Release Notes for the Cisco CSS UCS Servers: CPS-UCSM4-1RU-K9 and CPS-UCSM4-2RU-K9

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This document provides important information for the following Cisco Connected Safety and Security UCS Platform Series servers:

- CPS-UCSM4-1RU-K9
- CPS-UCSM4-2RU-K9

This document includes the following sections:

What's New in this Release

This document describes the following Cisco Connected Safety and Security UCS Platform Series servers.

- CPS-UCSM4-1RU-K9
- CPS-UCSM4-2RU-K9

The Cisco Connected Safety and Security UCS series servers provide a hardware platform for Cisco Connected Safety and Security applications, such as the Cisco Video Surveillance Manager.

Server Model Comparison

The Cisco Connected Safety and Security UCS series servers are available in a 1RU and 2RU configuration and include the following features:

Table 1   Supported Hardware Feature Comparison

Feature	CPS-UCSM4-1RU-K9	CPS-UCSM4-2RU-K9
Form-Factor	1 RU	2 RU
Processor	Single Intel Xeon E5-2600 v3 Series processor	Dual Intel Xeon E5-2600 v3 Series processors
Memory	16GB	32GB
HDD[1]	Up to four 4TB drives for a maximum capacity of 16TB.	Up to twelve 6 TB drives for a maximum capacity of 72TB.

1. 3.5-inch large form factor (LFF) SAS hard drives

✎

Note   The supported features described in Table 1 are a sub-set of the features supported by the Cisco UCS platform. See the Cisco Physical Security UCS Platform Series User Guide for more information.

Getting Started

To install and configure a Cisco Connected Safety and Security UCS series server appliance for the first time, complete the following high-level steps:

Procedure

Step 1   Physically install the Cisco Connected Safety and Security UCS series server appliance and complete the initial hardware setup. See the Cisco Physical Security UCS Platform Series User Guide.

Step 2   Configure Cisco Video Surveillance Manager. See the Cisco Video Surveillance Install and Upgrade Guide for more information.

Step 3   Use the Cisco Integrated Management Interface (CIMC) to monitor server health and events.

Step 4   Use the Cisco Video Surveillance Management Console to monitor additional server health and events.

Important Notes

NIC Redundancy

The Cisco Connected Safety and Security UCS series servers support the following:

- One 1-Gb Ethernet dedicated management port

- Two 1-Gb Base-T Ethernet ports

Note
- The LAN Ethernet posts are referred to as "Eth 0" and "Eth1" in the Cisco Connected Safety and Security applications, such as Cisco Video Surveillance.

- The Cisco Connected Safety and Security UCS series servers do NOT support the NIC redundancy modes. Only the *None* option is supported: the Ethernet ports operate independently and do not fail over if there is a problem.

Hard Drive Requirements

- Drives are not rebuilt when the same drive is removed and reinserted. The removed drive must be replaced with a new drive. The rebuild will start automatically.

- Installation is supported only the following drive combinations.
    - Cisco CSS UCSM4 1RU—Supports either 2 or 4 hard drives (other combinations are not supported).
    - Cisco CSS UCSM4 2RU—Supports either 2 or 6-12 drives (other combinations are not supported).

- All drives must be of the same capacity. Drives of different capacities are not supported (for example, you cannot mix 2TB, 4TB or 6TB drives in the same server).

- Installation is supported only if all hard drives are in optimal state.

Supported Options

The following sections provide information about the devices that this version of VSM supports:

- Emulex LPe 12002 Dual Port 8Gb Fibre Channel HBA Card, page 4

Note
See the "Server and FRU Part Numbers (PIDs)" section on page 8 for a complete list of the available servers and supported components.

Emulex LPe 12002 Dual Port 8Gb Fibre Channel HBA Card

The Cisco CSS UCSM4 1RU and Cisco CSS UCSM4 2RU servers support the (optional) Emulex LPe 12002 Dual Port 8Gb Fibre Channel HBA (CPS-AEPCI05) card. This card is used to connection external devices, such as external storage.

See the following for more information:

- LightPulse® LPe12000/LPe12002 Data Sheet for product overview information: http://www.cisco.com/en/US/prod/collateral/modules/ps10277/ps12571/elx_ds_all_hba_lpe12000. pdf

- Emulex LightPulse LPe12002 website, including features, specifications, and other information: http://www.emulex.com/products/fibre-channel-hbas/emulex-branded/lightpulse-lpe12002/features.html

Supported Firmware and BIOS Versions

Table 2   CPS-UCSM4-1RU-K9 Supported Firmware and BIOS Versions

Feature: CPS-UCSM4-1RU-K9	Version
System BIOS	C220M4.2.0.9b.0.012520161814
CIMC Firmware	2.0(9e)
Cisco 12G RAID controller BIOS	6.22.03.0_4.16.08.00_0x060B0200
Cisco 12G RAID controller Firmware	4.270.00-4612

Table 3   CPS-UCSM4-2RU-K9 Supported Firmware and BIOS Versions

Feature: CPS-UCSM4-2RU-K9	Version
System BIOS	C240M4.2.0.9.26.111820151651
CIMC Firmware	2.0(9e)
Cisco 12G RAID controller BIOS	6.25.03.3_4.17.08.00_0x060E0301
Cisco 12G RAID controller Firmware	4.290.00-4911

Supported Applications

The current release of the Cisco Connected Safety and Security UCS series servers support the following application:

- Cisco Video Surveillance Manager, Release 7.7 and higher, page 5

Cisco Video Surveillance Manager, Release 7.7 and higher

- Overview, page 5
- Initial Setup Procedure, page 5
- Upgrading the Cisco VSM System Software, page 6
- Recovering the Cisco VSM System Software, page 6
- More Information, page 7

Overview

The Cisco Connected Safety and Security UCS series servers support Cisco Video Surveillance Manager (Cisco VSM), Release 7.7 and higher. The Cisco Connected Safety and Security UCSM4 1RU and Cisco Connected Safety and Security UCSM4 2RU servers are shipped as server appliances, meaning that the Cisco Video Surveillance Manager system software is pre-loaded in a "bare-metal" configuration.

Note These servers do not currently support additional virtual machine (VM) installations. Virtual Machine deployment is supported on separate Cisco UCS Express, and B-, C-, and E- Series platform servers. See the "VM Installations" section on page 7 for more information.

Initial Setup Procedure

To install and configure a Cisco Connected Safety and Security UCS series server appliance for the first time, complete the following high-level steps:

Procedure

Step 1 Physically install the Cisco Connected Safety and Security UCS series server appliance and complete the initial hardware setup.

- See the Cisco Physical Security UCS Platform Series User Guide

Step 2 Complete the initial server setup.

- See the Cisco Video Surveillance Install and Upgrade Guide for instructions to use the browser-based Cisco Video Surveillance Management Console to complete the initial server setup for the Cisco Video Surveillance Manager.

- See also the Cisco Video Surveillance Management Console Administration Guide.

Step 3 Use the browser-based Cisco Video Surveillance Operations Manager to configure additional server options and Cisco VSM features.

See the Cisco Video Surveillance Operations Manager User Guide.

Upgrading the Cisco VSM System Software

To update the Cisco VSM system software, use the browser-based Cisco VSM Management Console to install the upgrade file that contains all required packages and components.

See the **Server Upgrade** section of Cisco Video Surveillance Management Console Administration Guide for instructions to obtain and install system upgrades.

Recovering the Cisco VSM System Software

To create a bootable USB flash drive used to recover an installation or perform a a factory installation of Cisco VSM 7, see the Cisco Video Surveillance Manager Recovery Guide (Cisco Connected Safety and Security UCS Platform Series).

The recovery options include the following:

Table 4   Recovery Options

Option	Description
recovery	Reinstalls the operating system. • Recorded video is preserved. • RAID configurations are preserved (only the OS partitions are formatted).
factory	Restores the server to the factory default settings: **Note** You must disconnect any external storage before using this option • Reinstalls the operating system. • Clears and reconfigures the RAID. ⚠ **Caution** This action deletes all data and video files.
factory_raid5	Restores a Cisco CSS UCSM4 2RU server to the factory default settings, including: **Note** Valid only on the Cisco CSS UCSM4 2RU with 6 or 12 internal drives. **Note** You must disconnect any external storage before using this option. • Reinstalls the operating system. • Clears and reconfigures the RAID. ⚠ **Caution** This action deletes all data and video files.
rescue	Boot to prompt from USB media. Use this option to recover a password or for other administrative tasks

More Information

See the following for more information:

- Related Documentation, page 9
- The Cisco Video Surveillance 7 Documentation Roadmap available at http://www.cisco.com/go/physicalsecurity/vsm/roadmap. This document provides descriptions and links to Cisco Video Surveillance documentation, server and storage platform documentation, and other related documentation.

Server Monitoring and Management Tools

The following software tools are used to monitor server health and events:

- Cisco Integrated Management Interface (CIMC), page 7
- Cisco Video Surveillance Management Console, page 7

Cisco Integrated Management Interface (CIMC)

You can monitor the server inventory, health, and system event logs by using the built-in Cisco Integrated Management Controller (CIMC) GUI or CLI interfaces. See the user documentation for your firmware release at the following URL:

http://www.cisco.com/en/US/products/ps10739/products_installation_and_configuration_guides_list.html

For example: see the Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 1.5.

Cisco Video Surveillance Management Console

For the Cisco Video Surveillance Manager application, use the browser-based Cisco VSM Management Console to configure, manage and monitor the server.

See the Cisco Video Surveillance Management Console Administration Guide for more information.

VM Installations

The current release of the Cisco Connected Safety and Security UCS series servers *not* currently support additional virtual machine (VM) installations. These servers are shipped pre-configured as a server appliance pre-loaded with the Cisco Video Surveillance Manager system software.

Virtual Machine deployment is supported on separate Cisco UCS Express, and B-, C-, and E- Series platform servers. See the Cisco Video Surveillance Virtual Machine Deployment and Recovery Guide for UCS Platforms for more information.

Server and FRU Part Numbers (PIDs)

The following servers and field replaceable units (FRUs) are supported by the Cisco Connected Safety and Security UCS Platform Series servers. Refer to these PIDs when ordering new or replacement components.

Table 5   *Part Numbers for the Cisco Connected Safety and Security UCS Platform Series*

Type	Part Number (PID)	Description
Server appliance	CPS-UCS-1RU-K9=	Cisco Connected Safety and Security UCSM4 1RU server
	CPS-UCS-2RU-K9=	Cisco Connected Safety and Security UCSM4 2RU server
Hard Drives	UCS-HDD2TI2F213	2 TB SAS 7.2K RPM 3.5 inch HDD
	UCS-HD4T7KS3-E	4TB SAS 7.2K RPM 3.5 inch HDD
	UCS-HD6T7KL4K	6 TB SAS 7.2K RPM 3.5 inch HDD
RAID Controller	UCSC-MRAID12G	Cisco 12G SAS Modular Raid Controller
Fiber Channel PCIe Card	N2XX-AEPCI05	Emulex LPe 12002 Dual Port 8Gb Fibre Channel HBA
Memory	UCS-MR-1X162RU-A	16GB DDR4-2133-MHz RDIMM/PC4-17000/dual rank/x4/1.2v
Power Supplies	CPS-PSU-650W=	650W power supply for CPS-UCS-M4-2RU-K9 server
	CPS-PSU1-770W	770W power supply for CPS-UCS-M4-1RU-K9 server

Using the Software Bug Toolkit

Use the Bug Search tool to find information about most caveats for releases, including a description of the problems and available workarounds. The Bug Search tool lists both open and resolved caveats.

To access Bug Search tool, you need the following items:

- Internet connection
- Web browser
- Cisco.com user ID and password

To use the Bug Search tool, follow these steps:

Procedure

Step 1   To access the Bug Toolkit, go to https://tools.cisco.com/bugsearch.

Step 2   Log in with your Cisco.com user ID and password.

Step 3   To look for information about a specific problem, enter the bug ID number or description in the **Search For** field, then press **Enter/Return**.

Step 4   To look for information if you do not know the bug ID number, use the other fields available in the tool.

Related Documentation

Installation and Administration

Cisco Physical Security UCS Platform Series User Guide.

http://www.cisco.com/en/US/products/ps10823/products_user_guide_list.html

Additional Server Hardware and Software Documentation

Cisco UCS C-Series Server Documentation (Roadmap)

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

Cisco Video Surveillance 7 Documentation Roadmap

Descriptions and links to Cisco Video Surveillance documentation, server and storage platform documentation, and other related documentation.

http://www.cisco.com/go/physicalsecurity/vsm/roadmap

Cisco Physical Security Product Information:

www.cisco.com/go/physicalsecurity/