> <li>1. <code>esxcli system module set --enabled=false --module=lsi_mr3</code></li> <li>2. <code>~# esxcli system module set --enabled=false --module=lsi_mr3</code></li> <li>3. <code>~# reboot</code></li> </ol>	2.0(10b)
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**Table 30: BIOS**

Defect ID	Symptom	Workaround	First Affected Release
CSCux01460	After you perform a power characterization, under advance power profile it displays an incorrect power range to cap the memory. This results in ineffective memory domain power capping.	Run the platform power capping instead.	2.0(10b)

**Open Caveats in Release 2.0(9d)**

The following defects are open in release 2.0(9d):

**Table 31: Web Management**

Defect ID	Symptom	Workaround	First Affected Release
CSCuv51153	On the C3260 server, you may be prompted to logout from the UI session indicating that a session is already active.	Manually clear the browser cookies.	2.0(7d)

**Open Caveats in Release 2.0(9c)**

The following defects are open in release 2.0(9c):

Table 32: BMC

Defect ID	Symptom	Workaround	First Affected Release
CSCux43338	On the Mozilla Firefox web browser 42.0, when you click the 'Paste Server Certificate' option on the Web UI, the pop-up dialog box eclipses the 'Save Certificate' and 'Cancel' buttons.	Move the dialog box so as to make the 'Save Certificate' and 'Cancel' buttons visible, or use a different web browser such as Google Chrome or Microsoft Internet Explorer.	2.0(9c)
CSCuw76431	While installing Red Hat Enterprise Linux 7.1 operating system on the UCS C-Series servers, a critical SEL entry similar to this is created: <i>The 2015-10-12 10:35:07 critical "System Software event: OS Event sensor, unknown event"</i> .	None.	2.0(9c)

Table 33: VIC

Defect ID	Symptom	Workaround	First Affected Release
CSCuv42027	The Priority Flow Control (PFC) mode is always set to 'Standard' on the Cisco VIC adapter if the corresponding switchport's PFC mode is set to ON. This results in the PFC mode not being enabled.	Set the switchport's PFC mode to 'Auto'.	2.0(9c)
CSCuw17399	When you check the transceiver details after an active optical cable of length seven meters is connected from the Cisco UCS VIC 1387 adapter to a Nexus 3016Q switch, it fails to detect the QSFP type. When we check the transceiver details, it does not detect the QSFP type of connector.	None.	2.0(9c)

## Open Caveat in Release 2.0(8d)

The following defect is open in release 2.0(8d)

**Table 34: LSI**

Defect ID	Symptom	Workaround	First Affected Release
CSCuv67943	On the C3160 server, the MSM Application displays a pop-up message reporting a defective slot. However, the error is displayed for one slot number below it. For instance, if slot number 31 is a defective slot, the error displays slot 30 as the defective slot.	Add a single number to the error message to view the correct slot number.	2.0(8)

## Open Caveats in Release 2.0(4c)

The following defects are open in release 2.0(4c):

**Table 35: Cisco IMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCu195481	The DIMM temperature sensors are not displayed in the Web UI or CLI interfaces.	No workaround. However, use raw IPMI commands to access these sensor readings, which are located in the Cisco Extended SDR.	2.0(4c)

**Table 36: BIOS**

Defect ID	Symptom	Workaround	First Affected Release
CSCut37666	In the JBOD mode, after creating the precision boot order for the HDDs connected to the Cisco 12G Modular SAS Pass through controller, the HDDs do not appear in the created order. This issue applies to LSI controllers with JBOD capability.	Use F6/Setup Boot order control for controlling the System boot order	2.0(4c)

**Table 37: LOM**

Defect ID	Symptom	Workaround	First Affected Release
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CSCun71765	<p>The 10GE LOM port (X540 based) flaps when the host reboots while the CIMC is in Shared LOM 10G network mode. This event may drop connections to the CIMC including the Virtual Media and vKVM.</p> <ul style="list-style-type: none"> <li>• CIMC network mode is Shared LOM 10G</li> <li>• Host reset 10GE LOM PHY. Usually happens on host reboot, driver load/unload or speed change</li> </ul>	Do not use Shared LOM 10G network mode if using Virtual Media or vKVM during host boot.	2.0(4c)
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Table 38: HUU

Defect ID	Symptom	Workaround	First Affected Release
CSCus94537	HDD firmware update using HUU takes time as the HDD firmware is updated sequentially. This increases the time to upgrade a server which has many HDD	None	2.0(3d)

## Open Caveats in Release 2.0(3d)

The following defects are open in release 2.0(3d):

Table 39: CIMC

Defect ID	Symptom	Workaround	First Affected Release
CSCuq11190	Slow network performance between VMs in OVM 3.3.1.	None.	2.0(3d)

Table 40: BIOS

Defect ID	Symptom	Workaround	First Affected Release
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CSCup56423	Actual boot order does not have the information to identify which LUN is assigned to LSI sSATA, LSI SATA, and different HDDs in AHCI mode.	Set the ROM mode option to UEFI only.	2.0(3d)
CSCup51154	The HII interface for 9300 is blank when 9300 external LSI adapter is present and ROM mode option is enabled.	None.	2.0(3d)
CSCuq15093	Unable to choose the EFI boot options using the PCHStorage policy device from Cisco IMC, when BIOS boot mode is in EFI and EFI OS is installed in any of the SATA drives.	Press F6 to choose the required EFI boot option to boot from.	2.0(3d)

### Open Caveats in Release 2.0(2c)

The following defects are open in release 2.0(2c):

Defect ID	Symptom	Workaround	First Affected Release
CSCuq56061	The WebUI stops responding when BIOS/CMC is updated using Internet Explorer 10.0 browser client.	Launch the WebUI using any other version of Internet Explorer other than 10.0 or use any other browser client.	2.0(2c)
Defect ID	Symptom	Workaround	First Affected Release
CSCuq15528	In the legacy boot mode, a few boot options do not appear in the menu or boot override page. This is an intermittent issue and happens when there are multiple boot options with SATA/RAID connected and UEFI boot options are disabled in the boot options.	If you want to boot from a particular option which does not appear on the menu or the override options, run the policy from Cisco IMC, or press <b>F2</b> and set the device as the first boot device. All the devices will be listed correctly on the boot options page.	2.0(2c)

### Open Caveats in Release 1.4(7)

The following defects are open in release 1.4(7):

Table 41: CIMC

Defect ID	Symptom	Workaround	First Affected Release
CSCud18756	LSI storage controllers with external ports (-8e cards) do not show up in CIMC local storage management.	None.	1.4(7)

## Known Behaviors

The following section lists known behaviors.

### Known Behaviors in Release 2.0(13h)

The following defect is a known behavior in release 2.0(13h):

Table 42: Cisco IMC

Defect ID	Symptom	Workaround	First Affected Release
CSCvc19789	Power characterization triggers automatically when you update Cisco IMC firmware from 2.0(9) to 2.0(13) with BIOS firmware still in version 2.0(9).	None.	2.0(13h)

### Known Behaviors in Release 2.0(13e)

The following defects are known behaviors in release 2.0(13e):

Table 43: BIOS

Defect ID	Symptom	Workaround	First Affected Release
CSCux72847	PXE boot from second 10 GE LOM port does not work. This issue may occur when PXE boot is configured to boot from the second 10GE LOM port, and the SAS controller Option ROM is also enabled and loaded.	Disable the SAS or LOM0 (1GE) Option ROMs to free up enough space to load both the 10GE Option ROMs.	2.0(13e)
CSCuy15543	On the Cisco IMC Web UI and CLI the actual boot order is displayed incorrectly when you configure the <b>IpmitoolBootOrder</b> from Cisco IMC using the <b>Configpolicy.xml</b> file that is used to configure the precision boot order policy.	None. The incorrect boot order should be ignored. The functionality works as expected and the BIOS setup displays the actual boot order correctly.	2.0(9e)



Table 44: BMC

Defect ID	Symptom	Workaround	First Affected Release
CSCux92616	With the client system running Java version 1.8 and update 66, KVM crashes while trying to activate vMedia and accept the pop-up prompt for unencrypted vMedia session.	Enable virtual media encryption using the Cisco IMC Web UI to avoid this pop-up.	2.0(13e)

Table 45: External Controllers

Defect ID	Symptom	Workaround	First Affected Release
CSCuy62185	Unable to access the <b>Fast Utility</b> option by pressing the <b>Ctrl+Q</b> keys, when the port is configured with iSCSI.	Enable port 60/64 emulation under USB configuration in BIOS.	2.0(10b)
CSCuz55512	SLES11 SP3 OS legacy installation becomes unresponsive on the C220 M4 and C240 M4 servers with inbox drivers for UCSC-PSAS12GHBA.	None. Use async drivers.	2.0(13e)
CSCuy12854	All Drives except boot drives are marked as <b>Offline</b> by UCSC-PSAS12GHBA on Windows.	None.	2.0(13e)
CSCuv51716	The C240 M4 servers connected to a Magma Chassis GPU Expander with Multiple Tesla (k40/K80) cards and running RedHat Enterprise Linux 6.x operating system occasionally become unresponsive during a reboot.	Hard reboot the server.	2.0(9c)
CSCuw86750	When physical drives containing all virtual drives are removed or replaced, the system displays a fault "configuration lost" which remains unchanged until a virtual drive is created or the configuration is cleared using WebBIOS or Ctrl +R function.	Reboot to see if the error is cleared. In most cases, it gets cleared.  If the error is not cleared, create a virtual drive or clear configuration using Web BIOS or the Ctrl+R function.	1.5(1)

CSCux44506	If a boot virtual drive is marked hidden after setting a different virtual drive as boot drive, and if the system is running from the previously configured boot virtual drive, the system may shut down based on the operating system.	None.	2.0(9c)
CSCuz61344	While trying to login into standalone Cisco IMC version 2.0.9 using CLI or GUI the interface becomes unresponsive. Sometimes an error is displayed, but most times it is unresponsive. This happens due to LDAP group authorization in Cisco IMC.	Remove the affected LDAP group from the Group Authorization options or resolve the circular loops in the AD database.  Modify search-group-depth to a value between 1-3.	2.0(9d)
CSCuz93611	When a Virtual Drive or a Drive Group is set to Transport Ready and a member physical drive is removed, the Virtual Drive or Drive Group cannot be deleted as it is blocked and also Transport Ready state cannot be cleared since Transport Ready is only for Optimal VD or DG.	Remove all members of the VD/DG and reinsert and then continue with next steps.	2.0(13e)
CSCva17225	Even after the <b>PowerSave</b> command has been sent to all the physical drives, Samsung and SanDisk SAS SSDs will remain active. This is because they do not support the Start Stop Unit (SSU) command.	None.	2.0(13e)
CSCuw55009	On the 3260 servers, while upgrading to or downgrading from SAS firmware supporting 240 VD firmware, these issues are seen:  During an upgrade, <i>auto-rebuild</i> does not get initiated, and during a downgrade, consistency check and secure erase operations do not resume.	None.	2.0(9)

Table 46: Firmware Upgrade

Defect ID	Symptom	Workaround	First Affected Release
CSCuz48865	Unable to downgrade the host firmware from 2.0(13x) version to 2.0(2x) versions.	Downgrade the firmware from 2.0(13x) to 2.0(6f) first and then downgrade it to 2.0(2x) versions.	2.0(13e)

Table 47: LSI

Defect ID	Symptom	Workaround	First Affected Release
CSCun50408	Creating VD from StorCli and WebBIOS, the default disk policy shown after creation is inconsistent in different UI. MegaRAID Storage Manager shows Unchanged and StorCli shows "Disk's default"	None. Both Unchanged and Disk's Default means the same in this case. Cisco supported Drives have <b>disk cache policy = Disabled</b> so in this case the Disk's Default or Unchanged refer to the same indicating the Disk cache is disabled.	2.0(4c)
CSCuq35761	LSI applications such as StorCli and MSM and CIMC Storage management allows JBOD with Operating system or File system to be converted to Unconfigured Good drives without meaningful error message indicating there could be data loss in such cases.	Users should be aware that there is going to be data loss when JBOD which has OS or File system is converted to Unconfigured Good. LSI Applications like MSM and StorCli prompt users with "Are you sure" message so users need to be careful to understand there will be data loss in such cases if they chose to convert JBOD with OS or File system to Unconfigured good drives. CIMC storage management allows JBOD to be converted to Unconfigured Good without any Warning Pop-Up message. Again users need to be make sure that there is no OS or Filesystem when they choose to convert JBOD to Unconfigured Good drives.	2.0(4c)
CSCus82741	LSI SWRAID driver with RHEL displays "Buffer IO Error" in the messages file when RAID INIT operation is done.	None.	2.0(4c)

**Table 48: XML API**

Defect ID	Symptom	Workaround	First Affected Release
CSCva77821	Few components such as BIOS, BMC, CMC fail to get activated while upgrading from 2.0(7e) to 2.0(13e) using non-interactive HUU.	Upgrade from 2.0(7e) to 2.0(9l), then upgrade to 2.0(13e).	2.0(13e)

## Known Behaviors in Release 2.0(12b)

Following is the known behavior for Release 2.0(12b):

**Table 49: Cisco IMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCuz30387	On the C460 M4 servers, host serial port (PMCLI) does not work when the host is powered off.	Power on the host.	2.0(12b)

## Known Behaviors in Release 2.0(10e)

Following is the known behavior for Release 2.0(10e):

**Table 50: External Controllers**

Defect ID	Symptom	Workaround	First Affected Release
CSCuy42320	If firmware is downgraded to legacy firmware, or Transport Ready is disabled in the new firmware, Transport Ready is cleared in NVRAM. But if the firmware is not a legacy firmware or it does not have Transport Ready implementation, Transport Ready is not cleared. In this case if Transport Ready aware firmware is flashed again, Transport Ready DGs will reappear. You are then required to manually clear Transport Ready.	None.	2.0(10b)

CSCux62038	When the Qlogic QLE8362 card is populated in the set-up, the server is unable to boot to BIOS (F2 menu).	Use Cisco IMC to configure all BIOS related settings.	2.0(10b)
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Table 51: BIOS

Defect ID	Symptom	Workaround	First Affected Release
CSCuy46516	When connected to a Magma chassis with the K80 populated in the chassis, intermittently the server becomes unresponsive during a BIOS POST.	None.	2.0(10b)

### Known Behaviors in Release 2.0(9d)

Following are the known behaviors for release 2.0(9d):

Table 52: External Controllers

Defect ID	Symptom	Workaround	First Affected Release
CSCuu56166	On the C3260 server, after you perform expansion or raid-level migration operations Virtual Drives (VD) do not display the updated size.	<p>Complete the following steps:</p> <ol style="list-style-type: none"> <li>1. Unclaim the disk from usage by powering off all the virtual machines before running the following command:  <code>~ esxcli storage core claiming unclaim ?t device ?d naa.xxx</code></li> <li>2. Ensure that the file naa.xxx disk is not located under <code>/vmfs/devices/disks</code></li> <li>3. Reclaim the disk again using the following command:  <code>~ esxcli storage core adapter rescan ?A vmhbaX</code></li> <li>4. Check whether or not the disk is added back with the new size.</li> </ol>	2.0.7(d)

## Known Behaviors in Release 2.0(9c)

Following are the known behaviors for release 2.0(9c)

**Table 53: BMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCun99348	When virtual KVM is disabled, the <b>Play Recording</b> action on the <b>Troubleshooting</b> screen fails.	Enable <b>Virtual KVM</b> on the <b>Remote Presence</b> tab.	2.0(1)
CSCuv08978	Management port MTU cannot be configured due to hardware limitations.	None.	1.5(4)
CSCuj36245	After restoring to factory defaults, when you import the BIOS tokens on the target machine, the values remain unchanged.	Power on the target machine and try the import operation after the BIOS post is completed.	2.0(1)

**Table 54: BIOS**

Defect ID	Symptom	Workaround	First Affected Release
CSCun99297	Cannot select specific USB thumb drive under boot option priorities.	Use F6 from the boot selection menu to select specific USB drives.	2.0(1)
CSCuo08591	System becomes unresponsive in the POST after the SD card removal when the host is powered on.	<ol style="list-style-type: none"> <li>1. AC cycle the system after removing the SD card.</li> <li>2. Reinsert the SD card.</li> </ol>	2.0(4c)
CSCun91835	Boot order varies when enabling or disabling the Option ROM.	None.	2.0(1)
CSCur61234	In the secure boot mode, a security violation error is triggered. This issue could also occur while trying to perform an AC power cycle, when the power characterization is enabled in the UEFI secure mode.	None.	2.0(4)

**Table 55: LSI**

Defect ID	Symptom	Workaround	First Affected Release
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CSCum87051	Random behavior of system freeze at boot @ BIOS POST screen for around 2 minutes followed by "Waiting for Battery Pack" message on LSI Ctrl-R BIOS for another 2 minutes. This only happens if there is a learn cycle pending for the supercap and the host is restarted (either AC/DC/reboot). At all other reboot/power cycle, this does not happen.	There is no work-around at this time.	2.0(4c)
CSCuu86314	On M4 servers, the iMR (Zero-memory) RAID Controller supports up to 32 virtual drives, but the command to create virtual drives in a single drive group allows only 16 virtual drives.	None. The RAID controller supports 32 virtual drives across all drive groups and only 16 drives in a single drive group.	2.0(6)
CSCum87232	Cisco IMC storage BBU info shows the Pack Energy value below the design capacity. This is also seen in the <b>storcli /cX /cv show all</b> command. On the current shipping 6G SAS RAID Controllers with Supercap, the Pack energy is always above the design capacity. This is a change in behavior confuses the user and makes the user think the supercap has or is going bad and gets a worrisome situation of the data integrity.	There is no work-around at this time. This is just a display issue and does not impact the actual functionality or data integrity.	2.0(4c)

CSCuw69844	On the servers with 2008M-8i, the VMware ESXi 5.5 Update 1 install fails while loading the installer.	<ol style="list-style-type: none"> <li>1. Go to System BIOS (Press F2)</li> <li>2. Choose PCI configuration &gt; MMCFG</li> <li>3. Change the value from Auto to 2 GB</li> <li>4. Change the value of Memory Mapped IO above 4G to Enabled</li> <li>5. Save and reboot the system.</li> </ol>	2.0(7)
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Table 56: External Controllers

Defect ID	Symptom	Workaround	First Affected Release
CSCuw42070	The MegaRAID Storage Manager fails to detect a new 6TB HGST drive with yellow amber LED. This happens when the drive is corrupted and displays an SAS link failure.	None.	2.0(8)
CSCuw55045	SAS Flash and MSM utilities are unable to downgrade the IT firmware if the Network Virtualization (NV) data version changes. To downgrade the NV data version, use the FlashOEM tool bundled with the Host Upgrade Utility (HUU).	Do not use SAS Flash and MSM utilities to downgrade the IT firmware. Use these to only use the HUU.	2.0(9c)
CSCuw09414	Powering off Virtual machines (VM) with the Virtual Graphics Processor unit (vGPU) takes 90 to 120 seconds in VMware ESXi 6.0.	Power off smaller number of VMs at one time.	2.0(4c)

Table 57: External OS

Defect ID	Symptom	Workaround	First Affected Release
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CSCuw80507	According to the knowledge base at <a href="https://access.cisco.com/solutions/21322">https://access.cisco.com/solutions/21322</a> , using IPMI commands on the Red Hat Enterprise Linux results in the over use of CPU resources.	Add the following command at the end of the kernel line in /etc/grub.conf: <code>ipmi_snpid_max_busy_us=&lt;time in microseconds&gt;</code>	1.5(2)
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## Known Behaviors in Release 2.0(8d)

Following are the known behaviors for release 2.0(8d):

**Table 58: BMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCul16923	The fault code F0181 is raised by CIMC when the local disk is removed while the rack server was in use. This fault is visible through CIMC WebUI, CLI and SNMP interfaces. But the same fault is not retrievable through the XML API interface.	None.	1.5(4)
CSCuj40520	Upgrading firmware with Host Upgrade Utility (HUU) can cause temporary storage faults while the upgrade is in progress. These faults are benign and will clear once the upgrade is complete.	None.	1.5(4)

**Table 59: Cisco IMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCuq23984	Cisco IMC does not respond during OOB update of utility virtual drives (SCU/HUU/Drivers) on flex flash.	It is recommended that host reboot actions are not performed while running OOB update of utility virtual drives on flex flash.	2.0(3d)

**Table 60: Web Management**

Defect ID	Symptom	Workaround	First Affected Release
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CSCuv63101	User gets logged out of the Web UI occasionally, after upgrading the Cisco IMC firmware from 2.0(6) to 2.0(8). This happens when browser cookies are not cleared.	Clear the browser cookies.	2.0(7)
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**Table 61: BIOS**

Defect ID	Symptom	Workaround	First Affected Release
CSCun00121	Cannot create boot option for partitions in SD card.	None.	2.0(1)
CSCul84767	The system locks up while running memtest86 from memtest.org. The problem is seen only with memtest86 from memtest.org.	Do not use memtest86 from memtest.org on C460 M4. Please use PassMark or any other memory test tools that have the support for IvyBridge EX platforms instead.	2.0(4c)
CSCun02543	Port number attributes are missing in the actual boot order for the FC and FCOE cards.	None.	2.0(1)

**Table 62: External Controllers**

Defect ID	Symptom	Workaround	First Affected Release
CSCut92393	On the C240 M4 servers, on rare occasions, the Cisco 12 Gigabyte SAS Modular RAID Controller displays an error when you try deleting a virtual drive.	None.	2.0(6)

CSCuv34371	When creating new virtual drives of any RAID type, the write cache policy defaults to 'write through' even with a fully functional BBU or super-capacitor battery. When a BBU is present, the default write cache policy should be 'write back with good BBU'. This happens on the C240 M4 and C220 M4 servers with 12 gigabyte SAS mezzanine RAID controllers.	In the standalone mode, on the Ciso IMC storage tab of the Web UI, edit the virtual drive to set the write caching policy to 'write back with good BBU'. You can also modify the setting using the LSI command line option <b>rom config utility</b> .	2.0(3d)
CSCuv36714	The MegaRAID Storage Manager displays consistency check errors on RAID 1 volume in Windows. This happens when you try writing data to the drive 20 to 30 minutes after a consistency check (which appears to be normal).	This is a known Microsoft limitation. For more information, see <a href="https://support.microsoft.com/kb/271398">https://support.microsoft.com/kb/271398</a> .	2.0(4c)

Table 63: External GPU Expanders

Defect ID	Symptom	Workaround	First Affected Release
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CSCuv04922	On the C240 M4 server, A "PCI Resource Error" message is seen with the Magma Chassis GPU Expander configuration due to a CPU I/O space limitation which supports a maximum of 64K. This happens when all or some of the PCI slots are occupied by different third party adapters.		2.0(4c)
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For Nvidia Grid K1 configuration: (where one Nvidia Grid K1 is internally connected on the C240 M4, and two Nvidia Grid K1 adapters are externally connected through the Magma Chassis)

- Local Boot: Cisco 12 Gigabyte SAS Modular RAID controller (HBA slot), Intel I350 LOM (L slot), Nvidia Grid K1 (slot2), Magma Expander HBA (slot5), Teradici APEX2800(slot6), Fusion IO drive(slot4)
- iSCSI Boot: Intel i350 LOM (L slot), Nvidia Grid K1(slot2), Magma Expander HBA (slot5), Teradici APEX2800(slot6), Fusion IO drive(slot4)
- SAN Boot: CISCO VIC1227(MLOM), Nvidia GRID K1 (slot2), Magma Expander HBA (slot5), Teradici APEX2800(slot6), Fusion IO drive(slot4)

For Nvidia Grid K2 configuration: (where one Nvidia GridK2 is internally connected on the C240 M4, and four Nvidia Grid K2 adapters are externally connected through the Magma Chassis)

		<ul style="list-style-type: none"> <li>• Local Boot: CISCO 12G SAS Modular RAID controller (HBA slot), Intel I350 LOM (L slot), Nvidia GRID K2 (slot2), Magma Expander HBA (slot5), Teradici APEX2800(slot6), Fusion IO drive(slot4)</li> <li>• iSCSI Boot: Intel i350 LOM(L slot), Nvidia Grid K2 (slot2), Magma Expander HBA (slot5), Teradici APEX2800(slot6), Fusion IO drive(slot4)</li> <li>• SAN Boot: CISCO 1227 SAN (MLOM), Nvidia Grid K2 (slot2), Magma Expander HBA (slot5), Teradici APEX2800(slot6), Fusion IO drive(slot4)</li> </ul>	
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### Known Behaviors in Release 2.0(7d)

Following are the known behaviors for release 2.0(7d)

**Table 64: Cisco IMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCuv34476	On the 3260 server, KVM fails to launch and displays the following message: <i>"Unable to Launch the application"</i> . This happens after swapping or changing a CMC and making it active or master.	Regenerate the certificate using the Web UI or CLI and reboot the CMC.	2.0(7d)

CSCuv28734	On the 3260 server, boot or crash file download fails with a Network error, when you use the Chrome 43 version browser for downloading.	Use other browsers or use Chrome version 42.	2.0(7d)
CSCuu50850	On the 3260 server, you cannot establish an IPMI session to a BMC when BMC is reset to factory default.	Reconfigure user using active CMC.	2.0(7d)
CSCur77980	On the 3260 server, unable to configure users after resetting CMC to factory defaults. This issue occurs when you attempt to configure a user with a different index number after the reset.	Use the same index number that was used before the reset to configure a user.	2.0(7d)
CSCuu43406	On the 3260 server, the server does not respond and displays an error message when the GUI is idle for a few minutes. This happens when you use Chrome Version 41.	Use other browsers or use Chrome version 42.	2.0(7d)
CSCuu43330	On the 3260 server, unable to login to Web UI when the login screen is left idle for a few minutes. This happens when you use Chrome Version 41.	Use other browsers or use Chrome version 42.	2.0(7d)
CSCur60690	On the 3260 server, configuring a user using the CLI or Web UI fails with the following message: <b>"Error: User with same name &lt;username&gt; already exists."</b> When a user is configured using the IPMI on BMC the local user, database may not sync with the active CMC. Hence when the same user is configured with a different index on active CMC this error occurs.	Check for the user index number on the local user database on BMC using IPMI and use the same index number to configure the user using the active CMC's CLI or Web UI.	2.0(7d)

Table 65: External Controllers

Defect ID	Symptom	Workaround	First Affected Release
CSCuu36101	<p>On the 3260 server, MegaRAID card does not support raid level migration when the card has maximum allowed number of virtual drives created on it.</p> <p><b>Note</b> Note This is a limitation of the MegaRAID software stack that requires a temporary or ghost VD to do the RLM operation.</p>	Do not create maximum number of allowed virtual drives.	2.0(7d)

## Known Behaviors in Release 2.0(6d)

Following are the known behaviors for release 2.0(6d):

Table 66: External Controller

Defect ID	Symptom	Workaround	First Affected Release
CSCui64842	<p>Hardware configuration settings of Broadcom 57810 adapters reset after firmware update. This issue happens on all 57810 adapters. The following settings are reset:</p> <ul style="list-style-type: none"> <li>• DCB Protocol</li> <li>• SRIOV</li> <li>• Number of VFs per PF</li> </ul>	Reconfigure the settings.	1.5(3)



CSCuu35160	While downgrading or upgrading LSI firmware, Cisco IMC log reports several CMD over OOB errors. This is expected behavior and the error messages are due to the controller being briefly unresponsive on out-of-band during firmware update.	None.	2.0(3e)
CSCuu36101	<p>MegaRAID card does not support raid level migration when the card has maximum allowed number of virtual drives created on it.</p> <p><b>Note</b> This is a limitation of the MegaRAID software stack that requires a temporary or ghost VD to do the RLM operation.</p>	Do not create maximum number of allowed virtual drives.	2.0(6d)

Table 67: VIC

Defect ID	Symptom	Workaround	First Affected Release
CSCuu56903	Data traffic between VMs where the vNICs have the same uplink on VIC 1225, could not be switched upstream.	<p>Assign vnic0,vnic1 pinned to Uplink-1 and vnic6,vnic7 to Uplink-2.</p> <p><b>1.</b> Note This may affect the physical uplink redundancy.</p>	2.0(3e)

### Known Behaviors in Release 2.0(4c)

Following are the known behaviors for release 2.0(4c):

Table 68: Cisco IMC

Defect ID	Symptom	Workaround	First Affected Release
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CSCut76388	For the C220 M4 and the C240 M4 servers, power consumption with 1400W PSUs fluctuates when power cap enabled and the power cap value is set towards a lower value within the allowed range.	Set a higher power cap value. For example, if the allowed power cap range is 350W-650W, then set a value higher than 500W.	2.0(4c)
CSCuq39610	The following error appears while configuring SD cards: ERROR_METADATA_EXISTS	Remove and insert the SD card and re-configure. If the error persists, replace the SD card.	2.0(3d)

Table 69: BIOS

Defect ID	Symptom	Workaround	First Affected Release
CSCur74413	Watchdog timer policy values change while upgrading or downgrading the BIOS firmware between 2.0(3d) and 2.0(3f) versions.	Reset the values after the BIOS firmware upgrade or downgrade.	2.0(3d)
CSCut05524	TxT getting disabled after few reboots.	Use the TPM Clear command in the BIOS to reset the counter and start over again.	2.0(3e)

Table 70: LSI

Defect ID	Symptom	Workaround	First Affected Release
CSCus54600	LSI9271-8i shows Storage Controller Inoperable? fault in UCSM (PMU Fault present in event log)	Replace the LSI9271-8i adapter	2.0(3i)
CSCus68862	Ubuntu (all versions available today) does not have the inbox drivers for any of the IT-based adapters.	None	2.0(3d)

Table 71: VIC

Defect ID	Symptom	Workaround	First Affected Release
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CSCut78400	Resetting a VIC adapter to default configuration, using the CLI command <code>adapter-reset-defaults</code> , may result in changing of the default MAC addresses. This may require configuration of the DHCP and OS to correct the changes to the default MAC addresses. The occurs for releases 2.0(4) and later due to moving of the default MAC address range to address certain VIC relates issues.	None.	2.0(4c)
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**Table 72: External OS**

Defect ID	Symptom	Workaround	First Affected Release
CSCuq75761	During installation of Red Hat Enterprise Linux 7, SAN LUNs mapped will not be visible. Server experiences kernel panic, when Red Hat Enterprise Linux 7 OS is installed on local storage and a SAN LUN is mapped.	No workaround. A driver update disk may be available later to address this issue.	2.0(2c)

**Table 73: External Controllers**

Defect ID	Symptom	Workaround	First Affected Release
CSCuq43129	OL 5.9 and OL 5.10 operating systems do not recognize QLE2672 SAN LUN during installation.	None.	2.0(3d)

CSCuq60947	Citrix XenCenter 6.2 configured VM instances fails to boot when driver is passed and vGPU is disassociated.	<p>Perform the following steps to disassociate vGPU from VM instance:</p> <ol style="list-style-type: none"> <li>1. From the VM console, choose Start &gt; Control Panel &gt; Hardware and Sound &gt; Device Manager &gt; Display Adapters &gt; Nvidia K1 or K2.</li> <li>2. Right click and choose <b>Uninstall</b>.</li> <li>3. Power off the VM from XenCenter console.</li> <li>4. In the XenCenter console, open VM Properties.</li> <li>5. Right click the GPU in left column and choose GPU type: &gt; None.</li> <li>6. Boot up the VM.</li> </ol>	2.0(3d)
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### Known Behaviors in Release 2.0(3d)

Following are the known behaviors for release 2.0(3d):

**Table 74: BIOS**

Defect ID	Symptom	Workaround	First Affected Release
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CSCuq99268	For the ESXi 5.5 and later updates, you can install the OS on a disk behind Cisco 9300 HBA using the native inbox driver (lsi-msgpt3). However, lsi_msgpt3 is not fully supported. Therefore it must be disabled and the async drivers must be installed.		2.0(3d)
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		<p>After installing the OS, complete the following steps to install the mpt3sas drivers:</p> <ol style="list-style-type: none"> <li>1. <b>#esxcli software vib install -v file:{FULL_PATH_TO_YOUR_VIB(_xxxvib)}</b></li> <li>2. Disable lsi-msgpt3 (native driver) using the following command: #esxcfg-module ?d lsi-msgpt3</li> <li>3. If the system is restarted, as a rule, the mpt3sas driver should take over. Verify this using the following command:  ~ # <b>esxcli storage core adapter list:</b> HBA Name Driver Link State UID Description ----- ----- -----  vmhba0 ahci link-n/a sata.vmhba0 Intel Corporation Patsburg 6 Port SATA AHCI .. vmhba1 mpt3sas link-n/a sas.xxxxxxxx LSI / Symbios Logic SAS3008 PCI-Express .. vmhba32 ahci link-n/a sata.vmhba32 Intel Corporation Patsburg 6 Port SATA AHCI .. vmhba33 ahci link-n/a sata.vmhba33 Intel Corporation Patsburg 6 Port SATA AHCI .. vmhba34 ahci link-n/a sata.vmhba34 Intel Corporation Patsburg 6 Port SATA AHCI .. vmhba35 ahci link-n/a sata.vmhba35 Intel Corporation Patsburg 6 Port SATA AHCI .. vmhba36 ahci link-n/a sata.vmhba36 Intel Corporation Patsburg 6 Port SATA AHCI ..</li> <li>4. If the driver name is still listed as lsi-msgpt3 for the above command, try removing (instead of disabling) lsi-msgpt3 using the following command: #esxcli software vib remove ?n lsi-msgpt3</li> </ol>
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		5. Restart the system.	
CSCup89033	The Power Monitoring graph is displayed on top of all pages if the Power Monitoring page is loading and you navigate to any other page.	Navigate back to the Power Monitoring page and wait till the page loads and then navigate to any other page.	2.0(3d)
CSCuq00837	On C220 M4 and C240 M4 servers, TPM fails to initialize after installing ESXi 5.1 U2 Patch 05, and enabling and activating TPM and TXT.	No workaround.	2.0(3d)
CSCuq04009	ESXi installer does not detect any SD card in xHCI mode.	Disable USB xHCI mode in the BIOS.	2.0(3d)
CSCuo28585	HII Drive Management and Enclosure Management menu displays only one port/connection (0-3) and not the other (4-7) when an expander is connected to a controller through two ports.	No workaround.	2.0(3d)
CSCuq14862	With inbox IGB driver in SLES 11 SP3, ethtool shows incorrect firmware version for Intel i350 LOM after installing the drivers for Intel i350 LOM from 2.0(3d) drivers ISO(5.2.5).	Update the igb version to 5.2.5. Unload and load the igb.	2.0(3d)
CSCuq24196	After installing the Windows Server 2012 to an iSCSI LUN, few network adapters display a yellow bang in the device manager (code 10) with the following description: This device is not working properly because Windows cannot load the drivers required for this device This occurs only on the NICs that are used for iSCSI boot.	Perform one of the following: A hotfix is available for Windows 8 and Windows Server 2012. Run this fix in the Windows OS image and then perform iSCSI installs. For more information on the fix, see <a href="http://support.microsoft.com/kb/2822241">http://support.microsoft.com/kb/2822241</a> OR Complete the following steps: <ol style="list-style-type: none"> <li>1. Un-install the drivers for the device which is showing yellow bang without deleting the device.</li> <li>2. Re-install the drivers.</li> <li>3. Restart the server.</li> </ol>	2.0(3d)

CSCup82749	Windows 2K12 R2 iSCSI Boot with Intel i350 and Pinecrest adapters displays BSOD when it is installed using the inbox drivers.	While installing the W2K12 R2 iSCSI, skip the Intel drivers from the drivers ISO. Reboot the server once the installation is finished.	2.0(3d)
CSCuq92331	Bandwidth test fails while running synthetic benchmarks, like the nvqual. This happens when the processor power management is enabled.	Disable the processor power management option using the BIOS setup.	2.0(3e)
CSCuo05774	Setting the boot mode to UEFI or Legacy requires two reboots for the change to reflect.	Reboot the server twice.	2.0(3e)
CSCul04884	Server enters BIOS setup menu when the boot devices that are configured in the service profile are not found. This impacts only C-series servers that are managed by Cisco UCS Manager.	None.	2.0(3e)
CSCuj28644	UEFI PXE boot or UEFI iSCSI boot does not work when the boot mode is set to UEFI.	Use the legacy boot mode when using PXE or iSCSI boot.	2.0(3e)

Table 75: Cisco IMC

Defect ID	Symptom	Workaround	First Affected Release
CSCuo26946	When you upgrade from releases 1.5(x) to 2.0(x) or downgrade from 2.0(x) to 1.5(x) or migrate from legacy to precision boot order, and if the SD card has four partitions, BIOS boot order mismatch occurs for the SD cards.	No workaround. You have to re-configure the boot order.	2.0(3d)
CSCuq32910	When the server boots with 2.0.3d release firmware, it fails to update the HUU firmware version and displays the current version of the Emulex OCe14102/Oce11102 as <b>Not</b> .	Reboot the server.	2.0(3d)



**Table 76: External Controller**

Defect ID	Symptom	Workaround	First Affected Release
CSCup87719	i350 adapter with default factory configuration dispatches the boot protocol Option ROM only for the first port. It does not dispatch Option ROM for the remaining 3 ports of the i350 card.	Enable the boot option for required ports using boot Util.	2.0(3d)

**Known Behaviors in Release 2.0(1b)**

Following are the known behaviors for Release 2.0(1b):

**Table 77: Cisco IMC**

Defect ID	Symptom	Workaround	First Affected Release
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CSCup49368	When you click <b>Update All</b> to upgrade from version 1.5.7 to 2.x using the <b>Cisco Host Upgrade Utility</b> the chassis firmware does not get updated.	<p>Using the Web UI, complete these steps to upgrade the chassis firmware:</p> <ol style="list-style-type: none"> <li>1. In the <b>Navigation</b> pane, click the <b>Server</b> tab.</li> <li>2. On the <b>Server</b> tab, click <b>Summary</b>.</li> <li>3. In the <b>Actions</b> area, click <b>Power Off Server</b>.</li> <li>4. Click <b>OK</b> to power off the server and updates the system firmware.</li> </ol> <p>Using the CLI, complete these steps to upgrade the chassis firmware:</p> <ol style="list-style-type: none"> <li>1. Server# <b>scope chassis</b></li> <li>2. Server /chassis # <b>scope firmware</b></li> <li>3. Server /chassis/firmware # <b>show detail</b>: Firmware update required on some components, please run update-all (under chassis/firmware scope) .</li> <li>4. Server /chassis/firmware # <b>update-all</b></li> </ol>	2.0(1b)
CSCup58906	When you downgrade to 2.0(1a), Cisco IMC Web UI displays warning messages and critical events.	A/C Power cycle the sever.	2.0(1b)

## Known Behaviors in Release 2.0(1)

Following are the known behaviors for the Release 2.0(1):

**Table 78: Cisco IMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCth84883	The LED sensor color is red or amber or blue (or any supported color) even though the LED state is set to OFF.	Ignore the LED color when the LED state is set to OFF.	2.0(1)
CSCtt08424	Cisco IMC power capping is not supported on VMware ESXi 5.0.	When Cisco IMC is upgraded to 1.4(2), the Cisco IMC will automatically disable power capping. Power capping must manually be re-enabled to use it.	2.0(1)
CSCun97225	When you downgrade from release 2.0(1a) to a 1.5(x) release, you see only seven platform event filters instead of 12 filters.	Restore factory default settings or run the Cisco OEM function command on the ipmitool raw <b>0x36 0x03 0xAA</b> .	2.0(1)
CSCuo40835	When you downgrade from release 2.0(1a) to a 1.5(x) release, if you have set the SNMP port value to anything other than the default value (161), you cannot reset this number.	Before downgrading, set the SNMP port to 161 or after downgrading restore factory defaults.	2.0(1)
CSCun10320	Cannot upgrade Cisco IMC firmware version from 1.5(3d) to 2.0(1a) using FTP.	Use a browser or SCP client upgrade.	2.0(1)
CSCum70086	Downloaded DVR player fails to play offline for Java versions 6 and below on Windows OS.	Edit and update the <b>script_win.bat</b> file with the correct Java version.	2.0(1)
CSCun66062	While using the CLI to define the precision boot order, if multiple devices' orders are changed by scoping to an individual device, the final order of the devices may not appear as what it was changed to.	Use the <b>rearrange-boot-device</b> command to set the boot order for multiple devices. Or use the Cisco IMC Web UI.	2.0(1)

CSCum26002	A delay occurs while pinging to check the connectivity to the DNS servers before a DDNS update is triggered.	You can manually check the connectivity to the preferred and alternate DNS servers for both the IPv4 and IPv6 addresses the using the ping option available in this release.	2.0(1)
CSCun11979	Cannot configure legacy boot order using the Cisco IMC Web UI.	Use CLI or XML API.	2.0(1)
CSCuo71634	After upgrading the Cisco IMC firmware and activating secure boot mode, when you immediately try to reboot Cisco IMC, it does not respond.	After the upgrade, reboot Cisco IMC after about 10 minutes.	2.0(1)

## Known Behaviors in Release 1.5.7

Following are the known behaviors for Release 1.5(7):

**Table 79: CIMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCul62033	During heavy I/O transactions on the SD card, read errors may be seen in CIMC.	Use Cisco FlexFlash 3.0 cards	1.5(7)
CSCua94308	There is no CIMC notification of Closed Loop Thermal Throttling (CLTT) when it occurs. CLTT happens automatically when the DIMM temperature crosses the UC (upper critical) temperature.	None.	1.5(7)
CSCuo18891	UCScfg_X64.exe batch - ignore set t.txt command displays "Error: Invalid Number of Arguments" error message, when the input file is in Unicode format.	Use ANSI format input file. (	1.5(7)

CSCud84978	SEL has memory entries, but no entries are seen in the fault page. Cisco UCSM fault codes are unavailable for these SEL.	None. SEL has to be used to decode the memory related events.	1.5(1)
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*Table 80: OS*

Defect ID	Symptom	Workaround	First Affected Release
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CSCun77988	After installation of ESXi in UEFI mode, the OS fails to boot up. The installation completes, but on the subsequent reboot, the server does not boot ESXi OS.		1.5(7)
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To resolve this issue, complete these steps:

1. Boot to Shell.
2. Determine fsxx (xx is where ESX is installed. It will be typically 0 i.e fs0:) This can be verified by using `fsx\EFI\Boot\BOOTX64EFI` command.
3. To get the current list of EFI Boot options use, **bcfg boot dump** command.

**Note** Save the last boot number for further use.

4. Use the following command to add new Boot Option at position `LAST_BOOT_NO + 1`. Last parameter in quotes can be any description for this new Boot Option. This is displayed during BIOS F6 menu  
- **bcfg boot add LAST\_BOOT\_NO + 1 ~~fsx\EFI\Boot\BOOTX64EFI~~ "UEFI: ESXi"**
5. Make the newly created Boot Option for ESX as the first by using **bcfg boot mv LAST\_BOOT\_NO + 4 1** command.

Reset the platform by issuing reset command at the shell. Press F6 when BIOS is booting to get

		into BIOS Boot Selection menu. Verify that newly created Boot Option is displayed. Select this and boot to ESX.	
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**Table 81: NVIDIA**

Defect ID	Symptom	Workaround	First Affected Release
CSCuo39368	Nvidia GPU cards non functional or erratic behavior on system beyond 1 TB of memory.	This is an Nvidia GPU limitation due to 40 bit addressing on the GPU's. The memory should be 1 TB or less for the GPU's to be functional.	1.5(7)

**Table 82: LSI**

Defect ID	Symptom	Workaround	First Affected Release
CSCue88244	Prepare for removal prepares a Hard drive for removal but LED on the HDD does not blink AMBER to indicate the drive is ready to be replaced. This happens only on direct connect C260 M3 configurations.	None.	1.5(4)



CSCui29979	BBU Charging Status shows either Charging or Discharging all the time. This could lead to confusion to customers as Charging or Discharging indicate that battery is not in optimal state.	Customers should use the BBU Status field to determine if the battery is in optimal state. If the BBU status is optimal, it will indicate a good battery. If the BBU status indicates battery needs replacement, then the BBU is bad and needs to be replaced. Charging Status is working as designed and will always indicate Charging or Discharging because Firmware keeps checking the battery charge and ensures that the charge does not fall below the band gap. It charges the battery when it is in lower limits and once it reaches the upper limit of the band, it will stop charging. There can be leakage current which can discharge the battery and bring it back to lower threshold. When this happens, the firmware initiates charging.	1.5(2)
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### Known Behaviors in Release 1.5(4)

Following are the known behaviors for Release 1.5(4):

**Table 83: BIOS**

Defect ID	Symptom	Workaround	First Affected Release
CSCul36732	SAN boot using Emulex adapters may fail on C-series servers managed by Cisco UCS Manager. This behavior occurs only on servers managed by Cisco UCS Manager.	During the BIOS post, press the hotkey to enter the Emulex Option ROM configuration screen and enable "EDD", save and exit.	1.5(4)
CSCub21433	UEFI OS install is not supported on Software RAID (Onboard SCU controller).	None. Use legacy mode OS installs when using Software RAID.	1.5(4)

CSCtz11862	Continuous beep sound is heard when the system is switched on.	Do not switch on the CIMC and the host simultaneously. Switch on the host 3 minutes after switching on the power supply.	1.5(4)
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Table 84: CIMC

Defect ID	Symptom	Workaround	First Affected Release
CSCuj89681	After moving an SD card to the single partition mode, if you downgrade to releases prior to 1.5(4x), all 4 partitions are visible in the WebUI/CLI.	None.	1.5(4)
CSCuj84718	SD card partition sizes appear as trash values for SCU,HUU and drivers during downgrade.	Upgrade to release 1.5(4x) and create a single partition, and then downgrade to a prior release. The partition sizes then appear to be 2097151 MB.	1.5(4)
CSCuj67995	Changing multiple configuration with Port parameter fails from CIMC configuration only.	Complete the following steps:  1. Set the mode to <b>Dedicated</b> and the redundancy to <b>None</b> .  2. Save the changes to the system.  3. Set the auto-negotiation field to <b>Yes</b> .	1.5(4)
CSCuj52943	In the transition from 4 partition configuration to a single partition, only configuration details are modified. Data on the SD remains intact. So after migrating to a single partition (HV), the HV partition will retain SCU data only if SCU has a valid file system during configuration migration.	After migrating to a single partition (HV) configuration, format and install the required OS on the HV partition.	1.5(4)

CSCul50285	<pre>ucs-c220-m3# scope bios/advanced ucs-c220-m3 /bios/advanced # ucs-c220-m3 /bios/advanced # set ConsoleRedir COM_0 ucs-c220-m3 /bios/advanced *# set BaudRate 115200 ucs-c220-m3 /bios/advanced *# set FlowCtrl None ucs-c220-m3 /bios/advanced *# set TerminalType VT100+ ucs-c220-m3 /bios/advanced *# commit ucs-c220-m3 /bios/advanced #</pre>	<p>Use the following process:</p> <pre>ucs-c220-m3# scope bios ucs-c220-m3 /bios #scope advanced ucs-c220-m3 /bios/advanced # set ConsoleRedir COM_0 ucs-c220-m3 /bios/advanced # commit</pre> <p>Changes to BIOS set-up parameters will require a reboot.</p> <p>Do you want to reboot the system?[y N]</p>	1.5(4)
CSCue10121	The PWRGD Sensor's Normal events are logged in the SEL during the CIMC boot and Host boot.	These are expected events and can be ignored.	1.5(4)
CSCuj41445	Auto complete for few fields is done.	Upgrade to 1.5(x) build.	1.5(4)
CSCud17092	Occasionally after a CIMC upgrade, one may see an error dialog box "Error: Unexpected error" in Web UI on main page upon the very first login. The Storage data may also be blank or invalid. Sometimes occurs during the very first login after a CIMC upgrade. It may be related to upgrade from 1.4x to 1.5.	Logging out and back in will fix it, but probably just because it takes time; therefore, just waiting a few minutes and refreshing the WebUI may fix the problem, also.	1.5(4)

**Table 85: Cisco usNIC**

Defect ID	Symptom	Workaround	First Affected Release
CSCu156178	CIMC limits the configurable vNICs, and usNICs to 229.	None. The remaining vNICs are reserved for the internal adapter usage. Of these remaining vNICs, 4 are mandatory- 2 eNICs, and 2 fNICs. When you configure 16 vNICs (including the 2 mandatory eNICs), you are left with 229-2(fNICs)-16(eNICs)= 211 usNICs.	1.5(4)

**Table 86: LSI**

Defect ID	Symptom	Workaround	First Affected Release
CSCuj83316	The battery is in a degraded state because it requires a manual (user initiated) relearn cycle. This is required of batteries that have been in use for over 1 year to accurately measure the battery's remaining capacity.	A manual (deep cycle) relearn must be started by the user. This can be done via the MegaCLI utility or from the Storage tab of the server CIMC. A relearn can take several hours and up to a day to complete. If the battery still has sufficient capacity after the relearn is complete, it will go to optimal state and the VDs will switch back to WriteBack mode if that is how they configured prior to the relearn.	1.5(4)

**Table 87: Web Management**

Defect ID	Symptom	Workaround	First Affected Release
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CSCtx16030	The WebUI DIMM "Operability" field in the memory inventory does not indicate failed DIMMs correctly.	The issue is observed only in the memory inventory reported by the WebUI. The BIOS reports the DIMM status properly in the BIOS Setup. So, if WebUI shows any DIMM as Inoperable, please check the status of all DIMMs on all the memory risers at Advanced -> Memory Configuration page of the BIOS Setup to get the correct status on the DIMMs.	1.5(4)
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### Known Behavior in Release 1.5(3)

Following are the known behaviors for Release 1.5(3):

**Table 88: Firmware Upgrade**

Defect ID	Symptom	Workaround	First Affected Release
CSCui82263	Downgrading from release version 1.5(3) to 1.5(1) release version does not throw an error in Host Upgrade Utility.	This is not an issue. Though an error is not reported, the update will not proceed.	1.5(3)

### Known Behaviors in Release 1.5(2)

Following are the known behaviors for Release 1.5(2):

**Table 89: CIMC**

Defect ID	Symptom	Workaround	First Affected Release
CSCuf52723	C240 M3 does not power up after firmware upgrade to 1.5(1B). While upgrading via HUU from firmware 1.4(6c) to 1.5(1b), HUU did not upgrade CIMC to 1.5(1b) even though it reported as successfully completed.	Manually force CIMC and BIOS update to fix it.	1.5(2)

CSCug78887	Base Distinguished Name (base-dn) parameter syntax is different in new LDAP implementation.	Use the following syntax: /ldap # set base-dn DC=Scom, DC=msdn, DC=com  instead of  /ldap # set base-dn Scom.msdn.com	1.5(2)
CSCuh71550	With Windows Active Directory, the child domain user login will fail with partial login name.	Provide fully qualified login name to make it work.	1.5(2)
CSCuh39061	Intel VTD and ATS are required BIOS setting for usNIC. However, there is no warning message in CIMC if these parameters are not enabled when usNIC is configured.	Make sure Intel VTD and ATS are enabled in BIOS setting when usNIC is configured.	1.5(2)
CSCuf08450	When upgrading the C24 M3 from 1.4.7a to 1.4.7f using the HUU (option to upgrade all), the servers fans run at almost double the speed they were running at on 1.4.7a.	None	1.5(2)
CSCug65160	Sometimes, a VIC link on a SFP+ copper cable goes down after a VIC reboot or CIMC reboot. Cables whose serial number starts with MOC1238 through MOC1309 could be affected.	AC power cycle the chassis to recover.	1.5(2)
CSCtx43305	The PSU firmware revision may only be partially available when the PSU does not have AC power.	Connect the AC power to the PSU. The full firmware revision will be available.	1.5(2)

Table 90: LSI

Defect ID	Symptom	Workaround	First Affected Release
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CSCue10144	When booting a Cisco C22x or C24x server, RAID levels are displayed when loading the LSI Option ROM. However, not all supported RAID levels are displayed.	This is done to distinguish between different 9240 controllers. Some of them support RAID5, and some do not. There are 2 products under the same 9240 name. However, there is not enough space in the name field to list every possible RAID level supported. This is why a partial list of RAID levels is displayed.	1.5(2)
CSCug95648	BBU charging status always shows as Charging and percentage of charging never reaches to 100%. It always shows 67%.	This is the new change in the firmware. The Battery re-learn cycle is completed successfully and battery is charged back to 67% which is in the band gap where charging will be stopped by LSI firmware and battery will be declared optimal. This is the charge needed to retain data upto 48 hours. The Charging Status showing "Charging" as there will be some leakages and battery will slowly loose charge and hence the battery will be charging.	1.5(2)
CSCuh82265	BBU status is showing as discharging and the charge % is stuck at 64%. Battery replacement alerts on the server. Server is showing battery discharging and there is a moderate alert which says Status: Learning Cycle Needed?	None	1.5(2)
CSCud13257	Hang occurs when using 64-bit MSM 12.08.03.03.	Use 32 bit version of MSM.	1.5(2)

Table 91: Host Upgrade Utility

Defect ID	Symptom	Workaround	First Affected Release
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CSCui09482	Firmware Update on Emulex LPe16002 will fail when tried from HUU on certain servers.	Emulex LPe16002 is already at the same firmware level of what HUU is carrying. So effectively an update is not needed. alternatively move the card to another server and try update.	1.5(2)
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**Table 92: SNMP**

Defect ID	Symptom	Workaround	First Affected Release
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CSCug37639		None.	1.5(2)
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When doing a MIB walk on several MIBs, they give a "No more variables left in this MIB View (It is past the end of the MIB tree)" error at the end.  
Failing MIBs: snmpVacmMIB

Sample good output:

```
[root@pebbles-iptv mibs]#
snmpwalk -v2c -c public
localhost
notificationLogMIB
NOTIFICATION-LOG-
MIB::nlmConfigGlobalAgeOut.0
= Gauge32: 1440 minutes
NOTIFICATION-LOG-
MIB::nlmStatsGlobalNotificationsLogged.0
= Counter32: 33
notifications
NOTIFICATION-LOG-
MIB::nlmStatsGlobalNotificationsBumped.0
= Counter32: 33
notifications
[root@pebbles-iptv mibs]#
**
```

Notice MIB ends cleanly, and there is no error.

**\*\* Sample bad output:**

```
[snmp@sv-repo ~]$ snmpwalk
-t 120 -v3 -u glasco -l
AuthPriv -a MD5 -A
enuf4me2do -x DES -X
tqbFjotlCow 14.17.2.45
.1.3.6.1.6.3.16.1.5.2.1.6
SNMP-VIEW-BASED-ACM-MIB::vacViewTreeFamilyStatus."all".1.1
= INTEGER: active(1)
SNMP-VIEW-BASED-ACM-MIB::vacViewTreeFamilyStatus."all".1.0
= INTEGER: active(1)
SNMP-VIEW-BASED-ACM-MIB::vacViewTreeFamilyStatus."all".1.1
= INTEGER: active(1)
SNMP-VIEW-BASED-ACM-MIB::vacViewTreeFamilyStatus."all".1.2
= INTEGER: active(1)
SNMP-VIEW-BASED-ACM-MIB::vacViewTreeFamilyStatus."none".1.0
= INTEGER: active(1)
SNMP-VIEW-BASED-ACM-
```

	<pre> MIB::varViewTreeFamilyStatus."_none".1.1 = INTEGER: active(1) SNMP-VIEW-BASED-ACM- MIB::varViewTreeFamilyStatus."_none".1.2 = INTEGER: active(1) SNMP-VIEW-BASED-ACM- MIB::varViewTreeFamilyStatus."_none".1.2 = No more variables left in this MIB View (It is past the end of the MIB tree) [snmp@sv-repo ~]\$  To have, "No more variables left in this MIB View" when there are more mibs left to walk. The final oid seen is 1.3.6.1.6.3.16.1.5.2.1.6, and within the error-status of the get-response packet, we get noSuchName(2), and this should be noError(0). </pre>	
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Table 93: Web Management

Defect ID	Symptom	Workaround	First Affected Release
CSCCuc19323	Sometime with Windows 2008 and IE 8.0 CIMC WEB UI login prompt will not be seen	Add CIMC IP to IE 8.0 trusted sites list. In the Internet Explorer browser window, select Tools -> Internet options -> Security -> Trusted Sites -> Sites -> Add	1.4(7)
CSCUh76949	After clicking on "Add Exception", user is prompted with a window which says "certificate is valid" and the "Confirm Security Exception" button is greyed out.	Clear the cache or refresh multiple times the issue will be resolved.	1.5(2)

## Known Behaviors in Release 1.5(1f)

Following are the known behaviors for Release 1.5(1f):

Table 94: CIMC

Defect ID	Symptom	Workaround	First Affected Release
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CSCuf53059	FlexFlash operational profile is not preserved on downgrade from 1.5(1x), resulting in all FlexFlash partitions being visible to the operating system.	Set the operational profile again after downgrade.	1.5(1f)
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**Table 95: Intel RSTe**

Defect ID	Symptom	Workaround	First Affected Release
CSCuf02487	Creating RAID volumes from Intel RSTe software RAID Option ROM (Control-I) is not supported.	Use LSI software RAID, LSI hardware RAID, or OS SW RAID.	1.5(1f)
CSCue72256	Hard drive Critical events are seen in SEL during server bootup when using Intel RSTe.	This is not a real hard drive fault. The HDD Critical events reported becomes normal after system boots up and can be ignored. If real HDD fault, then Critical event generated on HDD will be persistent and does not indicate normal even after server has booted up and in this case, user need to take action to replace that HDD.	1.5(1f)

**Known Behaviors in Release 1.5(1)**

Following are the known behaviors for Release 1.5(1):

**Table 96: BIOS**

Defect ID	Symptom	Workaround	First Affected Release
CSCuc75369	LSI Web BIOS may not launch on pressing Ctrl+H.	During BIOS post, press F6 to bringup the boot override list and select the appropriate entry to launch the web bios.	1.5(1)
CSCuc60934	BIOS Boot order is getting changed when a virtual media device is mounted and unmounted through CIMC WebUI vKVM console or CIMC CLI.	After unmounting the virtual media device, restore the boot order by re-configuring the boot order through either BIOS Setup or CIMC.	1.5(1)

CSCtf54851	Serial port B cannot be enabled for console redirection in the Server Management -> Console Redirection page of the BIOS setup.	Serial port B is primarily used for SOL functionality. The BIOS will start redirecting console messages to serial port B if SOL is enabled. You should enable SOL through BMC to get console redirection messages through serial port B.	1.5(1)
CSCth71350	If the current CIMC networking mode is shipping mode, then the BIOS F8 CIMC configuration utility does not allow a new networking mode and IP address to be set at the same time.	Set the new networking mode, save, then set the new IP address and save again.	1.5(1)
CSCtq84425	When BIOS console redirection is enabled, the keyboard can stop working in the Broadcom PCIe Option ROM at some baud rates.	Disable the BIOS console redirection.	1.5(1)
CSCtx27907	Occasionally, when BIOS starts, the following message is displayed: Error on Getting Cisco IMC IP/MAC Address.	This message can be ignored.	1.5(1)
CSCtx92042	When Broadcom 5709 Gigabit Ethernet adapter is plugged into one of the PCIE slots, the server gets stuck at the BIOS post screen during the booting process.	Upgrade the firmware on the Broadcom 5709 Gigabit Ethernet adapter to version 5.2.7 or later.	1.5(1)
CSCtr93601	BIOS downgrade using the iFlash32 utility, from 1.4.x to the older version 1.2.x fails.	Use the startup.nsh script available in the 1.2.x container for the downgrade. This script will execute the BIOS downgrade successfully.	1.5(1)

Table 97: CIMC

Defect ID	Symptom	Workaround	First Affected Release
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CSCuf05110	CIMC CLI does not report PID of HDD when using Intel RSTe.	None	1.5(1)
CSCue54670	For a server with Virident card (or any card for which fan control has specific modifications), if CIMC is reset to factory defaults when host is on, then the fan control will go back non-card specific settings. This might imply lower fan speeds and can cause heating up of cards if there are cards present that require higher fan speeds (ex: Virident FlashMaxII card). This is because information about cards is available to CIMC from host, and when a factory default is done, this information is erased.	Reboot the host, so that CIMC can get card specific information and bump up fan speeds as required.	1.5(1)
CSCtg92856	When you power on the chassis with some PS power cables disconnected, the system health LED on the front panel stays green, though some power supplies have no input voltage.	Connect all cables from APC power to the power supply securely.	1.5(1)

CSCtz52715	USB Key which is inserted on a Mac can be forced to be read-only.	<p>Mac users must unmount the removable drive before mapping.</p> <ol style="list-style-type: none"> <li>1. Run the following command from the command line interface: <code>diskutil unmount /Volumes/&lt;Volume name&gt;</code></li> <li>2. In the KVM/vMedia client, clear the Read Only checkbox. At this point, the user may be prompted asking if they wish to stop automatic mounting of the drive. Click Yes .</li> <li>3. Proceed with mapping the drive.</li> </ol> <p>These steps are time-sensitive, as the Mac OS is aggressive about re-mounting drives that have been unmounted. If the drive does get re-mounted by the OS before completing the steps, repeat the steps. Alternatively, unmap the USB stick, use the Finder to eject the device, wait for the device to disappear from the vMedia Client view, and then physically remove and re-insert it while the vMedia session is running. As above, click Yes to the questions asking about preventing automatic mounting of the drive.</p>	1.5(1)
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CSCua63839	On some Macs with spaces enabled, the vKVM popup notification that the session has ended can not be closed because trying to click the button causes the focus to move away from the space with the popup.	Move the vKVM main window to the same space with the popup notifier. Then, the popup can be dismissed by clicking on the button.	1.5(1)
CSCtr37876	SNMPv1 traps are sent when SNMPv2 and SNMPv3 traps are enabled.	None.	1.5(1)



CSCtx00839	The KVM screen displays a blank screen.	<p>Use the physical monitor to change the screen resolution. The following resolutions are supported:</p> <ul style="list-style-type: none"> <li>• 640x480 (8bpp)</li> <li>• 800x600 (8bpp)</li> <li>• 1024x768 (8bpp)</li> <li>• 1280x1024 (8bpp)</li> <li>• 1600x1200 (8bpp)</li> <li>• 1920x1080 (8bpp)</li> <li>• 1920x1200 (8bpp)</li> <li>• 640x480 (16bpp)</li> <li>• 800x600 (16bpp)</li> <li>• 1024x768 (16bpp)</li> <li>• 1280x1024 (16bpp)</li> <li>• 1600x1200 (16bpp)</li> <li>• 1920x1080 (16bpp)</li> <li>• 1920x1200 (16bpp)</li> <li>• 640x480 (24bpp)</li> <li>• 800x600 (24bpp)</li> <li>• 1024x768 (24bpp)</li> <li>• 1280x1024 (24bpp)</li> <li>• 640x480 (32bpp)</li> <li>• 800x600 (32bpp)</li> <li>• 1024x768 (32bpp)</li> <li>• 1280x1024 (32bpp)</li> </ul>	1.5(1)
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CSCtx88183	After firmware updates, the CIMC Web GUI and CLI might not display the Virtual Drive Information under the Virtual Drive tab and might display the Virtual Drive count as zero even though the Virtual Drive tab displays the list of virtual drives present in the system.	Restart the Cisco IMC.	1.5(1)
CSCty58229	The SNMP Hard Disk Inventory starts numbering with 0 while the CIMC HDD sensor starts with 1.	None. This symptom occurs because the SNMP Hard disk inventory matches with the storage inventory and both starts with index 0. The hard disk sensor numbering starts with 1 because it matches with the label in the SKU. You need to be aware of the difference and map it accordingly while browsing for a specific HDD detail across sensors and storage inventory.	1.5(1)
CSCty60975	The HDD presence cannot be viewed through SNMP.	Use either alternate interfaces or do SNMP query again for the HDD inventory after the action.	1.5(1)
CSCua11831	Duplicate SNMP traps are obtained when you insert Fan 2,4 and 5 in Cisco C22.	None.	1.5(1)
CSCuc87936	"Unable to communicate with FlexFlash" error message is seen after downgrading CIMC to version 1.4.	User should select the Reset Flex Controller button twice if the SD card is of type SD253. If not, select the button only once.	1.5(1)

Table 98: Intel Adapters

Defect ID	Symptom	Workaround	First Affected Release
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CSCuc52172	When multiple Intel network adapters are present and you enter the iSCSI configuration from one card, it allows you to change the configuration on all Intel cards. After the change, when one of the cards is removed, it appears that the Option ROM of the remaining cards is overwritten by the card that was removed.	Enter the iSCSI configuration of the card that must be modified. Do not modify other cards when they are visible. This issue is only with iSCSI configuration and not with PXE configuration.	1.5(1)
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Table 99: LSI

Defect ID	Symptom	Workaround	First Affected Release
CSCtg25373	If the number of Virtual Drives created in the LSI MegaRAID controller is greater than or equal to 50, the system will not boot from any of these Virtual Drives.	None. The system boots from MegaRAID Virtual Drives only if the number of Virtual Drives are lesser than or equal to 49.	1.5(1)
CSCua03604	RHEL 6.2 Install to iSCSI target hangs when 2008 MEZZ card Option ROM is disabled on C220/C240 M3 servers.	2008 LSI OPROM must always be enabled in System BIOS when it is present in the server. If users want to disable it, then during OS Installs, depending on the OS, they would need to blacklist the LSI MegaRAID driver for the 2008 MEZZ card so that system will not hang during install.	1.5(1)

CSCts37240	The following error message is displayed in some LSI RAID controllers when you navigate to Cisco IMC > Inventory > Storage > Battery Backup Unit . Error: required HW is missing ( i.e Alarm or BBU ) The server did not have BBU installed on it and it should have confirmed the absence of the unit.	None. This issue is currently under investigation.	1.5(1)
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Table 100: Web UI

Defect ID	Symptom	Workaround	First Affected Release
CSCtc22985	Printing from Web UI is not supported.	Print a screenshot of Web UI.	1.5(1)

## Known Behavior in Release 1.4(3)

Following is the known behavior for Release 1.4(3):

Table 101: CIMC

Defect ID	Symptom	Workaround	First Affected Release
CSCun24570	Unable to set all numeric CN from the WebUI.	Update the CN from CLI	1.4(3)

## Recommended Best Practices

### Best Practices to Install VMWare

#### Workaround for Installing VMWare on First Generation (Gen 1) SD Cards in Expert Mode

Once you start the installer application, find the partition where you want to install VMWare. In the following example the partition is **vmhba33:C0:T0:L0**.

1. Press Alt+F1 to enter the VMWare recovery console.
2. Create a GUID Partition Table (GPT) on the disk:  

```
/dev/disks # partedUtil mklabel mpx.vmhba33:C0:T0:L0 gpt
```
3. Verify the GPT:  

```
/dev/disks # partedUtil get mpx.vmhba33:C0:T0:L0
```

```
3785 255 63 60817408
```
4. Return to installing VMWare.

## Upgrading BIOS and Cisco IMC Firmware

Cisco provides the Cisco Host Upgrade Utility to assist you in upgrading the BIOS, Cisco IMC, CMC LOM, LSI storage controller, and Cisco UCS Virtual Interface Cards firmware to compatible levels. On the C220 M3, C240 M3, C22 M3, and C24 M3 servers, we recommend that you reboot Cisco IMC before performing the Cisco IMC and BIOS firmware update using NIHUU, HUU, web UI, CLI, or XML API.



**Note** When upgrading the Cisco IMC firmware for the UCS C-series platforms, ensure that you update using the full image (for example upd-pkg-cXXX-mx-Cisco IMC.full.\*.bin).

The correct and compatible firmware levels for your server model are embedded in the utility ISO.

To use this utility, use the Cisco Host Upgrade Utility User Guide which includes the instructions for downloading and using the utility ISO. Select the guide from this URL:

[http://www.cisco.com/en/US/products/ps10493/products\\_user\\_guide\\_list.html](http://www.cisco.com/en/US/products/ps10493/products_user_guide_list.html)

## Related Documentation

### Related Documentation

For configuration information for this release, refer to the following:

- [Cisco UCS C-Series Servers Integrated Management Controller CLI Configuration Guide](#)
- [Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide](#)
- [Cisco UCS Rack-Mount Servers Cisco IMC API Programmer's Guide](#)

For information about installation of the C-Series servers, refer to the following:

- [Cisco UCS C-Series Rack Servers Install and Upgrade Guides](#)

The following related documentation is available for the Cisco Unified Computing System:

- [Cisco UCS C-Series Servers Documentation Roadmap](#)
- [Cisco UCS Site Preparation Guide](#)
- [Regulatory Compliance and Safety Information for Cisco UCS](#)
- For information about supported firmware versions and supported UCS Manager versions for the rack servers that are integrated with the UCS Manager for management, refer to [Release Bundle Contents for Cisco UCS Software](#).

Refer to the release notes for Cisco UCS Manager software and the *Cisco UCS C Series Server Integration with Cisco UCS Manager Guide* at the following locations:

- [Cisco UCS Manager Release Notes](#)
- [Cisco UCS C Series Server Integration with Cisco UCS Manager Guides](#)