Release Notes for Cisco UCS Manager, Release 4.3

First Published: 2023-08-17

Last Modified: 2024-10-28

Cisco UCS Manager

Cisco UCS™ Manager, Release 4.3 provides unified, embedded management of all software and hardware components of the Cisco Unified Computing System™ (Cisco UCS) across multiple chassis, Cisco UCS servers, and thousands of virtual machines. Cisco UCS Manager manages Cisco UCS as a single entity through an intuitive GUI, a command-line interface (CLI), or an XML API for comprehensive access to all Cisco UCS Manager functions. For more information on Cisco UCS Manager, see Cisco UCS Manager on Cisco.com.

This document contains information on new features, resolved caveats, open caveats, and workarounds for Cisco UCS Manager, Release 4.3. This document also includes the following:

- Current information that became available after the technical documentation was published

- Related firmware and BIOS on blade and rack servers and other Cisco Unified Computing System (UCS) components associated with the release

Revision History

Table 1: Release 4.3(5)

Release	Date	Description
4.3(5a)	October 22, 2024	Created release notes for Cisco UCS Manager Release 4.3(5a).

Table 2: Release 4.3(4)

Release	Date	Description
4.3(4e)	October 28, 2024	Created release notes for Cisco UCS Manager Release 4.3(4e).
4.3(4d)	October 07, 2024	Created release notes for Cisco UCS Manager Release 4.3(4d).
4.3(4c)	September 01, 2024	Created release notes for Cisco UCS Manager Release 4.3(4c).

Release	Date	Description
4.3(4b)	July 25, 2024	Cisco UCS Manager introduces support for Cisco UCS X-Series Direct.
4.3(4a)	July 03, 2024	Added CSCwd35712 under Resolved Caveats in Release 4.3(4a), on page 123.
4.3(4b)	June 25, 2024	Created release notes for Cisco UCS Manager Release 4.3(4b).
4.3(4a)	June 05, 2024	Created release notes for Cisco UCS Manager Release 4.3(4a).

Table 3: Release 4.3(3)

Release	Date	Description
4.3(3a)	May 08, 2024	Updated New Hardware in Release 4.3(3a), on page 28.
4.3(3c)	April 22, 2024	Created release notes for Cisco UCS Manager Release 4.3(3c).
4.3(3a)	March 08, 2024	Updated Cisco UCS NVMeoF Support Matrix for 3rd Party Storage Vendors, on page 45.
4.3(3a)	February 15, 2024	Created release notes for Cisco UCS Manager Release 4.3(3a).

Table 4: Release 4.3(2)

Release	Date	Description
4.3(2f)	October 23, 2024	Created release notes for Cisco UCS Manager Release 4.3(2f).
4.3(2e)	January 23, 2024	Created release notes for Cisco UCS Manager Release 4.3(2e).
4.3(2c)	November 14, 2023	Created release notes for Cisco UCS Manager Release 4.3(2c).
4.3(2b)	August 16, 2023	Created release notes for Cisco UCS Manager Release 4.3(2b).

Top Reasons to Move to Cisco UCS Manager Release 4.3

Release 4.3(5a)

- Support for the following hardware:

  - Cisco UCS C225 M8 Server

  - Cisco UCS X215c M8 Compute Node

  - Cisco UCS Manager adds support for the following Cisco Tri-Mode M1 24G RAID and HBA controllers on Cisco UCS C-Series M7 servers:

    - UCSC-HBA-M1L16 and UCSC-RAID-M1L16 on Cisco UCSC-C220-M7 servers

    - UCSC-HBA-M1L16 and UCSC-RAID-MP1L32 on Cisco UCSC-C240-M7 servers

- The Cisco UCS Manager release 4.3(5a) introduces advanced security management to protect sensitive data and ensure network integrity. This release includes encryption management with an AES encryption master key option. Additionally, Media Access Control Security (MACsec) now supports Type-6 (AES encryption) in addition to Type-0 and Type-7 encryption for Ethernet uplink ports on Cisco UCS 6536, 6454, and 64108 Fabric Interconnects through GUI and CLI interfaces. This feature offers robust encryption capabilities, allowing administrators to manage encryption settings effectively and ensure data security and compliance with encryption standards.

  Note This functionality is not supported on Cisco UCS X-Series Direct (Cisco UCS Fabric Interconnects 9108 100G).

- Cisco UCS Manager now includes dynamic polling support to monitor the port status (up/down) and port speed of third-party Network Interface Cards (NICs) on Cisco UCS C-Series M6, M7, and M8 servers, offering real-time insights into network interface performance and ensuring optimal server connectivity and efficiency.

- Cisco UCS Manager enhances support for the server personality configuration of Hyperconverged Infrastructure (HCI). This feature is supported on Cisco UCS M6, M7, and M8 servers, allowing the servers to function either as standard UCS servers or HCI servers. The server personality field is an informational attribute that indicates the specific configuration or role assigned to the server. This simplifies the management of HCI and offers great visibility into server roles, enabling more efficient operations.

- Cisco UCS Manager supports enabling the EtherChannel pinning option for Cisco UCS VIC adapters to enhance performance. This option allows vNIC adapters with EtherChannel capabilities to utilize multiple uplink ports for optimized traffic distribution. This setting applies only to eNIC interfaces on Cisco UCS 1400, 14000, and 15000 series adapters and does not apply to fNIC interfaces.

- Cisco UCS Manager enables IPv6 overlay offload functionality. This feature, supported by updated async drivers, optimizes IPv6 network performance and enhances efficiency.

- Support for U.2 Solidigm P5520 NVMe High Perf. Medium Endurance and U.2 Solidigm P5620 NVMe High Perf. High Endurance with Cisco UCS UCS C225 M8, C245 M8, and all M7 and M6 servers.

Release 4.3(4b)

Support for the following hardware:

- Cisco UCS X-Series Direct
- Cisco UCS C245 M8 Server

Release 4.3(4a)

- Support for the following RAID controllers:
  - Cisco Tri-Mode 24G SAS RAID Controller w/4GB Cache (UCSC-RAID-HP) with Cisco UCS C220 M7 and C240 M7 servers.
  - Cisco boot optimized M.2 NVMe RAID controller (UCS-M2-NVRAID) with Cisco UCS C220 M7 and C240 M7 servers.

    This controller supports only RAID0, RAID1, or JBOD (default - JBOD) mode and only UEFI boot mode.

- Support for the UCS-TPM-002D TPM module with Cisco UCS X410c M7, X210c M7, X210c M6, B200 M6, C220 M7, C240 M7, C220 M6, and C240 M6 servers.

- Support for the UCS-TPM2-002D TPM module on Cisco UCS C225 M6 and C245 M6 servers.

- Support for Cisco UCSX-440P PCIe Node

- Support for the following GPUs:
  - Intel$^®$ Data Center GPU Flex 140, HHHL, 75W PCIe (UCSC-GPU-FLEX140) with Cisco UCS C220 M7 and C240 M7 servers
  - Intel$^®$ Data Center GPU Flex 170, FH-3/4L, 150W PCIe (UCSC-GPU-FLEX170) with Cisco UCS C240 M7 servers
  - NVIDIA$^®$ 350W, 40GB, 2-Slot FHFL L40S GPU (UCSX-GPU-L40S) on Cisco UCS X440p PCIe Node and Cisco UCS C240 M7 servers
  - NVIDIA$^®$ Hopper L4 70W, 24GB, 1-slot HHHL (UCSC-GPU-L4M6) with Cisco UCS C220 and C240 M6 servers
  - NVIDIA$^®$ H100 on Cisco UCS X440p PCIe Node, and Cisco UCS C240 M7 servers

- Cisco UCS Manager introduces support for Media Access Control Security (MACsec) type-0 and type-7 encryption for Ethernet uplink ports on Cisco UCS FI 6536, 6454 and 64108 through GUI and CLI interfaces.

- Cisco UCS Manager support for ERSPAN traffic monitoring on Cisco UCS 6536, 6454, and 64108 Fabric Interconnects.

- Cisco UCS Manager now provides support to configure Hybrid Slots Configuration policy for Cisco Tri-Mode 24G SAS RAID Controller w/4GB Cache (UCSC-RAID-HP) that indicates whether the RAID controller can handle U.3 drives in RAID or Direct attached modes.

- Cisco UCS Manager uses Data Sanitization feature to erase all sensitive data, thus making extraction or recovery of data impossible on the following UCS servers:

- Cisco UCS C220 M7, C240 M7, X210c M7, X410c M7

- Cisco UCS C220 M6, C240 M6, C225 M6, C245 M6, B200 M6, X210c M6 servers

- Cisco UCS C220 M5, C240 M5, C480 M5, C125 M5, B200 M5, B480 M5 servers

- Cisco UCS Manager supports inventory listing for PCIe Node adapters.

- Cisco UCS Manager supports TLS 1.3 protocol for HTTPS communication for improved Transport Layer Security.

- New Ethernet port error, MACsec and DCE counters are added for the adapters under statistics.

- Starting with Cisco UCS Manager release 4.3(4a), new optimized adapter policies are available for Windows, Linux, and VMware operating systems, for the Cisco UCS VIC 1400, 14000 and 15000 series adapter.

- Starting with Cisco UCS Manager release 4.3(4a), adapter stats collection includes **rx_no_buffer** counters of vNIC which is represented as **no buffer drop packets**.

- NXOS now includes Fabric Interconnect port data-rate and PFC monitoring and is accessible through **show logging onboard** commands, capturing threshold crossings without duplications allowing user to monitor congestion in the Cisco UCS fabric interconnects.

- Release 4.3(4a) qualifies the new CipherTrust KMIP server from Thales®, which is set to take over from the old SafeNet and Vormetric servers that are being phased out. The new CipherTrust KMIP server offers enhanced usability and an expanded feature set, but keeps the user experience the same. Support for new CipherTrust in Cisco UCS Manager starts with version 4.3(4a). For detailed instructions on the configuration process of the CipherTrust KMIP manager, please refer to the CipherTrust Manager user guide provided by Thales®.

Release 4.3(3a)

Support for the following 5th Gen Intel® Xeon® Scalable Processors with Cisco X210c M7 servers:

- Intel® Xeon® Platinum 8558P Processor

- Intel® Xeon® Platinum 8562Y+ Processor

- Intel® Xeon® Platinum 8592+ Processor

- Intel® Xeon® Platinum 8568Y+ Processor

- Intel® Xeon® Platinum 8592V Processor

- Intel® Xeon® Platinum 8580 Processor

- Intel® Xeon® Platinum 8558 Processor

- Intel® Xeon® Platinum 8558U Processor

- Intel® Xeon® Platinum 8570 Processor

- Intel® Xeon® Platinum 8571N Processor

- Intel® Xeon® Platinum 8581V Processor

- Intel® Xeon® Gold 6542Y Processor

- Intel® Xeon® Gold 6544Y Processor

- Intel® Xeon® Gold 6530 Processor

- Intel® Xeon® Gold 6554S Processor

- Intel® Xeon® Gold 6548Y+ Processor

- Intel® Xeon® Gold 6526Y Processor

- Intel® Xeon® Gold 6534 Processor

- Intel® Xeon® Gold 6538Y+ Processor

- Intel® Xeon® Gold 6548N Processor

- Intel® Xeon® Gold 5512U Processor

- Intel® Xeon® Gold 5515+ Processor

- Intel® Xeon® Gold 5520+ Processor

- Intel® Xeon® Gold 6538N Processor

- Intel® Xeon® Silver 4514Y Processor

- Intel® Xeon® Silver 4516Y+ Processor

Support for the following 5th Gen Intel® Xeon® Scalable Processors with Cisco UCS C220 M7 and C240 M7 servers:

- Intel® Xeon® Platinum 8592V Processor

- Intel® Xeon® Platinum 8562Y+ Processor

- Intel® Xeon® Platinum 8568Y+ Processor

- Intel® Xeon® Platinum 8592+ Processor

- Intel® Xeon® Platinum 8558P Processor

- Intel® Xeon® Platinum 8580 Processor

- Intel® Xeon® Platinum 8558 Processor

- Intel® Xeon® Gold 6542Y Processor

- Intel® Xeon® Gold 6544Y Processor

- Intel® Xeon® Gold 6548Y+ Processor

- Intel® Xeon® Gold 6526Y Processor

- Intel® Xeon® Gold 6530 Processor

- Intel® Xeon® Gold 6534 Processor

- Intel® Xeon® Gold 6554S Processor

- Intel® Xeon® Gold 6538Y+ Processor

- Intel® Xeon® Gold 5515+ Processor

- Intel® Xeon® Gold 5520+ Processor

- Intel® Xeon® Gold 6548N Processor

- Intel® Xeon® Silver 4514Y Processor

- Intel® Xeon® Silver 4516Y+ Processor

Release 4.3(2c)

- Support for the following X-Series servers with Cisco UCSX-9508 Chassis:

    - Cisco UCS X410c M7 Compute Node

- Support for the following UCS VIC cards:

    - Cisco UCS VIC 15427 (Support with Secure Boot feature)

    - Cisco UCS VIC 15230 (Support with Secure Boot feature)

    - Cisco UCS VIC 15237 mLOM (Support with Secure Boot feature)

Release 4.3(2b)

- Support for the following rack servers:

    - Cisco UCS C240 M7 Server

    - Cisco UCS C220 M7 Server

- Support for Cisco UCSX-9508 Chassis

- Support for the following X-Series servers with Cisco UCSX-9508 Chassis:

    - Cisco UCS X210c M7 Compute Node

    - Cisco UCS X210c M6 Compute Node

- Support for the following Intelligent Fabric Modules with Cisco UCS X-Series Servers:

    - UCSX-I-9108-25G

    - UCSX-I-9108-100G

- Support for the following UCS VIC cards:

    - Cisco UCS VIC 15425(Support with Secure Boot feature)

    - Cisco UCS VIC 15235 (Support with Secure Boot feature)

    - Cisco UCS VIC 15231

    - Cisco UCS VIC 15420 (Support with Secure Boot feature)

    - Cisco UCS VIC 15422 (Support with Secure Boot feature)

    - Cisco UCS VIC 14425

- Cisco UCS VIC 14825

- Support for Cisco UCS VIC Q-in-Q tunneling configuration. A Cisco UCS Manager based Q-in-Q (802.1Q-in-802.1Q) tunnel originating from Cisco UCS VIC allows to segregate the traffic in the Cisco UCS infrastructure, and helps to expand the VLAN space through the double-tagging of packets in hypervisor or non-hypervisor environments.

Supported Platforms and Release Compatibility Matrix

Supported Platforms in this Release

The following servers are supported in this release:

- Cisco UCS X215c M8 Compute Node

- Cisco UCS C225 M8 Server

- Cisco UCS C245 M8 Server

- Cisco UCS X410c M7 Compute Node

- Cisco UCS X210c M7 Compute Node

- Cisco UCS X210c M6 Compute Node

- Cisco UCS C240 M7 Server

- Cisco UCS C220 M7 Server

- Cisco UCS C220 M6

- Cisco UCS C240 M6

- Cisco UCS C245 M6

- Cisco UCS C225 M6

- Cisco UCS B200 M6

- Cisco UCS B200 M5

- Cisco UCS B480 M5

- Cisco UCS C220 M5

- Cisco UCS C240 M5

- Cisco UCS C240 SD M5

- Cisco UCS C480 M5

- Cisco UCS C480 M5 ML

- Cisco UCS S3260 M5

- Cisco UCS C125 M5

Cisco UCS Manager and Cisco UCS C-Series Release Compatibility Matrix for C-Series Rack-Mount Servers

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

Each Cisco UCS Manager release incorporates its corresponding C-Series Standalone release. For example, Cisco UCS Manager Release 4.2(1) is integrated with C-Series Standalone Release 4.2(1) for the M6 servers, Release 4.1(1) for the M4 and M5 servers, Release 4.0(2) for all the M4 and M5 servers. Hence, it supports all the M6, M5 and M4 servers supported by C-Series Standalone releases.

The following table lists the Cisco UCS Manager and C-Series software standalone releases for C-Series Rack-Mount Servers:

Table 5: Cisco UCS Manager and C-Series Software releases for C-Series Servers

Cisco UCS Manager Release	C-Series Standalone Releases Included	C-Series Servers Supported by the C-Series Standalone Releases
4.3(5)	4.3(5)	All M8, M7, and M6
	4.3(4)	S3260 M5
	4.3(2)	All M5
4.3(4)	4.3(4)	C245 M8 All M7, M6, and S3260 M5
	4.3(2)	All M5
4.3(3)	4.3(3)	All M7, M6, and S3260 M5
	4.3(2)	All M5
4.3(2)	4.3(2)	All M7, M6, and M5
4.2(3)	4.2(3)	All M6, M5, and S3260 M4
	4.1(3)	All M5 and S3260 M4
	4.1(2)	C220 M4, C240 M4, and C460 M4
4.2(2)	4.2(2)	All M6, M5, and S3260 M4
	4.1(3)	S3260 M4, All M5
	4.1(2)	C220 M4, C240 M4, C460 M4
4.2(1)	4.2(1)	All M6
	4.1(3)	S3260 M4, All M5
	4.1(2)	C220 M4, C240 M4, C460 M4

Cisco UCS Manager Release	C-Series Standalone Releases Included	C-Series Servers Supported by the C-Series Standalone Releases
4.1(3)	4.1(3)	S3260 M4, All M5
	4.1(2)	C220 M4, C240 M4, C460 M4
	3.0(4)	All M3
4.1(2)	4.1(2)	C220 M5, C240 M5, C240 SD M5, C480 M5, S3260 M5, C480 M5 ML, C125 M5, C220 M4, C240 M4, C460 M4, S3260 M4
	3.0(4)	All M3
4.1(1)	4.1(1)	C220 M5, C240 M5, C480 M5, S3260 M5, C125 M5, C480 M5 ML only
	4.0(2)	C220 M4, C240 M4, C460 M4, S3260 M4, C125 M5 only
	3.0(4)	All M3
4.0(4)	4.0(4)	C220 M5, C240 M5, C480 M5, S3260 M5, C480 M5 ML only
	4.0(2)	C220 M4, C240 M4, C460 M4, S3260 M4, C125 M5 only
	3.0(4)	All M3
4.0(2)	4.0(2)	C220 M4, C240 M4, C460 M4, C220 M5, C240 M5, C480 M5, S3260 M4, S3260 M5, C125 M5, C480 M5 ML only
	3.0(4)	All M3
4.0(1)	4.0(1)	C220 M4, C240 M4, C460 M4, C220 M5, C240 M5, C480 M5, S3260 M4, S3260 M5, C125 M5 only
	3.0(4)	All M3

System Requirements

Supported Operating Systems

For detailed information about supported operating system, see the interactive UCS Hardware and Software Compatibility matrix.

Supported Web Browsers

Cisco UCS Manager GUI	Web Browsers
HTML5	Apple Safari 16.2 (18614.3.7.1.5)
	Google Chrome 109.0.5414.75
	Microsoft Edge 109.0.1518.55
	Mozilla Firefox 108.0.2
	Opera 94.0.4606.76

Note   HTML-5 UI supports one user session per browser.

Network Requirements

The *Cisco UCS Manager Administration Management Guide, Release 4.3* provides detailed information about configuring the Intersight Device Connector.

Cisco UCS Central Integration

For the complete list of compatible versions of Cisco UCS Central and Cisco UCS Manager, see *Feature Support Matrix* in Release Notes for Cisco UCS Central.

Upgrade and Downgrade Guidelines

To get a complete overview of all the possible upgrade paths in Cisco UCS Manager, see Cisco UCS Manager Upgrade/Downgrade Support Matrix.

Upgrade and Downgrade to Release 4.3(5)

- In a setup equipped with Cisco UCS C225 M8 Server and Cisco UCS X215c M8 Compute Node, you cannot downgrade Infrastructure Firmware Version (A Bundle) or Host Firmware Version (C Bundle) to any release earlier than 4.3(5a).

- If your setup includes any of the following components, then you can not downgrade to any release earlier than 4.3(5a):

    - Cisco Tri-mode M1 24G RAID Controller W/4GB FBWC (16 Drives) (UCSC-RAID-M1L16)

    - Cisco Tri-mode M1 24G HBA Controller (16 Drives) (UCSC-HBA-M1L16)

    - Cisco Tri-mode M1 24G RAID Controller W/4GB FBWC (32Drives) (UCSC-RAID-MP1L32)

- MACsec Type-6 keys are supported in releases 4.3(5a) and later. You must remove Type-6 keys or migrate Type-6 keys to supported types, Type-0 or Type-7, before downgrading to any 4.3(4) release. If you wish to downgrade to any release earlier than 4.3(4a), then you must disable MACsec functionality before downgrading.

Table 6: Upgrade Paths to Release 4.3(5)

Upgrade from Release	Recommended Upgrade Path
Upgrade from any 4.3(4) release	Direct upgrade to release 4.3(5). **Note** When updating the Cisco UCS-FI-6324 Fabric Interconnect from firmware version 4.3(4), first download Infrastructure A bundle for release 4.3(5) and perform the upgrade. Then, proceed to download the server bundles for version 4.3(5).
Upgrade from any 4.3(3) release	Direct upgrade to release 4.3(5). **Note** When updating the Cisco UCS-FI-6324 Fabric Interconnect from firmware version 4.3(3), first download Infrastructure A bundle for release 4.3(5) and perform the upgrade. Then, proceed to download the server bundles for version 4.3(5).
Upgrade from any 4.3(2) release	Direct upgrade to release 4.3(5). **Note** When updating the Cisco UCS-FI-6324 Fabric Interconnect from firmware version 4.3(2), first download Infrastructure A bundle for release 4.3(5) and perform the upgrade. Then, proceed to download the server bundles for version 4.3(5).
Upgrade from any 4.2(2) or 4.2(3) release	Direct upgrade to release 4.3(5).

Upgrade from any 4.2(1) release	1. Upgrade from 4.2(1i) or later patch—Direct upgrade to release 4.3(5).
	
	 2. Upgrade from a patch earlier than 4.2(1i) —
	
	    a. Upgrade to release 4.2(1i)A bundle and activate.
	
	      Note Do not download release 4.3(5)A bundle before activating release 4.2(1i)A.
	
	    b. Download and upgrade to release 4.3(5).

Upgrade from Release	Recommended Upgrade Path

Upgrade from any 4.1(3) release	1. Upgrade from 4.1(3h) or later patch—Direct upgrade to release 4.3(5).
	
	2. Upgrade from a patch earlier than 4.1(3h)—
	
	   a. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate.
	
	      Note Do not download release 4.3(5)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.
	
	   b. Download and upgrade to release 4.3(5).

Upgrade from any 4.1(2) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(5)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(5).
Upgrade from any 4.1(1) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(5)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(5).
Upgrade from any 4.0(4) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(5)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(5).

Upgrade and Downgrade to Release 4.3(4)

- You cannot downgrade Infrastructure Firmware Version (A Bundle) of a Cisco UCS X-Series Direct setup to any release earlier than 4.3(4b).

- In a setup equipped with Cisco UCS C245 M8 Server, you cannot downgrade Infrastructure Firmware Version (A Bundle) or Host Firmware Version (C Bundle) to any release earlier than 4.3(4b).

- When upgrading the Cisco UCS-FI-6324 Fabric Interconnect from firmware version 4.3(3) or 4.3(2), first download Infrastructure A bundle for release 4.3(4) and perform the upgrade. Then, proceed to download the server bundles for version 4.3(4).

- If your setup includes any of the following components, then you can not downgrade to any release earlier than 4.3(4a):

    - Cisco UCSX-440P PCIe Node

    - Cisco Tri-Mode 24G SAS RAID Controller w/4GB Cache (UCSC-RAID-HP)

- To downgrade to any release earlier than 4.3(4a), you must remove the configuration for ERSPAN source traffic monitoring sessions and ERSPAN Origin Interface configuration.

- If you have enabled MACsec after upgrading to release 4.3(4a) or later, then you must disable it before downgrading to any release earlier than 4.3(4a).

- If your configuration includes any of the following adapters for management connectivity between Rack servers and UCS Fabric Interconnect, then you cannot upgrade to release 4.3(4a) or later:

    - Qlogic QL41132HORJ dual port 10GBase T OCP (UCSC-OCP-QD10GC)

    - QLogic QL41162HLRJ PCIe dual-port 10Gb Base-T PCIe NIC (UCSC-PCIE-QD10GC)

    - Cisco FastLinQ QL41212H 25GbE (UCSC-PCIE-QD25GF)

    - Qlogic QL41232HOCU dual port 25G OCP (UCSC-OCP-QD25GF)

    - Qlogic FastLinQ QL45412H 40GbE (UCSC-PCIE-QD40GF)

    - QLogic QL45611HLCU single port 100GbE PCIe NIC (UCSC-PCIE-QS100GF)

    - Qlogic FastLinQ QL45631HOCU single port 100G QSFP28 OCP 2.0 (UCSC-OCP-QS100GF)

If these adapters are not used for management connectivity with UCS Fabric Interconnect, then upgrade to release 4.3(4a) is allowed. However, if you need to revert to release 4.3(4a) or an earlier version, then you must re-acknowledge the server to recover the adapter inventory.

Table 7: Upgrade Paths to Release 4.3(4)

Upgrade from Release	Recommended Upgrade Path
Upgrade from any 4.3(3) release	Direct upgrade to release 4.3(4).
	Note When updating the Cisco UCS-FI-6324 Fabric Interconnect from firmware version 4.3(3), first download Infrastructure A bundle for release 4.3(4) and perform the upgrade. Then, proceed to download the server bundles for version 4.3(4).

Upgrade from Release	Recommended Upgrade Path
Upgrade from any 4.3(2) release	Direct upgrade to release 4.3(4). **Note** When updating the Cisco UCS-FI-6324 Fabric Interconnect from firmware version 4.3(2), first download Infrastructure A bundle for release 4.3(4) and perform the upgrade. Then, proceed to download the server bundles for version 4.3(4).
Upgrade from any 4.2(2) or 4.2(3) release	Direct upgrade to release 4.3(4).

Upgrade from any 4.2(1) release	**1.** Upgrade from 4.2(1i) or later patch—Direct upgrade to release 4.3(4).
	
	2. Upgrade from a patch earlier than 4.2(1i) —
	
	  a. Upgrade to release 4.2(1i)A bundle and activate.
	
	    Note Do not download release 4.3(4)A bundle before activating release 4.2(1i)A.
	
	  b. Download and upgrade to release 4.3(4).

Upgrade from any 4.1(3) release	**1.** Upgrade from 4.1(3h) or later patch—Direct upgrade to release 4.3(4).
	
	2. Upgrade from a patch earlier than 4.1(3h)—
	
	  a. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate.
	
	    Note Do not download release 4.3(4)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.
	
	  b. Download and upgrade to release 4.3(4).

Upgrade from any 4.1(2) release	**1.** Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(4)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. **2.** Download and upgrade to release 4.3(4).

Upgrade from Release	Recommended Upgrade Path
Upgrade from any 4.1(1) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(4)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(4).
Upgrade from any 4.0(4) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(4)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(4).

Upgrade and Downgrade to Release 4.3(3)

1. You cannot downgrade any Cisco UCS C220 M7, C240 M7, and X210c server equipped with any 5th Gen Intel® Xeon® Scalable Processor listed in New Hardware in Release 4.3(3a), on page 28 to any release earlier than 4.3(3a).

2. If you are planing to install any 15000 series Cisco UCS VIC, first supported in any 4.3 release, then ensure that you first upgrade the servers to the minimum supported release and then install the adapters in the server.

   If you install the adapters into the server running an earlier release and then upgrade the servers to the supported release, the servers require A/C power cycle to recognize the adapters.

   For example, to install Cisco UCS VIC 15427 adapter, first upgrade to release 4.3(2c) or later and then install the adapter in the server.

3. If you are managing Cisco UCS X-Series chassis or Cisco UCS M7 servers after upgrading to any 4.3(3) release, then you must decommission the X-Series chassis and M7 servers before downgrading to any unsupported release. Refer New Features in Release 4.3, on page 22 for minimum supported version for Cisco UCS X-Series chassis and Cisco UCS M7 servers.

4. Cisco UCS M4 servers are not supported by 4.3(2) and later releases. You must decommission Cisco UCS M4 servers before upgrading to release 4.3(3).

5. Once you upgrade to 4.3(3) or any later release and enable Netflow feature from Cisco UCS Manager GUI, then you cannot downgrade to any release earlier than 4.3(2). To downgrade to any release earlier than 4.3(2), you must first disable Netflow feature from Cisco UCS Manager GUI.

6. Once you upgrade Cisco UCS 6400 or 64108 FI to 4.3(3) or any later release and enable Q-in-Q feature from Cisco UCS Manager GUI, then you cannot downgrade to any release earlier than 4.3(2). To downgrade to any release earlier than 4.3(2), you must first disable Q-in-Q feature from Cisco UCS Manager GUI.

7. Once you upgrade to release 4.3(3) or later and enable **SMTP Authentication** under Call Home in Cisco UCS Manager GUI, then you cannot downgrade to any release earlier than 4.3(2). To downgrade to any release earlier than 4.3(2), you must first disable **SMTP Authentication** from Cisco UCS Manager GUI.

8. If you have installed any Cisco UCS VIC with secure boot feature, then you cannot downgrade to any release earlier than 4.3(2).

9. If Fibre Channel ports on UCS Fabric Interconnect are connected to non-Cisco products, ensure that these are operating as individual Fibre Channel links and not aggregated into a port channel. Fibre Channel port channels are not compatible with non-Cisco technology.

Table 8: Upgrade Paths to Release 4.3(3)

Upgrade from Release	Recommended Upgrade Path
Upgrade from any 4.3(2) release	Direct upgrade to release 4.3(3).
Upgrade from any 4.2(2) or 4.2(3) release	Direct upgrade to release 4.3(3).

Upgrade from any 4.2(1) release	1. Upgrade from 4.2(1i) or later patch—Direct upgrade to release 4.3(3).
	
	 2. Upgrade from a patch earlier than 4.2(1i) —
	
	   a. Upgrade to release 4.2(1i)A bundle and activate.
	
	     Note Do not download release 4.3(3)A bundle before activating release 4.2(1i)A.
	
	   b. Download and upgrade to release 4.3(3).

Upgrade from any 4.1(3) release	1. Upgrade from 4.1(3h) or later patch—Direct upgrade to release 4.3(3).
	
	 2. Upgrade from a patch earlier than 4.1(3h)—
	
	   a. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate.
	
	     Note Do not download release 4.3(3)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version..
	
	   b. Download and upgrade to release 4.3(3).

Upgrade from Release	Recommended Upgrade Path
Upgrade from any 4.1(2) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(3)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(3).
Upgrade from any 4.1(1) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(3)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(3).
Upgrade from any 4.0(4) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(3)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(3).

Infrastructure Upgrade and Downgrade to Release 4.3(2)

1. If you are planing to install any 15000 series Cisco UCS VIC, first supported in 4.3(2) release, then ensure that you first upgrade the servers to the supported release and then install the adapters in the server.

   If you install the adapters into the server running an earlier release and then upgrade the servers to the supported release, the servers require A/C power cycle to recognize the adapters.

   For example, to install Cisco UCS VIC 15427 adapter, first upgrade to release 4.3(2c) or later and then install the adapter in the server.

2. If you are managing Cisco UCS X-Series chassis or Cisco UCS M7 servers after upgrading to release 4.3(2), then you must decommission the X-Series chassis and M7 servers before downgrading.

3. Cisco UCS M4 servers are not supported by 4.3(2) and later releases. You must decommission Cisco UCS M4 servers before upgrading to release 4.3(2)

4. Once you upgrade to release 4.3(2) or later and enable Netflow feature from Cisco UCS Manager GUI, then you cannot downgrade to any previous release. To downgrade to any release earlier than 4.3(2), you must first disable Netflow feature from Cisco UCS Manager GUI.

5. Once you upgrade Cisco UCS 6400 or 64108 FI to release 4.3(2) or later and enable Q-in-Q feature from Cisco UCS Manager GUI, then you cannot downgrade to any previous release. To downgrade to any release earlier than 4.3(2), you must first disable Q-in-Q feature from Cisco UCS Manager GUI.

6. Once you upgrade to release 4.3(2) or later and enable **SMTP Authentication** under Call Home in Cisco UCS Manager GUI, then you cannot downgrade to any previous release. To downgrade to any release earlier than 4.3(2), you must first disable **SMTP Authentication** from Cisco UCS Manager GUI.

7. If you have installed any Cisco UCS VIC with secure boot feature, then you cannot dowgrade to any previous release.

8. If Fibre Channel ports on UCS Fabric Interconnect are connected to non-Cisco products, ensure that these are operating as individual Fibre Channel links and not aggregated into a port channel. Fibre Channel port channels are not compatible with non-Cisco technology.

Table 9: Upgrade Paths to Release 4.3(2)

Upgrade from Release	Recommended Upgrade Path
Upgrade from any 4.2(2) or 4.2(3) release	Direct upgrade to release 4.3(2).

Upgrade from any 4.2(1) release	1. Upgrade from 4.2(1i) or later patch—Direct upgrade to release 4.3(2).
	
	 2. Upgrade from a patch earlier than 4.2(1i) —
	
	   a. Upgrade to release 4.2(1i)A bundle and activate.
	
	     Note Do not download release 4.3(2)A bundle before activating release 4.2(1i)A.
	
	   b. Download and upgrade to release 4.3(2).

Upgrade from any 4.1(3) release	1. Upgrade from 4.1(3h) or later patch—Direct upgrade to release 4.3(2).
	
	 2. Upgrade from a patch earlier than 4.1(3h)—
	
	   a. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate.
	
	     Note Do not download release 4.3(2)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version..
	
	   b. Download and upgrade to release 4.3(2).

Upgrade from Release	Recommended Upgrade Path
Upgrade from any 4.1(2) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(2)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(2).
Upgrade from any 4.1(1) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(2)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(2).
Upgrade from any 4.0(4) release	1. Upgrade to release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version and activate. **Note** Do not download release 4.3(2)A bundle before activating release 4.1(3h)A bundle or later infrastructure bundle in 4.1(3) release version.. 2. Download and upgrade to release 4.3(2).

UCS Manager Health and Pre-Upgrade Check Tool

The UCS Manager Health and Pre-Upgrade Check Tool provides automated health and pre-upgrade checks that are designed to ensure your clusters are healthy before you upgrade. It is imperative that this healthcheck is not just performed, but that you take corrective action on any cluster that is found to be unhealthy. Correct all issues reported by the UCS Manager health check before continuing.

Default Open Ports

The following table lists the default open ports used in Cisco UCS Manager Release 4.3.

Port	Interface	Protocol	Traffic Type	Fabric Interconnect	Usage
22	CLI	SSH	TCP	UCS 6300 Series UCS 6400 Series UCS 6536 UCSX-S9108-100G	Cisco UCS Manager CLI access
80	XML	HTTP	TCP	UCS 6300 Series UCS 6400 Series UCS 6536 UCSX-S9108-100G	Cisco UCS Manager GUI and third party management stations. Client download
443	XML	HTTP	TCP	UCS 6300 Series UCS 6400 Series UCS 6536 UCSX-S9108-100G	Cisco UCS Manager login page access Cisco UCS Manager XML API access
743	KVM	HTTP	TCP	UCS 6300 Series UCS 6400 Series UCS 6536 UCSX-S9108-100G	CIMC Web Service / Direct KVM
7546	CFS	CFSD	TCP	UCS 6400 Series UCS 6536 UCSX-S9108-100G	Cisco Fabric Service

Cisco UCS Manager Network Management Guide, Release 4.2 provides a complete list of open TCP and UDP ports.

New Features in Release 4.3

Cisco UCS Manager, Release 4.3 is a unified software release for all supported UCS hardware platforms.

New Hardware Features

- New Hardware in Release 4.3(5a), on page 23
- New Hardware in Release 4.3(4e)—None
- New Hardware in Release 4.3(4d)—None
- New Hardware in Release 4.3(4c)—None
- New Hardware in Release 4.3(4b), on page 26
- New Hardware in Release 4.3(4a), on page 27
- New Hardware in Release 4.3(3c)—None
- New Hardware in Release 4.3(3a), on page 28
- New Hardware in Release 4.3(2f)—None
- New Hardware in Release 4.3(2e)—None
- New Hardware in Release 4.3(2c), on page 31
- New Hardware in Release 4.3(2b), on page 32

New Software Features

- New Software Feature in Release 4.3(5a), on page 36
- New Software in Release 4.3(4e)—None
- New Software in Release 4.3(4d)—None
- New Software in Release 4.3(4c)—None
- New Software Feature in Release 4.3(4b)—None
- New Software Feature in Release 4.3(4a), on page 37
- New Software Feature in Release 4.3(3c), on page 38
- New Software Feature in Release 4.3(3a)—None
- New Software in Release 4.3(2f)—None
- New Software Feature in Release 4.3(2e)—None
- New Software Feature in Release 4.3(2c)—None
- New Software Feature in Release 4.3(2b), on page 38

New Hardware in Release 4.3

New Hardware in Release 4.3(5a)

Cisco UCS X215c M8 Compute Node

The Cisco UCS X-Series Modular System simplifies your data center, adapting to the unpredictable needs of modern applications while also providing for traditional scale-out and enterprise workloads. It reduces the number of server types to maintain, helping to improve operational efficiency and agility as it helps reduce complexity. Powered by the Cisco Intersight™ cloud operations platform, it shifts your thinking from administrative details to business outcomes with hybrid cloud infrastructure that is assembled from the cloud, shaped to your workloads, and continuously optimized.

The Cisco UCS X215c M8 Compute Node is integrate into the Cisco UCS X-Series Modular System. Up to eight compute nodes can reside in the 7-Rack-Unit (7RU) Cisco UCS X9508 Chassis, offering one of the highest densities of compute, IO, and storage per rack unit in the industry.

The Cisco UCS X215c M8 Compute Node offers the following:

- CPU: Up to 2x 4th Generation AMD EPYC Processors with up to 128 cores per processors

- Memory:

    - 24 DIMM slots (12 DIMMs per CPU socket), up to 4800 MT/s DDR5.

    - Up to 6 TB of capacity.

- Storage: Up to 6 hot-pluggable, Solid-State Drives (SSDs), or Non-Volatile Memory Express (NVMe) 2.5-inch drives with a choice of enterprise-class Redundant Array of Independent Disks (RAID) or pass-through controllers with four lanes each of PCIe Gen 4 connectivity and up to 2 M.2 SATA or NVMe drives for flexible boot and local storage capabilities.

- Optional Front Mezzanine GPU module: The Cisco UCS Front Mezzanine GPU module is a passive PCIe Gen 4 front mezzanine option with support for up to two U.2 or U.3 NVMe drives and two HHHL GPUs.

- mLOM virtual interface cards:

    - Cisco UCS Virtual Interface Card (VIC) 15420 occupies the server's Modular LAN on Motherboard (mLOM) slot, enabling up to 50Gbps (2 x25Gbps) of unified fabric connectivity to each of the chassis Intelligent Fabric Modules (IFMs) for 100Gbps connectivity per server.

    - Cisco UCS Virtual Interface Card (VIC) 15230 occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 100 Gbps of unified fabric connectivity to each of the chassis Intelligent Fabric Modules (IFMs) for 100 Gbps connectivity per server with secure boot capability.

- Optional Mezzanine card:

    - Cisco UCS Virtual Interface Card (VIC) 15422 can occupy the server's mezzanine slot at the bottom rear of the chassis. An included bridge card extends this VIC's 100Gbps (4 x 25Gbps) of network connections through IFM connectors, bringing the total bandwidth to 100Gbps per VIC 15420 and 15422 (for a total of 200Gbps per server). In addition to IFM connectivity, the VIC 15422 I/O connectors link to Cisco UCS X-Fabric technology.

- Cisco UCS PCI Mezz card for X-Fabric can occupy the server's mezzanine slot at the bottom rear of the chassis. This card's I/O connectors link to Cisco UCS X-Fabric modules and enable connectivity to the X440p PCIe Node.

- Security: Includes secure boot silicon root of trust FPGA, ACT2 anti-counterfeit provisions, and optional Trusted Platform Model (TPM).

For complete list of supported peripherals for Cisco UCS X215c M8 Compute Node, see Cisco UCS X215c M8 Compute Node Spec Sheet.

Note   Cisco UCS X215c M8 Compute Node support only 14000 Series and 15000 Series secure boot VIC adapters.

Cisco UCS C225 M8 Server

The Cisco UCS C225 M8 Server is a versatile general-purpose infrastructure and application server. This high-density, 1RU, single-socket rack server delivers industry-leading performance and efficiency for a wide range of workloads, including virtualization, collaboration, and bare-metal applications.

The Cisco UCS C225 M8 Server extends the capabilities of the Cisco UCS rack server portfolio. It powers 4th Gen AMD EPYC™ Processors with 100 percent more cores per socket designed using AMD's chiplet architecture. With advanced features such as AMD Infinity Guard, compute-intensive applications will see significant performance improvements and reap other benefits such as power and cost efficiencies.

You can deploy the Cisco UCS C225 M8 Server as standalone servers or as part of the Cisco Unified Computing System™ managed by Cisco Intersight® or Cisco UCS Manager to take advantage of Cisco® standards-based unified computing innovations that can help reduce your Total Cost of Ownership (TCO) and increase your business agility.

The C225 M8 rack server brings many new innovations to the Cisco UCS AMD rack server portfolio. With the introduction of PCIe Gen 5.0 for high-speed I/O, a DDR5 memory bus, and expanded storage capabilities, the server delivers significant performance and efficiency gains that will improve your application performance.

The key features of Cisco UCS C225 M8 Server include:

- Supports one 4th Gen AMD EPYC CPU, with up to 128 cores per socket

- Up to 12 DDR5 DIMMs for up to 1.5 TB of capacity using 128 GB DIMMs

- Up to 4800 MT/s DDR5 memory

- Up to 3 PCIe 4.0 slots or up to 2 PCIe 5.0 slots, plus a modular LAN on motherboard (mLOM) / OCP slot 3.0 (details below)

- Support for Cisco UCS VIC 15000 Series adapters as well as a host of third-party NIC options

- UCS C225 M8S chassis: up to 10 SAS/SATA or NVMe disk drives

  - New tri-mode RAID controller supports SAS4 or NVMe hardware RAID

  - Up to 4 direct-attach NVMe SSDs

- UCS C225 M8N chassis: up to 10 direct attach NVMe SSDs

  - All 10 NVMe drives connected at PCIe Gen4 x4

- M.2 boot options

  - Up to two 960GB SATA M.2 drives with hardware RAID, or

  - Up to two 960GB NVMe M.2 drives with NVMe hardware RAID

- Up to three GPUs supported

- Hybrid modular LOM/OCP 3.0

  - One dedicated Gen 4.0 x16 slot that can be used to add an mLOM or OCP 3.0 card for additional rear-panel connectivity

  - mLOM allows for Cisco UCS Virtual Interface Cards (VICs) without consuming a PCIe slot, supporting quad-port 10/25/50 Gbps or dual-port 40/100/200 Gbps network connectivity

  - OCP 3.0 slot features full out-of-band management for select adapters

Cisco UCS Manager supports all the peripherals supported by Cisco UCS C225 M8 Server. For complete list of supported peripherals for Cisco UCS C225 M8 Server, see Cisco UCS C225 M8 SFF Rack Server Spec Sheet.

Note Cisco UCS C225 M8 Server support only 14000 Series and 15000 Series secure boot VIC adapters.

RAID Controllers

Cisco UCS Manager adds support for the following Cisco Tri-Mode M1 24G RAID and HBA controllers on Cisco UCS C-Series M7 servers:

- UCSC-HBA-M1L16 and UCSC-RAID-M1L16 on Cisco UCSC-C220-M7 servers

- UCSC-HBA-M1L16 and UCSC-RAID-MP1L32 on Cisco UCSC-C240-M7 servers

GPU Support

Support for the following new GPUs:

- NVIDIA A16 GPU on X440p: PCIE 250W 4X16GB, FHFL (UCSC-CGPU-A16)—Cisco UCS X215c M8 (with PCIe Node).

- NVIDIAH100-NVL GPU 400W, 94GB, 2-slot FHFL (UCSC-GPU-H100-NVL)—Cisco UCS X215c M8 (with PCIe Node), UCS X210c M7, UCS C245 M8, UCS C240 M7.

- NVIDIA L4-Mezz GPU 70W, 24GB, 1-slot HHHL (UCSX-GPU-L4-Mezz)—Cisco UCS X215c M8 and UCS X210c M7.

Extended support for the following existing GPUs:

- NVIDIAL40 300W, 48GB wPWR CBL (UCSC-GPU-L40)—Cisco UCS X215c M8 (with PCIe Node).

- NVIDIA L40S: 350W, 48GB, 2-slot FHFL GPU (UCSC-GPU-L40S)—Cisco UCS X215c M8 (with PCIe Node).

- NVIDIA L4:70W, 24GB, 1-slot HHHL GPU (UCSC-GPU-L4)—Cisco UCS X215c M8 (with PCIe Node).

New Hardware in Release 4.3(4b)

Cisco UCS X-Series Direct®

The Cisco UCS X-Series Direct® simplifies your data center, adapting to the unpredictable needs of modern applications while also providing an edge scaled for remote branch office workloads. It minimizes the IT infrastructure deployed at edge locations to achieve desired business outcomes. As you are looking to increase the number of applications at the edge while deploying as little IT infrastructure as possible, the Cisco UCS X-Series Direct®, powered by Cisco Intersight® and Cisco UCS Manager, enables the benefits of scale together with a secure and unified connectivity.

The Cisco UCS X-Series Direct begins with the Cisco UCS X9508 Chassis engineered to be adaptable and future ready. It is a standard, open system designed to deploy and automate faster in concert with a hybrid-cloud environment.

With a midplane-free design, I/O connectivity for the X9508 chassis is accomplished with frontloading, vertically oriented compute nodes intersecting with horizontally oriented I/O connectivity modules in the rear of the chassis. The I/O connectivity modules of the solution are the Cisco UCS X-Series Direct Fabric Interconnect Modules, a unified fabric for Ethernet and Fibre Channel. Additionally, the UCS X9508 chassis can have expanded GPU capabilities using the Cisco UCS X-Fabric technology which interconnects X-series compute and PCIe nodes using high-speed PCIe technology.

For more information see Cisco UCS X-Series Direct Data Sheet.

Cisco UCS C245 M8 Rack Server

The Cisco UCS C245 M8 Server is perfectly suited for a wide range of storage and I/O-intensive applications such as big data analytics, databases, collaboration, virtualization, consolidation, AI/ML and high-performance computing supporting up to two AMD® CPUs in a 2RU form factor.

The Cisco UCS C245 M8 Server extends the capabilities of the Cisco UCS rack server portfolio. With advanced features like AMD Infinity Guard, compute-intensive applications will see significant performance improvements and will reap other benefits such as power and cost efficiencies.

You can deploy the Cisco UCS C-Series rack servers as part of the Cisco Unified Computing System™ managed by Cisco Intersight® or Cisco UCS Manager® to take advantage of Cisco® standards-based unified computing innovations that can help reduce your Total Cost of Ownership (TCO) and increase your business agility or as standalone servers.

The Cisco UCS C245 M8 Server brings many innovations to the UCS AMD® rack server line. With the introduction of PCIe Gen 5.0 expansion slots for high-speed I/O, a DDR5 memory bus, and expanded storage capabilities, the server delivers significant performance and efficiency gains that will greatly enhance application performance. Features include:

- Support for up to two 4th Gen AMD EPYC™ CPUs in a server designed to drive as much as 256 CPU cores (128 cores per socket)

- Up to 24 DDR5 DIMM slots

- Up to 4800 MT/s DDR5 memory

- Up to 8 x PCIe Gen 4.0 slots or up to 4 x PCIe Gen 5.0 slots, plus a hybrid modular LAN on motherboard (mLOM) /OCP 3.0 slot (details below)

- Support for Cisco UCS VIC 15000 Series adapters as well as a host of third-party NIC options

- Up to 28 hot-swappable small-form-factor (SFF) SAS/SATA or NVMe drives (with up to 8 direct-attach NVMe drives) and New tri-mode RAID controller supports SAS4 plus NVMe hardware RAID.

- M.2 boot options

    - Up to two 960GB SATA M.2 drives with hardware RAID support

    - Up to two 960GB NVMe M.2 drives with NVMe hardware RAID

- Support for up to Eight GPUs

- Modular LOM / OCP 3.0

    - One dedicated PCIe Gen4x16 slot that can be used to add an mLOM or OCP 3.0 card for additional rear-panel connectivity

    - mLOM slot that can be used to install a Cisco UCS Virtual Interface Card (VIC) without consuming a PCIe slot, supporting quad-port 10/25/50 Gbps or dual-port 40/100/200 Gbps network connectivity

    - OCP 3.0 slot that features full out-of-band management for select adapters

Cisco UCS Manager supports all the peripherals supported by Cisco UCS C245 M8 Server. For complete list of supported peripherals for Cisco UCS C245 M8 Server, see Cisco UCS C245 M8 SFF Rack Server Spec Sheet.

New Hardware in Release 4.3(4a)

- Support for the following RAID controllers:

    - Cisco Tri-Mode 24G SAS RAID Controller w/4GB Cache (UCSC-RAID-HP) with Cisco UCS C220 M7 and C240 M7 servers.

    - Cisco boot optimized M.2 NVMe RAID controller (UCS-M2-NVRAID) with Cisco UCS C220 M7 and C240 M7 servers.

      This controller supports only RAID0, RAID1, or JBOD (default - JBOD) mode and only UEFI boot mode.

- Support for the UCS-TPM-002D TPM module with Cisco UCS X410c M7, X210c M7, X210c M6, B200 M6, C220 M7, C240 M7, C220 M6, and C240 M6 servers.

- Support for the UCS-TPM2-002D TPM module on Cisco UCS C225 M6 and C245 M6 servers.

- Support for Cisco UCSX-440P PCIe Node. For more information, see Cisco UCS X440p PCIe Node Spec Sheet.

- Support for the following GPUs:

    - Intel® Data Center GPU Flex 140, HHHL, 75W PCIe (UCSC-GPU-FLEX140) with Cisco UCS C220 M7 and C240 M7 servers

    - Intel® Data Center GPU Flex 170, FH-3/4L, 150W PCIe (UCSC-GPU-FLEX170) with Cisco UCS C240 M7 servers

    - NVIDIA® 350W, 40GB, 2-Slot FHFL L40S GPU (UCSX-GPU-L40S) on Cisco UCS X440p PCIe Node and Cisco UCS C240 M7 servers

- NVIDIA® Hopper L4 70W, 24GB, 1-slot HHHL (UCSC-GPU-L4M6) with Cisco UCS C220 and C240 M6 servers

- NVIDIA® H100 on Cisco UCS X440p PCIe Node, and Cisco UCS C240 M7 servers

- Support for Hynix® 96GB 2Rx4 PC5-5600B-RA0-1010-XT (HMCGM4MGBRB) DIMM with Cisco UCS X410c M7 servers equipped with the following processors:
  - Intel® Xeon® Gold 6416H Processor
  - Intel® Xeon® Gold 6418H Processor
  - Intel® Xeon® Gold 6434H Processor
  - Intel® Xeon® Gold 6448H Processor

New Hardware in Release 4.3(3a)

Support for 5th Gen Intel® Xeon® Scalable Processors

Support for the following 5th Gen Intel® Xeon® Scalable Processors with Cisco X210c M7 servers:

- Intel® Xeon® Platinum 8558P Processor
- Intel® Xeon® Platinum 8562Y+ Processor
- Intel® Xeon® Platinum 8592+ Processor
- Intel® Xeon® Platinum 8568Y+ Processor
- Intel® Xeon® Platinum 8592V Processor
- Intel® Xeon® Platinum 8580 Processor
- Intel® Xeon® Platinum 8558 Processor
- Intel® Xeon® Platinum 8558U Processor
- Intel® Xeon® Platinum 8570 Processor
- Intel® Xeon® Platinum 8571N Processor
- Intel® Xeon® Platinum 8581V Processor
- Intel® Xeon® Gold 6542Y Processor
- Intel® Xeon® Gold 6544Y Processor
- Intel® Xeon® Gold 6530 Processor
- Intel® Xeon® Gold 6554S Processor
- Intel® Xeon® Gold 6548Y+ Processor
- Intel® Xeon® Gold 6526Y Processor
- Intel® Xeon® Gold 6534 Processor
- Intel® Xeon® Gold 6538Y+ Processor

- Intel® Xeon® Gold 6548N Processor
- Intel® Xeon® Gold 5512U Processor
- Intel® Xeon® Gold 5515+ Processor
- Intel® Xeon® Gold 5520+ Processor
- Intel® Xeon® Gold 6538N Processor
- Intel® Xeon® Silver 4514Y Processor
- Intel® Xeon® Silver 4516Y+ Processor

Support for the following 5th Gen Intel® Xeon® Scalable Processors with Cisco UCS C220 M7 and C240 M7 servers:

- Intel® Xeon® Platinum 8592V Processor
- Intel® Xeon® Platinum 8562Y+ Processor
- Intel® Xeon® Platinum 8568Y+ Processor
- Intel® Xeon® Platinum 8592+ Processor
- Intel® Xeon® Platinum 8558P Processor
- Intel® Xeon® Platinum 8580 Processor
- Intel® Xeon® Platinum 8558 Processor
- Intel® Xeon® Gold 6542Y Processor
- Intel® Xeon® Gold 6544Y Processor
- Intel® Xeon® Gold 6548Y+ Processor
- Intel® Xeon® Gold 6526Y Processor
- Intel® Xeon® Gold 6530 Processor
- Intel® Xeon® Gold 6534 Processor
- Intel® Xeon® Gold 6554S Processor
- Intel® Xeon® Gold 6538Y+ Processor
- Intel® Xeon® Gold 5515+ Processor
- Intel® Xeon® Gold 5520+ Processor
- Intel® Xeon® Gold 6548N Processor
- Intel® Xeon® Silver 4514Y Processor
- Intel® Xeon® Silver 4516Y+ Processor

Support for 5600 DIMMs

Support for the following 5600 DIMMs with Cisco UCS X210c M7 servers:

- Samsung® 16GB 1Rx8 PC5-5600B-RD0-1010-XT (KR M321R2GA3PB0-CWMKH 2323)

- Samsung® 32GB 1Rx4 PC5-5600B-RC0-1010-XT (M321R4GA0PB0-CWM)

- Samsung® 64GB 2Rx4 PC5-5600B-RA0-1010-XT (KR M321R8GA0PB0-CWMCH 2326)

- Samsung® 96GB (M321RYGA0PB0-CWM)

- Hynix® 16GB 1Rx8 PC5-5600B-RD0-1010-XT (HMCG78AGBRA190N BB 307)

- Hynix® 32GB 1Rx4 PC5-5600B-RC0-1010-XT (HMCG84AGBRA190N BB 310)

- Hynix® 64GB 2Rx4 PC5-5600B-RA0-1010-XT (HMCG94AGBRA177N BB 327)

- Hynix® 96GB 96GB 2Rx4 PC5-5600B-RA0-1010-XT (HMCGM4MGBRB)

- Hynix® 128GB 2S2Rx4 PC5-5600B-RA0-1010-XT (HMCT04AGERA)

Support for the following 5600 DIMMs with Cisco UCS C240 M7 and C220 M7 servers:

- Hynix® 16GB 1Rx8 PC5-5600B-RD0-1010-XT (HMCG78AGBRA190N BB 307)

- Hynix® 32GB 1Rx4 PC5-5600B-RC0-1010-XT (HMCG84AGBRA190N BB 310)

- Hynix® 64GB 2Rx4 PC5-5600B-RA0-1010-XT (HMCG94AGBRA177N BB 327)

- Hynix® 96GB 2Rx4 PC5-5600B-RA0-1010-XT (HMCGM4MGBRB)

- Hynix® 128GB 2S2Rx4 PC5-5600B-RA0-1010-XT (HMCT04AGERA)

- Samsung® 16GB 1Rx8 PC5-5600B-RD0-1010-XT (KR M321R2GA3PB0-CWMKH 2323)

- Samsung® 32GB 1Rx4 PC5-5600B-RC0-1010-XT (M321R4GA0PB0-CWM)

- Samsung® 64GB 2Rx4 PC5-5600B-RA0-1010-XT (KR M321R8GA0PB0-CWMCH 2326)

- Micron® 96GB 2RX4 PC5-5600B-RA0-1010-XT (MTC40F204WS1RC56BB1 317)

Support for Hynix® 96GB 2Rx4 PC5-5600B-RA0-1010-XT (HMCGM4MGBRB) DIMM with Cisco UCS X410c M7 servers equipped with the following processors:

- Intel® Xeon® Platinum 8444H Processor

- Intel® Xeon® Platinum 8450H Processor

- Intel® Xeon® Platinum 8454H Processor

- Intel® Xeon® Platinum 8460H Processor

- Intel® Xeon® Platinum 8468H Processor

- Intel® Xeon® Platinum 8490H Processor

Supported GPUs

Support for the following Intel® GPU cards with the CPUs listed here:

- Support for Intel® Data Center GPU Flex 170, FH-3/4L, 150W PCIe with Cisco UCS C240 M7 servers

- Support for Intel® Data Center GPU Flex 140, HHHL, 75W PCIe with Cisco UCS C220 M7 and C240 M7 servers

New Hardware in Release 4.3(2c)

Cisco UCS X410c M7 Compute Node

The Cisco UCS X410c M7 Compute Node is the first 4-socket 4th Gen Intel® Xeon® Scalable Processors computing device to integrate into the Cisco UCS X-Series Modular System. Up to four compute nodes or two compute nodes and two GPU nodes can reside in the 7-rack-unit (7RU) Cisco UCS X9508 Server Chassis, offering high performance and efficiency gains for a wide range of mission-critical enterprise applications, memory-intensive applications and bare-metal and virtualized workloads.

The Cisco UCS X410c M7 Compute Node provides these main features:

- CPU: Four 4th Gen Intel Xeon Scalable Processors with up to 60 cores per processor

- Memory: Up to 16TB of main memory with 64x 256 GB DDR5-4800 Memory DIMMs

- Storage: Up to six hot-pluggable solid-state drives (SSDs), or non-volatile memory express (NVMe) 2.5-inch drives with a choice of enterprise-class RAID or passthrough controllers, up to two M.2 SATA drives with optional hardware RAID

- mLOM virtual interface cards:

  - Cisco UCS VIC 15420 occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 50 Gbps of unified fabric connectivity to each of the chassis's intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

  - Cisco UCS VIC 15231 occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 100 Gbps of unified fabric connectivity to each of the chassis's intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

  - Cisco UCS VIC 15230 (with secure boot feature) occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 100 Gbps of unified fabric connectivity to each of the chassis's intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

- Optional mezzanine card:

  - Cisco UCS 5th Gen VIC 15422 can occupy the server's mezzanine slot at the bottom rear of the chassis. This card's I/O connectors link to Cisco UCS X-Fabric technology. An included bridge card extends this VIC's 2x 50 Gbps of network connections through IFM connectors, bringing the total bandwidth to 100 Gbps per fabric (for a total of 200 Gbps per server).

  - Cisco UCS PCI Mezz card for Cisco UCS X-Fabric can occupy the server's mezzanine slot at the bottom rear of the chassis. This card's I/O connectors link to Cisco UCS X-Fabric modules and enable connectivity to the Cisco UCS X440p PCIe Node.

  - All VIC mezzanine cards also provide I/O connections from the X410c M7 compute node to the X440p PCIe node.

- Security: The server supports an optional trusted platform module (TPM). Additional features include a secure boot FPGA and ACT2 anti-counterfeit provisions.

Cisco UCS VIC Cards

Following Cisco UCS VIC Cards are supported from release 4.3(2c) onwards:

- Cisco UCS VIC 15427—The Cisco UCS VIC 15427 is a Quad Port CNA MLOM, 4 x 10/25/50G with Secure Boot for Cisco UCS C-Series M6 and M7 servers.

- Cisco UCS VIC 15230—The Cisco UCS VIC 15230 is a MLOM with Secure Boot for Cisco UCS X210c M6, X210c M7, and X410c M7 servers.

- Cisco UCS VIC 15237 mLOM—The Cisco UCS VIC 15237 mLOM is a MLOM, 2x40/100/200G with Secure Boot for Cisco UCS C-Series M6 and M7 servers.

New Hardware in Release 4.3(2b)

Cisco UCSX-9508 Chassis

The Cisco UCS® X-Series Modular System simplifies your data center, adapting to the unpredictable needs of modern applications while also providing for traditional scale-out and enterprise workloads. It reduces the number of server types to maintain, helping to improve operational efficiency and agility as it helps reduce complexity.

The Cisco UCS X-Series Modular System begins with the Cisco UCSX-9508 Chassis engineered to be adaptable and future ready. It is a standard, open system designed to deploy and automate faster in concert with a hybrid cloud environment.

With a midplane-free design, I/O connectivity for the X9508 chassis is accomplished with frontloading, vertically oriented compute nodes intersecting with horizontally oriented I/O connectivity modules in the rear of the chassis. A unified Ethernet fabric is supplied with the Cisco UCS 9108 Intelligent Fabric Modules. In the future, Cisco UCS X-Fabric Technology interconnects will supply other industry-standard protocols as standards emerge. Interconnections can be easily updated with new modules.

For more information, see Cisco UCS X9508 Chassis Data Sheet.

Cisco UCS X210c M7 Compute Node

The Cisco UCS X210c M7 Compute Node is the second generation of compute node to integrate into the Cisco UCS X-Series Modular System. It delivers performance, flexibility, and optimization for deployments in data centers, in the cloud, and at remote sites. This enterprise-class server offers market-leading performance, versatility, and density without compromise for workloads. Up to eight compute nodes can reside in the 7-rack-unit (7RU) Cisco UCSX-9508 Chassis, offering one of the highest densities of compute, I/O, and storage per rack unit in the industry.

The Cisco UCS X210c M7 Compute Node provides these main features:

- CPU: Up to 2x 4th Gen Intel® Xeon® Scalable Processors with up to 60 cores per processor and up to 2.625 MB Level 3 cache per core and up to 112.5 MB per CPU.

- Memory: Up to 8TB of main memory with 32x 256 GB DDR5-4800 DIMMs.

- Storage: Up to six hot-pluggable, solid-state drives (SSDs), or non-volatile memory express (NVMe) 2.5-inch drives with a choice of enterprise-class redundant array of independent disks (RAIDs) or passthrough controllers, up to two M.2 SATA and M.2 NVMe drives with optional hardware RAID.

- Optional front mezzanine GPU module: The Cisco UCS front mezzanine GPU module is a passive PCIe Gen 4.0 front mezzanine option with support for up to two U.2 NVMe drives and two HHHL GPUs.

- mLOM virtual interface cards:

- Cisco UCS Virtual Interface Card (VIC) 15420 occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 50 Gbps of unified fabric connectivity to each of the chassis intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

- ◦ Cisco UCS Virtual Interface Card (VIC) 15231 occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 100 Gbps of unified fabric connectivity to each of the chassis intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

- Optional mezzanine card:

  - Cisco UCS 5th Gen Virtual Interface Card (VIC) 15422 can occupy the server's mezzanine slot at the bottom rear of the chassis. This card's I/O connectors link to Cisco UCS X-Fabric technology. An included bridge card extends this VIC's 2x 50 Gbps of network connections through IFM connectors, bringing the total bandwidth to 100 Gbps per fabric (for a total of 200 Gbps per server).

  - Cisco UCS PCI Mezz card for X-Fabric can occupy the server's mezzanine slot at the bottom rear of the chassis. This card's I/O connectors link to Cisco UCS X-Fabric modules and enable connectivity to the Cisco UCS X440p PCIe Node.

  - All VIC mezzanine cards also provide I/O connections from the X210c M7 compute node to the X440p PCIe Node.

- Security: The server supports an optional trusted platform module (TPM). Additional features include a secure boot FPGA and ACT2 anti-counterfeit provisions.

Cisco UCS X210c M6 Compute Node

The Cisco UCS X210c M6 Compute Node is the first computing device to integrate into the Cisco UCS X-Series Modular System. Up to eight compute nodes can reside in the 7-Rack-Unit (7RU) Cisco UCS X9508 Chassis, offering one of the highest densities of compute, I/O, and storage per rack unit in the industry.

The Cisco UCS X210c M6 Compute Node provides these main features:

- CPU: Up to 2x 3rd Gen Intel® Xeon® Scalable Processors with up to 40 cores per processor and 1.5 MB Level 3 cache per core

- Memory: Up to 32x 256 GB DDR4-3200 DIMMs for up to 8 TB of main memory. Configuring up to 16x 512-GB Intel Optane™ persistent memory DIMMs can yield up to 12 TB of memory.

- Storage: Up to 6 hot-pluggable, solid-state drives (SSDs), or non-volatile memory express (NVMe) 2.5-inch drives with a choice of enterprise-class redundant array of independent disks (RAIDs) or pass-through controllers with four lanes each of PCIe Gen 4 connectivity and up to 2 M.2 SATA drives for flexible boot and local storage capabilities

- Optional front mezzanine GPU module: The Cisco UCS Front Mezzanine GPU module is a passive PCIe Gen 4 front mezzanine option with support for up to two U.2 NVMe drives and two GPUs.

- mLOM virtual interface cards:

  - Cisco UCS Virtual Interface Card (VIC) 14425 occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 50 Gbps of unified fabric connectivity to each of the chassis intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

  - Cisco UCS VIC 15231 occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 100 Gbps of unified fabric connectivity to each of the chassis intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

- Cisco UCS VIC 15420 occupies the server's modular LAN on motherboard (mLOM) slot, enabling up to 100 Gbps of unified fabric connectivity to each of the chassis intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

- Optional mezzanine card:

  - Cisco UCS VIC 14825 can occupy the server's mezzanine slot at the bottom rear of the chassis. This card's I/O connectors link to Cisco UCS X-Fabric technology. An included bridge card extends this VIC's 2x 50 Gbps of network connections through IFM connectors, bringing the total bandwidth to 100 Gbps per fabric (for a total of 200 Gbps per server).

  - Cisco UCS VIC 15422 X-Series mezz (UCSX-ME-V5Q50G) 4x25G can occupy the server's mezzanine slot at the bottom rear of the chassis. This card's I/O connectors link to Cisco UCS X-Fabric technology. An included bridge card extends this VIC's 2x 50 Gbps of network connections through IFM connectors, bringing the total bandwidth to 100 Gbps per fabric (for a total of 200 Gbps per server).

  - Cisco UCS PCI Mezz card for X-Fabric can occupy the server's mezzanine slot at the bottom rear of the chassis. This card's I/O connectors link to Cisco UCS X-Fabric modules and enable connectivity to the X440p PCIe Node.

- Security: The server supports an optional trusted platform module (TPM). Additional features include a secure boot FPGA and ACT2 anti-counterfeit provisions

Intelligent Fabric Module

The Intelligent Fabric Modules (IFMs) bring the unified fabric into the blade server enclosure, providing connectivity between the blade servers and the fabric interconnect, simplifying diagnostics, cabling, and management. Cisco UCS X-Series Servers support following IFMs:

- Cisco UCS 9108 25G IFMs (UCSX-I-9108-25G)

- Cisco UCS 9108 100G IFMs (UCSX-I-9108-100G)

Cisco UCS C240 M7 Server

The Cisco UCS C240 M7 Server is well-suited for a wide range of storage and I/O-intensive applications such as big data analytics, databases, collaboration, virtualization, consolidation, and high-performance computing in its two-socket, 2RU form factor. It incorporates the 4th Gen Intel® Xeon® Scalable Processors with up to 60 cores per socket.

In addition to the advanced features, the server is also equipped with the PCIe Gen 5.0 for high-speed I/O, a DDR5 memory bus, and expanded storage capabilities (up to 32 DDR5 DIMMs for up to 8 TB of capacity using 128 GB DIMMs (16 DIMMs per socket)) and delivers sigficant performance and efficiency gains that will improve your application performance.

You can deploy the Cisco UCS C-Series Rack Servers as standalone servers or as part of the Cisco Unified Computing System managed by Cisco Intersight or Intersight Managed Mode.

Cisco UCS C220 M7 Server

The Cisco UCS C220 M7 Server is a versatile general-purpose infrastructure and application server. This high-density, 1RU, 2-socket rack server delivers industry-leading performance and efficiency for a wide range of workloads, including virtualization, collaboration, and bare-metal applications. It incorporates the 4th Gen

Intel® Xeon® Scalable Processors, with up to 52 cores per socket. With advanced features such as Intel Advanced Matrix Extensions (AMX), Data Streaming Accelerator (DSA), In-Memory Analytics Accelerator (IAA), and QuickAssist Technology (QAT), the server offers significant performance improvements.

In addition to the advanced features, the server is also equipped with the PCIe Gen 5.0 for high-speed I/O, a DDR5 memory bus, and expanded storage capabilities (up to 32 DDR5 DIMMs for up to 4 TB of capacity using 128 GB DIMMs (16 DIMMs per socket)).

You can deploy the Cisco UCS C-Series rack servers as standalone servers or as part of the Cisco Unified Computing System™ with the Cisco Intersight Infrastructure Service cloud-based management platform. These computing innovations help reduce Total Cost of Ownership (TCO) and increase their business agility. These improvements deliver significant performance and efficiency gains that improve your application performance.

Cisco UCS VIC Cards

Following Cisco UCS VIC Cards are supported from release 4.3(2) onwards:

- Cisco UCS VIC 15425—The Cisco UCS VIC 15425 is a quad-port small-form-factor pluggable (SFP+/SFP28/SFP56) PCIe card designed for Cisco UCS C-series M6/M7 rack servers. The card supports 10/25/50-Gbps Ethernet or FCoE. The card can present PCIe standards-compliant interfaces to the host, and these can be dynamically configured as either NICs or HBAs.

- Cisco UCS VIC 15235—The Cisco UCS VIC 15235 is a dual-port quad small-form-factor pluggable (QSFP/QSFP28/QSFP56) PCIe card designed for Cisco UCS C-series M6/M7 rack servers. The card supports 40/100/200-Gbps Ethernet or FCoE. The card can present PCIe standards-compliant interfaces to the host, and these can be dynamically configured as either NICs or HBAs.

- Cisco UCS VIC 15231—The Cisco UCS VIC 15231 is a 2x100-Gbps Ethernet/FCoE-capable modular LAN on motherboard (mLOM) designed exclusively for the Cisco UCS X210 Compute Node. The Cisco UCS VIC 15231 enables a policy-based, stateless, agile server infrastructure that can present to the host PCIe standards-compliant interfaces that can be dynamically configured as either NICs or HBAs.

  Cisco UCS VIC 15231 occupies the modular LAN on motherboard (mLOM) slot of the server, enabling up to 100 Gbps of unified fabric connectivity to each of the chassis intelligent fabric modules (IFMs) for 200 Gbps (2x 100G) connectivity per server.

- Cisco UCS VIC 15420—The Cisco UCS VIC 15420 is a 4x25-Gbps Ethernet/FCoE capable modular LAN On Motherboard (mLOM) designed exclusively for Cisco UCS X210c M6/M7 Compute Node. The Cisco UCS VIC 15420 enables a policy-based, stateless, agile server infrastructure that can present to the host PCIe standards-compliant interfaces that can be dynamically configured as either NICs or HBAs.

  Cisco UCS VIC 15420 card occupies the modular LAN on the motherboard (mLOM) slot of the server, enabling up to 50 Gbps of unified fabric connectivity to each of the chassis intelligent fabric modules (IFMs) for 100 Gbps connectivity per server.

- Cisco UCS VIC 15422—The Cisco UCS VIC 15422 is a 4x25-Gbps Ethernet/FCoE capable mezzanine card (mezz) designed exclusively for Cisco UCS X210c M6/M7 Compute Node. The card enables a policy-based, stateless, agile server infrastructure that can present PCIe standards-compliant interfaces to the host that can be dynamically configured as either NICs or HBAs.

- Cisco UCS VIC 14425—The Cisco UCS VIC 14425 is a 4x25-Gbps Ethernet/FCoE capable modular LAN On Motherboard (mLOM) designed exclusively for Cisco UCS X210c M6 Compute Node. The Cisco UCS VIC 14425 enables a policy-based, stateless, agile server infrastructure that can present to the host PCIe standards-compliant interfaces that can be dynamically configured as either NICs or HBAs.

• Cisco UCS VIC 14825—The Cisco UCS VIC 14825 is a 4x25-Gbps Ethernet/FCoE capable mezzanine card (mezz) designed exclusively for Cisco UCS X210c M6 Compute Node. Cisco UCS X The card enables a policy-based, stateless, agile server infrastructure that can present PCIe standards-compliant interfaces to the host that can be dynamically configured as either NICs or HBAs. The UCS VIC 14000 bridge connector is required with the mezz card to connect the UCS X-Series Blade Server to Intelligent Fabric Module UCSX-I-9108-25G.

Supported GPUs

Following table shows the new GPU support matrix:

GPU	Cisco UCS Blade Servers	Cisco UCS Rack Servers
NVIDIA H100-80 GPU	No	Yes
NVIDIA L40 GPU	No	Yes
NVIDIA L4 GPU	No	Yes
NVIDIA T4 GPU	Yes	No

Note The NVIDIA T4 GPU is supported on the front mezzanine GPU module and on the Cisco UCS X210c M6 Compute Node and Cisco UCS X210c M7 Compute Node only.

Other Peripherals

Support for Cisco UCSB-PSU-2500ACDV 2500 Watt Server AC Power Supply for Cisco UCS 5108 Chassis.

Cisco UCS Manager supports all the peripherals supported by Cisco UCS C240 M7 Server, Cisco UCS C220 M7 Server, Cisco UCS X210c M6 Compute Node, and Cisco UCS X210c M7 Compute Node. For complete list of supported peripherals for a server, see Cisco UCS C-Series Rack Servers Data Sheet and Spec Sheet and Cisco UCS X-Series Modular System Data Sheet and Spec Sheet.

New Software in Release 4.3

New Software Feature in Release 4.3(5a)

• The Cisco UCS Manager release 4.3(5a) introduces advanced security management to protect sensitive data and ensure network integrity. This release includes encryption management with an AES encryption master key option. Additionally, Media Access Control Security (MACsec) now supports Type-6 (AES encryption) in addition to Type-0 and Type-7 encryption for Ethernet uplink ports on Cisco UCS 6536, 6454, and 64108 Fabric Interconnects through GUI and CLI interfaces. This feature offers robust encryption capabilities, allowing administrators to manage encryption settings effectively and ensure data security and compliance with encryption standards.

Note This functionality is not supported on Cisco UCS X-Series Direct (Cisco UCS Fabric Interconnects 9108 100G).

- Cisco UCS Manager now includes dynamic polling support to monitor the port status (up/down) and port speed of third-party Network Interface Cards (NICs) on Cisco UCS C-Series M6, M7, and M8 servers, offering real-time insights into network interface performance and ensuring optimal server connectivity and efficiency.

- Cisco UCS Manager enhances support for the server personality configuration of Hyperconverged Infrastructure (HCI). This feature is supported on Cisco UCS M6, M7, and M8 servers, allowing the servers to function either as standard UCS servers or HCI servers. The server personality field is an informational attribute that indicates the specific configuration or role assigned to the server. This simplifies the management of HCI and offers great visibility into server roles, enabling more efficient operations. The HCI server nodes can be configured in any of the following roles:

    - Nutanix HCI Node

    - Nutanix Compute Node

    - Nutanix Storage Node

- Cisco UCS Manager supports enabling the EtherChannel pinning option for Cisco UCS VIC adapters to enhance performance. This option allows vNIC adapters with EtherChannel capabilities to utilize multiple uplink ports for optimized traffic distribution. This setting applies only to eNIC interfaces on Cisco UCS 1400, 14000, and 15000 series adapters and does not apply to fNIC interfaces.

- Cisco UCS Manager enables IPv6 overlay offload functionality. This feature, supported by updated async drivers, optimizes IPv6 network performance and enhances efficiency.

- Support for U.2 Solidigm P5520 NVMe High Perf. Medium Endurance and U.2 Solidigm P5620 NVMe High Perf. High Endurance with Cisco UCS UCS C225 M8, C245 M8, and all M7 and M6 servers.

New Software Feature in Release 4.3(4a)

- Cisco UCS Manager introduces support for Media Access Control Security (MACsec) type-0 and type-7 encryption for Ethernet uplink ports on Cisco UCS FI 6536, 6454 and 64108 through GUI and CLI interfaces.

Note This functionality is not supported on Cisco UCS X-Series Direct.

- Cisco UCS Manager support for ERSPAN traffic monitoring on Cisco UCS 6536, 6454, and 64108 Fabric Interconnects.

Note This functionality is not supported on Cisco UCS X-Series Direct.

- Cisco UCS Manager now provides support to configure Hybrid Slots Configuration policy for Cisco Tri-Mode 24G SAS RAID Controller w/4GB Cache (UCSC-RAID-HP) that indicates whether the RAID controller can handle U.3 drives in RAID or Direct attached modes.

- Cisco UCS Manager uses Data Sanitization feature to erase all sensitive data, thus making extraction or recovery of data impossible on the following UCS servers:

    - Cisco UCS C220 M7, C240 M7, X210c M7, X410c M7

> • Cisco UCS C220 M6, C240 M6, C225 M6, C245 M6, B200 M6, X210c M6 servers
>
> • Cisco UCS C220 M5, C240 M5, C480 M5, C125 M5, B200 M5, B480 M5 servers

- Cisco UCS Manager supports inventory listing for PCIe Node adapters.

- Cisco UCS Manager supports TLS 1.3 protocol for HTTPS communication for improved Transport Layer Security.

- New Ethernet port error, MACsec and DCE counters are added for the adapters under statistics.

- Starting with Cisco UCS Manager release 4.3(4a), new optimized adapter policies are available for Windows, Linux, and VMware operating systems, for the Cisco UCS VIC 1400, 14000 and 15000 series adapter.

- Starting with Cisco UCS Manager release 4.3(4a), adapter stats collection includes the following:

  - **rx_no_buffer** counters of vNIC which is represented as **no buffer drop packets**.

  - support for PFC pause time through **TxWait** and **RxWait** counters.

- NXOS now includes Fabric Interconnect port data-rate and PFC monitoring and is accessible through **show logging onboard** commands, capturing threshold crossings without duplications allowing user to monitor congestion in the Cisco UCS fabric interconnects.

- Release 4.3(4a) qualifies the new CipherTrust KMIP server from Thales®, which is set to take over from the old SafeNet and Vormetric servers that are being phased out. The new CipherTrust KMIP server offers enhanced usability and an expanded feature set, but keeps the user experience the same. Support for new CipherTrust in Cisco UCS Manager starts with version 4.3(4a). For detailed instructions on the configuration process of the CipherTrust KMIP manager, please refer to the CipherTrust Manager user guide provided by Thales®.

New Software Feature in Release 4.3(3c)

Cisco UCS Manager is enhanced to better handle high power demand during discovery and deep discovery of a server in Cisco UCSX-9508 chassis when the chassis is under load.

New Software Feature in Release 4.3(2b)

- Beginning with release 4.3(2b), Cisco UCS Manager introduces support for Secure Boot on the following Virtual Interface Cards (VIC) on Cisco UCS C-Series and X-Series servers:

  - Cisco UCS VIC 15420

  - Cisco UCS VIC 15422

  - Cisco UCS VIC 15235

  - Cisco UCS VIC 15425

  Secure Boot is a trustworthy technology that ensures the code running on Cisco hardware platforms is authentic, unmodified, and operational as intended. The Secure Boot uses a trust anchor module (TAm) in hardware to verify the bootloader code. It also protects the boot code in hardware and checks digitally signed images to verify that only genuine, unmodified code boots on a Cisco device.

- Added Windows NENIC Driver support to enable **Receive Side Scaling Version 2 (RSSv2)** for Cisco UCS VIC 15000 series adapters. When RSS is enabled on the VIC, multiple hardware receive queues

can be configured on the Physical Function (PF). With RSSv2, the VIC adapters can now support up to 16 queues (4x). RSSv2 is supported on the following servers:

- Cisco UCS B-Series and C-Series M6 servers

- Cisco UCS C-Series and X-Series M7 servers

- Added support for NVMeOF using RDMA on Cisco UCS VIC 14000 series adapters.

- Support for Cisco UCS VIC Q-in-Q tunneling configuration. A Cisco UCS Manager based Q-in-Q (802.1Q-in-802.1Q) tunnel originating from Cisco UCS VIC allows to segregate the traffic in the Cisco UCS infrastructure, and helps to expand the VLAN space through the double-tagging of packets in hypervisor or non-hypervisor environments.

- Added support for migrating Cisco UCS 6400 Series Fabric Interconnect to Cisco UCS 6536 Fabric Interconnect:

    - Support for UCS-FI-6454 to UCS-FI-6536 migration

    - Support for UCS-FI-64108 to UCS-FI-6536 migration

    - Support for UCS-FI-6454 to UCS-FI-6536 migration with UCS Central

    - Support for UCS-FI-64108 to UCS-FI-6536 migration with UCS Central

- Cisco UCS Manager introduces Netflow Monitoring support for Cisco UCS 6400 and 6500 Series Fabric Interconnects.

    NetFlow monitoring includes both Host Receive and Transmit Direction Monitor. On Cisco UCS 6400 series and Cisco UCS 6536 Fabric Interconnects, NetFlow monitoring session applied to the Host Receive Direction Monitor will enable both transmit and receive monitoring, while NetFlow monitoring session applied to the Host transmit Direction Monitor is a NO-OP.

- Cisco UCS Manager introduces Policy Driven Chassis Group Cap for Cisco UCSX-9508 Chassis.

- SR-IOV support for ESXi on Cisco UCS VIC 15000 Series with Cisco UCS M6/M7 B-series, C-series and X-series servers and on Cisco UCS VIC 1400/14000 series for Cisco UCS M5/M6 B-series and C-series servers.

- QSFP - 100G SR 1.2 support with Cisco UCS VIC 1400 and 15000 Series.

- Cisco UCS Manager now supports soft check for IIS license.

    Cisco UCS X-Series Servers and Cisco M7 Servers require a valid Cisco Intersight license and a connection to Intersight to remain compliant. If Cisco UCS Manager 4.3(2) detects Cisco UCS X-Series or any M7 hardware, it checks to ensure that the domain is claimed with a Cisco Intersight instance (SaaS, Connected Virtual Appliance, or Private Virtual Appliance). If the domain is not claimed within Cisco Intersight (where the Cisco Intersight licenses are managed), Cisco UCS Manager displays a major fault to notify you of this requirement so that you can take necessary steps to move to a compliant deployment.

- Cisco UCS Manager also supports BMC Auto Upgrade functionality—If you migrate Cisco UCS X-Series Servers running Cisco IMC release lower than 4.3(2b) from IMM to Cisco UCS Manager managed mode, then Cisco UCS Manager auto upgrades Cisco IMC version to 4.3(2b).

- User Acknowledgment during Cisco UCS infra upgrade through Auto-Install is enhanced for better user experience:

```
Reboot Now

Are you sure you want to apply the changes immediately?
Acknowledging will cause a reboot of the Primary Fabric Interconnect.
Please make sure to validate (detailed info available in the Cisco UCS Manager
Firmware Management Guide) the below points to avoid unexpected network issues:

        • Dynamic vNIC (if any) are up and running
        • Ethernet/FIber channel date paths are operating as expected
        • No unexpected faults that may indicate a potential error, exist.

Click Yes to apply the pending changes.
```

Deprecated Hardware and Software in Cisco UCS Manager

Release 4.3(4a)

Beginning with Cisco UCS Manager release 4.3(4a) following adapters are not supported:

- Qlogic QL41132HORJ dual port 10GBase T OCP (UCSC-OCP-QD10GC)

- QLogic QL41162HLRJ PCIe dual-port 10Gb Base-T PCIe NIC (UCSC-PCIE-QD10GC)

- Cisco FastLinQ QL41212H 25GbE (UCSC-PCIE-QD25GF)

- Qlogic QL41232HOCU dual port 25G OCP (UCSC-OCP-QD25GF)

- Qlogic FastLinQ QL45412H 40GbE (UCSC-PCIE-QD40GF)

- QLogic QL45611HLCU single port 100GbE PCIe NIC (UCSC-PCIE-QS100GF)

- Qlogic FastLinQ QL45631HOCU single port 100G QSFP28 OCP 2.0 (UCSC-OCP-QS100GF)

Release 4.3(2b)

- Beginning with Cisco UCS Manager Release 4.3(2b), all Cisco UCS M4 and older servers and their accessories are no longer supported on all platforms (6300 Series, and 6400 Series Fabric Interconnects).

- Beginning with Cisco UCS Manager Release 4.3(2b), Cisco UCS 6200 Series FI is no longer supported.

Cross-Version Firmware Support

The Cisco UCS Manager A bundle software (Cisco UCS Manager, Cisco NX-OS, IOM and FEX firmware) can be mixed with previous B or C bundle releases on the servers (host firmware [FW], BIOS, Cisco IMC, adapter FW and drivers).

The following table lists the mixed A, B, and C bundle versions that are supported on Cisco UCS 6300, 6400 series and 6536 Fabric Interconnects:

Table 10: Mixed Cisco UCS Releases Supported on Cisco UCS 6300, 6400, 6536 Series Fabric Interconnects

	Infrastructure Versions (A Bundles)												
Host FW Versions (B or C Bundles)	4.0(1)	4.0(2)	4.0(4)	4.1(1)	4.1(2)	4.1(3)	4.2(1)	4.2(2)	4.2(3)	4.3(2)	4.3(3)	4.3(4)	4.3(5)

	Infrastructure Versions (A Bundles)												
Note	In a setup equipped with Cisco UCS C245 M8 Server, you cannot downgrade Infrastructure Version (A Bundle) or Host Firmware Version (C Bundle) to any release earlier than 4.3(4b). In a setup equipped with Cisco UCS X215c M8 Compute Node and Cisco UCS C225 M8 Server, you cannot downgrade Infrastructure Version (A Bundle) or Host Firmware Version (C Bundle) to any release earlier than 4.3(5a).												
4.3(5)	—	—	—	—	—	—	—	—	—	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.3(4)	—	—	—	—	—	—	—	—	—	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.3(3)	—	—	—	—	—	—	—	—	—	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.3(2)	—	—	—	—	—	—	—	—	—	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.2(3)	—	—	—	—	—	—	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.2(2)	—	—	—	—	—	—	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.2(1)	—	—	—	—	—	—	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.1(3)	—	—	—	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.1(2)	—	—	—	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536

	Infrastructure Versions (A Bundles)												
4.1(1)	—	—	—	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6200, 6332, 6332-16UP, 6454, 64108	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536	6332, 6332-16UP, 6454, 64108, 6536
4.0(4)	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	—	—	—	—
4.0(2)	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	—	—	—	—
4.0(1)	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	6200, 6332, 6332-16UP, 6454	—	—	—	—

The following table lists the mixed A and B bundle versions that are supported on Cisco UCS X-Series Direct:

Table 11: Mixed Cisco UCS Releases Supported on Cisco UCS X-Series Direct

Host FW Versions (B Bundles)	Infrastructure Versions (A Bundles)	
	4.3(4)	4.3(5)
4.3(4)	UCSX-S9108-100G	UCSX-S9108-100G
4.3(5)	UCSX-S9108-100G	UCSX-S9108-100G
Note	In a setup equipped with Cisco UCS X-Series Direct, you cannot downgrade Infrastructure Version (A Bundle) to any release earlier than 4.3(4b).	

The following table lists the mixed A, B, and C bundle versions that are supported on Cisco UCS Mini fabric interconnects:

Table 12: Mixed Cisco UCS Releases Supported on Cisco UCS Mini Fabric Interconnects

	Infrastructure Versions (A Bundles)												
Host FW Versions (B or C Bundles)	4.0(1)	4.0(2)	4.0(4)	4.1(1)	4.1(2)	4.1(3)	4.2(1)	4.2(2)	4.2(3)	4.3(2)	4.3(3)	4.3(4)	4.3(5)
Note	In a setup equipped with Cisco UCS C245 M8 Server, you cannot downgrade Infrastructure Version (A Bundle) or Host Firmware Version (C Bundle) to any release earlier than 4.3(4b).												
	In a setup equipped with Cisco UCS X215c M8 Compute Node and Cisco UCS C225 M8 Server, you cannot downgrade Infrastructure Version (A Bundle) or Host Firmware Version (C Bundle) to any release earlier than 4.3(5a).												
4.3(5)	—	—	—	—	—	—	—	—	—	6324	6324	6324	6324
4.3(4)	—	—	—	—	—	—	—	—	—	6324	6324	6324	6324

	Infrastructure Versions (A Bundles)												
4.3(3)	—	—	—	—	—	—	—	—	—	6324	6324	6324	6324
4.3(2)	—	—	—	—	—	—	—	—	—	6324	6324	6324	6324
4.2(3)	—	—	—	—	—	—	6324	6324	6324	6324	6324	6324	6324
4.2(2)	—	—	—	—	—	—	6324	6324	6324	6324	6324	6324	6324
4.2(1)	—	—	—	—	—	—	6324	6324	6324	6324	6324	6324	6324
4.1(3)	—	—	—	6324	6324	6324	6324	6324	—	6324	6324	6324	6324
4.1(2)	—	—	—	6324	6324	6324	6324	6324	—	6324	6324	6324	6324
4.1(1)	—	—	—	6324	6324	6324	6324	6324	—	6324	6324	6324	6324
4.0(4)	6324	6324	6324	6324	6324	6324	—	—	—	—	—	—	—
4.0(2)	6324	6324	6324	6324	6324	6324	—	—	—	—	—	—	—
4.0(1)	6324	6324	6324	6324	6324	6324	—	—	—	—	—	—	—

The following table lists the mixed B, C bundles that are supported on all platforms with the 4.3(5)A bundle:

Table 13: Mixed B, C Bundles Supported on All Platforms with the 4.3(5)A Bundle

Host FW Versions (B, C Bundles)	Infrastructure Versions (A Bundles)				
	4.3(5)				
	6300	6324	6400	6500	UCSX-S9108-100G
	Note	Cisco UCSX-S9108-100G supports only Cisco UCS X-Series Servers.			
	TBD	TBD	TBD	TBD	TBD
4.3(5)	Yes	Yes	Yes	Yes	Yes
4.3(4)	Yes	Yes	Yes	Yes	Yes
4.3(3)	Yes	Yes	Yes	Yes	No
4.3(2)	Yes	Yes	Yes	Yes	No
4.2(3)	Yes	Yes	Yes	Yes	No
4.2(2)	Yes	Yes	Yes	Yes	No
4.2(1)	Yes	Yes	Yes	Yes	No
4.1(3)	Yes	Yes	Yes	Yes	No
4.1(2)	Yes	Yes	Yes	No	No
4.1(1)	Yes	Yes	Yes	No	No

	Infrastructure Versions (A Bundles)				
4.0(1), 4.0(4) (B, C Bundles)	No	No	No	No	No

☞

Important If you implement cross-version firmware, you must ensure that the configurations for the Cisco UCS domain are supported by the firmware version on the server endpoints.

Cisco UCS NVMeoF Support Matrix for 3rd Party Storage Vendors

Table 14: Cisco UCS NVMeoF Support Matrix for 3rd Party Storage Vendors

Storage Vendor	Feature	Storage Array	Cisco UCS FI	Cisco UCS VIC	Operating System
NetApp Inc.®	NVMe-FC	ONTAP 9.7 onwards	Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	ESXi 7.0U3+, ESXi 8.0+, RHEL 8.6+, RHEL 9.0+, SLES 15SP3+
	NVMe-FC	ONTAP 9.7 onwards	Cisco UCS UCSX-S9108-100G	Cisco UCS 15000 Series	ESXi 7.0U3+, ESXi 8.0U2+, RHEL 8.9+, RHEL 9.3+, SLES 15SP4+
	Note	Cisco UCS VIC 1300 series is supported only with RHEL 8.6+. Refer https://hwu.netapp.com/ for latest Storage Array support details. A valid NetApp® account is required to access the compatibility information			
	NVMe-TCP	ONTAP 9.10 onwards	Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	ESXi 7.0U3 +, ESXi 8.0 +, RHEL 9.0+, SLES 15SP3+
	NVMe-TCP	ONTAP 9.10 onwards	Cisco UCS UCSX-S9108-100G	Cisco UCS 15000 Series	ESXi 7.0U3 +, ESXi 8.0 U2+, RHEL 9.3+, SLES 15SP4+
	Note	Refer https://hwu.netapp.com/ for latest Storage Array support details. A valid NetApp® account is required to access the compatibility information			

Storage Vendor	Feature	Storage Array	Cisco UCS FI	Cisco UCS VIC	Operating System
Pure Storage, Inc.[®]	NVMe-FC	Purity//FA 6.1 onwards	Cisco UCS 6300 Series Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1300 Series Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	ESXi 7.0U3 +, RHEL 8.6 +, SLES 15SP3 + , ESXi 8.0 , RHEL 9.0+
	NVMe-FC	Purity//FA onwards 6.6.3	Cisco UCS UCSX-S9108-100G	Cisco UCS 15000 Series	ESXi 7.0U3 +, RHEL 8.6 +, SLES 15SP3 + , ESXi 8.0 , RHEL 9.0+
	Note	Cisco UCS VIC 1300 series is supported Only with RHEL 8.6+.			
	NVMe-ROCEv2	Purity//FA 5.2 onwards	Cisco UCS 6300 Series Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	RHEL 7.2 +, RHEL 8.0 +, RHEL 9.0+, SLES 15SP1 +
	NVMe-ROCEv2	Purity//FA 5.2 onwards	Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	ESXi 7.0U3 and ESXI 8.0
	NVMe-ROCEv2	Purity//FA onwards 6.6.3	Cisco UCS UCSX-S9108-100G	Cisco UCS 15000 Series	RHEL 7.2 +, RHEL 8.0 +, RHEL 9.0+ ,ESXi 7.0U3 and ESXI 8.0
	NVMe-TCP	Purity//FA 6.4.2 onwards	Cisco UCS 6300 Series Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	ESXi 7.0U3 +, RHEL 9.0+ , SLES 15SP3 +
	NVMe-TCP				

Storage Vendor	Feature	Storage Array	Cisco UCS FI	Cisco UCS VIC	Operating System
		Purity//FA onwards 6.6.3	Cisco UCS UCSX-S9108-100G	Cisco UCS 15000 Series	RHEL 7.2 +, RHEL 8.0 +, RHEL 9.0+ ,ESXi 7.0U3 and ESXI 8.0 ,SLES 15SP4+
Dell Inc.®	NVMe-FC	PowerStore, PowerMax	Cisco UCS 6300 Series Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	ESXi 7.0U3 +, RHEL 8.6 +, SLES 15SP3+
	NVMe-FC	PowerStore, PowerMax	Cisco UCS UCSX-S9108-100G	Cisco UCS 15000 Series	ESXi 7.0U3+, ESXi 8.0U2+, RHEL 8.9+, RHEL 9.3+, SLES 15SP3+
	NVMe-TCP	PowerStore	Cisco UCS 6300 Series Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	ESXi 7.0U3 +, RHEL 8.6 +, SLES 15SP3+
	NVMe-TCP	PowerStore	Cisco UCS UCSX-S9108-100G	Cisco UCS 15000 Series	ESXi 7.0U3+, ESXi 8.0U2+, RHEL 8.9+, RHEL 9.3+, SLES 15SP4+

Storage Vendor	Feature	Storage Array	Cisco UCS FI	Cisco UCS VIC	Operating System
IBM® Information Technology	NVMe-FC	IBM FlashSystem 9500	Cisco UCS 6400 Series	Cisco UCS VIC 1440 Cisco UCS VIC 1480 Cisco UCS VIC 1340 Cisco UCS VIC 1380	ESXi 8.0+, RHEL 8.6+ , SLES 15SP4+, SLES 15SP5+, UEK R6 U3+
		IBM FlashSystem 9200			
		IBM FlashSystem 9100			
		IBM FlashSystem 7300			
		IBM FlashSystem 7200			
		IBM FlashSystem 5200			
		IBM FlashSystem 5035			
		IBM FlashSystem 5015			

Storage Vendor	Feature	Storage Array	Cisco UCS FI	Cisco UCS VIC	Operating System
Hitachi, Ltd.	NVMe-FC	HV Hitachi Virtual Storage Platform 5-Series(VSP 5600H)	Cisco UCS 6300 Series Cisco UCS 6400 Series Cisco UCS 6536	Cisco UCS 1400 Series Cisco UCS 14000 Series Cisco UCS 15000 Series	ESXi 7.0U3 +
		HV Hitachi Virtual Storage Platform 5-Series(VSP 5600)			
		HV Hitachi Virtual Storage Platform 5-Series(VSP 5500)			
		HV Hitachi Virtual Storage Platform 5-Series(VSP 5100)			
		HV Hitachi Virtual Storage Platform 5-Series(VSP 5200)			
		HV Hitachi Virtual Storage Platform 5-Series(VSP 5500H)			
		HV Hitachi Virtual Storage Platform 5-Series(VSP 5200H)			
		HV Hitachi Virtual Storage Platform 5-Series(VSP 5100H)			

Storage Vendor	Feature	Storage Array	Cisco UCS FI	Cisco UCS VIC	Operating System
		HV Hitachi Virtual Storage Platform E-Series(VSP E1090H)			
		HV Hitachi Virtual Storage Platform E-Series(VSP E1090)			

Note + under **OS Support** column refers to the newer release in that release train.

Compatibility and Support Matrix for Cisco Fabric Interconnects and MDS Switches

Cisco UCS Fabric Interconnect	Older Supported Release of MDS	Recommended Release of MDS
Cisco UCS 6536 FI	9.2	9.4
Cisco UCS 6454 FI	8.4, 9.2	9.4
Cisco UCS 64108 FI	8.4, 9.2	9.4
Cisco UCS X-Series Direct	—	9.4

Note For older supported release only MDS recommended minor version are supported. See Recommended Releases for Cisco MDS 9000 Series Switches for more information.

Internal Dependencies

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

- Version dependencies for Server FRU items such as DIMMs depend on the server type.

- Chassis items such as fans and power supplies work with all versions of Cisco UCS Manager.

Cisco UCSX-S9108-100G, 6536, 6400, 6300, and 6332 Series Fabric Interconnects and Components

Blade Servers

Note In a mixed firmware configuration, we recommend that the minimum server bundle corresponds to the Minimum Software Version. The infrastructure must be at or above the Minimum Software Version.

Table 15: Minimum Host Firmware Versions for Blade Servers

Servers	Minimum Software Version UCS 6324, UCS 6332, 6332-16UP FI	Minimum Software Version UCS 6324, UCS 6332, 6332-16UP FI		Minimum Software Version UCS 6454 FI	Minimum Software Version UCS 64108 FI	Minimum Software Version UCS 6536 FI	Minimum Software Version UCSX-S9108-100G	Suggested Software Version UCS 6324 Series FI UCS 6332, 6332-16UP FI UCS 6400 Series FI UCS 6536 Series FI
	UCS-IOM- 2204 UCS-IOM- 2208	UCS-IOM- 2304	UCS-IOM- 2304V2	UCS-IOM- 2204 UCS-IOM- 2208 UCS-IOM- 2408* UCSX-I-9108-25G	UCS-IOM- 2204 UCS-IOM- 2208 UCS-IOM- 2408* UCSX-I-9108-25G	UCS-IOM- 2304V1/V2 UCS-IOM- 2408 UCSX-I-9108-25G or UCSX-I-9108-100G	UCSX-S9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408 UCS-IOM- 2304 UCS-IOM- 2304V2 UCSX-I-9108-25G or UCSX-I-9108-100G
	UCS-IOM-2408 support M5 server is with UCS 1300/1400 series VIC adapters. UCS-IOM-2408 is supported with UCS 6400 Series/UCS 6536 FI UCS IOM-2304v1/v2 is supported with UCS 6300/UCS 6536 FI UCS IOM-220x is supported with UCS 6200 series/UCS 6300/UCS 6400 series FI. Cisco UCS M6 servers are not supported with 6200 series FI UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with UCS X-Series Servers							
UCS X215c M8	—	—	—	4.3(5a)	4.3(5a)	4.3(5a)	—	4.3(5a) *
UCS X410c M7	—	—	—	4.3(2c)	4.3(2c)	4.3(2c)	4.3(4b)	4.3(5a) *
UCS X210c M7	—	—	—	4.3(2b)	4.3(2b)	4.3(2b)	4.3(4b)	4.3(5a)*
UCS X210c M6	—	—	—	4.3(2b)	4.3(2b)	4.3(2b)	4.3(4b)	4.3(5a)*

* Cisco UCS X-Series servers are supported only with Cisco UCS UCSX-S9108-100G, 6454, 64108, and 6536 FIs and are not supported with Cisco UCS 6324, UCS 6332, 6332-16UP FIs.

Cisco UCS X215c M8 Compute Node is supported only with Cisco UCS 6454, 64108, and 6536 FIs.

Servers								
B200 M6	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(3m)	-	4.3(5a)
B200 M5	3.2(1d)	3.2(1d)	4.0(4o)	4.0(1a)	4.1(1a)	4.2(3m)	-	4.3(5a)
B480 M5	3.2(2b)	3.2(2b)	4.0(4o)	4.0(1a)	4.1(1a)	4.2(3m)	-	4.3(5a)

Rack Servers

> **Note** In a mixed firmware configuration, we recommend that the minimum server bundle corresponds to the Minimum Software Version. The infrastructure must be at or above the Minimum Software Version.

Table 16: Minimum Host Firmware Versions for Rack Servers

Servers	Minimum Software Version UCS 6332, 6332-16UP 2232 PP 2348	Minimum Software Version UCS 6454 2232 PP (10G) 2348 UPQ (10G) 93180YC-FX3 (25G server ports) 93180YC-FX3 (10G server ports)	Minimum Software Version UCS 64108 2232 PP (10G) 2348 UPQ (10G) 93180YC-FX3 (25G server ports) 93180YC-FX3 (10G server ports)	Minimum Software Version UCS 6536 93180YC-FX3 (25G server ports) 93180YC-FX3 (10G server ports) 2348 UPQ (10G server ports)	Suggested Software Version UCS 6332, 6332-16UP FI UCS 6400 Series FI UCS 6536
UCS C225 M8	—	4.3(5a)	4.3(5a)	4.3(5a)	4.3(5a)[*]
C245 M8	—	4.3(4b)	4.3(4b)	4.3(4b)	4.3(5a)[*]
UCS C240 M7	—	4.3(2b)	4.3(2b)	4.3(2b)	4.3(5a)[*]
UCS C220 M7	—	4.3(2b)	4.3(2b)	4.3(2b)	4.3(5a)[*]

[*] Cisco UCS C-Series M7 and M8 Serves are supported only with Cisco UCS 6454, 64108, and 6536 FIs and are not supported with Cisco UCS UCS 6332, 6332-16UP FIs.

C220 M6	4.2(1d)	4.2(1d)	4.2(1d)	4.2(3m)	4.3(5a)
C240 M6	4.2(1d)	4.2(1d)	4.2(1d)	4.2(3m)	4.3(5a)
C225 M6	4.2(1l)	4.2(1l)	4.2(1l)	4.2(3m)	4.3(5a)
C245 M6	4.2(1i)	4.2(1i)	4.2(1i)	4.2(3m)	4.3(5a)
C220 M5	3.2(1d)	4.0(1a)	4.1(1a)	4.2(3m)	4.3(5a)
C240 M5	3.2(1d)	4.0(1a)	4.1(1a)	4.2(3m)	4.3(5a)
C125 M5	4.0(1a)	4.0(1a)	4.1(1a)	4.2(3m)	4.3(5a)
S3260 M5	3.2(3a)	4.0(1a)	4.1(1a)	4.2(3m)	4.3(5a)
C480 M5 ML	4.0(2a)	4.0(2a)	4.1(1a)	4.2(3m)	4.3(5a)
C480 M5	3.2(2b)	4.0(1a)	4.1(1a)	4.2(3m)	4.3(5a)

Adapters

In the following table, the **Suggested Software Version** column does not provide FI, FEX/IOM, and adapter compatibility. Check the **Minimum Software Version** columns in the same table for compatibility information.

Table 17: Minimum Software Versions for Adapters

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI / UCS 6400 Series FI / UCS 6500 Series FI
	UCS-IOM-2204 UCS-IOM-2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 UCS-IOM-2408	93180YC-FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108-25G UCSX-I-9108-100G	UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCS-IOM-2304 UCS-IOM-2304V2
Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers										
Cisco UCS VIC 15427	-	-	-	-	4.3(2c)	4.3(2c)	-	4.3(2c)	-	4.3(5a)
Cisco UCS VIC 15230	-	-	-	-	4.3(2c)	4.3(2c)	-	4.3(2c)	4.3(5a)	4.3(5a)
Cisco UCS VIC 15237 mLOM	-	-	-	-	4.3(2c)	4.3(2c)	-	4.3(2c)	-	4.3(5a)
UCSX-ML-V5D200G (Cisco UCS VIC 15231 Dual-port 100-G mLOM)	-	-	-	-	4.3(2b)	4.3(2b)	-	4.3(2b)	4.3(5a)	4.3(5a)
UCSX-ME-V5Q50G (Cisco UCS VIC 15422 Quad-port 25G mezzanine)	-	-	-	-	4.3(2b)	4.3(2b)	-	4.3(2b)	-	4.3(5a)
UCSX-ML-V5Q50G (Cisco UCS VIC 15420 Quad-port 25G mLOM)	-	-	-	-	4.3(2b)	4.3(2b)	-	4.3(2b)	4.3(5a)	4.3(5a)
UCSX-V4-Q25GML (Cisco UCS VIC 14425 Quad-port 25G mLOM)	-	-	-	-	4.3(2b)	4.3(2b)	-	4.3(2b)	4.3(5a)	4.3(5a)
UCSX-V4-Q25GME (Cisco VIC 14825 Quad-port 25G mezzanine)	-	-	-	-	4.3(2b)	4.3(2b)	-	4.3(2b)	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI / UCS 6400 Series FI / UCS 6500 Series FI
	UCS-IOM-2204 UCS-IOM-2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 UCS-IOM-2408	93180YC-FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108-25G UCSX-I-9108-100G	UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCS-IOM-2304 UCS-IOM-2304V2
Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers										
UCSC-P-V5D200G (Cisco UCS VIC 15235 Dual-port 40/100/200-G PCIe\)	-	-	4.3(2b)	-	-	-	-	-	-	4.3(5a)
UCSC-P-V5Q50G (Cisco UCS VIC 15425 Quad-port 10/25/50-G PCIe	-	-	4.3(2b)	-	4.3(2b)	-	4.3(2b)	4.3(2b)	-	4.3(5a)
UCSC-M-V5Q50G (Cisco UCS VIC 15428 MLOM 4-port adapter)	-	-	4.2(1d)	-	4.2(1d)	-	-	4.2(3m)	-	4.3(5a)
UCSC-M-V5D200G (Cisco UCS VIC 15238 MLOM adapter) Direct Attached only	4.2(3m) Direct Attached only	4.2(3m) Direct Attached only	4.2(3m) Direct Attached only	-	-	-	4.2(3m) Direct Attached only (40/100G)	4.2(3m) Direct Attached only (40/100G)	-	4.3(5a)
UCSBMLV5Q 10G (Cisco VIC 15411)	4.2(1d)	4.2(1d)	-	4.2(1d)	-	4.2(1d)	4.2(3m)	-	-	4.3(5a)
UCSC-PCIE-C100-04 (Cisco UCS VIC 1495)	4.0(2a)*	4.0(2a)	-	4.0(2a)*	-	4.0(2a)*	4.2(3m) Direct Attach only (40/100G)	4.2(3m) Direct Attach only (40/100G)	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI / UCS 6400 Series FI / UCS 6500 Series FI
	UCS-IOM-2204 UCS-IOM-2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 UCS-IOM-2408	93180YC-FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108-25G UCSX-I-9108-100G	UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCS-IOM-2304 UCS-IOM-2304V2
	Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers									
UCSC-MLOM-C100-04 (Cisco UCS VIC 1497)	4.0(2a)[*]	4.0(2a)[*]	-	4.0(2a)[*]	-	4.0(2a)[*]	4.2(3m) Direct Attach only (40/100G)	4.2(3m) Direct Attach only (40/100G)	-	4.3(5a)
UCSB-MLOM-40G-04 (UCS VIC 1440)	4.0(1a)[*]	4.0(1a)[*]	-	4.0(1a)[*]	-	4.1(1a)[*]	4.2(3m)	-	-	4.3(5a)
UCSCM-V25-04 (UCS VIC 1467)	-	-	4.2(1l)	-	4.2(1l)	-	-	4.2(3m)	-	4.3(5a)
UCSC-M-V100-04 (UCS VIC 1477)	4.2(1l)Direct Attached only				-	-	4.2(3m) Direct Attached only	-	-	4.3(5a)
UCSB-VIC-M84-4P (UCS VIC 1480)	4.0(1a)[*]	4.0(1a)[*]	-	4.0(1a)[*]	-	4.1(1a)[*]	4.2(3m)	-	-	4.3(5a)
UCSC-PCIE-C25Q-04 (UCS VIC 1455)	4.0(1a)[*]	4.0(1a)[*]	4.2(3m)	4.0(1a)[*]	4.2(3m)	4.1(1a)[*]	-	4.2(3m)	-	4.3(5a)
UCSC-MLOM-C25Q-04 (UCS VIC 1457)	4.0(1a)[*]	4.0(1a)[*]	4.2(3m)	4.0(1a)[*]	4.2(3m)	4.1(1a)[*]	-	4.2(3m)	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI / UCS 6400 Series FI / UCS 6500 Series FI
	UCS-IOM-2204 UCS-IOM-2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 UCS-IOM-2408	93180YC-FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108-25G UCSX-I-9108-100G	UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCS-IOM-2304 UCS-IOM-2304V2
	Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers									
UCSC-PCIE-C40Q-03 (UCS VIC 1385) UCSC-MLOM-C40Q-03 (UCS VIC 1387)	3.1(3a)*	3.1(3a)*	4.2(3m)	4.0(1a)*	4.2(3m)	4.1(1a)*	-	4.2(3m)	-	4.3(5a)
UCSB-MLOM-40G-03 (UCS VIC 1340) UCSB-VIC-M83-8P (UCS VIC 1380)	3.1(3a)*	3.1(3a)*	-	4.0(1a)*	-	4.1(1a)*	4.2(3m)	-	-	4.3(5a)
UCSC-PCIE-BD16GF (Emulex LPe31002 Dual-Port 16G FC HBA)	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE-ID40GF (Intel XL710 adapter)	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE-IQ10GF (Intel X710-DA4 Quad Port 10G Ethernet PCIe adapter)	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE-ID10GF (Intel X710-DA2 Dual Port 10G Ethernet PCIe adapter)	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI UCS 6400 Series FI UCS 6500 Series FI
	UCS-IOM -2204 UCS-IOM -2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM- 2204 UCS-IOM -2208 UCS-IOM -2408*	93180YC -FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108 -25G UCSX-I-9108- 100G	UCS-IOM -2204 UCS-IOM -2208 UCS-IOM -2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM -2304 V1/V2 UCS-IOM -2408	93180YC -FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108 -25G UCSX-I-9108- 100G	UCSX-I-9108 -25G UCSX-I-9108- 100G	UCS-IOM -2204 UCS-IOM -2208 UCS-IOM -2408* UCS-IOM- 2304 UCS-IOM- 2304V2
	Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers									
UCSC-PCIE -ID40GF: Intel XL710-QDA2 Dual port 40 Gigabit Ethernet PCIe adapter	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE -ID25GF (Intel XXV710-DA2 Dual port 25 Gigabit Ethernet PCIe adapter)	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE -ID10GC (Intel X550-T2 adapter)	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
N2XX-AIPCI01 (Intel X520 dual port adapter)	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE-IRJ45: Intel Ethernet Server Adapter I350-T4	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-MLOM-IRJ45: Intel Ethernet I350-mLOM 1 Gbps Network Controller	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE -ID25GF (Intel X710 25Gb Dual-port BaseT)	3.2(3a)*	3.2(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI UCS 6400 Series FI UCS 6500 Series FI
	UCS-IOM-2204 UCS-IOM-2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 UCS-IOM-2408	93180YC-FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108-25G UCSX-I-9108-100G	UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCS-IOM-2304 UCS-IOM-2304V2
	Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers									
UCSC-PCIE -IQ10GC (Intel X710-T4)	3.2(2b)*	3.2(2b)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE -IQ10GF (Intel X710-DA4 adapter) UCSC-PCIE -ID40GF (Intel XL710 adapter)	—	3.1(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE -BD32GF (Emulex LPe32002) UCSC-PCIE -BS32GF (Emulex LPe32000 Single-Port 32G FC HBA)	3.1(3a)*	3.1(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE -E16002 (Emulex LPe16002-M6 16G FC rack HBA)	3.2(1d)*	3.2(1d)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)
UCSC-PCIE -ID10GC (Intel X550 Dual-port 10GBase-T NIC)	3.1(3a)*	3.1(3a)*	-	4.0(1a)*	-	4.1(1a)*	-	-	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI / UCS 6400 Series FI / UCS 6500 Series FI
	UCS-IOM-2204 UCS-IOM-2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 UCS-IOM-2408	93180YC-FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108-25G UCSX-I-9108-100G	UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCS-IOM-2304 UCS-IOM-2304V2
Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers										
UCSC-O -ID25GF (Intel XXV710 - DA2 - OCP1 2x25/10GbE OCP 2.0 adapter)	4.0(1a) *	4.0(1a) *	-	4.0(1a) *	-	4.0(1a) *	-	-	-	4.3(5a)
UCSC-P -Q6D32GF (Cisco-QLogic QLE2772 2x32GFC Gen 6 Enhanced PCIe HBA)	4.2(1l)	4.2(1l)	-	4.2(1l)	-	4.2(1l)	-	-	-	4.3(5a)
UCSC-P -B7D32GF (Cisco-Emulex LPe35002-M2-2x32GFC Gen 7 PCIe HBA)	4.2(1l)	4.2(1l)	-	4.2(1l)	-	4.2(1l)	-	-	-	4.3(5a)
UCSC-P -I8D100GF(Cisco - Intel E810CQDA2 2x100 GbE QSFP28 PCIe NIC)	4.2(1l)	4.2(1l)	-	4.2(1l)	-	4.2(1l)	-	-	-	4.3(5a)
UCSC-P -I8Q25GF (Cisco - Intel E810XXVDA4 4x25/10 GbE SFP28 PCIe NIC)	4.2(1l)	4.2(1l)	-	4.2(1l)	-	4.2(1l)	-	-	-	4.3(5a)
UCSC-P -I8D25GF (Cisco - Intel E810XXVDA2 2x25/10 GbE SFP PCIe NIC)	4.2(1l)	4.2(1l)	-	4.2(1l)	-	4.2(1l)	-	-	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI / UCS 6400 Series FI / UCS 6500 Series FI
	UCS-IOM-2204 UCS-IOM-2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 UCS-IOM-2408	93180YC-FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108-25G UCSX-I-9108-100G	UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCS-IOM-2304 UCS-IOM-2304V2
	Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers									
UCSC-P -ID10GC (Cisco - Intel X710T2LG 2x10 GbE RJ45 PCIe NIC)	4.2(1l)	4.2(1l)	-	4.2(1l)	-	4.2(1l)	-	-	-	4.3(5a)
UCSC-O -ID10GC: Cisco(R) X710T2LG 2x10 GbE RJ45 OCP 3.0 NIC	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	-	4.3(5a)
UCSC-P -IQ1GC: Intel I710-T4L 4x1GBASE-T NIC	Cisco UCS Manager does not support UCSC-P -IQ1GC: Intel I710-T4L 4x1GBASE-T NIC card even if the server supports this card.									
UCSB-RAID12G-M6: Cisco FlexStorage 12G SAS RAID Controller	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	-	4.3(5a)
UCSC-SAS-M6T: Cisco M6 12G SAS HBA for (16 Drives)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	-	4.3(5a)
UCSX-X10C-RAIDF: UCS X10c Compute RAID Controller	-	-	-	-	-	-	-	-	-	4.3(5a)
Cisco Mini Storage Carrier for M.2 SATA-SWRAID Mode	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	4.2(1d)	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI / UCS 6400 Series FI / UCS 6500 Series FI
	UCS-IOM-2204 / UCS-IOM-2208	UCS-IOM-2304 / UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 / UCS-IOM-2208 / UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) / 2232 PP 2348 UPQ / UCSX-I-9108-25G / UCSX-I-9108-100G	UCS-IOM-2204 / UCS-IOM-2208 / UCS-IOM-2408* / UCSX-I-9108-25G / UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 / UCS-IOM-2408	93180YC-FX3 (10/25G server ports) / 2348 UPQ (10G server ports) / UCSX-I-9108-25G / UCSX-I-9108-100G	UCSX-I-9108-25G / UCSX-I-9108-100G	UCS-IOM-2204 / UCS-IOM-2208 / UCS-IOM-2408* / UCS-IOM-2304 / UCS-IOM-2304V2
	Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers. UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers. UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers.									
Cisco UCSC-P-M5S100GF (Mellanox ConnectX-5 MCX515A-CCAT 1 x 100GbE QSFP PCI NIC)	4.1(1a)	4.1(1a)	-	4.1(1a)	-	4.1(1a)	-	-	-	4.3(5a)
Cisco UCSC-P-M5D25GF (Mellanox ConnectX-5 MCX512A-ACAT 2 x 25Gb/10GbE SFP PCI)	4.1(1a)	4.1(1a)	-	4.1(1a)	-	4.1(1a)	-	-	-	4.3(5a)
Cisco UCSC-O-M5S100GF (Mellanox ConnectX-5 MCX545B-ECAN 1 x 100GbE QSFP PCI NIC)	4.1(1a)	4.1(1a)	-	4.1(1a)	-	4.1(1a)	-	-	-	4.3(5a)
Cisco UCSC-PCIE-QS100GF (QLogic R FastLinQ QL45611H 100GbE)	4.0(4o)	4.0(2a)	-	4.0(4o)	-	4.1(1a)	-	-	-	4.3(5a)
Cisco UCSC-PCIE-QD40GF (QLogic QL45412H 40GbE)	3.2(3a)	3.2(3a)	-	4.0(1a)	-	4.1(1a)	-	-	-	4.3(5a)
Cisco UCSC-PCIE-QD16GF (QLogic QLE2692 16GB dual Port FC HBA)	3.2(3a)	3.2(3a)	-	4.0(1a)	-	4.1(1a)	-	-	-	4.3(5a)

Adapters	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6332, 6332-16UP	Minimum Software Version UCS 6454	Minimum Software Version UCS 6454	Minimum Software Version UCS 64108	Minimum Software Version UCS 6536	Minimum Software Version UCS 6536	UCSX-S9108-100G (Primary)	Suggested Software Version UCS 6332, 6332-16UP FI UCS 6400 Series FI UCS 6500 Series FI
	UCS-IOM-2204 UCS-IOM-2208	UCS-IOM-2304 UCS-IOM-2304V2	2232 PP 2348	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408*	93180YC-FX3 (10/25G server ports) 2232 PP 2348 UPQ UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2304 V1/V2 UCS-IOM-2408	93180YC-FX3 (10/25G server ports) 2348 UPQ (10G server ports) UCSX-I-9108-25G UCSX-I-9108-100G	UCSX-I-9108-25G UCSX-I-9108-100G	UCS-IOM-2204 UCS-IOM-2208 UCS-IOM-2408* UCS-IOM-2304 UCS-IOM-2304V2
	Cisco UCS IOMs are applicable only for Cisco UCS B-Series Servers UCSX-I-9108-25G and UCSX-I-9108-100G are supported only with Cisco UCS X-Series Servers UCSX-S9108-100G (Primary) supports only Cisco UCS X-Series Servers									
Cisco UCSC-PCIE-QD25GF (QLogic FastLinQ QL41212H 25GbE adapter)	3.2(3a)	3.2(3a)	-	4.0(1a)	-	4.1(1a)	-	-	-	4.3(5a)
Cisco UCSC-OCP-QD25GF (QLogic FastLinQ QL41232H Dual Port 25GbE Adapter)	4.0(1a)	4.0(1a)	-	4.0(1a)	-	4.0(1a)	-	-	-	4.3(5a)
Cisco UCSC-OCP-QD10GC (QLogic FastLinQ QL41132H Dual Port 10GbE Adapter)	4.0(1a)	4.0(1a)	-	4.0(1a)	-	4.0(1a)	-	-	-	4.3(5a)
Cisco UCSC-PCIE-QD10GC (Qlogic QL41162HLRJ-11-SP dual-port 10GBase-T CNA)	4.0(2a	4.0(2a	-	4.0(2a)	-	4.0(2a)	-	-	-	4.3(5a)
Cisco UCSB-MLOM-PT-01 (Cisco Port Expander Card)	3.2(2b)	3.2(2b)	-	4.0(1a)	-	4.0(1a)	-	-	-	4.3(5a)
Cisco UCSC-PCIE-QD32GF (Qlogic QLE2742 Dual Port 32Gb FC HBA)	3.2(3a)	3.2(3a)	-	4.0(1a)	-	4.1(1a)	-	-	-	4.3(5a)

✎

Note   Cisco UCS Manager Infrastructure A Bundle only supports adapters running release 4.1(3) or later.

Cisco UCS Fabric Interconnect Server Compatibility Matrix - Release 4.3(5a)

Cisco UCS 6536 FI

Table 18: Cisco UCS 6536 FI - Cisco UCS Rack Servers

Cisco VIC	Direct Attach (40/100G)	Direct Attach (4x25G or 25G QSA28)	FEX		
			93180YC-FX3 (25G server ports)	93180YC-FX3 (10G server ports)	2348 UPQ (10G server ports)
15427 (UCSC-M-V5Q50GV2)	Not Supported	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server **Note** Reverse breakout is not supported.	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	All supported 10G PIDs	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server
15237 (UCSC-M-V5D200GV2)	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	Not Supported	Not Supported	Not Supported	Not Supported
15235 (UCSC-P-V5D200G)	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	Not Supported	Not Supported	Not Supported	Not Supported
15238 (UCSC-M-V5D200G)	All Cisco UCS C-Series M6 and M7 servers	Not Supported	Not Supported	Not Supported	Not Supported
15425 (UCSC-P-V5Q50G)	Not Supported	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server **Note** No reverse breakout supported	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	All supported 10G PIDs	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server

Cisco VIC	Direct Attach (40/100G)	Direct Attach (4x25G or 25G QSA28)	FEX		
			93180YC-FX3 (25G server ports)	93180YC-FX3 (10G server ports)	2348 UPQ (10G server ports)
15428 (UCSC-M-V5Q50G)	Not Supported	All Cisco UCS C-Series M6 and M7 servers **Note** No reverse breakout supported	All Cisco UCS C-Series M6 and M7 servers	All supported 10G PIDs	All Cisco UCS C-Series M6 and M7 servers
1497-40G/100G (UCSC-MLOMC100-04)	All Cisco UCS C-series M5 servers	Not Supported	Not Supported	Not Supported	Not Supported
1495-40G/100G (UCSC-PCIEC100-04)	All Cisco UCS C-Series M6, C-Series M5, and S-series M5 servers	Not Supported	Not Supported	Not Supported	Not Supported
1477-40G/100G (UCSC-MV100-04)	All Cisco UCS C-series M6 servers	Not Supported	Not Supported	Not Supported	Not Supported
1467-10G/25G (UCSC-MV25-04)	Not Supported	All Cisco UCS C-Series M6 servers	All Cisco UCS C-Series M6 servers	All supported 10G PIDs	All Cisco UCS C-Series M6 servers
1457-10G/25G (UCSC-MLOMC25Q-04)	Not Supported	Cisco UCS C220 M5 and C240 M5	Cisco UCS C220 M5 and C240 M5	All supported 10G PIDs	Cisco UCS C220 M5 and C240 M5
1455-10G/25G (UCSC-PCIEC25Q-04)	Not Supported	All Cisco UCS C-Series M5 and M6 servers and S-series M5 servers	All Cisco UCS C-Series M5 and M6 servers and S-series M5 servers	All supported 10G PIDs	All Cisco UCS C-Series M5 and M6 servers and S-series M5 servers
1387 - 40G (UCSC-MLOM-C40Q-03)	All Cisco UCS C-Series M5 Servers (40G)	Not Supported	Not Supported	With QSA and SFP-10G-SR only without QSA and SFP-10G-SR/LR, CU1/3/5M, ACU7M only	All Cisco UCS C-Series M5 servers (QSA at adapter)
1385 - 40G (UCSC-PCIE-C40Q-03)	All Cisco UCS C-Series M5 Servers (40G)	Not Supported	Not Supported	With QSA and SFP-10G-SR only without QSA and SFP-10G-SR/LR, CU1/3/5M, ACU7M only	All Cisco UCS C-Series M5 servers (QSA at adapter)

Table 19: Cisco UCS 6536 FI - Cisco UCS Blade Servers

Cisco VIC	IOM	
	2304v1/v2 & /2408	UCSX-I-9108-25G or UCSX-I-9108-100G
15230 (UCSX-ML-V5D200GV2)	-	Cisco UCS X215c M8 Cisco UCS X210c M6, X210c M7, and X410c M7
15420 + UCS VIC 15000 bridge connector (UCSX-V5-BRIDGE+) + 15422 (UCSX-ME-V5Q50G)	-	Cisco UCS X215c M8 Cisco UCS X210c M6, X210c M7, and X410c M7

Cisco VIC	IOM	
	2304v1/v2 & /2408	UCSX-I-9108-25G or UCSX-I-9108-100G
15420 (UCSX-ML-V5Q50G)	-	Cisco UCS X215c M8 Cisco UCS X210c M6, X210c M7, and X410c M7
15231 (UCSX-ML-V5D200G)	-	Cisco UCS X210c M6, X210c M7, and X410c M7
14425 + UCS VIC 14000 bridge connector (UCSX-V4-BRIDGE) + 14825 (UCSX-V4-Q25GME)	-	Cisco UCS X210c M6
14425 (UCSX-V4-Q25GML)	-	Cisco UCS X210c M6
15411 + Port Expander (UCSB-ML-V5Q10G + UCSB-MLOM-PT-01)	Cisco UCS B200 M6	-
15411 (UCSB-ML-V5Q10G)	Cisco UCS B200 M6	-
1440 + 1480 + Port Expander (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P) + UCSB-MLOM-PT-01	Cisco UCS B480 M5	-
1440 + 1480 + 1480 (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P +UCSB-VIC-M84-4P)	Cisco UCS B480 M5	-
1440 + 1480 (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P)	Cisco UCS B200 M6, B200 M5, B480 M5	-
1440 + Port Expander (UCSB-MLOM-40G-04 + UCSB-MLOM-PT-01)	Cisco UCS B200 M6, B200 M5, B480 M5	-
1440 (UCSB-MLOM-40G-04)	Cisco UCS B200 M6, B200 M5, B480 M5	-
1340 + 1380 + Port Expander	Cisco UCS B480 M5	-
1340 + 1380 + 1380	Cisco UCS B480 M5	-
1340 + 1380 (UCSB-MLOM-40G-03 + UCSB-VIC-M83-8P)	Cisco UCS B200 M5 and B480 M5	-
1340 + Port Expander - 10G/40G (UCSB-MLOM-40G-03 + UCSB-MLOM-PT-01)	Cisco UCS B200 M5 and B480 M5	-
1340 - 10G/40G (UCSB-MLOM-40G-03)	Cisco UCS B200 M5 and B480 M5	-

Cisco UCS 6400 and 64108 FIs

Table 20: Cisco UCS 6400 and 64108 FIs - Cisco UCS Rack Servers

Cisco VIC	Direct Attach (10G/25G)	Direct Attach (4x10G/4x25)	Direct Attach (40G/100G)	FEX		
				2232 PP (10G)	93180YC-FX3 (25G server ports)	93180YC-FX3 (10G server ports)
15427 (UCSC-M-V5Q50GV2)	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	Not Supported	Not Supported	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	SFP-10G-SR/SR-S only
15237 (UCSC-M-V5D200GV2)	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported
15235 (UCSC-P-V5D200G)	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported
15238 (UCSC-M -V5D200G)	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported
15425 (UCSC-P-V5Q50G)	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	Not Supported	Not Supported	All Cisco UCS C-Series M6 and M7 servers Cisco UCS C245 M8 Server Cisco UCS C225 M8 Server	SFP-10G-SR/SR-S only
15428 (UCSC-M -V5Q50G)	All Cisco UCS C-Series M6 and M7 servers	All Cisco UCS C-Series M6 and M7 servers	Not Supported	Not Supported	All Cisco UCS C-Series M6 and M7 servers	SFP-10G-SR/SR-S only
Note	Break-out is supported (6400 side QSFP, on adapter side two ports can be connected to 1 VIC (like ports 1 and 2) Reverse-breakout : Not supported					
1495-40G/100G (UCSC -PCIEC100 -04)	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported
1497-40G/100G (UCSC -MLOMC100 -04)	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported

Cisco VIC	Direct Attach (10G/25G)	Direct Attach (4x10G/4x25)	Direct Attach (40G/100G)	FEX		
				2232 PP (10G)	93180YC-FX3 (25G server ports)	93180YC-FX3 (10G server ports)
1477-40G/100G (UCSC-MV100 -04)	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported	Not Supported
1467-10G/25G (UCSC -MV25-04)	All Cisco UCS C-Series M6 servers	All Cisco UCS C-Series M6 servers	Not Supported	All Cisco UCS C-Series M6 servers	All Cisco UCS C-Series M6 servers	SFP-10G-SR/SR-S only
1457-10G/25G (UCSC-MLOM C25Q-04)	Cisco UCS C220 M5, C240 M5	Cisco UCS C220 M5, C240 M5	Not Supported	Cisco UCS C220 M5, C240 M5	Cisco UCS C220 M5, C240 M5	SFP-10G-SR/SR-S only
1455-10G/25G (UCSC-PCIEC 25Q-04)	All Cisco UCS C-Series M5 and M6 servers, and S-Series M5 servers	All Cisco UCS C-Series M5 and M6 servers, and S-Series M5 servers	Not Supported	All Cisco UCS C-Series M5 and M6 servers, and S-Series M5 servers	All Cisco UCS C-Series M5 and M6 servers, and S-Series M5 servers	SFP-10G-SR/SR-S only
1387 - 40G (UCSC-MLOM -C40Q-03)	All Cisco UCS C-Series M5 servers QSA at adapter)	Not Supported	Not Supported	All Cisco UCS C-Series M5 servers QSA at adapter)	Not Supported	With QSA and SFP-10G-SR only
1385 - 40G (UCSC-PCIE -C40Q-03)	All Cisco UCS C-Series M5 and S-Series M5 servers (Except C125 M5) QSA at adapter)	Not Supported	Not Supported	All Cisco UCS C-Series M5 and S-Series M5 servers (Except C125 M5) QSA at adapter)	Not Supported	With QSA and SFP-10G-SR only

Table 21: Cisco UCS 6400 and 64108 FIs - Cisco UCS Blade Servers

Cisco VIC	IOM	
	2204/2208/2408	UCSX-I-9108-25G
15230 (UCSX-ML-V5D200GV2)	Not Supported	Cisco UCS X215c M8 Cisco UCS X210c M6, X210c M7, and X410c M7
15420 + UCS VIC 15000 bridge connector (UCSX-V5-BRIDGE+) + 15422 (UCSX-ME-V5Q50G)	Not Supported	Cisco UCS X215c M8 Cisco UCS X210c M6, X210c M7, and X410c M7
15420 (UCSX-ML-V5Q50G)	Not Supported	Cisco UCS X215c M8 Cisco UCS X210c M6, X210c M7, and X410c M7

Cisco VIC	IOM	
	2204/2208/2408	**UCSX-I-9108-25G**
15231 (UCSX-ML-V5D200G)	Not Supported	Cisco UCS X210c M6, X210c M7, and X410c M7
14425 + UCS VIC 14000 bridge connector (UCSX-V4-BRIDGE) + 14825 (UCSX-V4-Q25GME)	Not Supported	Cisco UCS X210c M6
14425 (UCSX-V4-Q25GML)	Not Supported	Cisco UCS X210c M6
15411 + Port Expander (UCSB-ML -V5Q10G + UCSB-MLOM -PT-01)	B200 M6	Not Supported
15411 (UCSB-ML -V5Q10G)	B200 M6	Not Supported
1440 + 1480 + 1480 (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P + UCSB-VIC-M84-4P)	Cisco UCS B480 M5	Not Supported
1440 + 1480 + Port Expander (UCSB-MLOM-40G-04 + UCSB-VIC- M84-4P) + UCSB-MLOM-PT-01	Cisco UCS B480 M5	Not Supported
1440 + 1480 (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P)	Cisco UCS B200 M6, B200 M5, B480 M5	Not Supported
1440 + Port Expander (UCSB-MLOM-40G-04 + UCSB-MLOM-PT-01)	Cisco UCS B200 M6, B200 M5, B480 M5	Not Supported
1440 (UCSB-MLOM-40G-04)	Cisco UCS B200 M6, B200 M5, B480 M5	Not Supported
1340 + 1380 + 1380	Cisco UCS B480 M5	Not Supported

Cisco VIC	IOM	
	2204/2208/2408	UCSX-I-9108-25G
1340 + 1380 + Port Expander	Cisco UCS B480 M5	Not Supported
1340 + Port Expander - 10G/40G (UCSB-MLOM-40G-03 + UCSB-MLOM-PT-01)	Cisco UCS B200 M5 and B480 M5	Not Supported
1340 + 1380 (UCSB-MLOM-40G-03 + UCSB-VIC-M83-8P)	Cisco UCS B200 M5 and B480 M5	Not Supported
1340 - 10G/40G (UCSB-MLOM-40G-03)	Cisco UCS B200 M5 and B480 M5	Not Supported

Cisco UCS 6300 FI

Table 22: Cisco UCS 6300 FI - Cisco UCS Rack Servers

Cisco VIC	Direct Attach	Direct Attach (Break-out)	FEX	
			2232 PP	2348
15427 (UCSC-M-V5Q50GV2)	All Cisco UCS C-Series M6 servers	All Cisco UCS C-Series M6 servers	Not Supported	All Cisco UCS C-Series M6 servers
15237 (UCSC-M-V5D200GV2)	All Cisco UCS C-Series M6 servers	Not Supported	Not Supported	Not Supported
15235 (UCSC-P-V5D200G)	All Cisco UCS C-Series M6 servers	Not Supported	Not Supported	Not Supported
15425 (UCSC-P-V5Q50G)	All Cisco UCS C-Series M6 servers	All Cisco UCS C-Series M6 servers	Not Supported	All Cisco UCS C-Series M6 servers
15428 (UCSC-M-V5Q50G)	All Cisco UCS C-Series M6 servers	All Cisco UCS C-Series M6 servers	Not Supported	All Cisco UCS C-Series M6 servers
15238 (UCSC-M-V5D200G)	All Cisco UCS C-Series M6 servers	Not Supported	Not Supported	Not Supported
1497-40G/100G (UCSC-MLOMC100-04)	Cisco UCS C220 M5, C240 M5 servers	Not Supported	Not Supported	Not Supported
1495-40G/100G (UCSC-PCIEC100-04)	All Cisco UCS C-Series M5 and M6 servers and S-Series M5 servers	Not Supported	Not Supported	Not Supported

Cisco VIC	Direct Attach	Direct Attach (Break-out)	FEX	
			2232 PP	2348
1477-40G/100G (UCSC-MV100-04)	All Cisco UCS C-Series M6 servers	Not Supported	Not Supported	Not Supported
1467-10G/25G (UCSC-MV25-04)	All Cisco UCS C-Series M6 servers (10G speed with 6332-16UP)	All Cisco UCS C-Series M6 servers	All Cisco UCS C-Series M6 servers	All Cisco UCS C-Series M6 servers
1457-10G/25G (UCSC-MLOMC25Q-04)	Cisco UCS C220 M5 and C240 M5 (10G speed with 6332-16UP)	Cisco UCS C220 M5 and C240 M5	Cisco UCS C220 M5 and C240 M5	Cisco UCS C220 M5 and C240 M5
1455-10G/25G (UCSC-PCIEC25Q-04)	All Cisco UCS C-Series M5 and M6 servers and S-Series M5 servers (10G speed with 6332-16UP)	All Cisco UCS C-Series M5 and M6 servers and S-Series M5 servers	All Cisco UCS C-Series M5 and M6 servers and S-Series M5 servers	All Cisco UCS C-Series M5 and M6 servers and S-Series M5 servers
1387 - 40G (UCSC-MLOM-C40Q-03)	All Cisco UCS C-Series M5 servers (40G or 10G using QSA)	Not Supported	All Cisco UCS C-Series M5 servers (QSA at adapter)	All Cisco UCS C-Series M5 servers (QSA at adapter)
1385 - 40G (UCSC-PCIE-C40Q-03)	All Cisco UCS C-Series M5 servers (except UCS C125 M5) and S-Series M5 servers (40G or 10G using QSA)	Not Supported	All Cisco UCS C-Series M5 servers (except UCS C125 M5) and S-Series M5 servers (40G or 10G using QSA)	All Cisco UCS C-Series M5 servers (except UCS C125 M5) and S-Series M5 servers (40G or 10G using QSA)

Table 23: Cisco UCS 6300 FI - Cisco UCS Blade Servers

Cisco VIC	IOM
	2304v1/v2 2204/2208
15411 + Port Expander (UCSB-ML-V5Q10G + UCSB-MLOM-PT-01)	Cisco UCS B200 M6
15411 (UCSB-ML-V5Q10G)	Cisco UCS B200 M6
1440 + 1480 + 1480	Cisco UCS B480 M5
1440 + 1480 + Port Expander (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P) + UCSB-MLOM-PT-01	Cisco UCS B480 M5
1440 + 1480 (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P)	Cisco UCS B200 M5, B480 M5 and B200 M6 servers
1440 + Port Expander (UCSB-MLOM-40G-04 + UCSB-MLOM-PT-01)	Cisco UCS B200 M5, B480 M5 and B200 M6 servers

Cisco VIC	IOM
	2304v1/v2 **2204/2208**
1440 (UCSB-MLOM-40G-04)	Cisco UCS B200 M5, B480 M5 and B200 M6 servers
1340 + 1380 + 1380	Cisco UCS B480 M5
1340 + 1380 + Port Expander	Cisco UCS B480 M5
1340 + Port Expander - 10G/40G (UCSB-MLOM-40G-03 + UCSB-MLOM-PT-01)	Cisco UCS B200 M5 and B480 M5 servers
1340 + 1380 (UCSB-MLOM-40G-03 + UCSB-VIC-M83-8P)	Cisco UCS B200 M5 and B480 M5 servers
1340 - 10G/40G (UCSB-MLOM-40G-03)	Cisco UCS B200 M5 and B480 M5 servers

Cisco UCS 6324 FI

Table 24: Cisco UCS 6324 FI - Cisco UCS Rack Servers

Cisco VIC	Direct Attach (10G)	Direct Attach (Break-out)
15428 (UCSC-M-V5Q50G)	Not Supported	Not Supported
15238 (UCSC-M-V5D200G)	Not Supported	Not Supported
1497-40G/100G (UCSC-MLOMC100-04)	Not Supported	Not Supported
1495-40G/100G (UCSC-PCIEC100-04)	Not Supported	Not Supported
1477-40G/100G (UCSC-MV100-04)	Not Supported	Not Supported
1467-10G/25G (UCSC-MV25-04)	Not Supported	Not Supported
1457-10G/25G (UCSC-MLOMC25Q-04)	Cisco UCS C220 M5 and C240 M5 servers	Cisco UCS C220 M5 and C240 M5 servers
1455-10G/25G (UCSC-PCIEC25Q-04)	All Cisco UCS C-Series and S-Series M5 servers	All Cisco UCS C-Series and S-Series M5 servers
1387 - 40G (UCSC-MLOM-C40Q-03)	All Cisco UCS C-Series M5 servers (QSA at the adapter)	Not Supported
1385 - 40G (UCSC-PCIE-C40Q-03)	All Cisco UCS C-Series M5 servers (QSA at the adapter)	Not Supported

Table 25: Cisco UCS 6324 FI - Cisco UCS Blade Servers

| Cisco VIC | IOM | 6324 |
	2204/2208	(Primary Chassis)
15411 (UCSB-ML-V5Q10G)	Not Supported	Not Supported
15411 + Port Expander (UCSB-ML-V5Q10G + UCSB-MLOM-PT-01)	Not Supported	Not Supported
1440 + 1480 + 1480 (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P +UCSB-VIC-M84-4P)	Not Supported	Cisco UCS B480 M5
1440 + 1480 + Port Expander (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P) + UCSB-MLOM-PT-01	Not Supported	Cisco UCS B480 M5
1440 + 1480 (UCSB-MLOM-40G-04 + UCSB-VIC-M84-4P)	Not Supported	Cisco UCS B200 M5, B480 M5, and B200 M6
1440 + Port Expander (UCSB-MLOM-40G-04 + UCSB-MLOM-PT-01)	Not Supported	Cisco UCS B200 M5, B480 M5, and B200 M6
1440 (UCSB-MLOM-40G-04)	Not Supported	Cisco UCS B200 M5, B480 M5, and B200 M6
1340 + 1380 + 1380	Cisco UCS B480 M5	Cisco UCS B480 M5
1340 + 1380 + Port Expander	Cisco UCS B480 M5	Cisco UCS B480 M5
1340 + 1380 (UCSB-MLOM-40G-03 + UCSB-VIC-M83-8P)	Cisco UCS B200 M5 and B480 M5	Cisco UCS B200 M5 and B480 M5
1340 + Port Expander - 10G/40G (UCSB-MLOM-40G-03 + UCSB-MLOM-PT-01)	Cisco UCS B200 M5 and B480 M5	Cisco UCS B200 M5 and B480 M5
1340 - 10G/40G (UCSB-MLOM-40G-03)	Cisco UCS B200 M5 and B480 M5	Cisco UCS B200 M5 and B480 M5

Cisco UCS Fabric Interconnect 9108 100G

Table 26: Cisco UCS FI 9108 100G - Cisco UCS Blade Servers

| Cisco VIC | UCSX-S9108-100G |
	(Primary Chassis)
14425 (UCSX-V4-Q25GML)	Cisco UCS X210c M6

Cisco VIC	UCSX-S9108-100G (Primary Chassis)
14425 + UCS VIC 14000 bridge connector (UCSX-V4-BRIDGE) + 14825 (UCSX-V4-Q25GME)	Cisco UCS X210c M6
15231 (UCSX-ML-V5D200G)	Cisco UCS X210c M6, X210c M7, and X410c M7
15230 (UCSX-ML-V5D200GV2)	Cisco UCS X210c M6, X210c M7, and X410c M7
15420 (UCSX-ML-V5Q50G)	Cisco UCS X210c M6, X210c M7, and X410c M7
15420 + UCS VIC 15000 bridge connector (UCSX-V5-BRIDGE+) + 15422 (UCSX-ME-V5Q50G)	Cisco UCS X210c M6, X210c M7, and X410c M7

Other Hardware

Other Hardware

We recommend that you use the latest software version for all Chassis, Fabric Interconnects, Fabric Extenders, Expansion Modules and Power Supplies. To determine the minimum software version for your mixed environment, see . The following is the list of other supported hardware:

Table 27: Supported Hardware for UCS 6500 Series Fabric Interconnects

Type	Details
Chassis	UCSB-5108-AC2 UCSB-5108-DC2 Cisco UCSX-9508 Chassis (For Cisco UCS X-Series Servers)
Fabric Interconnects	UCS 6500
Fabric Extenders	93180YC-FX3 (25G server ports) 93180YC-FX3 (10G server ports) 2348 UPQ (10G server ports) 2304v1/v2 & /2408 UCSX-I-9108-25G or UCSX-I-9108-100G (Supported with Cisco UCS X-Series Servers)
Power Supplies	UCS-PSU-6536-AC UCSX-PSU-2800AC (For Cisco UCSX-9508 Chassis)

Table 28: Supported Hardware for UCS 6400 Series Fabric Interconnects

Type	Details
Chassis	UCSC-C4200-SFF
	N20–C6508
	UCSB-5108-DC
	UCSB-5108-AC2
	UCSB-5108-DC2
	UCSB-5108-HVDC
	Cisco UCSX-9508 Chassis (For Cisco UCS X-Series Servers)
Fabric Interconnects	UCS 64108
	UCS 6454
Fabric Extenders	2232 PP (10G)
	93180YC-FX3 (25G server ports)
	93180YC-FX3 (10G server ports)
	2204/2208/2408
	UCSX-I-9108-25G
Power Supplies	UCS-PSU-6332-AC
	UCS-PSU-6332-DC
	UCS-PSU-64108-AC
	UCS-PSU-6332-DC

Table 29: Supported Hardware for UCS 6332, UCS 6332-16UP Fabric Interconnects

Type	Details
Chassis	N20–C6508
	UCSB-5108-DC
	UCSB-5108-AC2
	UCSB-5108-DC2
	UCSB-5108-HVDC
Fabric Interconnects	UCS 6332UP
	UCS 6332-16UP

Type	Details
Fabric Extenders	2232 PP
	2348
	2304v1/v2
	2204/2208
Power Supplies	UCS-PSU-6332-AC
	UCS-PSU-6332-DC

Note The 40G backplane setting is not applicable for 22xx IOMs.

GB Connector Modules, Transceiver Modules, and Cables

Following is the list of Gb connector modules, transceiver modules, and supported cables:

Note
- Transceiver modules and cables that are supported on a specific Fabric Interconnect are not always supported on all VIC adapters, IOMs, or FEXes that are compatible with that Fabric Interconnect. Detailed compatibility matrices for the transceiver modules are available here:https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html

- S-Class transceivers, for example, QSFP-40G-SR4-S, do not support FCoE.

Table 30: Supported Transceiver Modules and Cables for GB Connector Modules

Gb Connector Modules	Transceiver Modules and Cables
FC for UCS 6500 Series Fabric Interconnects	DS-SFP-4X32G-SW
1GbE for UCS 6500 Series Fabric Interconnects	GLC-TE (QSA), port 9, 10
	GLC-SX-MMD (QSA)
10GbE for UCS 6500 Series Fabric Interconnects	SFP-10G-SR (QSA)
	SFP-10G-SR-S(QSA)
	SFP-10G-LR (QSA)
	SFP-10G-LR-S (QSA)
	CVR-QSFP-SFP10G
	SFP-H10GB-CU1M

Gb Connector Modules	Transceiver Modules and Cables
25GbE for UCS 6500 Series Fabric Interconnects	SFP-10/25G-LR-S
	SFP-10/25G-CSR-S
	SFP-25G-SL
	CVR-QSFP28-SFP25G
	SFP-H25G-CU1M (P1)
	SFP-H25G-CU2M (P1)
	SFP-H25GB-CU3M
	SFP-25G-AOC2M
	SFP-25G-AOC3M
	SFP-25G-SR-S

Gb Connector Modules	Transceiver Modules and Cables
40GbE for UCS 6500 Series Fabric Interconnects	QSFP-H40G-AOC1M
	QSFP-H40G-AOC2M
	QSFP-H40G-AOC3M
	QSFP-H40G-AOC5M
	QSFP-H40G-AOC15M
	QSFP-H40G-AOC25M
	QSFP-40G-CU1M
	QSFP-40G-CU2M
	QSFP-40G-CU3M
	QSFP-40G-CU5M
	QSFP-40G-SR4
	QSFP-40G-SR4-S
	QSFP-40G-CSR4
	QSFP-40G-LR4
	QSFP-40G-LR4-S
	QSFP-4SFP10G-CU1M
	QSFP-4SFP10G-CU3M
	FET-40G
	Note FET-40G is supported only between FI and IOM/FEX
	QSFP-40G-ACU10M
	QSFP-40G-SR-BD
	QSFP-100G40G-BIDI
	Note QSFP-100G40G-BIDI is supported only on border ports/uplink ports in 40G mode.

Gb Connector Modules	Transceiver Modules and Cables
100GbE for UCS 6500 Series Fabric Interconnects	QSFP-100G-SR1.2
	QSFP-100G-SR4-S
	QSFP-100G-LR4-S
	QSFP-100G-SM-SR
	QSFP-100G-SL4
	QSFP-40/100-SRBD (or) QSFP-100G40G-BIDI
	Note QSFP-100G40G-BIDI is supported between FI and I9108-100G IOM/N9K-C93180YC-FX3 FEX/border ports in 100G mode.
	QSFP-100G-CU1M
	QSFP-100G-CU2M
	QSFP-100G-CU3M
	QSFP-100G-CU5M
	QSFP-4SFP25G-CU1M
	QSFP-4SFP25G-CU2M
	QSFP-4SFP25G-CU3M
	QSFP-4SFP25G-CU5M
	QSFP-100G-AOC1M
	QSFP-100G-AOC2M
	QSFP-100G-AOC3M
	QSFP-100G-AOC5M
	QSFP-100G-AOC7M
	QSFP-100G-AOC10M
	QSFP-100G-AOC15M
	QSFP-100G-AOC20M
	QSFP-100G-AOC25M
	QSFP-100G-AOC30M
	QSFP-100G-DR-S
	QSFP-100G-FR-S

Gb Connector Modules	Transceiver Modules and Cables
FC for UCS 6400 Series Fabric Interconnects	DS-SFP-FC8G-SW
	DS-SFP-FC8G-LW
	DS-SFP-FC16G-SW
	DS-SFP-FC16G-LW
	DS-SFP-FC32G-SW
	DS-SFP-FC32G-LW
100-Gb for UCS 6400 Series Fabric Interconnects	QSFP-100G-SR1.2
	QSFP-40/100G-SRBD
	QSFP-100G-SR4-S
	QSFP-100G-LR4-S
	QSFP-100G-SM-SR
	QSFP-100G-CU1M
	QSFP-100G-CU2M
	QSFP-100G-CU3M
	QSFP-100G-AOC1M
	QSFP-100G-AOC2M
	QSFP-100G-AOC3M
	QSFP-100G-AOC5M
	QSFP-100G-AOC7M
	QSFP-100G-AOC10M
	QSFP-100G-AOC15M
	QSFP-100G-AOC20M
	QSFP-100G-AOC25M
	QSFP-100G-AOC30M
	QSFP-4SFP25G-CU1M
	QSFP-4SFP25G-CU2M
	QSFP-4SFP25G-CU3M
	QSFP-4SFP25G-CU5M

Gb Connector Modules	Transceiver Modules and Cables
40-Gb for UCS 6400 Series Fabric Interconnects	QSFP-40G-SR4
	QSFP-40G-SR4-S
	QSFP-40G-SR-BD
	QSFP-40G-LR4
	QSFP-40G-LR4-S
	QSFP-40G-ER4
	WSP-Q40GLR4L
	QSFP-H40G-CU1M
	QSFP-H40G-CU3M
	QSFP-H40G-CU5M
	QSFP-H40G-ACU7M
	QSFP-H40G-ACU10M
	QSFP-H40G-AOC1M
	QSFP-H40G-AOC2M
	QSFP-H40G-AOC3M
	QSFP-H40G-AOC5M
	QSFP-H40G-AOC10M
	QSFP-H40G-AOC15M
	QSFP-4SFP10G-CU1M
	QSFP-4SFP10G-CU3M
	QSFP-4SFP10G-CU5M
	QSFP-4X10G-AC7M
	QSFP-4X10G-AC10M
	QSFP-4X10G-AOC1M
	QSFP-4X10G-AOC3M
	QSFP-4X10G-AOC5M
	QSFP-4X10G-AOC7M

Gb Connector Modules	Transceiver Modules and Cables
40-Gb for UCS 6300 Series Fabric Interconnects	QSFP-40G-SR4 in 4x10G mode with external 4x10G splitter cable to SFP-10G-SR
	QSFP-40G-CSR4
	QSFP-40G-LR4
	QSFP-40G-LR4-S
	QSFP-40G-SR-BD
	QSFP-40G-SR4
	QSFP-40G-SR4-S
	FET-40G
	QSFP-4SFP10G-CU1M
	QSFP-4SFP10G-CU3M
	QSFP-4SFP10G-CU5M
	QSFP-4X10G-AC7M
	QSFP-4X10G-AC10M
	QSFP-4X10G-AOC1M
	QSFP-4X10G-AOC2M
	QSFP-4X10G-AOC3M
	QSFP-4X10G-AOC5M
	QSFP-4X10G-AOC7M
	QSFP-4X10G-AOC10M
	QSFP-H40G-ACU7M
	QSFP-H40G-ACU10M
	QSFP-H40G-AOC1M
	QSFP-H40G-AOC2M
	QSFP-H40G-AOC3M
	QSFP-H40G-AOC5M
	QSFP-H40G-AOC7M
	QSFP-H40G-AOC10M
	QSFP-H40G-AOC15M
	QSFP-H40G-CU1M
	QSFP-H40G-CU3M
	QSFP-H40G-CU5M

Gb Connector Modules	Transceiver Modules and Cables
32-Gb FC for UCS 6454 Fabric Interconnects	DS-SFP-FC32G-SW DS-SFP-FC32G-LW
25-Gb for UCS 6454 Fabric Interconnects	4x25GbE 10M[1]
25-Gb for UCS 6400 Series Fabric Interconnects	SFP-25G-SR-S SFP-H25G-CU1M SFP-H25G-CU2M SFP-H25G-CU3M SFP-H25G-CU5M SFP-H25G-AOC1M SFP-H25G-AOC2M SFP-H25G-AOC3M SFP-H25G-AOC5M SFP-H25G-AOC7M SFP-H25G-AOC10M SFP-10/25G-LR-S SFP-10/25G-CSR-S
16-Gb for UCS 6454 and UCS 6332UP Fabric Interconnects	DS-SFP-FC16G-LW DS-SFP-FC16G-SW

Gb Connector Modules	Transceiver Modules and Cables
10-Gb for UCS 6400 Series Fabric Interconnects	SFP-10G-SR
	SFP-10G-SR-S
	SFP-10G-LR
	SFP-10G-LR-S
	SFP-10G-ER
	SFP-10G-ER-S
	SFP-10G-ZR
	SFP-10G-ZR-S
	FET-10G
	Note FET-10G is only supported between Fabric Interconnects and IOMs/FEXs.
	SFP-10G-LRM
	SFP-H10GB-CU1M
	SFP-H10GB-CU2M
	SFP-H10GB-CU3M
	SFP-H10GB-CU5M
	SFP-H10GB-ACU7M
	SFP-H10GB-ACU10M
	SFP-10G-AOC1M
	SFP-10G-AOC2M
	SFP-10G-AOC3M
	SFP-10G-AOC5M
	SFP-10G-AOC7M
	SFP-10G-AOC10M

Gb Connector Modules	Transceiver Modules and Cables
10-Gb for UCS 6300 Series Fabric Interconnects	SFP-10G-SR
	SFP-10G-SR-S
	SFP-10G-LR
	SFP-10G-LR-S
	SFP-H10GB-CU1M
	SFP-H10GB-CU2M
	SFP-H10GB-CU3M
	SFP-H10GB-CU5M
	SFP-H10GB-ACU7M
	SFP-H10GB-ACU10M
	FET-10G
	[2]SFP-10G-AOC1M
	SFP-10G-AOC2M
	SFP-10G-AOC3M
	SFP-10G-AOC5M
	SFP-10G-AOC7M
	SFP-10G-AOC10M
8-Gb FC for UCS 6400 Series and UCS 6332UP Fabric Interconnects	DS-SFP-FC8G-SW
	DS-SFP-FC8G-LW
4-Gb FC for UCS 6300 Series Fabric Interconnects	DS-SFP-FC4G-SW
	DS-SFP-FC4G-LW
1-Gb for UCS 6400 Series Fabric Interconnects	GLC-TE
	GLC-SX-MMD
	SFP-GE-T
1-Gb for UCS 6300 Series Fabric Interconnects	GLC-TE
	GLC-SX-MM
	GLC-LH-SM

[1] Supported from Cisco UCS Manager, Release 4.1(2)
[2] SFP-10G-AOC cables are only supported for Cisco 1455 and 1457 VIC cards.

✎

Note The maximum length of fiber optic runs is limited to 300 meters. This is imposed by our use of 802.3X/802.1Qbb Priority Pauses. SFP-10G-LR is supported between fabric interconnect and FEX, but the 300 m limit still applies.

Table 31: Supported GPU/GPU PCIe Node

GPU/GPU PCIe Node	PID	Supported Servers	Minimum Software Version	Suggested Software Version
NVIDIA A16 GPU on X440p: PCIE 250W 4X16GB, FHFL	UCSC-CGPU-A16	Cisco UCSX215c M8 (with PCIe Node)	4.3(5a)	4.3(5a)
NVIDIA H100-NVL GPU 400W, 94GB, 2-slot FHFL	UCSC-GPU-H100-NVL	Cisco UCS X210c M7 Cisco UCS X215c M8 (with PCIe Node)	4.3(5a)	4.3(5a)
		Cisco UCS C245 M8	4.3(5a)	4.3(5a)
		Cisco UCS C240 M7	4.3(5a)	4.3(5a)
NVIDIA L4-Mezz GPU 70W, 24GB, 1-slot HHHL	UCSX-GPU-L4-Mezz	Cisco UCS X210c M7 Cisco UCS X215c M8	4.3(5a)	4.3(5a)
UCSX-440P-D GPU PCIe Node	UCSX-440P-D	Cisco UCS X210c M7, X210c M6, and X410c M7	4.3(4a)	4.3(5a)
Intel GPU Flex 140, Gen4x8, HHHL, 75W PCIe (Front Mezz)	UCSX-GPU-FLX140MZ	Cisco UCS X210c M7	4.3(2b)	4.3(5a)
Intel GPU Flex 140, Gen4x8, HHHL, 75W PCIe	UCSX-GPU-FLEX140	Cisco UCS X410c M7 and X210c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPU-FLEX140	Cisco UCS C220 M7 and C240 M7	4.3(4a)	4.3(5a)

GPU/GPU PCIe Node	PID	Supported Servers	Minimum Software Version	Suggested Software Version
Intel GPU Flex 170, Gen4x16, HHFL, 150W PCIe	UCSX-GPU-FLEX170	Cisco UCS X410c M7 and X210c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPU-FLEX170	Cisco UCS C240 M7	4.3(4a)	4.3(5a)
NVIDIA A16 PCIE 250W 4X16GB	UCSX-GPU-A16-D	Cisco UCS X210c M7 and X210c M6 (with PCIe Node)	4.3(4a)	4.3(5a)
		Cisco UCS X410c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPU-A16	Cisco UCS C240 M6	4.2(1d)	4.3(5a)
		Cisco UCS C245 M6	4.2(1i)	4.3(5a)
NVIDIA L4 Tensor Core, 70W, 24GB	UCSX-GPU-L4	Cisco UCS X210c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
		Cisco UCS X410c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
NVIDIA L40 300W, 48GB wPWR CBL	UCSX-GPU-L40	Cisco UCS X210c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
		Cisco UCS X410c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPU-L40	Cisco UCS C240 M7	4.3(2b)	4.3(5a)
		Cisco UCS X215c M8 (with PCIe Node)	4.3(5a)	4.3(5a)

GPU/GPU PCIe Node	PID	Supported Servers	Minimum Software Version	Suggested Software Version
NVIDIA L40S: 350W, 48GB, 2-slot FHFL GPU	UCSX-GPU-L40S	Cisco UCS X210c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSX-GPU-L40S	Cisco UCS X410c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPU-L40S	Cisco UCS C240 M7	4.3(4a)	4.3(5a)
		Cisco UCS X215c M8 (with PCIe Node)	4.3(5a)	4.3(5a)
NVIDIA T4 PCIE 75W 16GB	UCSX-GPU-T4-16	Cisco UCS X210c M6 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPU-T4-16	Cisco UCS C220 M6	4.3(2b)	4.3(5a)
		Cisco UCS C245 M6	4.2(1f)	4.3(5a)
		Cisco UCS C225 M6	4.2(1l)	4.3(5a)
		Cisco UCS C240 M5, C220 M5, and C480 M5	3.2(3a)	4.3(5a)
		Cisco UCS S3260 M5	3.1(2b)	4.3(5a)
NVIDIA T4 GPU PCIE 75W 16GB, MEZZ form factor (Front Mezz)	UCSX-GPU-T4-MEZZ	Cisco UCS X210c M7 and X210c M6	4.3(2b)	4.3(5a)
NVIDIA Hopper L4 70W, 24GB, 1-slot HHHL	UCSC-GPU-L4M6	Cisco UCS C220 M6, C240 M6	4.3(4a)	4.3(5a)
NVIDIA H100: 350W, 80GB, 2-slot FHFL GPU	UCSX-GPU-H100-80	Cisco UCS X210c M7 and X410c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPU-H100-80	Cisco UCS C240 M7	4.3(4a)	4.3(5a)

GPU/GPU PCIe Node	PID	Supported Servers	Minimum Software Version	Suggested Software Version
NVIDIA L4:70W, 24GB, 1-slot HHHL GPU	UCSC-GPU-L4	Cisco UCS C245 M8	4.3(5a)	4.3(5a)
		Cisco UCS C220 M7 and C240 M7	4.3(2b)	4.3(5a)
		Cisco UCS X215c M8 (with PCIe Node)	4.3(5a)	4.3(5a)
NVIDIA P4	UCSC-GPU-P4	Cisco UCS C220 M5	3.2(3a)	4.3(5a)
NVIDIA M10	UCSC-GPU-M10	Cisco UCS C240 M5 and C480 M5	3.2(3a)	4.3(5a)
NVIDIA GRID P6 Front Mezzanine	UCSB-GPU-P6-F	Cisco UCS B200 M5	3.2(1d)	4.3(5a)
		Cisco UCS B480 M5	3.2(2b)	4.3(5a)
NVIDIA GRID P6 Rear Mezzanine	UCSB-GPU-P6-R	Cisco UCS B200 M5	3.2(1d)	4.3(5a)
		Cisco UCS B480 M5	3.2(2b)	4.3(5a)
TESLA A30, PASSIVE, 180W, 24GB	UCSC-GPU-A30-D	Cisco UCS C240 M7	4.3(2b)	4.3(5a)
	UCSC-GPU-A30	Cisco UCS C240 M6	4.2(1d)	4.3(5a)
		Cisco UCS C245 M6	4.2(1i)	4.3(5a)

GPU/GPU PCIe Node	PID	Supported Servers	Minimum Software Version	Suggested Software Version
TESLA A40 RTX, PASSIVE, 300W, 48GB	UCSX-GPU-A40-D	Cisco UCS X210c M7 and X210c M6 (with PCIe Node)	4.3(4a)	4.3(5a)
		Cisco UCS X410c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPU-A40-D	Cisco UCS C240 M7	4.3(2b)	4.3(5a)
	UCSC-GPU-A40	Cisco UCS C240 M6	4.2(1d)	4.3(5a)
		Cisco UCS C245 M6	4.2(1i)	4.3(5a)
		Cisco UCS C480 M5	3.2(3a)	4.3(5a)
TESLA A100, PASSIVE, 300W, 80GB12	UCSX-GPU-A100-80-D	Cisco UCS X210c M7 and X210c M6 (with PCIe Node)	4.3(4a)	4.3(5a)
		Cisco UCS X410c M7 (with PCIe Node)	4.3(4a)	4.3(5a)
	UCSC-GPUA100-80-D	Cisco UCS C240 M7	4.3(2b)	4.3(5a)
	UCSC-GPU-A100-80	Cisco UCS C240 M6	4.2(1d)	4.3(5a)
		Cisco UCS C245 M6	4.2(1i)	4.3(5a)
		All Cisco UCS C-Series M5	4.2(2c)	4.3(5a)
TESLA A10, PASSIVE, 150W, 24GB	UCSC-GPU-A10	Cisco UCS C240 M6	4.2(1d)	4.3(5a)
		Cisco UCS C245 M6	4.2(1i)	4.3(5a)

Cisco UCS Mini and Components

UCS Mini Supported Chassis

Table 32: Minimum Software Versions for UCS Mini Chassis

Chassis	Minimum Software Version	Suggested Software Version
UCSB-5108-AC2	3.0(1e)	4.3(5a)
UCSB-5108-DC2	3.0(2c)	4.3(5a)

UCS Mini Supported Blade and Rack Servers

Table 33: Minimum Host Firmware Versions for Blade and Rack Servers on UCS Mini

Servers	Minimum Software Version	Suggested Software Version
B200 M6	4.2(1d)	4.3(5a)
B200 M5	4.2(1d)	4.3(5a)
B480 M5	4.2(1d)	4.3(5a)
C220 M5	4.2(1d)	4.3(5a)
C240 M5	4.2(1d)	4.3(5a)
C480 M5	4.2(1d)	4.3(5a)

UCS Mini Supported Adapters

Adapters	Minimum Software Version	Suggested Software Version
UCSC-PCIE-C25Q-04 (UCS VIC 1455)	4.2(2a)	4.3(5a)
UCSC-MLOM-C25Q-04 (UCS VIC 1457)	4.2(2a)	4.3(5a)
UCSB-VIC-M84-4P (UCS VIC 1480)	4.2(2a)	4.3(5a)
UCSB-MLOM-40G-04 (UCS VIC 1440)	4.2(2a)	4.3(5a)
UCSC-PCIE-C40Q-03 (UCS VIC 1385) UCSC-MLOM-C40Q-03 (UCS VIC 1387)	3.1(3a)	4.3(5a)

Adapters	Minimum Software Version	Suggested Software Version
UCSB-MLOM-40G-03 (UCS VIC 1340) UCSB-VIC-M83-8P (UCS VIC 1380)	3.1(3a)	4.3(5a)

UCS Mini Supported Fabric Interconnects

Fabric Interconnects	Minimum Software Version	Suggested Software Version
Cisco UCS 6324	3.1(3a)	4.3(5a)

UCS Mini Supported Fabric Extenders for Secondary Chassis

Fabric Extenders	Minimum Software Version	Suggested Software Version
UCS 2204 XP	3.1(3a)	4.3(5a)
UCS 2208 XP	3.1(3a)	4.3(5a)

UCS Mini Supported Power Supplies

Power Supplies	Minimum Software Version	Suggested Software Version
UCSB-PSU-2500ACDV UCSB-PSU-2500DC48 UCSC-PSU-930WDC UCSC-PSU2V2-930WDC UCSC-PSUV2-1050DC UCSC-PSU1-770W UCSC-PSU2-1400 UCSC-PSU2V2-1400W UCSC-PSU2V2-650W UCSC-PSU2V2-1200W	3.1(3a)	4.3(5a)

UCS Mini Supported Gb Connector Modules

We recommend that you use the current software version for Gb port speed connections. Following is the list of Gb connector modules and supported cables:

✎

Note	Transceiver modules and cables that are supported on a specific Fabric Interconnect are not always supported on all VIC adapters, IOMs, or FEXes that are compatible with that Fabric Interconnect. Detailed compatibility matrices for the transceiver modules are available here:https://www.cisco.com/c/en/us/support/interfaces-modules/transceiver-modules/products-device-support-tables-list.html

Gb Connector Modules	Transceivers Modules and Cables
40-Gb	QSFP-40G-SR4 in 4x10G mode with external 4x10G splitter cable to SFP-10G-SR
	QSFP-4SFP10G-CU1M
	QSFP-4SFP10G-CU3M
	QSFP-4SFP10G-CU5M
	QSFP-4X10G-AC7M
	QSFP-4X10G-AC10M
	QSFP-4X10G-AOC1M
	QSFP-4X10G-AOC2M
	QSFP-4X10G-AOC3M
	QSFP-4X10G-AOC5M
	QSFP-4X10G-AOC7M
	QSFP-4X10G-AOC10M

Gb Connector Modules	Transceivers Modules and Cables
10-Gb	SFP-10G-LR
	SFP-10G-LR-S
	SFP-10G-LR-X
	SFP-10G-SR
	SFP-10G-SR-S
	SFP-10G-SR-X
	SFP-H10GB-CU1M
	SFP-H10GB-CU2M
	SFP-H10GB-CU3M
	SFP-H10GB-CU5M
	SFP-H10GB-ACU7M
	SFP-H10GB-ACU10M
	SFP-10G-AOC1M
	SFP-10G-AOC2M
	SFP-10G-AOC3M
	SFP-10G-AOC5M
	SFP-10G-AOC7M
	SFP-10G-AOC10M
8-Gb	DS-SFP-FC8G-SW
	DS-SFP-FC8G-LW
4-Gb	DS-SFP-FC4G-SW
	DS-SFP-FC4G-LW
1-Gb	GLC-TE
	GLC-LH-SM
	GLC-SX-MM

Cisco UCS X-Series Direct and Components

Cisco UCS X-Series Direct Supported Chassis

Table 34: Minimum Software Versions

Chassis	Minimum Software Version	Suggested Software Version
Cisco UCS X9508 Chassis	4.3(4b)	4.3(5a)

Cisco UCS X-Series Direct Supported Blade Servers

Table 35: Minimum Host Firmware Versions for Blade Servers on Cisco UCS X-Series Direct

Servers	Minimum Software Version	Suggested Software Version
X210c M7	4.3(4b)	4.3(5a)
X410c M7	4.3(4b)	4.3(5a)
X210c M6	4.3(4b)	4.3(5a)

Cisco UCS X-Series Direct Supported Fabric Interconnects

Fabric Interconnects	Minimum Software Version	Suggested Software Version
Cisco UCS 9108-100G	4.3(4b)	4.3(5a)

Cisco UCS X-Series Direct Supported Gb Connector Modules

We recommend that you use the current software version for Gb port speed connections. Following is the list of Gb connector supported cables:

Gb Connector Modules	Cables
100-GbE	QSFP-100G-SR4-S
	QSFP-100G-SR4-S (Breakout)
	QSFP-100G-LR4-S
	QSFP-100G-SM-SR
	QSFP-100G-SL4
	QSFP-100G-SL4 (Breakout)
	QSFP-100G-SR1.2
	QSFP-40/100-SRBD
	QSFP-100G-DR-S
	QSFP-100G-FR-S
	QSFP-100G-CU1M
	QSFP-100G-CU2M
	QSFP-100G-CU3M
	QSFP-100G-CU5M
	QSFP-100G-AOC1M
	QSFP-100G-AOC2M
	QSFP-100G-AOC3M
	QSFP-100G-AOC5M
	QSFP-100G-AOC7M
	QSFP-100G-AOC10M
	QSFP-100G-AOC15M
	QSFP-100G-AOC20M
	QSFP-100G-AOC25M
	QSFP-100G-AOC30M
40GbE	QSFP-40G-SR4
	QSFP-40G-SR4 (Breakout)
	QSFP-40G-SR4-S
	QSFP-40G-SR4-S (Breakout)
	QSFP-40G-CSR4
	QSFP-40G-CSR4 (Breakout)
	QSFP-40G-SR-BD

Gb Connector Modules	Cables
4X25GbE	QSFP-4SFP25G-CU1M
	QSFP-4SFP25G-CU2M
	QSFP-4SFP25G-CU3M
	QSFP-4SFP25G-CU5M
4x10GbE	QSFP-4SFP10G-CU1M
	QSFP-4SFP10G-CU2M
	QSFP-4SFP10G-CU3M
	QSFP-4X10G-AOC3M
	QSFP-4X10G-AOC5M
25GbE via QSA28	SFP-25G-SR-S
	SFP-10/25G-LR-S
	SFP-10/25G-CSR-S
	SFP-25G-SL
	SFP-H25G-CU1M
	SFP-H25G-CU2M
	SFP-H25G-CU3M
	SFP-H25G-CU5M
10GbE/1GbE via QSA or QSA28	SFP-10G-SR
	SFP-10G-SR
	SFP-10G-SR-S
	SFP-10G-LR (With QSA)
	SFP-10G-LR
	SFP-10G-LR-S
	SFP-10G-LR-S
	CVR-QSFP-SFP10G+ GLC-T (ports 7, 8)
	CVR-QSFP-SFP28+ GLC-T (ports 7, 8)
8G, 16G, 32G FC	4x 8G FC breakout with 128G QSF
	4x 16G FC breakoutwith 128G QSFP
	4x 32G FC breakoutwith 128G QSFP

Capability Catalog

The Cisco UCS Manager Capability 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 Capability Catalog is embedded in Cisco UCS Manager, but at times it is also released as a single image file to make updates easier.

The following table lists the PIDs added in this release and maps UCS software releases to the corresponding Capability Catalog file.

Table 36: Version Mapping

UCS Release	Catalog File Name	Additional PIDs in this Release
4.3(5a)	ucs-catalog.4.3.5a.T.bin	

UCS Release	Catalog File Name	Additional PIDs in this Release
		Cisco UCS X215c M8 Compute Node
		• UCSX-215C-M8
		• UCSX-215C-M8-U
		Cisco UCS C225 M8 Server
		• UCSC-C225-M8S
		• UCSC-C225-M8N
		Cisco Tri-Mode M1 24G RAID and HBA controllers:
		• UCSC-RAID-MP1L32
		• UCSC-RAID-M1L16
		• o UCSC-HBA-M1L16
		GPUs:
		• UCSC-CGPU-A16
		• UCSC-GPU-H100-NVL
		• UCSX-GPU-L4-Mezz
		Drives:
		• UCS-NVB1T9O1V
		• UCSB-NVA1T9O1V
		• UCS-NVB3T8O1V
		• UCSB-NVA3T8O1V
		• UCS-NVB7T6O1V
		• UCSB-NVA7T6O1V
		• UCS-NVB15TO1V
		• UCSB-NVA15TO1V
		• UCS-NVB1T6O1P
		• UCSB-NVA1T6O1P
		• UCS-NVB3T2O1P
		• UCSB-NVA3T2O1P
		• UCS-NVB6T4O1P
		• UCSB-NVA6T4O1P
		• UCS-NVB12T8O1P
		• UCS-SDB480OA1V
		• UCS-SDB960OA1V
		• UCS-SDB3T8OA1V
		• UCSB-SDA480OA1V
		• UCSB-SDA960OA1V

UCS Release	Catalog File Name	Additional PIDs in this Release
		• UCSB-SDA3T8OA1V
		• UCSB-SDC480OA1V
		• UCSB-SDC960OA1V
		• UCSB-SDC3T8OA1V
		• UCS-SDB480OA1P
		• UCS-SDB960OA1P
		• UCS-SDB1T9OA1P
		• UCS-SDB3T8OA1P
		• UCSB-SDA480OA1P
		• UCSB-SDA960OA1P
		• UCSB-SDA1T9OA1P
		• UCSB-SDC480OA1P
		• UCSB-SDC960OA1P
		• UCSB-SDC1T9OA1P
		• UCS-M2240OA1V
		• UCS-M2480OA1V
4.3(4e)	ucs-catalog.4.3.4e.T.bin	—
4.3(4d)	ucs-catalog.4.3.4d.T.bin	—
4.3(4c)	ucs-catalog.4.3.4c.T.bin	—
4.3(4b)	ucs-catalog.4.3.4b.T.bin	Cisco UCS C245 M8 Server • UCSC-C245-M8SX Cisco UCS 9108 100G FI • UCSX-S9108-100G

UCS Release	Catalog File Name	Additional PIDs in this Release
4.3(4a)	ucs-catalog.4.3.4a.T.bin	RAID Controllers: • UCSC-RAID-HP • UCS-M2-NVRAID TPM Module: • UCS-TPM-002D GPU: • UCSX-GPU-FLEX170 • UCSX-GPU-FLEX140 • UCSX-GPU-L40S • UCSC-GPU-L4M6 • UCSX-GPU-H100-80
4.3(3c)	ucs-catalog.4.3.3c.T.bin	—

UCS Release	Catalog File Name	Additional PIDs in this Release
4.3(3a)	ucs-catalog.4.3.3a.T.bin	

UCS Release	Catalog File Name	Additional PIDs in this Release
		CPUs for Cisco UCS X210c M7 Compute Node:
		• UCSX-CPU-I8592V
		• UCSX-CPU-I8592+
		• UCSX-CPU-I8581V
		• UCSX-CPU-I8580
		• UCSX-CPU-I8571N
		• UCSX-CPU-I8570
		• UCSX-CPU-I8568Y+
		• UCSX-CPU-I8562Y+
		• UCSX-CPU-I8558U
		• UCSX-CPU-I8558P
		• UCSX-CPU-I8558
		• UCSX-CPU-I6554S
		• UCSX-CPU-I6548Y+
		• UCSX-CPU-I6548N
		• UCSX-CPU-I6544Y
		• UCSX-CPU-I6542Y
		• UCSX-CPU-I6538Y+
		• UCSX-CPU-I6538N
		• UCSX-CPU-I6534
		• UCSX-CPU-I6530
		• UCSX-CPU-I6526Y
		• UCSX-CPU-I5520+
		• UCSX-CPU-I5515+
		• UCSX-CPU-I5512U
		• UCSX-CPU-I4516Y+
		• UCSX-CPU-I4514Y
		CPUs for Cisco UCS C220 M7 and C240 M7 servers:
		• UCS-CPU-I6542Y
		• UCS-CPU-I6544Y
		• UCS-CPU-I6548Y+
		• UCS-CPU-I6526Y
		• UCS-CPU-I6530
		• UCS-CPU-I8562Y+
		• UCS-CPU-I8568Y+

UCS Release	Catalog File Name	Additional PIDs in this Release
		• UCS-CPU-I8592+
		• UCS-CPU-I8558P
		• UCS-CPU-I6534
		• UCS-CPU-I6554S
		• UCS-CPU-I6538Y+
		• UCS-CPU-I4514Y
		• UCS-CPU-I8580
		• UCS-CPU-I8592V
		• UCS-CPU-I5515+
		• UCS-CPU-I5520+
		• UCS-CPU-I4516Y+
		• UCS-CPU-I8558
		• UCS-CPU-I6548N
		DIMMs for Cisco UCS C220 M7 and C240 M7 servers:
		• UCS-MRX16G1RE3
		• UCS-MRX32G1RE3
		• UCS-MRX64G2RE3
		• UCS-MRX96G2RF3
		• UCS-MR128G4RE3
		DIMMs for Cisco UCS X210c M7 Compute Node:
		• UCSX-MRX16G1RE3
		• UCSX-MRX32G1RE3
		• UCSX-MRX64G2RE3
		• UCSX-MRX96G2RF3
		• UCSX-MR128G4RE3
4.3(2f)	ucs-catalog.4.3.2f.T.bin	—
4.3(2e)	ucs-catalog.4.3.2e.T.bin	—

UCS Release	Catalog File Name	Additional PIDs in this Release
4.3(2c)	ucs-catalog.4.3.2c.T.bin	Cisco UCS X410c M7 Compute Node: • UCSX-410C-M7 • UCSX-410C-M7-U Cisco UCS VIC: • UCSC-M-V5Q50GV2 • UCSC-M-V5Q50GV2D • UCSX-ML-V5D200GV2 • UCSX-ML-V5D200GV2D • UCSC-M-V5D200GV2 • UCSC-M-V5D200GV2D

UCS Release	Catalog File Name	Additional PIDs in this Release
4.3(2b)	ucs-catalog.4.3.2b.T.bin	Cisco UCSX-9508 Chassis M7: • UCSX-M7-MLB • UCSX-9508-D= • UCSX-9508-D-U • UCSX-9508-D-CH Cisco UCS X210c M7 Compute Node: • UCSX-210C-M7 • UCSX-210C-M7-U Cisco UCS X210c M6 Compute Node: • UCSX-210C-M6 • UCSX-210C-M6-U Cisco UCS C240 M7 Server: • UCSC-C240-M7SX • UCSC-C240-M7SN Cisco UCS C220 M7 Server: • UCSC-C220-M7S • UCSC-C220-M7N Intelligent Fabric Module: • UCSX-I-9108-25G • UCSX-I-9108-100G Cisco UCS VIC: • UCSC-P-V5Q50G • UCSC-P-V5D200G • UCSX-ML-V5D200G-D • UCSX-ML-V5Q50G-D • UCSX-ME-V5Q50G-D • UCSX-V4-Q25GML • UCSX-V4-Q25GME NVIDIA GPU: • UCSC-GPU-T4-16 PSU: • UCSB-PSU-2500ACDV

Security Fixes

Security Fixes in Release 4.3(5a)

CSCwk62264

Cisco UCS 6400 Series Fabric Interconnects and UCS 6500 Series Fabric Interconnects in UCS Manager Mode includes Third-party Software that is affected by the vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2024-6387—A security regression (CVE-2006-5051) has been discovered in the OpenSSH server (sshd). A race condition exists that may cause sshd to handle certain signals unsafely. This vulnerability can potentially be exploited by an unauthenticated, remote attacker by failing to authenticate within a specified time period.

The affected third-party software component has been upgraded to a version that includes fixes for the vulnerability. Future versions of the product(s) will not be affected by this vulnerability.

CSCwk62723

Cisco UCS B-Series Blade Servers - Serial over LAN (SOL) and Cisco UCS X-Series Compute Nodes - Serial over LAN (SOL) includes Third-party Software that is affected by the vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2024-6387—A security regression (CVE-2006-5051) has been discovered in the OpenSSH server (sshd). A race condition exists that may cause sshd to handle certain signals unsafely. This vulnerability can potentially be exploited by an unauthenticated, remote attacker by failing to authenticate within a specified time period.

The affected third-party software component has been upgraded to a version that includes fixes for the vulnerability. Future versions of the product(s) will not be affected by this vulnerability.

CSCwk75392

Cisco UCS Manager includes Third-party Software that is affected by the vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2023-52425—libexpat through 2.5.0 allows a denial of service (resource consumption) because many full reparsings are required in the case of a large token for which multiple buffer fills are needed.

The affected third-party software component has been upgraded to a version that includes fixes for the vulnerability. Future versions of the product(s) will not be affected by this vulnerability.

Security Fixes in Release 4.3(4e)

There are no security fixes in release 4.3(4e).

Security Fixes in Release 4.3(4d)

There are no security fixes in release 4.3(4d).

Security Fixes in Release 4.3(4c)

CSCwk62264

Cisco UCS Manager includes Third-party Software that is affected by the vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2024-6387—A race condition has been identified in the sshd service related to its signal handler. If a client fails to authenticate within the LoginGraceTime period (default is 120 seconds, previously 600 seconds in older OpenSSH versions), the sshd SIGALRM handler is triggered asynchronously. This handler, however, invokes several functions that are not safe to call from within a signal handler, such as syslog().

The affected third-party software component has been upgraded to a version that includes fixes for the vulnerability. Future versions of the product(s) will not be affected by this vulnerability.

Security Fixes in Release 4.3(4b)

There are no security fixes in release 4.3(4b).

Security Fixes in Release 4.3(4a)

CSCwi59915

Cisco UCS Manager includes Third-party Software that is affected by the vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2023-48795—The SSH transport protocol with certain OpenSSH extensions, found in OpenSSH before 9.6 and other products, allows remote attackers to bypass integrity checks, such that some packets are omitted (from the extension negotiation message), and a client and server may consequently end up with a connection for which some security features have been downgraded or disabled, also known as Terrapin attack.

  This occurs because the SSH Binary Packet Protocol (BPP), implemented by these extensions, mishandles the handshake phase and use of sequence numbers. For example, when there is an effective attack against SSH's use of ChaCha20-Poly1305 (and CBC with Encrypt-then-MAC), the bypass occurs in chacha20-poly1305@openssh.com, (and if CBC is used, then the -etm@openssh.com MAC algorithms).

The affected third-party software component has been upgraded to a version that includes fixes for the vulnerability. Future versions of the product(s) will not be affected by this vulnerability.

Security Fixes in Release 4.3(3c)

There are no security fixes in Release 4.3(3c).

Security Fixes in Release 4.3(3a)

CSCwh58728

Cisco UCS Manager includes Third-party Software that is affected by the vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2023-38408—The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.)

The affected third-party software component has been upgraded to a version that includes fixes for the vulnerability. Future versions of the product(s) will not be affected by this vulnerability.

CSCwi20282

This product includes Third-party Software that is affected by the vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2007-2768—OpenSSH, when using OPIE (One-Time Passwords in Everything) for PAM, allows remote attackers to determine the existence of certain user accounts, which displays a different response if the user account exists and is configured to use one-time passwords (OTP), a similar issue to CVE-2007-2243.

- CVE-2008-3844—Certain Red Hat Enterprise Linux (RHEL) 4 and 5 packages for OpenSSH, as signed in August 2008 using a legitimate Red Hat GPG key, contain an externally introduced modification (Trojan Horse) that allows the package authors to have an unknown impact.

- CVE-2016-20012—OpenSSH through 8.7 allows remote attackers, who have a suspicion that a certain combination of username and public key is known to an SSH server, to test whether this suspicion is correct. This occurs because a challenge is sent only when that combination could be valid for a login session.

- CVE-2018-15473—OpenSSH through 7.7 is prone to a user enumeration vulnerability due to not delaying bailout for an invalid authenticating user until after the packet containing the request has been fully parsed, related to `auth2-gss.c`, `auth2-hostbased.c`, and `auth2-pubkey.c`.

- CVE-2018-15919—Remotely observable behavior in `auth-gss2.c` in OpenSSH through 7.8 could be used by remote attackers to detect existence of users on a target system when GSS2 is in use.

- CVE-2018-20685—In OpenSSH 7.9, `scp.c` in the scp client allows remote SSH servers to bypass intended access restrictions via the filename of `.` or an empty filename. The impact is modifying the permissions of the target directory on the client side.

- CVE-2019-6109—An issue was discovered in OpenSSH 7.9. Due to missing character encoding in the progress display, a malicious server (or Man-in-The-Middle attacker) can employ crafted object names to manipulate the client output, for example, by using ANSI control codes to hide additional files being transferred. This affects `refresh_progress_meter()` in `progressmeter.c`.

- CVE-2019-6110—In OpenSSH 7.9, due to accepting and displaying arbitrary stderr output from the server, a malicious server (or Man-in-The-Middle attacker) can manipulate the client output, for example, to use ANSI control codes to hide additional files being transferred.

- CVE-2019-6111—An issue was discovered in OpenSSH 7.9. Due to the scp implementation being derived from 1983 rcp, the server chooses which files/directories are sent to the client. However, the scp client only performs cursory validation of the object name returned (only directory traversal attacks are prevented). A malicious scp server (or Man-in-The-Middle attacker) can overwrite arbitrary files in the scp client target directory. If recursive operation (-r) is performed, the server can manipulate subdirectories as well (for example, to overwrite the .ssh/authorized_keys file).

- CVE-2020-14145—The client side in OpenSSH 5.7 through 8.4 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows man-in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client).

- CVE-2020-15778—scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument.

- CVE-2021-28041—ssh-agent in OpenSSH before 8.5 has a double free that may be relevant in a few less-common scenarios, such as unconstrained agent-socket access on a legacy operating system, or the forwarding of an agent to an attacker-controlled host.

- CVE-2021-36368—An issue was discovered in OpenSSH before 8.9. If a client is using public-key authentication with agent forwarding but without -oLogLevel=verbose, and an attacker has silently modified the server to support the None authentication option, then the user cannot determine whether FIDO authentication is going to confirm that the user wishes to connect to that server, or that the user wishes to allow that server to connect to a different server on the user's behalf.

- CVE-2021-41617—sshd in OpenSSH 6.2 through 8.x before 8.8, when certain non-default configurations are used, allows privilege escalation because supplemental groups are not initialized as expected. Helper programs for AuthorizedKeysCommand and AuthorizedPrincipalsCommand may run with privileges associated with group memberships of the sshd process, if the configuration specifies running the command as a different user.

- CVE-2023-38408—The PKCS#11 feature in ssh-agent in OpenSSH before 9.3p2 has an insufficiently trustworthy search path, leading to remote code execution if an agent is forwarded to an attacker-controlled system. (Code in /usr/lib is not necessarily safe for loading into ssh-agent.)

The affected third-party software component has been upgraded to a version that includes fixes for the vulnerability. Future versions of the product(s) will not be affected by this vulnerability.

Security Fixes in Release 4.3(2f)

There are no security fixes in release 4.3(2f).

Security Fixes in Release 4.3(2e)

CSCwh23927

Cisco UCS C225 M6 and C245 M6 servers with certain AMD® CPUs are affected by vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) ID:

- CVE-2023-20569—A side channel vulnerability on some of the AMD® CPUs may allow an attacker to influence the return address prediction. This may result in speculative execution at an attacker-controlled address, potentially leading to information disclosure.

CSCwh43415

Cisco UCS C225 M6 and C245 M6 servers with AMD® CPUs are affected by vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2021-26345—Failure to validate the value in APCB may allow a privileged attacker to tamper with the APCB token to force an out-of-bounds memory read potentially resulting in a denial of service.

- CVE-2022-23830—SMM configuration may not be immutable, as intended, when SNP is enabled resulting in a potential limited loss of guest memory integrity.

- CVE-2021-46774—Insufficient DRAM address validation in System Management Unit (SMU) may allow an attacker to read/write from/to an invalid DRAM address, potentially resulting in denial-of-service.

- CVE-2023-20519—A Use-After-Free vulnerability in the management of an SNP guest context page may allow a malicious hypervisor to masquerade as the guest's migration agent resulting in a potential loss of guest integrity.

- CVE-2023-20566—Improper address validation in ASP with SNP enabled may potentially allow an attacker to compromise guest memory integrity.

CSCwh68315

The Cisco products UCS B-Series M6 Blade Servers; UCS C-Series M6 Rack Servers; UCS X-Series M6 Compute Nodes include an Intel$^®$ CPU that is affected by the vulnerability identified by the following Common Vulnerability and Exposures (CVE) ID:

- CVE-2023-23583—Sequence of processor instructions leads to unexpected behavior for some Intel$^®$ Processors may allow an authenticated user to potentially enable escalation of privilege and/or information disclosure and/or denial of service via local access.

Security Fixes in Release 4.3(2c)

CSCwh46667

Cisco UCS Manager includes Third-party Software that is affected by the vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2022-0778—The BN_mod_sqrt() function, which computes a modular square root, contains a bug that can cause it to loop forever for non-prime moduli. This function is used when parsing certificates that contain elliptic curve public keys in compressed form or explicit elliptic curve parameters with a base point encoded in compressed form.

  It is possible to trigger the infinite loop by crafting a certificate that has invalid explicit curve parameters. Certificate parsing happens prior to verification of the certificate signature, and hence, any process that parses an externally supplied certificate may thus be subject to a denial of service attack.

  The infinite loop can also be reached when parsing crafted private keys as they can contain explicit elliptic curve parameters. Vulnerable situations include:

  - TLS clients consuming server certificates

  - TLS servers consuming client certificates

  - Hosting providers taking certificates or private keys from customers

  - Certificate authorities parsing certification requests from subscribers

  - Anything else which parses ASN.1 elliptic curve parameters

  - Also any other applications that use the BN_mod_sqrt() where the attacker can control the parameter values are vulnerable to this DoS issue

  In the OpenSSL 1.0.2 version the public key is not parsed during initial parsing of the certificate which makes it slightly harder to trigger the infinite loop. However, any operation which requires the public key from the certificate triggers the infinite loop. In particular the attacker can use a self-signed certificate to trigger the loop during verification of the certificate signature. This issue affects OpenSSL versions 1.0.2, 1.1.1 and 3.0. It was addressed in the releases of 1.1.1n and 3.0.2 on the 15th March 2022. Fixed in OpenSSL 3.0.2 (Affected 3.0.0,3.0.1). Fixed in OpenSSL 1.1.1n (Affected 1.1.1-1.1.1m). Fixed in OpenSSL 1.0.2zd (Affected 1.0.2-1.0.2zc).

  The affected third-party software component is upgraded to a version that includes fixes for the vulnerability. Future versions of the product(s) will not be affected by this vulnerability.

Security Fixes in Release 4.3(2b)

CSCwc01592

Cisco UCS Manager feature if affected by the following Common Vulnerability and Exposures (CVE) ID:

- CVE-2023-20016—A vulnerability in the backup configuration feature of Cisco UCS Manager and in the configuration export feature of Cisco FXOS Software could allow an unauthenticated attacker with access to a backup file to decrypt sensitive information stored in the full state and configuration backup files.

- This vulnerability is due to a weakness in the encryption method used for the backup function. An attacker could exploit this vulnerability by leveraging a static key used for the backup configuration feature. A successful exploit could allow the attacker to decrypt sensitive information that is stored in full state and configuration backup files, such as local user credentials, authentication server passwords, Simple Network Management Protocol (SNMP) community names, and other credentials.

    Cisco has released software updates that address this vulnerability. There are no workarounds that address this vulnerability.

- For more information see Cisco FXOS Software and UCS Manager Software Configuration Backup Static Key Vulnerability

Defect ID - CSCwf30460

Cisco UCS M6 B-Series and C-Series servers are affected by vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2022-41804—Unauthorized error injection in Intel® SGX or Intel® TDX for some Intel® Xeon® Processors which may allow a privileged user to potentially enable escalation of privilege through local access.

    CVE-2022-40982—Information exposure through microarchitectural state after transient execution in certain vector execution units for some Intel(R) Processors may allow an authenticated user to potentially enable information disclosure through local access.

    CVE-2023-23908—Improper access control in some 3rd Generation Intel® Xeon® Scalable processors may allow a privileged user to potentially enable information disclosure through local access.

    CVE-2022-37343— Improper access control in the BIOS firmware for some Intel® Processors may allow a privileged user to potentially enable escalation of privilege through local access.

Defect ID - CSCwf30468

Cisco UCS M5 B-Series and C-Series servers are affected by vulnerabilities identified by the following Common Vulnerability and Exposures (CVE) IDs:

- CVE-2022-40982—Information exposure through microarchitectural state after transient execution in certain vector execution units for some Intel® Processors may allow an authenticated user to potentially enable information disclosure through local access.

    CVE-2022-43505—Insufficient control flow management in the BIOS firmware for some Intel® Processors may allow a privileged user to potentially enable denial of service through local access.

Resolved Caveats

The resolved bugs for a release are accessible through the Cisco Bug Search Tool. This web-based tool provides you with access to the Cisco bug tracking system, which maintains up-to-date information about bugs and vulnerabilities in this product and other Cisco hardware and software products.

✎

Note   You must have a Cisco.com account to log in and access the Cisco Bug Search Tool. If you do not have one, you can register for an account.

For more information about the Cisco Bug Search Tool, see the Bug Search Tool Help & FAQ.

Resolved Caveats in Release 4.3(5a)

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwm67631	After updating the BMC and BIOS, clicking **Power Off** followed by **Reset CMOS** may result in a failure. The server remains powered off even after a Redfish power-on command. This issue occurs with UCS Blade servers equipped with AMD® processors are fully populated with 64GB or higher DIMMs and all drives loaded, not previously powered on. This issue is resolved.	4.3(5a)A	4.3(5a)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwk91747	FC traffic may experience a brief disruption due to the flap of vEth associated with the vFC interfaces in the following scenarios: • Rebooting one of the Fabric Interconnects (affects all servers with vHBAs). • PMON restart (affects all servers with vHBAs). • Making changes to the vNIC or vHBA in the service profile associated with a server (affects the specific server whose service profile is modified). • Loss of CIMC connectivity due to a CIMC reset or other issues (affects the specific server with CIMC connectivity issues). This disruption can cause an FC traffic outage and may result in the operating system hanging, requiring a reset to restore normal functionality. This issue impacts vFC interfaces corresponding to the vHBAs and FC traffic of the servers only. It does not impact the vNIC interfaces and Ethernet traffic of the servers.	4.3(4a)A	4.3(5a)A

Resolved Caveats in Release 4.3(4e)

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwk91747	FC traffic may experience a brief disruption due to the flap of vEth associated with the vFC interfaces in the following scenarios: • Rebooting one of the Fabric Interconnects (affects all servers with vHBAs). • PMON restart (affects all servers with vHBAs). • Making changes to the vNIC or vHBA in the service profile associated with a server (affects the specific server whose service profile is modified). • Loss of CIMC connectivity due to a CIMC reset or other issues (affects the specific server with CIMC connectivity issues). This disruption can cause an FC traffic outage and may result in the operating system hanging, requiring a reset to restore normal functionality. This issue impacts vFC interfaces corresponding to the vHBAs and FC traffic of the servers only. It does not impact the vNIC interfaces and Ethernet traffic of the servers.	4.3(4a)A	4.3(4e)A

Resolved Caveats in Release 4.3(4d)

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwm49499	Upgrading Cisco UCS 6454 Fabric Interconnect from version 4.2(3h) to 4.3(4a) fails due to DME core file generation when Cisco UCS Manager setup includes Cisco UCS S3260 servers with Local LUN configured through a Storage Profile. This issue causes Cisco UCS Manager to become inaccessible post-upgrade. This issue is resolved.	4.3(4a)A	4.3(4d)A
CSCwm55862	In a Cisco UCS Central managed UCS domain, after upgrading Cisco UCS Manager to version 4.3(4a) or later, you are unable to use the **Use Global** option to convert local policies to global policies. The error message indicates that policy ownership cannot be modified to global due to a reference to a local policy. This issue is resolved.	4.3(4a)A	4.3(4d)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwk92950	When attempting to update the firmware for servers equipped with two H100-NVL GPUs, the firmware update process fails during activation in Cisco UCS Manager. This issue occurs when there are two GPU cards of the same version, such as A10, A40, A100-80, A16, A30, H100-80, and L40S. The failure is indicated by error code 4131 and results in the GPU firmware update not being completed. This issue is resolved.	4.3(4d)A	4.3(4d)A
CSCwm44591	After upgrading the Cisco UCS Manager infrastructure firmware to version 4.3(4a), the Cisco UCS 6454 Fabric Interconnects stopped using the `10G_ETH_PORT_ACTIVATION_PKG` license and switched to the standard `ETH_PORT_ACTIVATION_PKG` license. This change results in a mismatch in license usage, triggering a grace period warning due to the overuse of the standard license. The system displays the error: `One or more ports with license type ETH_PORT_ACTIVATION_PKG on fabric-interconnect A have started using license grace period.` This issue is resolved.	4.3(4a)A	4.3(4d)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwm02539	Booting from SAN sometimes fails to UEFI shell because an array is sending an ADISC to the initiator, or the initiator is sending an IO command before the connection is fully negotiated. This happens when multiple servers are booting from SAN to a target that uses ADISC to build the connection. This issue is resolved.	4.3(4a)B	4.3(4d)B

Resolved Caveats in Release 4.3(4c)

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwk28221	When changing the FCoE VLAN from 3121 to 3120 in Cisco UCS Manager while FI is in FC Switch mode, initiators can FLOGI and obtain FCID but fail to PLOGI to target ports, resulting in indefinite timeouts. Admin down/up of the FC link or port-channel resolves the issue. This change causes path loss in ESXi, with host logs showing successful FLOGI and FCID assignment but PLOGI timeouts. This issue is resolved.	4.3(2b)	4.3(4c)

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwk29071	On Cisco UCS-FI-6332-16UP FI running release 4.1(3j), the **Transmit Fault Count** increases by 3 when executing the show interface transceiver details command or generating tech support logs. This issue is observed on Fabric Interconnects (FI-A and FI-B) equipped with Cisco FINISAR SFP modules (DS-SFP-FC16G-SW) but does not occur with Cisco AVAGO SFP modules. The increment is specific to Cisco FINISAR SFP modules and does not indicate any hardware errors. This issue is resolved.	4.1(3j)A	4.3(4c)A
CSCwk49974	Cisco UCS-FI-6454 Fabric Interconnects Cisco UCS Manager release 4.3(4a) experience unexpected reboots when performing SNMP bulkwalkget requests with packet sizes greater than the MTU (1500). This issue is due to SNMP jumbo packet fragmentation, leading to kernel panics and high impact on data traffic if failover is not configured. This issue is resolved.	4.3(3a)A	4.3(4c)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwk09092	During an upgrade of Cisco UCS Manager from 4.2(3g) to 4.3(3a) on Cisco UCS-FI-6454 Fabric Interconnects in UCS Manager Cluster mode, the Data Management Engine (DME) consumes 100% of FI CPU resources, leading to significant slowness. This results in the DME being inaccessible and unable to use scope commands. The Cisco UCS Manager GUI becomes inaccessible, CLI logins take excessive time and often fall to the default role regardless of the account, and changes in Cisco UCS Manager cannot be made. The issue persists through failover, pmon stop/start, and container restarts. This issue is resolved.	4.3(3a)A	4.3(4c)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwf96053	When deploying a new Cisco UCS Domain within a Cisco UCS Central environment, global identifiers such as MAC pools, UUID pools, and iSCSI IP pools are not visible on Cisco UCS 6454 FI domains. This issue does not affect Cisco UCS 6300 FI. The issue occurs with Cisco UCS Central 2.0(1r) and Cisco UCS Manager 4.2(3d) on Cisco UCS 6454 FI, while Cisco UCS Manager 4.2(2c) or 4.2(1d) on Cisco 6300 FI works fine. The issue persists despite pushing global policies and identifiers from Cisco UCS Central. This issue is resolved.	4.2(3k)A	4.3(4c)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release

CSCwk66102	After upgrading Cisco UCS Manager from 4.3(2e)A to 4.3(3c)A on Cisco UCSX-FI-6536 Fabric Interconnects, the Communication Service FSM fails with the following error:
	
	`[FSM:FAILED]: communication service configuration` (FSM:sam:dme:CommSvcEpUpdateSvcEp).
	
	`Remote-Invocation-Error:`
	
	`name to naming property('snmpCommSecP.name')`
	
	`mismatch: Rn: '[SNMP String]', Prop:'SNMP     String'`
	
	This issue occurs despite the SNMP string being correctly set. The failure may impact LDAP authentication if FQDN is used for the LDAP server(s) due to DNS not being programmed when the FSM fails.
	
	This issue is resolved.
		4.3(3c)A	4.3(4c)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwm02504	When updating the UBM firmware on Cisco UCS X210c M6 servers with UCSX-X10C-RAIDF, the update may fail with the following error: `Error: Failed to get product serial number` This results in the UBM getting stuck in an activating state, which can be observed under the installed firmware tab by expanding the RAID controller. This issue is typically found in IMM-based firmwares, as no UCS Manager firmwares have featured a 0x42e UBM firmware. This issue is resolved.	4.3(3a)A	4.3(4c)A

Resolved Caveats in Release 4.3(4b)

There are no resolved caveats in release 4.3(4b).

Resolved Caveats in Release 4.3(4a)

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwf49262	UCS Manager prevents VLAN ID 1 from being employed as a Q-in-Q VLAN unless the default name of the VLAN, which is **default**, is modified by a user. This issue is resolved.	4.3(2b)	4.3(4a)

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwd35712	A critical defect has been identified in the Cisco UCS Manager where the Data Management Engine (DME) crashes due to an **instance id not found** error. Additional symptoms include the inability to access the Cisco UCS Manager GUI, non-functionality of cluster management services, and a core dump indicated by the **show pmon state** command via SSH. The problem is not firmware-specific and can impact any Cisco UCS Manager domain. Although the data plane and server operations of the domain remain unaffected, there is no workaround for this issue, and affected environments may require restoration from a backup. This issue is resolved.	4.2(1d)	4.3(4a)

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwj01478	During the deployment of Cisco UCSX-9508 chassis equipped with Cisco UCS 6454 FI and Cisco UCS 9108 25G Intelligent Fabric Module (IFM) with Cisco UCS Manager integration, the PSU view displays **Power: Error** and **Input Source: Unknown**, despite the physical server PSU LEDs showing green. Major faults in Cisco UCS Manager persist even after decommissioning and re-acknowledging the chassis.	4.3(2b)A	4.3(4a)

Resolved Caveats in Release 4.3(3c)

The following caveat is resolved in Release 4.3(3c):

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwj08579	In a setup equipped with Cisco UCSX-9508 Chassis, there is an issue where the values for the PowerExtended Policy VextendedMode attribute do not get communicated to the IFM, despite the Cisco UCS Manager GUI accurately reflecting the updated values. This discrepancy occurs following modifications made through Cisco UCS Central. This issue is resolved.	4.3(3a)A	4.3(3c)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwj00344	Cisco UCS Manager may report insufficient power during discovery and deep discovery phases. This issue is resolved. Cisco UCS Manager is updated to report real-time power available in Cisco UCSX-9508 Chassis equipped with Cisco UCS X-Series servers. This enhancement helps you to monitor power during discovery and deep discovery phases when the chassis available power is limited.	4.3(3a)A	4.3(3c)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwj54974	After upgrading Cisco UCS Manager to release 4.3(3c) version, a Cisco UCS X-Series server may revert to using the maximum power budget listed in the catalog if Cisco UCS Manager is unable to perform real-time power profiling accurately. This could lead to a situation where Cisco UCS Manager predicts insufficient power budget allocation, which might prevent the server from being discovered or associated successfully. This issue occurs under following conditions: • UEFI BIOS Boot Security is enabled and applied to a server from Boot Order Service Profile Policy. • Global Power Profiling Policy is enabled. • A server is discovered or re-acknowledged before the activation of the host firmware pack version 4.3(3c). • Either the Grid Power mode is activated, or there is a reduced number of power supply units in a chassis. This issue is resolved.	4.3(3a)B	4.3(3c)B

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwj28488	Cisco UCS server is unable to start the PNUOS because BIOS/bt/biosSecureVars/dbx_os file with an invalid certificate prevents PNUOS from operating. The dbx_os file holds certificates added by the operating system and specifies which certificates are prohibited from loading. The cause of the failure is a secure boot violation and following error message is displayed: `Invalid signature detected. Check secure boot policy in setup` This issue is resolved.	4.3(3a)A	4.3(3c)A

Resolved Caveats in Release 4.3(3a)

The following caveats are resolved in Release 4.3(3a):

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwi31115	Cisco UCS 6454 FI does not detect the NX-OS on the active FI after replacement. This issue is resolved.	4.2(1n)A	4.3(3a)A
CSCwh37590	Cisco UCS Manager displays error while changing the Power Save Policy. This issue is resolved.	4.3(2c)A	4.3(3a)A
CSCwi07879	When VLAN group permissions are provided at the root level to the vNIC created at sub-org level, shows configuration failure. This issue is resolved.	4.2(2c)A	4.3(3a)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwh75796	SCP backup on Linux host server fails due to MOD message. This issue is resolved.	4.2(3h)C	4.3(3a)C
CSCwh26280	In a setup equipped with Cisco UCS X210c M7 servers, when IPMI tool sends a query to the out-of-band (OOB) IP address for the server, it takes more than 30 seconds to receive a response. This delay causes monitoring tools to display an error because the expected response time in less than 30 seconds. This issue is resolved.	4.3(2c)A	4.3(3a)A

Resolved Caveats in Release 4.3(2f)

The following caveats are resolved in Release 4.3(2f):

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwm72893	Under rare conditions, Cisco UCS VIC adapter may experience a firmware hang due to a software anomaly in the embedded CPU (eCPU), leading to a watchdog timeout and Non-Maskable Interrupt (NMI). This can result in temporary storage connectivity loss. This issue is resolved. The latest firmware update addresses this issue by enhancing error-handling mechanisms to prevent such occurrences.	4.2(3i)A	4.3(2f)A

Resolved Caveats in Release 4.3(2e)

The following caveats are resolved in Release 4.3(2e):

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwe95417	Cisco UCS 5108 AC2 chassis shows incorrect power chart after upgrading to release 4.3(2c)A bundle. This issue is resolved.	4.3(2c)A	4.3(2e)A
CSCwh26280	In a setup equipped with Cisco UCS X210c M7 servers, when IPMI tool sends a query to the out-of-band (OOB) IP address for the server, it takes more than 30 seconds to receive a response. This delay causes monitoring tools to display an error because the expected response time in less than 30 seconds. This issue is resolved.	4.3(2c)A	4.3(2e)A
CSCwh31644	Cisco UCS Manager fails to discover any Chassis or rack servers. This issue is resolved.	4.2(3e)A	4.3(2e)A
CSCwh28338	vMedia image mount fails during OS deployment on a server with OOB IP configuration. This issue happens because the IP NAT is on the secondary FI, while the Cisco IMC is informed that it resides on primary FI. This issue is resolved.	4.2(3g)A	4.3(2e)A

Resolved Caveats in Release 4.3(2c)

The following caveats are resolved in Release 4.3(2c):

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwf52054	Cisco UCS 2200/2300/2400 IOMs may go offline after upgrading to release 4.2(3d). This issue is resolved.	4.2(3d)A	4.3(2c)A
CSCwh15315	Third-party SFP goes into unsupported state after upgrading to release 4.2(2a)A or later. This issue is resolved.	4.2(2a)A	4.3(2c)A
CSCwf56305	Cisco UCS VIC 1455 shows incorrect Port enumeration. This issue is resolved.	4.2(2a)A	4.3(2c)A

CSCwh60769	DIMMs with M321R8GA0BB0-CQKDS OEM part number (Samsung 64gb DIMMs 4800MHz) display the following fault:
	
	`Severity: Warning`
	`Code: F0502`
	`ID: 327373`
	`Status: None`
	`Description: DIMM DIMM_PX_X1 on server 1/6`
	`has an invalid FRU`
	`Affected Object:`
	`sys/chassis-X/blade-X`
	`/board/memarray-X/mem-X`
	`Name: Memory Unit Identity Unestablishable`
	`Cause: Identity Unestablishable`
	
	This issue is resolved.
		4.3(2b)A	4.3(2c)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwf91291	The RAID controller in Cisco UCS X210c servers may read incorrect voltage value and mark the battery as dead. This results in the following error: `Battery Backup unit IMM/ chassis-x/server-y/ controller-1/ BBU is marked bad and needs to be replaced` This issue is resolved.	4.3(2b)A	4.3(2c)A
CSCwf88211	Cisco UCS C240 M6 servers may show the following error while in operation: `AdapterHostEthInterfaceDown` There is no functionality impact. This issue is resolved.	4.2(3h)A	4.3(2c)A
CSCwb82433	Cisco UCS C220 M5 servers equipped with Cisco UCS VIC 1400 series adapter and have **Geneve** feature enabled, go offline after the Cisco UCS VIC adapters fail to respond. This issue is resolved.	4.1(3d)A	4.3(2c)A
CSCwh30074	Cisco UCS 6332 FI unexpectedly gets reset with the following reason: `vlan_mgr hap reset` This issue is resolved.	4.2(2c)A	4.3(2c)A

Resolved Caveats in Release 4.3(2b)

The following caveats are resolved in Release 4.3(2b):

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCvy59090	In a rare event when all the fans are **Inoperable** and a thermal even occurs, the IOM CMC may shutdown the entire chassis. This issue is resolved.	4.0(4a)A	4.3(2b)A
CSCwd82597	Infrastructure downgrade fails due to missing image. This issue occurs under the following condition: If Q-in-Q feature is enabled while downgrading, it will block the downgrade process. When Q-in-Q feature is manually disabled, and downgraded is restarted, delete package script and auto-install scrip may start at the same time and auto-install may not find the correct image version to set boot path. This issue is resolved.	4.2(3b)	4.3(2b)
CSCvf88524	Creating and storing kernel dump on any alternate drive (other than C drive) corrupts the OS even if the Challenge-Handshake Authentication Protocol (CHAP) is enabled in the boot policy and in iSCSI SAN. This issue is resolved.	3.1(3a)B	4.3(2b)B
CSCvh04298	The IOMs connected to an FI no longer reboot unexpectedly due to software-controlled resets. This issue is resolved.	3.1(3c)A	4.3(2b)A

Defect ID	Symptom	First Bundle Affected	Resolved in Release
CSCwf00940	Broadcom Inc.® AERO RAID Controller (Cisco UCS X210c RAID module) power good response is high when host is powered on. This issue is resolved. Broadcom Inc.® released new Vision PSOC image to improve AERO RAID Controller board power good response.	4.3(2b)A	4.3(2b)A
CSCwf18625	Few UCS-HD1T7K12N and UCS-HD2T7K12N running firmware version CN05 may experience timeouts and go offline. This issue is resolved.	4.1(3j)C	4.3(2b)C

Open Caveats

The open bugs for a release are accessible through the Cisco Bug Search Tool. This web-based tool provides you with access to the Cisco bug tracking system, which maintains up-to-date information about bugs and vulnerabilities in this product and other Cisco hardware and software products.

> **Note** You must have a Cisco.com account to log in and access the Cisco Bug Search Tool. If you do not have one, you can register for an account.

For more information about the Cisco Bug Search Tool, see the Bug Search Tool Help & FAQ.

Open Caveats for Release 4.3(5a)

There are no open caveats in Release 4.3(5a).

Open Caveats for Release 4.3(4e)

There are no open caveats in Release 4.3(4e).

Open Caveats for Release 4.3(4d)

There are no open caveats in Release 4.3(4d).

Open Caveats for Release 4.3(4c)

The following caveats are open in Release 4.3(4c).

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwm09720	In Cisco UCS Manager releases 4.3(3) and 4.3(4), the MC Server generates a high volume of delta events in Cisco UCS X9508 chassis, causing a flood of events to Cisco bladeAG. This results in continuous Cisco bladeAG crashes, preventing blade discovery and user SP operations. The issue is due to the mc_delta_psu_fw_version function incorrectly setting the "used" length, generating unnecessary 256KB delta events. Initializing the "used" length to 0 prevents these delta events.	To mitigate this issue, contact Cisco TAC to increase the bladeAG virtual memory limit to 800MB.	4.3(3c)C
CSCwk82692	In Cisco UCS Manager releases 4.3(3a) through 4.3(4b) on Cisco UCS 6454/64108/6536 Fabric Interconnects, bladeAG processes may reach the 400MB memory limit and crash due to memory aborts. This results in blades being stuck in a consistent discovery loop. The bladeAG service experience multiple restarts, causing users to be unable to perform blade operations such as power on/off and complete discovery until the process stabilizes. This issue is observed in domains with a minimum of 16+ Cisco UCS X-Series chassis.	To mitigate this issue, contact Cisco TAC to increase the bladeAG virtual memory limit.	4.3(3c)A

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwk68790	Solidigm NVMe U.2 Drive information is partially inventoried on Cisco UCS M5 Rack servers. Missing details include PID, VID, Vendor name, Product Name, model version, package version, and startup version. This results in incomplete inventory information being displayed.	Solidigm drives are supported on Cisco UCS M5 and M6 rack servers, but the missing data (PID, VID, Vendor name, Product Name, model version, package version, startup version) are not displayed.	4.3(4c)A and C
CSCwm06144	When installing Solidigm NVMe drives in Cisco UCS M7 Blade servers, the PCIe Address property is not visible in the Cisco UCS Manager GUI Inventory under **Inventory** > **Storage** > **Controller**. Despite this, the drives are discovered and usable.	There is no known workaround.	4.3(4c)A

Open Caveats for Release 4.3(4b)

The following caveats are open in Release 4.3(4b).

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwk45543	Cisco UCS C245 M8 Server hybrid display incorrectly shows two Ethernet ports on the rear image of the server; these ports are not physically present and will be removed to reflect the actual hardware configuration.	This is a display only issue. There is no functionality impact.	4.3(4b)

Open Caveats for Release 4.3(4a)

The following caveats are open in Release 4.3(4a):

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwj61708	When performing a warm reboot of multiple servers in a scale-setup of 160 servers and high PV count of greater than 64K in Cisco UCS FI domain, secure boot adapters may not restart instantly under certain situations. This was observed in a scale setup where simultaneous warm reboot of 22 blades across three chassis was initiated. Some blades with Cisco UCS VIC 15000 series secure boot adapters failed to boot from the SAN after a soft reboot. These adapters execute a cleanup process with the Fabric Interconnects to maintain system integrity, which needs to be finished before the server BIOS can recognize the adapters. This issue arises specifically under conditions of very high PV count or exceptionally high CPU utilization on the FI. During these instances, if the server BIOS finalizes the boot sequence before the secure boot adapters finish the cleanup, the adapters may fail to be detected. Consequently, the server may not successfully boot from the SAN. This issue is observed in configurations using Cisco UCS blade servers equipped with Cisco UCS VIC 15000 series adapters.	Reboot the failed servers.	4.3(4a)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwi70374	If you have configured Cisco UCS Manager to only allow **TLSv1.3** under the **Allowed SSL Protocols** setting, connection to UCS Central fails. Cisco UCS Central connects using an older version of TLS (such as TLSv1.2 or earlier).	Use **TLS 1.2 only**.	4.3(4a)
CSCwj40445	The issue is seen in Cisco UCS Central where updating a Global Service Profile Template with certain number of Service Profiles and analyzing the impact of a host firmware policy change erroneously reports incorrect number of affected servers. This problem occurs when the Service Profiles are from different sub-organizations; however, it does not manifest when Service Profiles are from the same sub-organization.	In Cisco UCS Central, create a new Host Firmware Policy with the same package but ensure it is not in use. Apply this policy to the Service Profile Template in question, run impact analysis, and if the expected number of affected profiles is reported, you may safely save and proceed with the changes.	4.3(2b)A

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwk91747	FC traffic may experience a brief disruption due to the flap of vEth associated with the vFC interfaces in the following scenarios: • Rebooting one of the Fabric Interconnects (affects all servers with vHBAs). • PMON restart (affects all servers with vHBAs). • Making changes to the vNIC or vHBA in the service profile associated with a server (affects the specific server whose service profile is modified). • Loss of CIMC connectivity due to a CIMC reset or other issues (affects the specific server with CIMC connectivity issues). This disruption can cause an FC traffic outage and may result in the operating system hanging, requiring a reset to restore normal functionality. This issue impacts vFC interfaces corresponding to the vHBAs and FC traffic of the servers only. It does not impact the vNIC interfaces and Ethernet traffic of the servers.	The FC traffic recover automatically after a brief disruption. If the operating system hangs, a reset may be required to restore normal functionality.	4.3(4a)

Open Caveats for Release 4.3(3c)

There are no open caveats in Release 4.3(3c).

Open Caveats for Release 4.3(3a)

The following caveats are open in Release 4.3(3a):

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwi70964	In a setup up equipped with Cisco UCS M7 servers (with Intel® Xeon® Platinum 8558P Processor) and Nvidia® H100 GPU adapter, RHEL/Ubuntu installation or bootup fail with kernal panic.	Perform one of the following: • Update BIOS settings MMIO High Granularity to 1024GB from **Advanced** > **Socket Config** > **Uncore Config** > **Uncore General Config** • Disable QAT setting for all processors in BIOS settings from **Advanced** > **Socket Confg** > **IIO Config** > **IOAT Config** > **Sck0 IOAT Config**. Disable CPM. Perform these for all the sockets in the processor.	4.3(3a)B and C
CSCwi84495	Cisco UCS M7 Blade servers equipped with Intel® Xeon® Platinum 8558P Processor and Intel Flex 170 GPU adapter fail to boot and gets into continuous reset loop.	Disable QAT setting for all processors in BIOS settings from **Advanced** > **Socket Confg** > **IIO Config** > **IOAT Config** > **Sck0 IOAT Config**. Disable CPM. Perform these for all the sockets in the processor.	4.3(3a)B and C

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwi01267	In a setup up equipped with Cisco UCS M7 Blade servers and Intel® Flex 170, 140 GPU adapters, RHEL/Ubuntu installation or bootup fail with kernal panic.	Update BIOS following MMIO High settings from **Advanced** > **Socket Config** > **Uncore Config** > **Uncore General Config** • MMIO High Granularity to 1024 GB • MMIO High Base to 56T • Disable **Limit CPU PA to 46 bits**	4.3(3a)B and C
CSCwd35712	A critical defect has been identified in the Cisco UCS Manager where the Data Management Engine (DME) crashes due to an **instance id not found** error. Additional symptoms include the inability to access the Cisco UCS Manager GUI, non-functionality of cluster management services, and a core dump indicated by the **show pmon state** command via SSH. The problem is not firmware-specific and can impact any Cisco UCS Manager domain. Although the data plane and server operations of the domain remain unaffected, there is no workaround for this issue, and affected environments may require restoration from a backup.	There is no known workaround. Restore the domain from backup.	4.2(1d)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwj01478	During the deployment of Cisco UCSX-9508 chassis equipped with Cisco UCS 6454 FI and Cisco UCS 9108 25G Intelligent Fabric Module (IFM) with Cisco UCS Manager integration, the PSU view displays **Power: Error** and **Input Source: Unknown**, despite the physical server PSU LEDs showing green. Major faults in Cisco UCS Manager persist even after decommissioning and re-acknowledging the chassis.	Reboot the primary IFM.	4.3(2b)A

Open Caveats for Release 4.3(2f)

There are no open caveats in Release 4.3(2f).

Open Caveats for Release 4.3(2e)

There are no open caveats in Release 4.3(2e).

Open Caveats for Release 4.3(2c)

There are no open caveats in Release 4.3(2c).

Open Caveats for Release 4.3(2b)

The following caveats are open in Release 4.3(2b):

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwe09048	If you install ESXi OS on SAN LUN on Cisco UCS X210 M6 server and same service profile is associated with Cisco UCS X210 M7 server, the OS results in PSOD boot error.	1. Press **Shift** + **O** to enter boot option. 2. Execute the following command to get the recovery_key: **esxcli system settings encryption recovery list** 3. Provide this TPM recovery key as a boot option during Cisco UCS X210 M7 boot. encryptionRecoveryKey=recovery_key	4.3(2b)

Defect ID	Symptom	Workaround	First Bundle Affected

CSCwf53294	In a setup with Cisco UCS M7 servers, RHEL 8.7 does not boot up when VMD is enabled in the BIOS.
	
	Server boots to a blank screen or boot halts with the following message:
	
	`DMAR: DRHD: handling fault status reg 2 DMAR: [INTR-REMAP] Request device`
	
	`[c2:00.5] fault index 0x8000`
	
	`[fault reason 0x25] Blocked a compatibility format interrupt request.`
		Perform one of the following:
		
		1. Cisco recommends that you should upgrade to RHEL release 8.8
		
		2. For existing RHEL 8.7 installation, perform the following:
		  a. Upgrade the kernel to 4.18.0-425.13.1.el8_7 or later.
		  b. Remove boot parameter intremap=off if used before
		  c. Update BIOS to release 4.3(2b)
		
		3. For new RHEL 8.7 installation, perform the following:
		  a. Disable VMD.
		  b. Install RHEL version 8.7
		  c. Update kernel to 4.18.0-425.13.1.el8_7 or later.
		  d. Reboot and Enable VMD in the BIOS.
			4.3(2b)

CSCwf44478	In a setup equipped with Cisco UCS C-Series and X-Series M7 servers, running RHEL OS versions 8.6 or 9.0, Micron 7450 NVMe drives do not get detected after hot-plug.	For RHEL version 8.6, update kernel to version 4.18.0-425.13.1.el8_7 or later For RHEL version 9.0, update kernel to version 5.14.0-162.6.1.el9_1 or later	4.3(2b)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwe95482	While moving Cisco UCS X-Series server managed by Cisco UCS X9508 Chassis from IMM to UCS Manager manged mode, it may take about 10 minutes for the Discovery FSM to show. This happens when the servers are in CIMC version 5.1.1.x or earlier.	Wait for 10 minutes after inserting the blade in the chassis. The discovery FSM status should show up. If it does not, upgrade the server to CIMC 5.1.1.x or later version before inserting the server to a UCS Manager managed chassis.	4.3(2b)
CSCwb76030	After decommissioning and recommissioning, server discovery fails with the following error message: `no connection to MC endpoint`	Wait for at least 30 seconds after decommissioning is completed before performing recommission.	4.3(2b)
CSCwc85559	Currently, Cisco UCS Manager does not support a speed configuration of 40G for FCoE ports and sets the speed as **auto**. Therefore, with a 40G transceiver, FCoE uplink port and Port channel go into **Admin State down** state. Cisco UCS Manager is unable to match the speed configuration with the upstream switch speed of 40G.	Ensure that the speed is set as **Auto** and **Auto Negotiation** is set to **ON** on the upstream switch side.	4.2(3b)
CSCvx88159	When a power grid policy is enabled, the maximum power limit for chassis is set as 5 KW. However, while creating a power group for chassis having M6 blades, the range of values shown for power group is 6400-8300W which is beyond the set limit for the power grid policy.	There is no known workaround.	4.2(1d)
CSCwd71199	Cisco IMC VMedia mounts with out of band external IP addresses assigned to management interfaces do not work.	Move CIMC management connection to inband and back to out of band to help clear the stale entries.	4.2(3b)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwc87968	Associated vLANs do not show up as enabled while removing them for a border port from **LAN Uplinks Manager** in Cisco UCS Manager UI option. As a result, you cannot remove vLAN from the border port. This issue happens only while using Cisco UCS Manager in Google Chrome® browser.	Use any other supported web browser to access Cisco UCS Manager.	4.2(3b)
CSCwf21977	Cisco UCS Manager CLI interface does not support manual control over day light saving time settings.	There is no known workaround.	4.2(1l)
CSCwd35712	A critical defect has been identified in the Cisco UCS Manager where the Data Management Engine (DME) crashes due to an **instance id not found** error. Additional symptoms include the inability to access the Cisco UCS Manager GUI, non-functionality of cluster management services, and a core dump indicated by the **show pmon state** command via SSH. The problem is not firmware-specific and can impact any Cisco UCS Manager domain. Although the data plane and server operations of the domain remain unaffected, there is no workaround for this issue, and affected environments may require restoration from a backup.	There is no known workaround. Restore the domain from backup.	4.2(1d)

Known Behavior and Limitations in Release 4.3

Known Behavior and Limitations in Release 4.3(5a)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwm70985	During or immediately after a firmware upgrade/downgrade on NVIDIA L40s GPUs, no read/write operations should be performed on the card. However, PNUOS performs read operations using the `nvidia-smi` utility to check the GPU mode immediately after the upgrade. This issue occurs when upgrading/downgrading firmware on NVIDIA L40 GPUs, causing PNUOS to crash and raise a major fault. As a result, Cisco UCS Manager does not support mode switch for NVIDIA L40 GPUs from release 4.3(5a) onwards.	You can perform mode changes using NVIDIA tools on the host OS if required. This limitation does not affect other L-series GPUs, which continue to support mode changes.	4.3(5a)
CSCwj96037	In an ESXi 8.0U2 environment with VMs running RHEL9.3/RHEL9.4, there are observed issues when hot-pluggable Intel® and Micron® NVMe drives are removed or inserted. Commands such as lsblk, lspci, and nvme list do not update correctly, resulting in incorrect drive information and potential VM power-off. VMs may not properly recognize and update new drive information after NVMe drive removal or insertion.	Perform the following steps to ensure that VM can detect the newly inserted NVME drive: 1. Power off VM. 2. Add PCIe NVME Drive to VM Config. 3. Power on VM.	4.3(5a)

Known Behavior and Limitations in Release 4.3(4e)

There are no known behavior and limitations in Release 4.3(4e).

Known Behavior and Limitations in Release 4.3(4d)

There are no known behavior and limitations in Release 4.3(4d).

Known Behavior and Limitations in Release 4.3(4c)

There are no known behavior and limitations in Release 4.3(4c).

Known Behavior and Limitations in Release 4.3(4b)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwk45449	Enhanced VIC-FPGA and Storage PSOC: Once updated to the latest version, the high FPGA/PSOC version is irreversible and cannot be downgraded; however, firmware versions remain flexible for downgrade or upgrade. The PSOC component within any storage controllers is not eligible for downgrade after upgrade; users can only adjust the firmware version as needed.	The PSOC version is fixed post-upgrade and cannot revert to a previous version. Plan your upgrades accordingly, as this change is permanent. Downgrading the PSOC component is intentionally restricted by design. Ensure that all necessary considerations are made before initiating an upgrade.	4.3(4b)

Known Behavior and Limitations in Release 4.3(4a)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwb76030	After decommissioning and recommissioning, server discovery fails with the following error message: `no connection to MC endpoint`	Wait for at least 30 seconds after decommissioning is completed before performing recommission.	4.3(2b)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwc85559	Cisco UCS Manager does not support a speed configuration of 40G for FCoE ports and sets the speed as auto. Therefore, with a 40G transceiver, FCoE uplink port and Port channel go into Admin State down state. Cisco UCS Manager is unable to match the speed configuration with the upstream switch speed of 40G.	Ensure that the speed is set as **Auto** and **Auto Negotiation** is set to **ON** on the upstream switch side.	4.2(3b)

Known Behavior and Limitations in Release 4.3(3c)

There are no known behavior and limitations in Release 4.3(3c).

Known Behavior and Limitations in Release 4.3(3a)

There are no known behavior and limitations in Release 4.3(3a).

Known Behavior and Limitations in Release 4.3(2f)

There are no known behavior and limitations in Release 4.3(2f).

Known Behavior and Limitations in Release 4.3(2e)

There are no known behavior and limitations in Release 4.3(2e).

Known Behavior and Limitations in Release 4.3(2c)

There are no known behavior and limitations in Release 4.3(2c).

Known Behavior and Limitations in Release 4.3(2b)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwd82136	In a setup equipped with Cisco UCS 6400 Series FI connecting using passive copper cables to Cisco UCS C-Series servers with Cisco UCS VIC1457/1455/1467, ports on the FI may to error-disabled state with the following reason after a link flap or after a server is decommissioned and recommissioned: errDisabledExcessportIn	Flap the Fabric Interconnect (FI) port connected to the Cisco UCS C-Series server.	4.3(2b)
CSCwe98830	If Cisco UCS S3260 chassis is equipped with Cisco UCS B-Series server, the firmware details are not displayed for Cisco UCS VIC card.	There is no known workaround.	4.3(2b)
CSCwe48563	In a setup equipped with Cisco UCS 6400 Series or 6536 FIs, logical configuration from any 4.2(3) patch release to 4.2(3b) succeeds instead of failing due to enhancement in the security.	There is no known workaround.	4.3(2b)
CSCwe32091	Under the following conditions Cisco UCS VIC support MAX LUN values above 1024: • UCS Manager with release 4.2(3d) or later. • Cisco UCS VIC firmware version 5.2.3c.230101 or earlier for 14XX series or 4.5.3b.230101 or earlier for 13XX series.	There is no known workaround. Update Cisco UCS VIC firmware version.	4.3(2b)

Defect ID	Symptom	Workaround	First Bundle Affected
CSCwf61445	Cisco recommends the below screen resolutions for launching the UCS Manager for the best experience. • 1920 x 1080 • 1600 x 900 • 1440 x 900 • 1360 x 768 • 1280 x 768 • 1280 x 720 Cisco UCS Manager does not support browser full screen mode. Hence, use the recommended resolutions only.	There is no known workaround.	4.3(2b)
CSCvp31928	UCS Manager allows you to delete security without any warning. Set-up continues to function normally without security.	This issue does not have any functionality impact.	4.3(2b)
CSCvh60768	In a setup running ESXi OS, when vNICs are removed in Service Profile while CDN (Consistent Device Naming) is enabled, the vNICs are re-orederd from the vNIC, which was removed.	Manually assign vmNIC number in /etc/vmware/esx.conf file and reboot.	3.2(2)B
CSCwd82136	In a setup equipped with Cisco UCS 6400 series FI connected to Cisco UCS C-Series servers using Cisco VIC 1457/1455/1467, ports on the FI may go to error-disabled state with **errDisabledExcessportIn** reason after a link flap.	Flap the FI port connected to the Cisco UCS C-Series servers.	4.2(3b)A

Defect ID	Symptom	Workaround	First Bundle Affected
CSCvp38564	NMPTU in AD mode hangs or goes into infinite loop when DCPMM in AppDirect mode.	If DCPMM is detected in system, BIOS does not load NMPTU to prevent hang/infinite loop.	4.0(3)
CSCvp37389	DCPMM clock stop may cause DCPMM media to go into disable state.	There is no known workaround.	4.0(3)
CSCva74263	Cisco UCS 6324 In a setup equipped with Cisco UCS 6324 FI (Cisco UCS Mini FI), QoS buffers get full and do not drain out. As a result, all packets get dropped on the FI and there are no Tx on the uplink ports.	Reboot the FI to clear this cnodition.	3.1(1e)
CSCvh17760	IOM reboots without core.	There is no known workaround.	3.(1g)
CSCvs83647	Cisco UCS 6454 FI reboots with the following error mssage: `Security Daemon hap reset`	There is no known workaround.	4.0(4d)A
CSCwh22856	UCS Manager does not allow creation of same VSAN ID in both SAN cloud and storage cloud from release 4.3(2b). However, if you were already using the same VSAN for both SAN cloud and storage cloud, then you cannot modify the duplicate VSAN configuration after upgrading to release 4.3(2b).	There is no known workaround.	4.3(2b)

Related Documentation

For more information, you can access related documents from the following links:

- Release Bundle Contents for Cisco UCS Software

- Cisco UCS C-series Rack Server Integration Guides

- Cisco UCS C-series Software Release Notes

- Release Notes for Cisco Intersight Infrastructure Firmware