Release Notes for Cisco UCS C-Series Software, Release 1.3(2)

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This document describes the new features, system requirements, open caveats and known behaviors for C- series software release 1.3(2) including Cisco Integrated Management Controller software and any related BIOSes, firmware, or drivers. Use this document in conjunction with the documents listed in the "Related Documentation" section on page 28.

Note 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.

Table 1   Online History Change

Part Number	Revision	Date	Description
OL-24438-01	A0	March 11, 2011	Created release notes for Release 1.3(1c).
	B0	April 15, 2011	Updated firmware files table for Release 1.3(1d). Patch release 1.3(1d) contains improvements to offline firmware diagnostics.
	C0	April 16, 2011	Updated release notes for release 1.3(2d). This release applies to C200-M1, C210-M1, C200-M2 and C210-M2 servers. C200-M2 (SFF) servers are supported this release onwards.
	D0	July 18, 2011	Release 1.3(2j) contains fixes to address issues found in manufacturing.

Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Contents

This document includes the following sections:

Introduction

Cisco® UCS C-Series Rack-Mount Servers extend unified computing innovations to an industry-standard form factor to help reduce total cost of ownership (TCO) and increase business agility. Designed to operate both in standalone environments and as part of the Cisco Unified Computing System™1, the series employs Cisco technology to help customers handle the most challenging workloads. The series incorporates a standards-based unified network fabric, Cisco VN-Link virtualization support, and Cisco Extended Memory Technology. It supports an incremental deployment model and protects customer investments with a future migration path to unified computing.

The Cisco UCS C460 M1 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 C250 Extended-Memory Rack-Mount Server is a two-socket, two-rack-unit (2RU) rack-mount server featuring patented Cisco Extended Memory Technology. It is designed to increase performance and capacity for demanding virtualization and large-data-set workloads. It also can reduce the cost of smaller memory footprints. This server is built for virtualized workloads in enterprise data centers, service provider environments, and virtual desktop hosting. The system also helps increase

performance for large-data-set workloads, including database management systems and modeling and simulation applications. Applications that are memory bound today will benefit by the 384 GB of addressable memory that the Cisco UCS C250 server offers.

The Cisco UCS C210 General-Purpose Rack-Mount Server is a general-purpose, two-socket, two-rack-unit (2RU) rack-mount server housing up to 16 internal small form-factor (SFF) SAS or SATA disk drives for a total of up to 8 terabytes (TB) of storage. The Cisco UCS C210 server is designed to balance performance, density, and efficiency for workloads requiring economical, high-capacity, reliable, internal storage. Based on quad-core Intel® Xeon® 5500 or 5600 series processors, the server is built for applications including virtualization, network file servers and appliances, storage servers, database servers, and content-delivery servers.

The Cisco UCS C200 High-Density Rack-Mount Server is a high-density server with balanced compute performance and I/O flexibility. This price-to-performance optimized two-socket, one-rack-unit (1RU) rack-mount server is designed to balance simplicity, performance, and density for web infrastructure and mainstream data center, small-office, and remote-office applications. Its single-rack-unit size makes it useful for service providers offering dedicated or multi-tenant hosting, and its economical price makes it well suited to the appliance market.

C-series servers are capable of standalone management using Cisco Integrated Management Controller (CIMC), which is an integration of the service processor hardware and the CIMC firmware. CIMC has a Web GUI and a CLI mode.

The Cisco UCS C200 M2 Small Form Factor (SFF) server is a new factory-configurable option that is an alternate to the existing Cisco UCS C200 M2 Large Form Factor (LFF) server.

The LFF version of the server can contain up to four 3.5-inch LFF hard drives or solid state drives. If a customer orders the new SFF version of the server, the chassis is configured with a new drive backplane and new front drive bays that can contain up to eight 2.5-inch SFF drives. The new drive bays and backplane are factory-configurable, but are not supported as field-configurable.

The new SFF server also allows configurable selection of front-panel control modules. Customers can choose the standard control panel module or an optional DVD-drive module. These two modules are field-replaceable and interchangeable with the supplied cables.

In addition, new 2.5-inch drives have been qualified as configurable options for the SFF server. New RAID controller options have also been qualified for the SFF server (LSI MegaRAID 9280-4i4e and LSI 1068-based mezzanine card).

Cisco UCS P81E Virtual Interface Card

A Cisco UCS C-Series network adapter can be installed to provide options for I/O consolidation and virtualization support. The available adapter is the Cisco UCS P81E Virtual Interface Card.

The Cisco UCS P81E Virtual Interface Card is optimized for virtualized environments, for organizations that seek increased mobility in their physical environments, and for data centers that want reduced costs through NIC, HBA, cabling, and switch reduction and reduced management overhead. This Fibre Channel over Ethernet (FCoE) PCIe card offers the following benefits:

- Allows up to 2 virtual Fibre Channel and 16 virtual Ethernet adapters to be provisioned in virtualized or non virtualized environments using just-in-time provisioning, providing tremendous system flexibility and allowing consolidation of multiple physical adapters.

- Delivers uncompromising virtualization support, including hardware-based implementation of Cisco VN-Link technology and pass-through switching.

- Improves system security and manageability by providing visibility and portability of network polices and security all the way to the virtual machine.

The virtual interface card makes Cisco VN-Link connections to the parent fabric interconnects, which allows virtual links to connect virtual NICs in virtual machines to virtual interfaces in the interconnect. In a Cisco Unified Computing System environment, virtual links then can be managed, network profiles applied, and interfaces dynamically reprovisioned as virtual machines move between servers in the system.

The Cisco UCS P81E Virtual Interface Card (VIC) can be configured by a KVM connection to the card through the EFI as an alternative to using the CIMC CLI or GUI. The processor on the VIC hosts the VIC Configuration Utility, a CLI providing many commands that are the same or similar to those of the CIMC, as well as a few unique commands.

> **Note** A Cisco UCS P81E Virtual Interface Card will be able to communicate upstream with a Cisco Nexus 5000 switch only if the minimum NX-OS level is 5.0.x.

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

Firmware Files

The C-Series software release 1.3(2) includes the following software files:

Table 2   Files in this release

CCO Software Type	File name(s)	Comment
Unified Computing System (UCS) Server Firmware	C200M1-1.3.2j.zip	BIOS/CIMC Software Container
Unified Computing System (UCS) Server Firmware	hostUpgrade_v1_3_2j.iso	Host Upgrade Utility
Unified Computing System (UCS) Drivers	ucs-cxxx-drivers.1.3.2a.iso	Drivers

Table 2 **Files in this release**

CCO Software Type	File name(s)	Comment
Unified Computing System (UCS) Utilities	ucs-c2xx-utils-efi.1.3.2.iso ucs-c2xx-utils-linux.1.3.2.iso ucs-c2xx-utils-vmware.1.3.2.iso ucs-c2xx-utils-windows.1.3.2.iso	Utilities
Unified Computing System (UCS) Adapter Firmware	ucs-cxxx-fw.1.3.2.iso	Third-Party Firmware

Note Always upgrade both the BIOS and CIMC in a container. Do not upgrade individual components (only BIOS or only CIMC), since this could lead to 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)
- LSI (for LSI storage controllers)
- Cisco UCS P81E Virtual Interface Card (VIC) (if present)

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:

Cisco Host Upgrade Utility User Guide

The hostUpgrade_v1_3_2j.iso contains the following files:

Table 3   Host Upgrade Utility: Files in this release

Server	CIMC	BIOS	P81E card	LOM Version
C460M1	1.3(2i)	1.3.2e.0	1.5(1)	C460T6045-2.0 BCM5709C-1GE LOM C460T6045-2.0 BCM57711-10GE LOM 3.3/aa0.5ad BCM57711-10GE LOM
C250	1.3(1e)	1.3.1c.0	1.5(1)	C250T6045-2.0 BCM5709
C200 and C210	1.3(2j)	1.3.2.0	1.5(1)	1.4 Intel 82576

Table 4   Host Upgrade Utility: Files in this release

Server	LSI	Firmware Version
C460	9260-8i (Nvdata version - 2.09.03-0014) 9240-8i	2.120.13-1133 2.120.14-1122
C250	3081 9261 (Nvdata version - 2.09.03-0011)	1.32.04.00 2.120.13-1133
C200 and C210	1064 1068 8708 9261 (Nvdata version - 2.09.03-0011) 9260-4i	1.32.04.00 1.32.04.00 1.40.272-1225 2.120.13-1133 2.120.13-1133

System Requirements

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

- Sun JRE 1.6 or later.
- Microsoft Internet Explorer 6.0 or higher or Mozilla Firefox 3.0 or higher
- The Microsoft Windows XP, Microsoft Windows Vista, Red Hat Enterprise Linux 5.0 or higher operating systems.

Updating the Firmware

Use the Host Upgrade Utility to upgrade the C-Series firmware. This utility upgrades BIOS, CIMC, LOM, LSI, and P81E firmware. All firmware should be upgraded together to ensure proper operation of your server.

Note   The BIOS Quiet Boot option is not available release 1.2(1) onwards.

Features in this Release

This section briefly describes the new features introduced in this release:

- Enhanced power restore policy with random and fixed delay.
- Support for testing trap destination.
- Support for vKVM and vMedia.
- SNMP version 2 monitoring on UCS C-Series hardware.
- Display of key adapter attributes in CIMC.
- Inventory of PCIe adapters, including vendor, make and model.
- P81E Virtual Interface Card Network Interface Virtualization (NIV) using CIMC or UCSM.

Note   When the NIV is enabled you will not be able to use FCoE ports/configure it in the P81E card. Only Ethernet ports can be configured and used.

- RAID inventory through CIMC for LSI 9260, 9261, and 9280 storage adapters.
- Display of DIMM population details and predictive failure of DIMMs.
- Generic fault reporting through CIMC.
- Power capping on C-series servers.
- Configurable BIOS settings through CIMC.
- Native UEFI support for Windows 2008 R2 on C200, C210, and C250.
- Support for new LSI RAID 9280-4i4e (9280-4i4e is supported on C200 and C200 M2 SFF).
- iSCSI boot using LOM ports on C250 and C460
- Host Upgrade Utility now supports upgrading LSI firmware and P81E firmware as well as BIOS, CIMC, and LOM firmware

Hardware Features

The following platforms are supported release 1.3(2d) onwards:

- UCS-C200-M1
- UCS-C210-M1
- UCS-C200-M2
- UCS-C210-M2
- UCS-C200 M2 (SFF)

SNMP

Release 1.3(1c) supports "cucsFaultTable", defined in the CISCO-UNIFIED-COMPUTING-FAULT-MIB", to report faults related to FAN and Power Supply units. The associated MIBs can be found at the following link:
ftp://ftp.cisco.com/pub/mibs/supportlists/ucs/ucs-C-supportlist.html

BIOS/Hardware

Symptom Cisco is introducing a new generation of SATA 2.5-inch hard drives which are for the first time compatible with the new SATA Revision 3.0 standard capable of 6 Gbit/s. In particular these hard drives are SATA 500 GB (A03-D500GC3) and 1 TB (A03-D1TBSATA). Due to legacy design constraints in certain Generation M2 C-Series servers, the faster 6 Gbit/s link speeds may not always be possible in all servers. However, in those cases, the link speeds will properly negotiate the link back to the Revision 2.0 standard capability of 3 Gbit/s. This operation is seamless to the user.

Workaround This is a known behavior, as follows:

- The UCS C200 M2 SFF server supports these drives at full 6Gbit/s speeds.
- The UCS C210 M2 server guarantees support of these drives at a minimum of 3Gbit/s speeds.
- The UCS C250 M2 server guarantees support of these drives at a minimum of 3Gbit/s speeds.
- The UCS C460 M2 server supports these drives at full 6Gbit/s speeds.

Note In some cases, you may find that some or all links have negotiated to the higher 6Gbit/s speeds. Those links that do, will operate properly at that speed.

Upgrading BIOS and CIMC firmware

Caution When you upgrade the BIOS firmware, you must also upgrade the CIMC firmware to the same version, or the server will not boot. Do not power off the server until the BIOS and CIMC firmware are matching, or the server will not boot.

Cisco provides the Cisco Host Upgrade Utility to assist you in upgrading the BIOS, CIMC, LOM, LSI storage controller, and Cisco UCS P81E Virtual Interface Card firmware to compatible levels.

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

To use this utility, start with the Cisco Host Upgrade Utility User Guide, which includes the instructions for downloading and using the utility ISO. Select the correct guide for your desired firmware version from this URL:

http://www.cisco.com/en/US/products/ps10493/products_user_guide_list.html

- Cisco Host Upgrade Utility User Guide for Release 1.2(x)
- Cisco Cisco Host Upgrade Utility User Guide for Release 1.3(x)

Resolved Caveats

This section lists the resolved caveats in the 1.3(2d) release:

Web Management

Symptom On the CIMC WebUI summary screen, for Processors, Memory, Power Supplies, and Fans, there is a hyperlink next to the status indicator. When the status is bad, you could reasonably expect the link to take you to a page that displays the source of the fault. Instead, for CPUs and Memory, the links take you to the inventory page which will not show the source of the fault.

Workaround Navigate to the sensor and System Event Log screens to find the source of problems. In particular, CPU faults indicate over temperature conditions, so the temperature sensors screen should be viewed. For memory faults, the System Event Log needs to be scanned to see the messages sent from the BIOS to the BMC indicating memory events. (CSCtf39952)

BIOS

Symptom Some C460 M1 systems generate "Critical Interrupt #0x1b" SEL messages.

Workaround The BIOS generates these SEL messages when it detects a fatal error in the uncore portion of the CPU. There is no workaround since the cause for uncore fatal error is unknown. This problem does not occur on C460 M2. (CSCtg30658)

Symptom The web interface and the CLI always show that the Memory RAS configuration is set to maximum performance.

Workaround Use the BIOS setup screen to view the current Memory RAS configuration. The memory RAS configuration can be viewed in the "Advanced", "Memory RAS and Performance Configuration" menu. The CLI and web interface can be used to set the Memory RAS configuration. This bug only causes problems when viewing the RAS configuration. (CSCtl84130)

CIMC

SNMP configuration is not saved in CIMC exported configuration. (CSCtl52440)

Symptom HDD status is not available on the health summary page.

Workaround At present there is no backend support. Look up for the faults in the storage tab of the webUI. (CSCtl90750)

Symptom Memory mirroring mode and memory sparing mode cannot be configured from CIMC.

Workaround Use BIOS Setup (F2) to configure these modes. (CSCto06825)

Known Behaviors

This section lists the known behaviors in the 1.3(2d) release:

CLI

Symptom There's a message discrepancy between user interface and CLI when an invalid special character is entered.

Workaround Special characters should be entered with double quotes to be considered a valid string. (CSCto11022)

This section lists the known behaviors in the 1.3(1c) release:

vKVM/vMedia

Symptom When you try to use virtual media to map both a .img file and a physical USB stick (pen/thumb drive), the following message (or a similar one) pops up: "Either Virtual media is detached or virtual media redirection for the selected virtual disk drive is already is in use by another user"

Workaround The workaround is to only map one or the other drive at a time. (CSCtk54308)

Symptom When creating a vMedia image file, a popup with the following message is displayed, "Create Image Failed. An error occurred in the Image library."

Workaround The image creation feature only supports image sizes up to 4 GB (32-bits) in size. Trying to create images from filesystems larger than that will result in an error. There is no direct workaround. Break data into smaller chunks, and represent each chunk as a separate image. (CSCtk61700)

Symptom When shutting down a vKVM session, you will notice a popup with the following message, "Closing this session will also close the locked virtual media session. Do you want to continue?"

Workaround None. Click the "Yes" button. (CSCtk61907)

CIMC

Symptom KVM console goes blank after updating CIMC firmware from 1.2.1a.0 to 1.3(1).

Workaround Clear the Java cache from the control panel and try to launch the KVM. (CSCtl93037)

- In the power restore policy, a delay value is displayed even if the delay type is random. Ignore this issue. (CSCtk83452)

This section lists the known behaviors in the 1.2(2d) release:

CIMC

Symptom With maximum hardware acceleration in some Windows OS installs, the vKVM cursor disappears.

Workaround If the slider is moved even one notch to the left of the maximum acceleration, then the remote cursor appears. (CSCtj30195)

This section lists the known behaviors in the 1.2(1a) release:

CIMC

Symptom The CIMC Web GUI doesn't come up after certificate import. The browser displays the following Error message: Error Invalid Server Certificate. A request failed because the server's certificate was invalid.

Workaround Provide different values for the corresponding fields for "Subject Information" and "Issuer Information" during the certificate import process. (CSCth63837)

Symptom After using the WSMAN command the session displays the following error message: Error: Unable to create Resource Locator object.

Workaround There is no workaround. This request is not valid. You will need to provide a valid target so that CIMC can return appropriate information. (CSCth43327)

Symptom Occasionally IPMI LAN interfaces will become unresponsive (to the point of lost functionality) under stress.

Workaround The workaround is not to use IPMI queries during times of high SOL traffic. (CSCtd05874)

Symptom The uboot version shows extra character after normal CIMC version.

Workaround The extra character is displayed after updating to 1.2.x revisions of the firmware. This is a new feature added to the release and it specifies a specific uboot version. (CSCti49855)

Symptom Two active media sessions observed in the webUI/CLI.

Workaround Reset to default through the webUI or CLI so that the new changes take effect. (CSCti42465)

BIOS

Symptom After upgrading to BIOS version 1.2.1a.0, one of the two onboard LOMs may get disabled.

Workaround After upgrading to BIOS version 1.2.1a.0, reboot the server, go to the BIOS setup screen, navigate to the Advanced -> PCI Configuration screen, and set the "Onboard Gbit NIC2" to enabled. Then save and exit the BIOS setup. (CSCti71226)

LSI

Symptom When the installation of the LSI SNMP agent on a Windows OS is complete, an error message that reads as "Fatal Error" may be displayed, indicating an unsupported version of firmware is installed on the storage controller.

Workaround The firmware version installed on the storage controller must be a supported version. To view the list of supported firmware versions for the controller, see: http://www.cisco.com/en/US/products/ps10477/prod_technical_reference_list.html (CSCti35162)

Symptom When there are 8708 and 1064E LSI controllers on the same system, the product name of the 1064E controller is displayed as "UNUSED" on the MIB walk.

Workaround Remove the 8708 LSI controller and place only the 1064E to view the product name in the MIB walk. (CSCti64538)

Open Caveats

This section lists the open caveats in the 1.3(2d) release:

CIMC

Symptom On some C210 servers, FAN4 and FAN5 TACH sensors display status as CRITICAL while the fan speed is 0.

Workaround The workaround is to reset the CIMC. (CSCth27898)

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 CIMC Web GUI and CLI correctly reports the number of failed DIMMs, but does not display which of the DIMMs have failed.

Workaround BIOS Setup (F2) or CIMC System Event Log can display the exact failed DIMMs. (CSCto09153)

Symptom On C460 servers, the CIMC Web GUI does not display Cisco P81E card details when the main CPU is powered off.

Workaround Use the CIMC CLI or power on the main CPU. (CSCtn75815)

Symptom If you enter special characters for a VNIC name like "(" or ")" then a core is generated.

Workaround Special characters should be assigned in quotes. For example, If assigning cd()() as the name of the VNIC, it should be enclosed in quotes in the GUI as "cd()()". (CSCto54995)

Caveats from Previous Releases

> **Note** Release 1.3(1) does not support UCS integration. Customers who want to integrate their C-Series server with a UCS instance must use release 1.2(x). If your server is currently running 1.3(1), you need to downgrade it using the 1.2.2 Host Upgrade Utility. For more information, see the Hardware Installation Guide for the type of server you are integrating.

Release 1.3(1c)

This section lists the open caveats in the 1.3(1c) release:

CIMC

Symptom CiMC storage view of LSI 9260 card occasionally reports 0 Cache Memory size.

Workaround There is no workaround for CIMC storage management views. You can use host-based MSM tools to corroborate data. (CSCtn08982)

Symptom When NIC mode is in shared_lom and the boot order is such that EFI is not the first one in the order and there is no other media to boot from, the following message is displayed - "Select proper media else press a key". If you enter a key, the KVM session terminates.

Workaround Ensure that you have the proper media in place before trying to boot from the device. If not, when prompted with above message, you will have to place the required media and then reboot the host. Else have the system in dedicated mode. (CSCtl82492)

Symptom PI2CPerformOP ioctl driver failures occur in CIMC log.

Workaround This failure message is seen when CIMC couldn't communicate to certain devices, due to the devices being missing or if there is a momentary communication failure. If the messages are constant, this may indicate a problem with the server. There is no workaround for this issue. (CSCtn55177)

Symptom Power cap does not change P-state on ESXi 4.1

Workaround None. Power capping is not yet supported on VMware ESX or ESXi. (CSCtn03928)

Symptom Image files created by the Virtual Media subsystem are created in the user's desktop directory.

Workaround There is no workaround. Currently image files are always created in the user's desktop directory. Once the image file is created a user can move it anywhere, but the creation process is currently in a fixed location. (CSCtk59127)

Symptom The CIMC firmware upgrade utility can cause an error on the CIMC that will cause System Event Log (SEL) messages to be repeated as if the CIMC had just been restarted.

Workaround None. firmware upgrade will complete successfully, but dozens of extra redundant SEL messages can occur. (CSCtl12301)

- BIOS configuration is not saved in CIMC exported configuration. (CSCtl72671)

CLP

Symptom SMASH memory enumeration can fail on UCS-C460-M1.

Workaround None for SMASH interfaces. Memory related data can be retrieved through CiIC CLI or WebUI. (CSCtn29771)

vKVM/vMedia

Symptom KVM displays Out of Range error message during host reboot with SLES 11.

Workaround Wait for the graphics mode to be restored after reboot is sufficient. (CSCtk59159)

Symptom KVM fails to launch with a pop-up "Unable to launch Application".

Workaround Follow these steps:

Step 1 Update the JRE to http://www.java.com/en/download/inc/windows_upgrade_ie.jsp

Step 2 Close all browsers.

Step 3 Clear the cache (Internet Options -> Tools).

Open a new browser window and start a CIMC session. KVM should now be able to launch. (CSCtl70994)

Symptom User is not allowed to choose file name when creating vMedia image files.

Workaround The .img file created when using the vMedia "Create Image" feature is the same as the directory from which the contents are created with the ".img" extension added. Before creating the file, you can change the directory name to match what you would like the final file name to be. (CSCtk59152)

Symptom User sees out of date (without KVM and VM tabs) KVM/vMedia client windows.

Workaround When running 1.3(1) software, if a KVM session is initiated, and the client does not have separate KVM and VM tabs, then it almost certainly indicates an older client is being run. The solution is to clear the java cache on the system. This is different than the browser cache. On Windows XP, perform the following steps:

Step 1 Navigate to the Control Panel -> Java Control Panel.

Step 2 Click on the Settings button in the Temporary Internet Files panel.

Step 3 Click on the Delete Files button in the Temporary Files Settings popup box.

Step 4 Be sure to check the Applications and Applets checkbox and then click OK. (CSCtn41499)

Symptom KVM and vMedia don't work with mismatched IE and JRE executables.

Workaround Ensure that the matching JRE (and only the matching JRE) are installed. If a mismatched JRE is installed, it needs to be removed. (CSCtn42526)

Symptom Garbled WebUI output when LSI 9280-4i4e card is installed and external JBOD connected.

Workaround There is no actual data integrity problem, but the displays can be significantly garbled. One workaround is to only use external or only internal on any given controller card. Another is to use host based tools to display information on controllers where both internal and external storage is connected. (CSCtn03816)

LOM

Symptom C460 10GE LOM ports are not supported in RHEL 5.6. Broadcom netxtreme2-6.0.XX Linux drivers cannot be compiled in RHEL 5.6.

Workaround Broadcom doesn't support RHEL5.6 in this release. It will be supported in the next one. Use RHEL 5.5 or RHEL 6.0 instead of 5.6 to use 10GE LOM ports. (CSCtn17919)

Release 1.2(2d)

This section lists the open caveats for the 1.2(2d) release:

CIMC

Symptom C460 CIMC network mode shared_lom_10g with active-standby redundancy can stop working when the host OS is also using 10GE LOM port and then is rebooted.

Workaround Do not use the CIMC network mode shared_lom_10g. Use one of the other modes instead. (CSCtj57061)

Symptom C460 CIMC network mode shared_lom_10g with active-active redundancy will lose connectivity temporarily when the host OS is also using a 10GE LOM port.

Workaround Do not use CIMC network mode shared_lom_10g. Use one of the other modes instead. (CSCtj58245)

Symptom When downgrading from CIMC version 1.2 release to 1.1, CIMC is inaccessible.

Workaround Check its current network settings through the CIMC Configuration Utility or set the CIMC network settings to default using the CIMC Configuration Utility and use default network settings for version 1.1. (CSCti48255)

Symptom LED sensor color is displayed as Red or Amber or Blue (or any supported color) even though LED state if OFF.

Workaround Ignore LED color when LED state is OFF. (CSCth84883)

Symptom Network mode cannot be set to cisco_card mode even though the option is available.

Workaround Install Cisco UCS P81E card to move into cisco_card network mode. (CSCth87044)

BIOS

Symptom On C series servers with UCS P81E Virtual Interface Card, the system may hang during system boot (BIOS post).

Workaround This happens only when more than two vNICs are set to bootable in UCS P81E Virtual Interface Card. Do not set more than two vNICs to be bootable in UCS P81E Virtual Interface Card. (CSCti22874)

LSI

Symptom Server reboots when one or more Intel SSD 64GB drives are plugged in when the C-460 Server is up and running.

Workaround If Intel 64GB SSD drives need to be used in the C-460 server, power down the system completely and gracefully and then plug in the drives. The drives are recognised by the storage controller after power-on.

Symptom The host based LSI tool MegaCli when executed will display a "Permission Denied" message on ESXi4.1 and ESX4.1 operating system.

Workaround After installing MegaCli on ESXi4.1 or ESX4.1, use the following command to change permission: chmod 755 MegaCli. Once the permission is changed, MegaCli command and options work successfully. (CSCtk11863)

Release Notes for Cisco UCS C-Series Software, Release 1.3(2)

Symptom LSI Storage controllers on C-460 M1, C200 M2, C250-M2 servers running ESX4.1 and ESXi4.1 cannot be managed using the host application MegaRAID Storage Manager running on remote clients.

Workaround The LSI controller can be managed using WebBIOS which can be accessed using Cntrl+H keys during BIOS bootup when LSI controller is scanned. (CSCtk06208)

Symptom System reboots when one or more Intel SSD 64GB drives are plugged in when the C-460 Server is up and running.

Workaround If Intel 64GB SSD drives need to be used in the C-460 server, power down the system completely and gracefully and then plug in the drives. The drives are recognised by the Storage controller after power-on. (CSCti94758)

Utilities

Symptom If you try to move to cisco_card mode from the CIMC Configuration Utility, you see the error "Net mode invalid".

Workaround Install either just one or two R2X0-PSU2-650-SB power supply units in the server. Restart the CIMC and move to cisco_card mode. (CSCti70359)

This section lists the open caveats in the 1.2(1a) release:

CIMC

Symptom CIMC becomes un-responsive when repeated WSMAN requests are sent.

Workaround Multiple WSMAN requests timeout as current CIM object manager servers only support one request at a time. Send WSMAN requests in a staggered manner so that they do not time out. (CSCth57587)

Symptom Occasionally when configuring a C-series rack server for in-band management (connecting to the management controller via the host LAN on Motherboard ports, or via a Cisco adapter port), rebooting the host will cause an existing vKVM session to drop.

Workaround Use the dedicated CIMC ports for management connectivity. If that is not possible in your C-series server deployment, configure the switch ports to which the host is attached for fast spanning-tree recalculations. That can avoid the usual 30-second delay many switches impose when a port bounces before they re-run the spanning-tree calculation. (CSCth98858)

Symptom When updating CIMC firmware through TFTP, if the image file is corrupted, the update status indicator is the same as if the file does not exist.

Workaround Be aware that this error message can actually indicate either of the above conditions and should make sure that the file both the exists, and is a valid firmware image for the CIMC being upgraded. (CSCti17492)

BIOS

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)

Adapter firmware

Symptom While connected to the adapter CLI through the EFI VIC configuration utility, a user has to press the tab key (auto completion) two to three times for the command to auto complete.

Workaround None. (CSCti17428)

Release 1.1.(2)

This section lists the open caveats for the 1.1(2a) release and applies to the M1 version of the C460 server.

Symptom If the number of Virtual Drives created in the LSI MegaRAID controller is greater than or equal to 50, the system will not boot from any of these Virtual Drives.

Workaround None. The system boots from MegaRAID Virtual Drives only if the number of Virtual Drives are lesser than or equal to 49. (CSCtg25373)

This section lists the known behaviors for the 1.1(2a) release and applies to the M1 version of the C460 server.

Symptom Wake on LAN (WoL) Magic packet will not wake the system if they are sent to 10 GigE LOM SFP+ interfaces.

Workaround Use 1 GigE LOM ports for WoL. (CSCtg68906)

Miscellaneous

Symptom The CLP command takes a long time to complete and/or other applications appear slow.

Workaround The **-l all** option instructs CLP to traverse the entire sub tree. Due to the number of objects that must be queried, this command requires a long time to execute. To reduce the time and resources required, **cd** to the target(s) of interest and execute a **show** on the individual objects. (CSCtg72073)

BIOS

Symptom The display from both onboard and external videos go blank during BIOS POST. However, the display works during the operating system boot.

Workaround Do not install an external PCIe VGA adaptor to view the BIOS POST or to access the BIOS Setup or EFI shell. Wait a few minutes for the BIOS to hand off the control to the operating system to bring up the display. (CSCtf37551)

Symptom BIOS setup hangs while hot-plugging multiple USB devices into a USB hub.

Workaround Reboot the system with all the required USB devices connected to the hub. (CSCtf51706)

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 System reboots during EFI Windows 2008 R2 installation.

Workaround EFI OS installation is not supported by the BIOS. You should disable the EFI- Optimized mode in the BIOS setup and install Windows 2008 R2 in legacy mode. (CSCtf87728)

Symptom The BIOS EFI shell hangs while hot-plugging the USB CD-ROM into a USB hub.

Workaround Reboot the system with the USB-CD-ROM connected. The BIOS detects and configures it correctly during the POST. (CSCta99789)

Symptom If you enter the LSI Option ROM Configuration utility WebBIOS by pressing CTRL+H during boot, the BIOS boot order changes. As a result, the system may not boot in the same order as expected, after exiting WebBIOS and rebooting.

Workaround After exiting the WebBIOS (which also reboots the system), update the boot order by entering BIOS setup. (CSCta56788) To update the boot order follow the steps below:

Step 1 Press **F2** to enter the BIOS Setup.

Step 2 Navigate to the Boot Option tab, select **Hard Disk Order** and update the boot order as required.

Step 3 Update the Boot Option #1, #2, and so on.

Step 4 Press **F10** to save and exit.

CIMC

Symptom The virtual mouse in the KVM console is difficult to use when installing SLES 11.

Workaround Use a physical mouse instead of a virtual mouse when installing SLES 11. (CSCta55758)

Symptom The CIMC time/date is set to 1970.

Workaround Do not reboot the CIMC after the BIOS sets the time/date for the CIMC. (CSCtc21237)

Symptom A firmware update using a browser does not show the progress bar at times, due to slow network bandwidth.

Workaround Ideally, the download time should not be greater than 10 minutes. If the update takes longer than that to download, try to update the image by uploading it to a nearby TFTP server. (CSCtf03964)

Release 1.1(1)

The following caveats were opened in UCS software release 1.1(1d) and are still unresolved.

This section lists the open caveats for the 1.1(1d) release. Unless otherwise noted, the caveats are for all rack server platforms.

Misc

Symptom When network mode is set to shared LOM with redundancy is set to None, and if the cable is connected to LOM Port2, CIMC doesn't pick the IP.

Workaround In Shared LOM, NONE mode, only LOM Port1 is expected to pick the IP. So connect cable to Port1 and IP will be retrieved. (CSCtf86648)

Symptom The following message appears after installation or upgrade to ESX 4.0 vSphere:
```
Error:TSC: 1137350434cpu0 :0)NUMA : 827 Signficant imbalance between NUMA nodes detected.
Performance may be impacted.:
```

Workaround There are two possible workarounds.

Option 1: Ensure that memory configuration is equal across both processors. Ensure that there are equal amounts of DIMMs of the same size and speed inserted in the DIMM sockets.

Option 2: Reboot system and enter BIOS setup by pressing F2. Go to **Advanced-->Memory Configuration-->Memory RAS --> Performance Configuration**--> and change NUMA Optimized to Disabled. Press F10 to save and reboot. (CSCtc33846)

BIOS

Symptom At times due to slow network bandwidth, a firmware update using a browser doesn't show the progress bar.

Workaround Ideally, the download time should not be greater than 10 minutes. If the update takes longer than that to download, try to update the image by uploading it to a nearby TFTP server. (CSCtf03964)

Symptom The front panel COM port does not work.

Workaround Use the rear panel COM port. (CSCte96760)

Symptom Faulty DIMM size and speed are reported in SMBIOS Type 17. The expected behavior is to report "No DIMM" for failed DIMM slots.

Workaround The user should not assume all DIMMs reported through SMBIOS type 17 are working. Instead the user should go to BIOS setup to find out the working and failing DIMMs. Also the user can retrieve the failing DIMM information from the system error log. (CSCtd44151)

Symptom When VT-UTF8 is selected as a terminal type in BIOS Setup, junk characters are seen on the terminal.

Workaround Do not select VT-UTF8 as terminal type. Use the default VT100 mode. (CSCtb25124)

Symptom Installation of any UEFI Aware Operating System may result in a complete system failure.

Workaround No workaround exists. We do not support UEFI aware Operating Systems. (CSCtd71780)

Release 1.0(2)

The following caveats were opened in UCS software release 1.0(2) and are still unresolved.

This section lists the open caveats for this release. Unless otherwise noted, the caveats are for all rack server platforms.

Misc

Symptom The following message appears after installation or upgrade to ESX 4.0 vSphere:
```
Error:TSC: 1137350434cpu0 :0)NUMA : 827 Signficant imbalance between NUMA nodes detected.
Performance may be impacted.:
```

Workaround There are two possible workarounds.

Option 1: Ensure that memory configuration is equal across both processors. Ensure that there are equal amounts of DIMMs of the same size and speed inserted in the DIMM sockets.

Option 2: Reboot system and enter BIOS setup by pressing F2. Go to **Advanced-->Memory Configuration-->Memory RAS --> Performance Configuration**--> and change NUMA Optimized to Disabled. Press F10 to save and reboot. (CSCtc33846)

Symptom The firmware update freezes at downloading stage and at 5% completion. This may occur if there is an interruption to the firmware download while installing firmware through the browser client. Examples of interruptions include: closing the browser, clicking on the browser's stop button, clicking on the browser's refresh button, and network errors.

Workaround If the download appears to have frozen, the easiest workaround is to log out then try the firmware installation again.   If the browser has already been closed and you cannot log out, then wait until the session expires and try again. (CSCtb70038)

BIOS

Symptom At times due to slow network bandwidth, a firmware update using a browser doesn't show the progress bar.

Workaround Ideally, the download time should not be greater than 10 minutes. If the update takes longer than that to download, try to update the image by uploading it to a nearby TFTP server. (CSCtf03964)

Symptom The front panel COM port does not work.

Workaround Use the rear panel COM port. (CSCte96760)

Symptom Faulty DIMM size and speed are reported in SMBIOS Type 17. The expected behavior is to report "No DIMM" for failed DIMM slots.

Workaround The user should not assume all DIMMs reported through SMBIOS type 17 are working. Instead the user should go to BIOS setup to find out the working and failing DIMMs. Also the user can retrieve the failing DIMM information from the system error log. (CSCtd44151)

Symptom When VT-UTF8 is selected as a terminal type in BIOS Setup, junk characters are seen on the terminal.

Workaround Do not select VT-UTF8 as terminal type. Use the default VT100 mode. (CSCtb25124)

Symptom Installation of any UEFI Aware Operating System may result in a complete system failure.

Workaround No workaround exists. We do not support UEFI aware Operating Systems. (CSCtd71780)

CIMC

Symptom After resetting a C250 M1 to factory defaults, if the network cable is connected to management port 2, the restored IP doesn't ping other addresses. Factory default mode is not supposed to be used for normal operation. If ethernet management port 2 is used it gets a static IP used by Cisco even if DHCP is enabled.

Workaround Connect to management port 1 instead. (CSCte93298)

Release 1.0(1d)

The following caveats were opened in UCS software release 1.0(1d) and are still unresolved.

Misc

Symptom The following message appears after installation or upgrade to ESX 4.0 vSphere:
`Error:TSC: 1137350434cpu0 :0)NUMA : 827 Signficant imbalance between NUMA nodes detected. Performance may be impacted.:`

Workaround There are two possible workarounds.

Option 1: Ensure that memory configuration is equal across both processors. Ensure that there are equal amounts of DIMMs of the same size and speed inserted in the DIMM sockets.

Option 2: Reboot system and enter BIOS setup by pressing F2. Go to **Advanced-->Memory Configuration-->Memory RAS --> Performance Configuration**--> and change NUMA Optimized to Disabled. Press F10 to save and reboot. (CSCtc33846)

BIOS

Symptom When a configuration uses a large number of PCIE devices with Option ROM, a device's legacy Option ROM may not be loaded by BIOS, limiting the ability to boot from that device. The system BIOS searches for and executes Option ROM in the order it enumerates the PCIE devices. In some cases, the Option ROMs which gets loaded earlier may take all the available 128K space leaving no space for the remaining Option ROMs. This limitation is inherent in PC and server architecture.

Workaround There is no workaround. (CSCte19257)

Symptom When a USB keyboard or mouse is hot plugged during an Option ROM initialization or configuration screen, it may not work during BIOS POST. Only the hot-plugged keyboard/mouse will not work, other devices which are plugged-in before or after the Option ROM, will work.

Workaround Do not hot plug a USB keyboard/mouse during Option ROM initialization or configuration. (CSCtb84361)

Symptom After replacing the CMOS battery and reconnecting AC power, the system does not restart.

Workaround None, the server needs to be sent back to Cisco for recovery. (CSCtd79490)

Symptom Installation of any UEFI Aware Operating System may result in a complete system failure.

Workaround No workaround exists. We do not support UEFI Aware Operating Systems. (CSCtd71780)

Web UI

Symptom A system configured to generate SNMP notification on hard drive removal is not generating the notification. SEL and IPMI events are being generated.

Workaround Use IPMI event monitoring or SEL instead of SNMP. (CSCtd82129)

Symptom On completion of the "Recover Corrupt BIOS" wizard, clicking on the "Finish" button brings up a dialog with the message "BIOS recovery may not be in a state in which it can be canceled. Attempt to cancel anyway?"

Workaround The message is shown erroneously. Simply click "Yes" to close the message dialog. (CSCtd84141)

Symptom A name without domain part used during login in a scenario where authentication fails over from AD to CIMC does not succeed.

Workaround To connect to an AD server you need to use the full form of a user name (like bob@domain.com, even if domain.com had been specified in AD configuration). If this fails because the AD server is unreachable then login with the partial name. (CSCtd74258)

Release 1.0(1)

The following caveats were opened in UCS software release 1.0(1) and are still unresolved.

BIOS

Symptom Faulty DIMMs size and speed are sometimes reported in SMBIOS Type 17. The expected behavior is to report "No DIMM" for failed DIMM slots.

Workaround The user should not assume all DIMMs reported through SMBIOS type 17 are working. Instead the user should go to BIOS setup to investigate working and failing DIMMs. You can also retrieve DIMM failure information from SEL. (CSCtd44151)

Symptom When CMOS is cleared by jumper or by CIMC, the date and time of the system does not get reset to a default value or keep its correct value.

Workaround After clearing the CMOS, set the correct date and time using the BIOS setup or booting to an OS. (CSCtd38095)

Symptom If the BIOS senses a faulty memory DIMM the LED next to the slot will not be lit until after the BIOS POST is complete.

Workaround None, the delay is unavoidable. The fault information is available in the BIOS setup memory information and the BMC SEL event log, you can check there to discover which DIMM is faulty. (CSCtd44133)

Symptom When VT-UTF8 is selected as a terminal type in BIOS Setup, junk characters are seen on the terminal.

Workaround Do not select the VT-UTF8 terminal type, instead use the VT100 default mode. (CSCtb25124)

Symptom After installing the CMOS clear jumper or clearing CMOS from CIMC, the date shows as 01/01/01XX. The expectation is to see the default date as 01/01/1998.

Workaround After clearing CMOS, the user is expected to set the correct date. Once the date is set to a correct date, it will persist. (CSCtc14697)

Symptom EFIOptimized is a command under the UEFI Shell used to enable EFI optimized mode which removes legacy components of the BIOS. When you enable this mode, the boot order is changed to boot from the EFI Shell only. When you disable this mode, the expectation is to see previously configured devices in the boot order, but in the case of the LSI 1064E SAS controller, you will not see the SAS drives in the BIOS Setup screen.

Workaround Reapply the desired boot order through Web UI or CLI interfaces of CIMC. (CSCtc76805)

GUI Interface

Symptom The WebUI **Admin->User Management->Sessions** page does not get refreshed automatically when the user launches the KVM console. When you go to the **Admin->User Management->Sessions** page and click on the "Launch KVM Console" button on the toolbar the KVM Console will pop-up however the KVM Console session is not reported on the Sessions page.

Workaround Click the "Refresh" button on the toolbar to see the new KVM session.(CSCtb06106)

Symptom Existing WebUI sessions are not terminated after changing the CIMC IP address. After changing the IP address, the WebUI will not respond to requests at the old IP address. You will need to log in to the WebUI again at the new IP address. The old WebUI sessions however will still be active and can be seen in the **Admin -> User Management -> Sessions** screen.

Workaround There are three possible workarounds:

1. After changing the IP address, manually log out from the session immediately and log in again using the new IP address.

2. After logging in using the new IP address, manually terminate the old sessions using the **Admin -> User Management -> Sessions** screen.

3. Do nothing and the sessions will automatically time out after the configured timeout period. (CSCtb72716)

IPMI

Symptom POST Quiet display function does not work as expected. POST diagnostic messages display on the screen instead of the Cisco logo.

Workaround Go to the BIOS setup and use the Quiet boot mode option to enable Quiet boot mode and display the Cisco logo if desired. (CSCtb85059)

Symptom When using the IPMI SOL set configuration commands, IPMI SOL parameter changes can be applied even if the sub-function is disabled

Workaround None. (CSCtb64323)

KVM

Symptom Launching the KVM console with Microsoft Internet Explorer browsers fails and causes the message "Internet Explorer was not able to open this Internet site. The requested site is either unavailable or cannot be found." This error occurs with Microsoft Internet Explorer browsers with the advanced "Do not save encrypted pages to disk" option set.

Workaround From the Internet Explorer toolbar, select **Tools -> Internet Options**. The Internet Options dialog will pop up. Click the Advanced tab and uncheck the "Do not save encrypted pages to disk" option. (CSCtd19439)

Documentation Updates

SNMP

In the CLI and GUI configuration guides, the "Exporting the CIMC Configuration" task should include the following prerequisite:

- If you want the option to restore the SNMP configuration information when you import the configuration file, make sure that SNMP is enabled on this server before you create the configuration file. If SNMP is disabled when you export the configuration, CIMC will not apply the SNMP values when the file is imported.

In addition, the "Importing a CIMC Configuration" task should include the following prerequisite:

- If you want to restore the SNMP configuration information when you import the configuration file, make sure that SNMP is disabled on this server before you do the import. If SNMP is enabled when you perform the import, CIMC does not overwrite the current values with those saved in the configuration file.

Active Directory

In the section titled "Active Directory" in the Cisco UCS C-Series Servers Integrated Management Controller CLI Configuration Guide, Release 1.2(1), and the Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 1.2(1), the following statement is incorrect:

"When Active Directory is enabled in the CIMC, all user authentication and role authorization is performed by Active Directory, and the CIMC ignores the local database. If the CIMC cannot connect to Active Directory, it reverts to the local database."

The correct behavior is as follows:

"When Active Directory is enabled, user authentication and role authorization are performed by Active Directory for user accounts not found in the local user database."

Related Documentation

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

- Cisco UCS C-Series Servers Integrated Management Controller CLI Configuration Guide, Release 1.1(1)
- Cisco UCS C-Series Servers Integrated Management Controller Configuration Guide, Release 1.1(1)
- Cisco UCS C-Series Servers Integrated Management Controller CLI Command Reference, Release 1.1(1)

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

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