

# **Release Notes for Cisco UCS C-Series Software, Release 1.4(7)**

#### First Published Date: November 19, 2012 Part Number: OL-28367-01

This document describes the new features, system requirements, open caveats and known behaviors for C- series software release 1.4(7) including Cisco Integrated Management Controller software and any related BIOS, firmware, or drivers. Use this document in conjunction with the documents listed in the "Related Documentation" section on page 30.



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

Table 1 shows the online change history for this document.



Part Number	Revision	Date	Description
OL-28367-01	A0	November 19, 2012	Created release notes for Release 1.4(7)
	B0	January 31, 2013	• Added information on Release 1.4(7f1) which is released for the following servers:
			- Cisco UCS-C22 M3 (SFF and LFF)
			- Cisco UCS-C24 M3 (SFF, and LFF)
			<ul> <li>Revised the CIMC and HUU versions for these server platforms to 1.4(7f).</li> </ul>
			• Added information on release 1.4(7c1) for UCS-C240 and UCS-C220 servers.
			• Updated the Known Behaviors and Open Caveats sections for release 1.4(7f1).
	C0	February 27, 2013	• Added information on Release 1.4(7g) which i released on Cisco UCS C-220 servers.
			• Updated the Resolved Caveats section.
	D0	March 15, 2013	• Added information on Release 1.4(7d)1 which is released on Cisco UCS C260 and Cisco UCS C460 servers.
			• Updated the Resolved Caveats section.
	E0	March 28, 2013	• Added information on Release 1.4(7h) which is released on Cisco UCS C220 and Cisco UCS C240 servers to resolve an LSI card overheating issue.

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# Introduction

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## **Overview of the Server Models**

This section includes the following sections:

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### **Overview of Cisco UCS C460 and C260 Rack Servers**

The Cisco UCS C460 High-Performance Rack-Mount Server is designed with the performance and reliability to power compute-intensive, enterprise-critical standalone applications and virtualized workloads. The system is a four-rack-unit (4RU) rack-mount server supporting up to four Intel Xeon 7500 series processors, up to 512 GB of DDR3 memory in 64 slots, and 12 small form-factor (SFF) hot-pluggable SAS and SATA disk drives. Abundant I/O capability is provided by 10 PCI Express (PCIe) slots supporting the Cisco UCS C-Series network adapters, with an eleventh PCIe slot reserved for a hard disk drive array controller card. Additional I/O is provided by two Gigabit Ethernet LAN-on-motherboard (LOM) ports, two 10 Gigabit Ethernet ports, and two dedicated out-of-band (OOB) management ports.

The Cisco UCS C260 High-Performance Rack-Mount Server is designed with the performance and reliability to power compute-intensive, enterprise-critical standalone applications and virtualized workloads. The system is a two-rack-unit (2RU) rack-mount server supporting up to two Intel Xeon 7500 series processors, up to 1 TB of DDR3 memory in 64 slots, and 16 small form-factor (SFF) hot-pluggable SAS and SATA disk drives. Abundant I/O capability is provided by 7 PCI Express (PCIe) slots supporting the Cisco UCS C-Series network adapters and hard disk drive array controller cards. Additional I/O is provided by two Gigabit Ethernet LAN-on-motherboard (LOM) ports, two optional 10 Gigabit Ethernet LOM ports, and two dedicated out-of-band (OOB) management ports.

This server is shipped from the factory with one pre-installed Cisco Flexible Flash card. The slots for these cards are on the I/O riser.

The Cisco UCS 460 M2 and the Cisco UCS 260 M2 interfaces with Cisco UCS using the Cisco UCS Virtual Interface Card (VIC); 1225 and P81E. The Cisco UCS VIC is a virtualization-optimized Fibre Channel over Ethernet (FCoE) PCI Express (PCIe) 2.0 x8 10-Gbps adapter designed for use with Cisco UCS C-Series servers. The VIC is a dual-port 10 Gigabit Ethernet PCIe adapter that can support up to 128 (P81E) or 256 (1225) PCIe standards-compliant virtual interfaces, which can be dynamically configured so that both their interface types-network interface card (NIC) or host bus adapter (HBA) and identity (MAC address and worldwide name (WWN))-are established using just-in-time provisioning. In addition, the Cisco UCS VIC can support network interface virtualization and Cisco® Data Center Virtual Machine Fabric Extender (VM-FEX) technology.

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

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

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

The Cisco UCS C220 M3 and the Cisco UCS C240 M3 interfaces with Cisco UCS using the Cisco UCS Virtual Interface Card (VIC); 1225 and P81E. The Cisco UCS VIC is a virtualization-optimized Fibre Channel over Ethernet (FCoE) PCI Express (PCIe) 2.0 x8 10-Gbps adapter designed for use with Cisco UCS C-Series servers. The VIC is a dual-port 10 Gigabit Ethernet PCIe adapter that can support up to 128 (P81E) or 256 (1225) PCIe standards-compliant virtual interfaces, which can be dynamically configured so that both their interface types-network interface card (NIC) or host bus adapter (HBA) and identity (MAC address and worldwide name (WWN))-are established using just-in-time provisioning. In addition, the Cisco UCS VIC can support network interface virtualization and Cisco® Data Center Virtual Machine Fabric Extender (VM-FEX) technology.

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

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

The server is orderable in two different versions, each with one of two different front panel and back plane configurations:

• Cisco UCS C22 M3, small form-factor (SFF) drives with 8-drive backplane

Holds up to eight 2.5-inch hard drives or solid state drives

• Cisco UCS C22 M3, large form factor (LFF) drives, with 4-drive backplane)

Holds up to four 3.5-inch hard drives

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

The server is orderable in three different versions, each with one of three different front panel/backplane configurations:

• Cisco UCS C24 - small form-factor (SFF) drives, with 24-drive backplane and expander

Holds up to twenty-four 2.5-inch hard drives or solid state drives.

• Cisco UCS C24 - small form-factor (SFF) drives, with 16-drive backplane, and no expander

Holds up to sixteen 2.5-inch hard drives or solid state drives and enables embedded RAID to be used in the server.

• Cisco UCS C24 - large form-factor (LFF) drives, with 12-drive backplane and expander

Holds up to twelve 3.5-inch hard drives

The Cisco UCS C22 M3 and the Cisco UCS C24 M3 interfaces with Cisco UCS using the Cisco UCS Virtual Interface Card (VIC); 1225 and P81E. The Cisco UCS VIC is a virtualization-optimized Fibre Channel over Ethernet (FCoE) PCI Express (PCIe) 2.0 x8 10-Gbps adapter designed for use with Cisco UCS C-Series servers. The VIC is a dual-port 10 Gigabit Ethernet PCIe adapter that can support up to 128 (P81E) or 256 (1225) PCIe standards-compliant virtual interfaces, which can be dynamically configured so that both their interface types-network interface card (NIC) or host bus adapter (HBA) and identity (MAC address and worldwide name (WWN))-are established using just-in-time provisioning. In addition, the Cisco UCS VIC can support network interface virtualization and Cisco® Data Center Virtual Machine Fabric Extender (VM-FEX) technology.

### **Overview of the Pre-Installed Cisco Flexible Flash Card**

The Cisco Flexible Flash card is pre-installed with three software bundles, each on one of four preconfigured virtual drives (VDs). The fourth VD allows you to install an OS or an embedded hypervisor.

The VDs are configured with the following content:

- Cisco UCS Server Configuration Utility (SCU).
- Hypervisor (HV). This is a VD that you can use for your own purposes.
- Cisco Drivers (Drivers).
- Cisco Host Upgrade Utility (HUU).

Refer to the following documents for more information about these tasks:

- Replacing a card: Refer to any of the following:
  - Cisco UCS C260 Server Installation and Service Guide
  - Cisco UCS C220 Server Installation and Service Guide
  - Cisco UCS C240 Server Installation and Service Guide
- Enabling and booting a VD: Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide or the Cisco UCS C-Series Servers Integrated Management Controller CLI Configuration Guide
- Monitoring and managing a card with CIMC: Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide or the Cisco UCS C-Series Servers Integrated Management Controller CLI Configuration Guide

The links to these documents are in the C-Series documentation road map:

http://www.cisco.com/go/unifiedcomputing/c-series-doc

### Hardware and Software Interoperability

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

http://www.cisco.com/en/US/products/ps10477/prod\_technical\_reference\_list.html

## **Transceivers Specifications**

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

Table 2 and Table 3 details the controllers and the supported transceivers.

 Table 2
 Controllers and SFP+ Twinax Transceivers Support Matrix

Controllers (LOM and PCle)	10GBASE-CU SFP+ Cable 1 Meter, passive	10GBASE-C U SFP+ Cable 3 Meter, passive	10GBASE-CU SFP+ Cable 5 Meter, passive	10GBASE-CU SFP+ Cable 7 Meter, active	10GBASE-CU SFP+ Cable 10 Meter, active
	SFP-H10GB- CU1M	SFP-H10G B-CU3M	SFP-H10GB- CU5M	SFP-H10GB- ACU7M	SFP-H10GB-A CU10M
Cisco UCS Virtual Interface Cards	X	X	X	X	x
Intel x520	x	х	Х	Х	x
Broadcom 57712	X	Х	Х	Х	X

#### Table 3 Controllers and SFP+Optical Transceivers Support Matrix

Controllers (LOM and PCIe)	Intel SR Optics	JDSU (PLRXPL-SC-S43-22-N) SFP+	Cisco SFP-10G-SR
Cisco UCS Virtual Interface Cards	NA	NA	Х
Intel x520	x	NA	Not supported
Broadcom 57712	NA	X	X

## **Firmware Files**

The C-Series software release 1.4(7) includes the following software files:

#### Table 4 Files in this release

CCO Software Type	File name(s)	Comment
Unified Computing System	ucs-c2x-huu-1.4.7f1.iso Host Upgrad	
(UCS) Server Firmware	ucs-c220-huu-1.4.7h.iso	
	ucs-c240-huu-1.4.7h.iso	
	ucs-c260-huu-1.4.7d1.iso	
	ucs-c460-huu-1.4.7d1.iso	
Unified Computing System	ucs-cxx-drivers.1.4.7.iso	Drivers
(UCS) Drivers	ucs-cxxx-drivers.1.4.7.iso	
Unified Computing System	ucs-cxxx-utils-efi.1.4.7.iso	Utilities
(UCS) Utilities	ucs-cxxx-utils-linux.1.4.7.iso	
	ucs-cxxx-utils-vmware.1.4.7.iso	
	ucs-cxxx-utils-windows.1.4.7.iso	
Unified Computing System (UCS) Adapter Firmware	ucs-cxxx-fw.1.4.7.iso	Third-Party Firmware

Note

Always upgrade both the BIOS and the CIMC from the HUU ISO. Do not upgrade individual components (only BIOS or only CIMC), since this could lead to unexpected behavior.

Note

If you choose to upgrade BIOS and the CIMC individually and not from the HUU ISO, make sure to upgrade both CIMC and BIOS to the same container release. If the BIOS and the CIMC versions are from different container releases, it could result in unexpected behavior.

## **Host Upgrade Utility**

The Cisco Host Upgrade Utility (HUU) is a tool that upgrades the following firmware:

- Cisco Integrated Management Controller (CIMC)
- System BIOS
- LAN on motherboard (LOM)
  - Intel Ethernet i350 PCI Server Adapter
- LSI
  - LSI SAS2008
  - LSI MegaRAID SAS 9240-8i
  - LSI MegaRAID SAS 9220-4i

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- LSI MegaRAID SAS 9220-8i
- LSI MegaRAID SAS 9266-8i
- LSI MegaRAID SAS 9266CV-8i
- LSI MegaRAID SAS 9260-8i
- LSI MegaRAID SAS 9240-8i
- LSI MegaRAID SAS 9265CV-8i
- Cisco UCS VIC P81E
- Cisco UCS VIC 1225
- Broadcom PCI adapters
  - 5709 Dual and Quad port adapters
  - 57712 Dual port adapter
  - 57711 Dual Port
  - 57712 10GBaseT
- Intel adapters
  - i350 Quad port adapter
  - X520 Dual port adapter
  - X540 Dual port adapter

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

http://www.cisco.com/en/US/products/ps10493/products\_user\_guide\_list.html

Starting with 1.4 release, separate ISO images of Host Upgrade Utility are available for different server platforms.

The ISO image is now named as ucs-<server\_platform>-huu-<version\_number>.iso.

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The Cisco Host Upgrade Utility contains the following files:

Table 5Files in ucs-c22-huu-1.4.7f1.iso

Server(s)	Component	Version			
C22	CIMC	1.4(7f)			
	BIOS	1.4.7c.0         2.1(1aS5) - uboot - 2.1(1aS5)         2.1(1aS5) - uboot - 2.1(1aS5)			
	UCS VIC P81E				
	UCS VIC 1225				
	LOM				
	Intel-i350 (4-port)	1.5 - 02.10 - 2.7.105 - 1.3.82 - 5.0.05 - 2.7.105			
	EEPROM VERSION	1.5			
	CISCO VERSION	02.10			
	iSCSI VERSION	2.7.105			
	PXE VERSION	1.3.82			
	UEFI VERSION	5.0.05			
	CLP VERSION	2.7.105			
	Intel-i350 (2-port)	1.61 - 02.12 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111			
	EEPROM VERSION	1.61			
	CISCO VERSION	02.12			
	iSCSI VERSION	2.7.111			
	PXE VERSION	1.3.98			
	UEFI VERSION	5.1.01			
	CLP VERSION	2.7.111			
	LSI				
	LSI-2008	2.120.274-1543			
	LSI-9240-8i	2.120.274-1543			
	LSI-9220-4i	2.120.274-1543			
	LSI-9220-8i	2.120.274-1543			
	LSI-9266-8i	3.190.55-1868			
	LSI-9266CV-8i	3.190.55-1868			
	LSI-9265-8i	3.190.55-1868			
	LSI-9285-8e	3.190.55-1868			
	LSI-9285CV-8e	3.190.55-1868			
	PCI				
	BCM-5709-Dual-Port	A0907GT7441.0-7.4.0			
	BCM-5709-Quad-Port	A0906GT7441.0-7.4.0			
	BCM-57712-Dual-Port	A1213GT7441.0			
	BCM-57712-10G-BaseT	A1202T7441.0			

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Server(s)	Component	Version
C22	INTEL-I350	1.61 - 02.03 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111
	INTEL-X520	2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111
	INTEL-X540	4.03 - 02.02 - 2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	EEPROM VERSION	4.03
	CISCO VERSION	02.02
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111

#### Table 5 Files in ucs-c22-huu-1.4.7f1.iso (continued)

#### Table 6Files in ucs-c24-huu-1.4.7f1.iso

Server(s)	Component	Version
C24	CIMC	1.4(7f)
	BIOS	1.4.7c.0
	UCS VIC P81E	2.1(1aS5) - uboot - 2.1(1aS5)
	UCS VIC 1225	2.1(1aS5) - uboot - 2.1(1aS5)
	LOM	
	Intel-i350 (4-port)	1.5 - 02.10 - 2.7.105 - 1.3.82 - 5.0.05 - 2.7.105
	EEPROM VERSION	1.5
	CISCO VERSION	02.10

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Server(s)	Component	Version		
C24	iSCSI VERSION	2.7.105		
	PXE VERSION	1.3.82		
	UEFI VERSION	5.0.05		
	CLP VERSION	2.7.105		
	INTEL i350 (2-port)	1.61 - 02.12 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111		
	EEPROM VERSION	1.61		
	CISCO VERSION	02.12		
	iSCSI VERSION	2.7.111		
	PXE VERSION	1.3.98		
	UEFI VERSION	5.1.01		
	CLP VERSION	2.7.111		
	LSI			
	LSI-2008	2.120.274-1543		
	LSI-9240-8i	2.120.274-1543		
	LSI-9220-4i	2.120.274-1543		
	LSI-9220-8i	2.120.274-1543		
	LSI-9266-8i	3.190.55-1868		
	LSI-9266CV-8i	3.190.55-1868		
	LSI-9265-8i	3.190.55-1868		
	LSI-9285-8e	3.190.55-1868		
	LSI-9285CV-8e	3.190.55-1868		
	PCI			
	BCM-5709-Dual-Port	A0907GT7441.0-7.4.0		
	BCM-5709-Quad-Port	A0906GT7441.0-7.4.0		
	BCM-57712-Dual-Port	A1213GT7441.0		
	BCM-57712-10G-BaseT	A1202T7441.0		
	INTEL-I350	1.61 - 02.03 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.11		
	INTEL-X520	2.7.111 - 2.2.07 - 3.2.01 - 2.7.111		
	INTEL-I350	1.5 - 02.01 - 2.7.105 - 1.3.82 - 5.0.05 - 2.7.105		
	iSCSI VERSION	2.7.111		
	PXE VERSION	2.2.07		
	UEFI VERSION	3.2.01		
	CLP VERSION	2.7.111		
	INTEL-X540	4.03 - 02.02 - 2.7.111 - 2.2.07 - 3.2.01 - 2.7.11		
	EEPROM VERSION	4.03		

Table 6

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Files in ucs-c24-huu-1.4.7f1.iso (continued)

Server(s)	Component	Version
C24	CISCO VERSION	02.02
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111

#### Table 6 Files in ucs-c24-huu-1.4.7f1.iso (continued)

#### Table 7Files in ucs-c240-huu-1.4.7h.iso

Server(s)	Component	Version		
C240	CIMC	1.4(7h)		
	BIOS	1.4.7d.0		
	UCS VIC P81E	2.1(1bS4) - uboot - 2.1(1bS4)		
	UCS VIC 1225	2.1(1bS4) - uboot - 2.1(1bS4)		
	LOM			
	Intel-i350	1.61 - 02.12 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111		
	EEPROM VERSION	1.61		
	CISCO VERSION	02.12		
	iSCSI VERSION	2.7.111		
	PXE VERSION	1.3.98		
	UEFI VERSION	5.1.01		
	CLP VERSION	2.7.111		
	LSI			
	LSI-2008	2.120.274-1543		
	LSI 9240-8i	2.120.274-1543		
	LSI 9266-8i	3.190.55-1868		
	LSI-9266CV-8i	3.190.55-1868		
	LSI-9285-8e	3.190.55-1868		
	LSI-9285CV-8e	3.190.55-1868		
	PCI			
	BCM-5709-Dual-Port	A0907GT7441.0-7.4.0		
	BCM-5709-Quad-Port	A0906GT7441.0-7.4.0		
	BCM-57712-Dual-Port	A1213GT7441.0		
	BCM-57712-10G-BaseT	A1202T7441.0		
	BCM-57810-Dual-Port	A1006GT7441.0		

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Server(s)	Component	Version
	INTEL-I350	1.61- 02.03 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111
C240	INTEL-X520	2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111
	INTEL X540	4.03 - 02.02 - 2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	EEPROM VERSION	4.03
	CISCO VERSION	02.02
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111

Table 7Files in ucs-c240-huu-1.4.7h.iso

Server(s)	Component	Version
C220	CIMC	1.4(7h)
	BIOS	1.4.7c.0
	UCS VIC P81E	2.1(1bS4) - uboot - 2.1(1bS4)
	UCS VIC 1225	2.1(1bS4) - uboot - 2.1(1bS4)
	LOM	1
	Intel-i350	1.61 - 02.12 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111
	EEPROM VERSION	1.61
	CISCO VERSION	02.12
	iSCSI VERSION	2.7.111
	PXE VERSION	1.3.98
	UEFI VERSION	5.1.01
	CLP VERSION	2.7.111
	LSI	
	LSI-2008	2.120.274-1543
	LSI 9240-8i	2.120.274-1543
	LSI 9266-8i	3.190.55-1868
	LSI-9266CV-8i	3.190.55-1868
	LSI-9285-8e	3.190.55-1868
	LSI-9285CV-8e	3.190.55-1868
C220	PCI	
	BCM-5709-Dual-Port	A0907GT7441.0-7.4.0
	BCM-5709-Quad-Port	A0906GT7441.0-7.4.0
	BCM-57712-Dual-Port	A1213GT7441.0
	BCM-57712-10G-BaseT	A1202T7441.0
	BCM-57810-Dual-Port	A1006GT7441.0
	INTEL-I350	1.61 - 02.03 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111
	INTEL-X520	2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111

#### Table 8Files in ucs-c220-huu-1.4.7h.iso

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Server(s)	Component	Version
	INTEL-X540	4.03 - 02.02 - 2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	EEPROM VERSION	4.03
	CISCO VERSION	02.02
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111

#### Table 8Files in ucs-c220-huu-1.4.7h.iso

#### Table 9Files in ucs-c260-huu-1.4.7d1.iso

Server(s)	Component	Version
C260M2	CIMC	1.4(7d)
	BIOS	1.4.7b.0
	UCS VIC P81E	2.1(1aS5) - uboot - 2.1(1aS5)
	UCS VIC 1225	2.1(1aS5) - uboot - 2.1(1aS5)
	LOM	
	Broadcom 5709-1GE	C260T7441-6.2
	Broadcom 57712-10GE	C260T7441-6.2
	8727-Phy	aa0.511
	PCIe Adapters	
	BCM-5709-Dual-Port	A0907GT7441.0-7.4.0
	BCM-5709-Quad-Port	A0906GT7441.0-7.4.0
	BCM-57711-Dual-Port	6.2.25
	BCM-57712-Dual-Port	A1213GT7441.0
	BCM-57712-10G-BaseT	A1202T7441.0
	BCM-57810	A1006GT7441.0
	INTEL-82576-Quad-Port	1.3.32
	INTEL-I350	1.61 - 02.03 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111
	INTEL X-520	2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111

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Server(s)	Component	Version
	INTEL X-540	4.03 - 02.02 - 2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	EEPROM VERSION	4.03
	CISCO VERSION	02.02
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111
	LSI	
	926x	2.120.233-1471

Table 9	Files in ucs-c260-huu-1.4.7d1.iso

### Send document comments to ucs-docfeedback@cisco.com

Server(s)	Component	Version
C460M1	CIMC	1.4(7d)
C460M2	BIOS	1.4.7b.0
	UCS VIC P81E	2.1(1aS5) - uboot - 2.1(1aS5)
	UCS VIC 1225	2.1(1aS5) - uboot - 2.1(1aS5)
	LOM	
	BCM5709C-1GE	C460T7441-6.2
	BCM57711-10GE	C460T7441-6.2
	BCM57711-phy	3.3/aa0.5ad
	PCIe Adapters	
	BCM-5709-Dual-Port	A0907GT7441.0-7.4.0
	BCM-5709-Quad-Port	A0906GT7441.0-7.4.0
	BCM-57711-Dual-Port	6.2.25
	BCM-57712-Dual-Port	A1213GT7441.0
	BCM-57712-10G-BaseT	A1202T7441.0
	BCM-57810-Dual-Port	A1006GT7441.0
	INTEL-82576-Quad-Port	1.3.32
	INTEL-I350	1.61 - 02.03 - 2.7.111 - 1.3.98 - 5.1.01 - 2.7.111
	INTEL-X520	2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111
	INTEL-X540	4.03 - 02.02 - 2.7.111 - 2.2.07 - 3.2.01 - 2.7.111
	EEPROM VERSION	4.03
	CISCO VERSION	02.02
	iSCSI VERSION	2.7.111
	PXE VERSION	2.2.07
	UEFI VERSION	3.2.01
	CLP VERSION	2.7.111
	LSI	
	9260-8i	2.120.233-1471
	9240-8i	2.120.274-1543

#### Table 10 Files in ucs-c460-huu-1.4.7d1.iso

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## **System Requirements**

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

- Sun JRE 1.6.0\_14 or later
- Microsoft Internet Explorer 6.0 or higher, Mozilla Firefox 3.0 or higher
- Microsoft Windows 7, Microsoft Windows XP, Microsoft Windows Vista, Apple Mac OS X v10.6, Red Hat Enterprise Linux 5.0 or higher operating systems

## **Updating the Firmware**

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

- BIOS
- CIMC
- LAN on Motherboard Settings
- PCIe adapter Firmware

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

## **Upgrading BIOS and CIMC Firmware**

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When you upgrade the BIOS firmware, you must also upgrade the CIMC firmware from the same HUU ISO, or the server may not boot. Do not power off the server until the BIOS and CIMC firmware are updated.

Cisco provides the Cisco Host Upgrade Utility to assist you in upgrading the BIOS, CIMC, LOM, LSI storage controller, and Cisco UCS Virtual Interface Cards firmware to compatible levels.

Note

When upgrading the CIMC firmware for the UCS C-series M3 platforms, ensure that you update using the full image (for example upd-pkg-c2XX-m3-cimc.full.\*.bin).

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

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

http://www.cisco.com/en/US/products/ps10493/products\_user\_guide\_list.html

# **Supported Features**

This section includes the following topics:

- Supported Software Features, page 19
- Software Utilities, page 19

- Supported Platforms, page 19
- SNMP, page 19

### **Supported Software Features**

The following new software features are supported in the Release 1.4(7):

- Support for Single Wire Management using UCS Manager 2.1(1) and VIC 1225.
- HUU Upgrade of Intel X520 and X540 PCIe adapters
- Windows 8 management client support
- Windows 2012 VIC support
- Chassis components firmware update using the **update-all** command in the **chassis/firmware** scope An AC power cycle may be required for the new firmware to take effect.
- Defect fixes

## **Software Utilities**

The following standard utilities are available:

- Host Update Utility (HUU)
- Server Config Utility (SCU) including Interactive Offline Diagnostics (IOD)
- BIOS and CIMC Firmware Update utilities

The utilities features are as follows:

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

## **Supported Platforms**

The following platforms are supported in Release 1.4(7):

- UCS-C460
- UCS-C260
- UCS-C220
- UCS-C240
- UCS-C22
- UCS-C24

## **SNMP**

The supported MIB definition for Release 1.4(3) and later releases can be found at the following link: ftp://ftp.cisco.com/pub/mibs/supportlists/ucs-C-supportlist.html

```
Note
```

The above link is incompatible with IE 9.0.

### **Supported Storage Controllers**

SNMP supports the following storage controllers:

#### In C22

- MegaRAID 9265CV-8i
- MegaRAID 9240-8i
- MegaRAID 9220-8i
- MegaRAID 9220-4i

#### In C24

- MegaRAID 9265CV-8i
- MegaRAID 9240-8i
- MegaRAID 9220-8i

#### In C220 and C240

- Cisco UCSC RAID SAS 2008M-8i
- LSI-9266CV-8i
- LSI-9266-8i

#### In C460 and C260

- 9260-8i
- 9240-8i
- 9261-8i

# **Resolved Caveats**

## Release 1.4(7h)

CIMC

Symptom An idle C240 system with LSI cards may show higher card temperatures.

Workaround None (CSCue95493)

## Release 1.4(7d)1

The following caveat was resolved in 1.4(7d)1 release:

#### BIOS

Symptom Allow the user to manage the memory refresh rates from the BIOS setup menu.

Workaround None (CSCuf28394)

## Release 1.4(7g)

The following caveats were resolved in 1.4(7g) release:

#### BIOS

Symptom Allow the user to manage the memory refresh rates from the BIOS setup menu.

Workaround None (CSCuf28394)

#### CIMC

Symptom LSI 9266 cards on C220-M3 servers get overheated when the system is idle.

Workaround None (CSCue68150)

## Release 1.4(7)

The following caveats were resolved in 1.4(7) release:

#### CIMC

Symptom During system power on or reboot, HDD critical events are generated in the SEL.

**Workaround** This is not really a critical event. The HDD critical event is harmless and does not indicate an actual HDD fault. When the system boots to OS, the same HDD which reported critical becomes normal. This is also applicable to the LSI applications. The SEL should show that the HDD which displayed the critical events goes back to normal after 30-60 seconds. (CSCtz96990)

Symptom The SEL event is not logged in the OS Watchdog timer expiration.

Workaround None. (CSCtz77929)

Symptom RAID subsystem Virtual Drive write performance can drop without warning from the CIMC.

**Workaround** There is no immediate solution to the notification problem from the CIMC in current releases. You can try the following workarounds:

- Run regularly scheduled refresh cycles during non-peak load to prevent this issue.
- Monitor the BBU (Battery Backup Unit) charge information periodically to know the charge status.
- Configure standard host-based tools for monitoring and alerting. (CSCub12581)

**Symptom** C260 and C460 cannot disable LOM ports in BIOS. This is useful for hiding LOM ports from operating system.

Workaround None (CSCua34833)

**Symptom** The CIMC Web GUI displays the battery status as "unknown" when LSI 9265CV-8i with supercap battery is used.

Workaround Use MegaCLI or LSI Web BIOS to read the battery status.(CSCty64241)

#### BIOS

**Symptom** Server may get stuck at boot, displaying "Configuring and Testing memory...", in turn causing discovery failure.

Workaround No workaround. Please upgrade to BIOS version 1.4.5d.0 or later. (CSCuc32377)

Symptom BIOS cannot operate 3 RDIMMS Per Channel (3DPC) at 1333 MHz on C240 servers.

Workaround None. (CSCuc70489)

**Symptom** If you set the Console Redirection as Enabled and update the BIOS to Release 1.4(6), on the next system boot, the Console Redirection is seen as Disabled instead of "Com0" as Console Redirection was enabled in the previous boot.

Workaround Set the Console Redirection as required after the BIOS update.(CSCua93020)

**Symptom** When I/O is running on two or more hard disks part of a RAID Array, the Activity LED is seen blinking green on the hard disks on which the I/O is running and is part of the RAID array and also on the adjacent hard disk which is not part of the RAID group.

**Workaround** Ignore the activity LED running on the adjacent hard disk as there is no actual I/O running on this hard disk. (CSCtz13588)

#### LSI

Symptom The rebuild of drives fail if the RAID group contains both SAS and SATA hard disks.

**Workaround** Using both SAS and SATA drives together in the RAID group is not recommended. (CSCtz63094)

**Symptom** The server is unable to boot to the OS.

Workaround Try the following workarounds:

- Restart the server again.
- If rebooting does not fix the issue, then enter the WebBIOS using Cntrl+H during BIOS POST when LSI controller OPROM is seen. In WebBIOS, navigate to the Logical Drive Tabs and set the Virtual drive in which the OS is installed and restart the server. This will result in successful booting to the OS. (CSCua92555)

**Symptom** When the host dispatches the OptionROM for LSI Adapters, it displays the following message: Adapter at BaseBoard is not responding. No MegaRAID Adapter installed

**Workaround** Restart the host by either pressing Ctrl+Alt+Del or restart the server from CIMC Web GUI. (CSCua80224)

**Symptom** The following issues are observed in Cisco UCS C460 servers with Qlogic 4Gbps HBA in a generation 1 PCI slot:

- Host OS resets
- Storage LUNs might become unavailable.

This issue is observed in slot 8.

Workaround Move Qlogic 4 Gbps HBA to a generation 2 slot and do not use it in slot 8. (CSCub58866)

**Symptom** When the I/O is running on two or more hard disks part of a RAID array, the Activity LED is seen blinking GREEN on the hard disks on which the I/O is running and part of the RAID array and also on the adjacent hard disk which is not part of the RAID group.

**Workaround** None. You can ignore the Activity LED running on the adjacent hard disk of the RAID array as there is no actual I/O running on this hard disk. (CSCtz10983)

#### Misc

**Symptom** Virtual Interface Card (VIC) does not support Microsoft Windows 2012 on C-series Platforms in 1.4(6), 1.4(6d) and 1.4(3o).

Workaround None (CSCub95871)

# **Known Behaviors**

## Release 1.4(7f1)

The following caveats were resolved in 1.4(7f1) release:

#### CIMC

**Symptom** In the CLI and WebUI, sometimes all the physical drives connected to the storage controller are not shown under the **CIMC Storage** tab.

Workaround LSI option ROM shows all connected Physical drive information. (CSCue17502)

**Symptom** In the CLI and WebUI, sometimes the created Virtual Drives (VD) are not shown under the **CIMC Storage** tab.

Workaround LSI option ROM shows all Virtual drive details. (CSCue17546)

**Symptom** SNMP Storage Inventory shows RAID battery information even when a battery is not connected physically.

Workaround Read the battery information from the LSI WEB BIOS, if needed. (CSCue07915)

## Release 1.4(7)

This section lists the known behaviors for release 1.4(7):

#### CIMC

Symptom PID shows wrong value for MegaRAID 9266CV-8i w/FTM + LSI CacheVault.

Workaround None (CSCua25496)

**Symptom** PSU firmware revision may only be partially available when the PSU does not have AC power. The issue happens when the chassis has two PSUs present but one PSU does not have AC power. On the PSU without AC power, only 4 PSU firmware digits may be displayed instead of the full 8.

**Workaround** Connect AC power to the PSU. The full firmware revision will then be available. (CSCtx43305)

Symptom The HDD presence cannot be viewed through SNMP.

**Workaround** Use either alternate interfaces or do SNMP query again for the HDD inventory after the action. (CSCty60975)

Symptom Duplicate SNMP traps are obtained when you insert Fan 2,4 and 5 in Cisco C22.

Workaround None. (CSCua11831)

**Symptom** The SNMP Hard Disk Inventory starts numbering with 0 while the CIMC HDD sensor starts with 1.

**Workaround** None. This symptom occurs because the SNMP Hard disk inventory matches with the storage inventory and both starts with index 0. The hard disk sensor numbering starts with 1 because it matches with the label in the SKU. You need to be aware of the difference and map it accordingly while browsing for a specific HDD detail across sensors and storage inventory. (CSCty58229)

**Symptom** When you power on the chassis with some PS power cables disconnected, the system health LED on the front panel stays green, though some power supplies have no input voltage.

Workaround Connect all cables from APC power to the power supply securely. (CSCtg92856)

Symptom SNMPv1 traps are sent when SNMPv2 and SNMPv3 traps are enabled.

Workaround None.(CSCtr37876)

BIOS

**Symptom** Bus number for the Mezz, slot2 on C220 and slot4, 5 on C240 has changed. For this reason, HW raid adaptor firmware upgrade through UCSM fails on C220/C240 rack servers.

**Workaround** Re-acknowledging the rack server will solve the issue.(CSCuc81667)

**Symptom** LSI Web BIOS may not launch on pressing Ctrl+H. This happens only UEFI Shell or UEFI native boot entity is set as the first boot device in boot order.

**Workaround** During BIOS post, press F6 to bringup the boot override list and select the appropriate entry to launch the Web BIOS. (CSCuc75369)

**Symptom** TPM operation triggered from OS not carried out by bios.

**Workaround** Starting from this release, the BIOS admin password needs to be installed for TPM operation to work seamlessly.(CSCuc52983)

**Symptom** When BIOS console redirection is enabled, the keyboard can stop working in the Broadcom PCIe option ROM at some baud rates.

Workaround Disable the BIOS console redirection.(CSCtq84425)

**Symptom** Serial port B cannot be enabled for console redirection in the Server Management —> Console Redirection page of the BIOS setup.

**Workaround** Serial port B is primarily used for SOL functionality. The BIOS will start redirecting console messages to serial port B if SOL is enabled. You should enable SOL through BMC to get console redirection messages through serial port B. (CSCtf54851)

**Symptom** If the current CIMC networking mode is shipping mode, then the BIOS F8 CIMC configuration utility does not allow a new networking mode and IP address to be set at the same time.

**Workaround** Set the new networking mode, save, then set the new IP address and save again. (CSCth71350)

**Symptom** PCI bus and device number for some of the devices change, on upgrading the C220 and C240 servers from 1.4(4c) to later software releases.

**Workaround** None. Reconfigure your OS and applications which depend on the fixed PCI bus and device numbers. (CSCud22651)

#### LOM

**Symptom** Boot protocol selection (PXE, iSCSI or FCoE) cannot be done from option ROM configuration menu on Intel LOM/Adapters.

**Workaround** Intel does not support boot protocol selection in the option ROM configuration menu. In order to change boot protocol, an Intel utility "bootutil" must be used. This utility is available for DOS, UEFI and Linux and is distributed on Cisco driver disk. The syntax is

bootutil -nic=<port> -bootenable=[pxe | iscsiprimary | iscsisecondary | fcoe|disable]

Once the boot protocol is selected the rest of the parameters can be configured either from the option ROM configuration menu or with bootutil. (CSCtx85320)

**Symptom** Old Broadcom 10 GE network drivers may not be compatible with new 10GE firmware. The operating system may crash if booted with old drivers and new firmware.

Workaround Upgrade drivers before upgrading firmware. (CSCuc09231)

#### **OS Install**

**Symptom** During a Linux installation (seen during RHEL6.3 installation), the vKVM display goes green with a message saying "Out of Range."

Workaround Follow one of the following methods:

- Either use a local monitor for the entire installation process, or do not use a local monitor at all during the installation process. The installation can complete entirely over vKVM or entirely via a locally attached monitor.
- At the beginning of the installation process, force the video resolution to a size supported by the vKVM subsystem.

To do this, edit the boot options presented at the "Welcome to Red Hat Enterprise Linux 6.3!" screen.

In this screen, select the "Install or upgrade an existing system" option, and hit the **<tab>** key to edit the kernel options.

Add resolution=1024x768 to the end of the options.(CSCuc33956)

Web UI

Symptom Printing from Web UI will work from Internet Explorer, but not Firefox.

Workaround None. (CSCtc22985)

# **Open Caveats**

## Release 1.4(7f1)

This section lists the open caveats for release 1.4(7f1):

#### CIMC

**Symptom** The PWRGD Sensor's Normal events are logged in the SEL during the CIMC boot and Host boot.

**Workaround** These are expected events and can be ignored. (CSCue10121)

Symptom The DRAM\_PWRGD Sensor Reading is not shown.

Workaround None (CSCue16859)

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#### BIOS

**Symptom** When upgrading the C24 M3 server from 1.4.7a version to 1.4.7f version using the HUU (option to upgrade all), the server fans run at almost double the speed that they were running at on 1.4.7a version.

Workaround None (CSCuf08450)

## **Release 1.4(7)**

This section lists the open caveats for release 1.4(7):

#### CIMC

**Symptom** LSI storage controllers with external ports (-8e cards) do not show up in CIMC local storage management.

Workaround There is no workaround. (CSCud18756)

**Symptom** Repeated VIC adapter resets using CIMC Web UI or CLI adapter-reset can cause VIC card to hang.

**Workaround** Do not reset the VIC adapter unless necessary. It should normally never be necessary to reset the VIC adapter manually. (CSCuc83809)

Symptom vmedia is not usable in BIOS boot order when using a VIC P81E card.

**Workaround** No workaround. This is a known behavior with P81e card. This card gets reset during host reboot, due to that vKVM and vMedia sessions are getting closed and BIOS boot order is lost due to power savings mode. The new generation VIC 1225 card does not have this issue if CIMC network mode is configured to cisco\_card.(CSCud08544)

#### **Intel Adapter**

**Symptom** When multiple Intel network adapters are present and you enter the iSCSI configuration from one card, it allows you to change the configuration on all Intel cards. After the change, when one of the cards is removed, it appears that the option ROM of the remaining cards is overwritten by the card that was removed.

**Workaround** Enter the iSCSI configuration of the card that must be modified. Do not modify other cards when they are visible. This issue is only with iSCSI configuration and not with PXE configuration. (CSCuc52172)

#### BIOS

**Symptom** EFI shell cimcconfig does not work on C260 and C460.

Workaround Press F8 from BIOS POST instead to start the CIMC config tool. (CSCuc40505)

**Symptom** CIMC System Event Log reports "System Software event: Post sensor, HECI or ME Firmware initialization failed [0x5301] was asserted".

Workaround None (CSCua51565).

**Symptom** Continuous beep sound is heard when the system is powered on.

**Workaround** Wait for few seconds before turning on the power to the system after the AC power cord is plugged in.(CSCtz11862)

#### LSI

**Symptom** When a drive rebuild is ongoing in C420 and C260 servers, the SEL will show the following entries for the drive on which the rebuild is occurring:

Platform alert LED\_HLTH\_STATUS #0x01 | LED color is amber | Asserted Drive slot (Bay) HDD4\_STATUS #0xe8 | Drive Fault | Deasserted

**Workaround** Ignore these messages as they do not indicate a bad drive. When the rebuild is done, the messages do not show up in the SEL. (CSCuc45639)

Symptom SSD Caching is enabled even when SSD is not part of the virtual drive.

**Workaround** None. When virtual drives do not have SSD, there is no impact to performance. (CSCuc13837)

**Symptom** The LSI controller CLI Application MegaCli does not properly work under Windows Power Shell. A failure message is displayed when creating virtual drives for RAID levels 1,5,10,50 and 60.

**Workaround** MegaCli is not supported in Power Shell. Use the command prompt on Windows for running all MegaCli commands and options. (CSCub49559)

Symptom OS installs with LSI inbox drivers even if its pointed to out of box driver v00.00.06.18.

**Workaround** Reinstall the drivers after OS install, which has dkms.rpm as dependency or use inbox drivers. (CSCuc39070)

#### Web UI

**Symptom** Sometimes, on Windows 2008 servers and Internet Explorer 8.0 version, the CIMC WEB UI login prompt will not be seen.

**Workaround** Add CIMC IP to IE 8.0 trusted sites list. In the Internet Explorer window, click Tools -> Internet options -> Security -> Trusted Sites -> Sites -> Add. (CSCuc19323)

# **Related Documentation**

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

- Cisco UCS C-Series Servers Integrated Management Controller CLI Configuration Guide
- Cisco UCS C-Series Servers Integrated Management Controller Configuration Guide
- Cisco UCS C-Series Servers Integrated Management Controller CLI Command Reference

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

- Cisco UCS C-Series Servers Documentation Roadmap
- Cisco UCS Site Preparation Guide
- Regulatory Compliance and Safety Information for Cisco UCS

# **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html.

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