

Release Notes for Cisco UCS Platform Emulator, Release 2.1(1aPE3)

First Published: November 26, 2012 Part Number: OL-28288-01 CO Current Release: 2.1(1aPE3)

This document describes system requirements, new features, images information, resolved caveats, known caveats and workarounds for Cisco UCS Platform Emulator, Release 2.1(1aPE3). This document also includes current information that became available after the technical documentation was published.

Use this release notes as a supplement with the other documents listed in the documentation roadmap http://www.cisco.com/go/unifiedcomputing/b-series-doc.

Make sure to review other available documentation on Cisco.com to obtain current information on Cisco UCS Platform Emulator.

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Revision History

Table 1 shows the revision history:

Table 1 Online History Change

Part Number	Revision	Release	Date	Description
OL-28288-01	A0	2.1(1aPE1)	November 26, 2012	Created Release notes for Cisco UCS Platform Emulator, Release 2.1
OL-28288-01	В0	2.1(1aPE2)	December 20, 2012	Updated release information to support Release 2.1(1aPE2).
				Updated: New Software Features, Known Limitations
				Added: CSCud75075.
OL-28288-02	C0	2.1(1aPE3)	February 21, 2012	Added: CSCud77593, CSCud93243, CSCue20944, CSCud92761, and CSCue27490.

Introduction

Cisco UCS Platform Emulator is the Cisco UCS Manager application bundled into a virtual machine (VM). The VM includes software that emulates hardware communications for the Cisco Unified Computing System (Cisco UCS) hardware that is configured and managed by Cisco UCS Manager. For example, you can use Cisco UCS Platform Emulator to create and test a supported Cisco UCS configuration, or to duplicate an existing Cisco UCS environment for troubleshooting or development purposes.



Cisco UCS Platform Emulator, Release 2.1(1aPE3) replaces Release 2.1(1aPE2). You should recreate a new Cisco UCS Platform Emulator VM with the newest Cisco UCS Platform Emulator version to use the latest features.

Cisco UCS Platform Emulator Virtual Machine Packaging

Cisco UCS Platform Emulator is packaged as a compact virtual machine (VM) with the CentOS open source Linux distribution. This VM can run a Cisco UCS Manager multichassis, multiblade simulation on a laptop or desktop computer and does not require an internet connection. Cisco UCS Platform Emulator is delivered as a zip file and as an .ova file. The zip file includes the.vmx file. The filename of the zip file includes the Cisco UCS Platform Emulator release number, such as Cisco_UCS_Platform_Emulator_2.1.1aPE3.zip. The file size is approximately 490 to 500 MB.

System Requirements

Before installing Cisco UCS Platform Emulator, ensure the system meets the following requirements:

- 2 GB free RAM
- 8 GB disk space

- 1.8-GHz single CPU
- A Mozilla-compatible browser (Firefox or Google Chrome)
- Java Runtime Environment 1.6 or later. You can download files from http://www.java.com

Virtual Machine Prerequisites

Before installing Cisco UCS Platform Emulator, install one of the following supported virtual machine (VM) hypervisors:

- VMware Player 4.0 and above for Microsoft Windows and Linux
- VMware Workstation 7 and above for Microsoft Windows and Linux
- VMware Fusion 4.0 and above for Mac OS X
- VMware vSphere ESXi 4.0 and above
- Microsoft Hyper-V Server
- Java Runtime Environment Version 1.7

New Hardware Features

Cisco UCS Platform Emulator, Release 2.1(1aPE3), adds support for the following new hardware:

- Rack-Mount Servers
 - Cisco UCS C200 High-Density Rack-Mount Server
 - Cisco UCS C210 General-Purpose Rack-Mount Server
 - Cisco UCS C250 Extended-Memory Rack-Mount Server
 - Cisco UCS C220 Rack Server
 - Cisco UCS C240 Rack Server
 - Cisco UCS C22 Rack Server
 - Cisco UCS C24 Rack Server
- Fabric Extender
 - Cisco Nexus 2232 Fabric Extender
- Switches
 - Cisco UCS 6248UP
 - Cisco UCS 6296UP
- Blade Servers
 - Cisco UCS B-22 Blade Server
 - Cisco UCS B-250 Blade Server
 - Cisco UCS B-440 Blade Server
- Network Adaptors
 - Cisco UCS VIC 1280 Virtual Interface Card
 - Cisco UCS VIC 1240 Virtual Interface Card
 - Cisco UCS VIC 1225 Virtual Interface Card
 - Emulex OCe11102-F Converged Network Adapter

- Qlogic QLE8242 Converged Network Adapter
- Broadcom NetXtreme II
- I/O Module
 - Cisco UCS I/O Module 2208XP

New Software Features

This section briefly describes the new features introduced in Cisco UCS Platform Emulator, Release 2.1(1aPE3). For detailed information about the features listed, see the documents listed in the "Related Documentation" section.

Cisco UCS Platform Emulator, Release 2.1(1aPE3) includes the following new software features:

- Catalog has been updated to include all supported CPUs and DIMMs.
- When the Cisco UCS Platform Emulator system name is changed, Release 2.1(1a) includes a resolution to an fsm-failed critical fault.
- Default database persistence status has changed to Preserve Database. The default is no longer Reset Database.
- Cluster high availability (HA) support on the back-end and the GUI.
- Fabric extender and rack-mount server support.
- Multiple uplinks supported till 8 uplinks.
- Connection support for hardware to non-primary fabric interconnect slots.
- Import from Live Cisco UCS and Import XML upgraded support for rack servers.
- NTP/NFS support for Cisco UCS Central scaling.
- Enabling backup and restore feature on Cisco UCS Manager of Cisco UCS Platform Emulator except full-state backup.
- New validate configuration feature in the GUI.
- New automated rack to fabric extender connection algorithm for rack-mount servers in the GUI.
- Cisco UCS Platform Emulator technical support for debugging.
- Unified port support for Cisco UCS 6248UP and Cisco UCS 6296UP fabric interconnects.
- Online help for Cisco UCS Platform Emulator.
- Status summary displays the process status in the GUI.
- Pmon used to restart terminated processes.
- Persist the Cisco UCS Manager database using the GUI.
- Certificate generation for Cisco UCS Central registration.
- Network settings such as the cluster status and the static IP address can be changed using the VM console.
- New hypervisor support is added (you can use VMplayer, VMfusion, VMware vSphere Hypervisor (ESXi). For additional information on using hypervisors, see the current *Cisco UCS Platform Emulator User Guide* and the Virtual Machine Prerequisites section.

Known Limitations

Cisco UCS Platform Emulator, Release 2.1(1aPE3) has the following limitations:

- **Singe-wire management**—Single-wire management of rack-mount servers is not supported in Cisco UCS Platform Emulator, Release 2.1(1aPE3).
- Import from a running Cisco UCS system and import from XML—If you import a setup with rack servers, we recommend that the setup is either a true high-availability (HA) or a true stand-alone setup. If there is a mixed configuration then the import may not work.
- **Recommission and decommission**—Chassis and blade server recommission and decommission are not supported. Only rack servers can be recommissioned or decommissioned.
- **Domain Name Server (DNS) resolution** DNS resolution is not available for Cisco UCS Platform Emulator. All domain names must be resolved manually using a static IP address.
- **Blade server discovery**—When a blade server discovery is complete, performing a power ON/OFF to boot the server is not supported.
- Blade server configuration error—A configuration error message is displayed when the configuration includes a Cisco UCS B200 M3 Blade Server and only the Cisco UCS 1240 Virtual Interface Card. The error message displays "Identify Unestablishable". The blade server configuration will not fail if you include the Cisco UCS 1240 Virtual Interface Card and the Cisco UCS 1280 Virtual Interface Card in the configuration.
- **Syslog**—Cisco UCS Platform Emulator and Cisco UCS Manager integrated with Cisco UCS Platform Emulator does not produce a syslog.
- **Data path**—Cisco UCS Platform Emulator does not emulate network data flow. The software emulates the functions that are necessary for the management plane.
- XML Export in Google Chrome—The Startup Hardware Configuration user interface allows you to save the XML-formatted hardware configuration to a local computer. This is the client computer that is running the browser. To save the file, click Export Configuration to XML File > Save as... and then save the XML text to a local file. However, If you are using Google Chrome, you must save the file as a .txt file. If you save the file in another format such as .xml, Google Chrome adds unnecessary HTML tags in the saved file produces an incorrect XML format.
- **Microsoft Internet Explorer**—Microsoft Internet Explorer does not support the Cisco UCS Platform Emulator **Model Object Browser** and **Start-up Inventory** features. To use these features, you must use a Mozilla-compatible browsers such as Mozilla Firefox or Google Chrome. Internet Explorer Version 8.0 and later supports other Cisco UCS Platform Emulator features.
- Cut-through interfaces—Cut-through interfaces to equipment such as IPMI and SNMP, are not supported. Servers in a Cisco UCS domain contain integrated management controllers (CIMCs), each of which supports an IPMI interface. The fabric interconnect components of Cisco UCS support an SNMP interface. However, because both fabric interconnects and CIMC are considered to be endpoints of the Cisco UCS management system, these interfaces are cut-through interfaces that bypass Cisco UCS Manager, the central management system.
- Serial over LAN, FTP, TFTP, Telnet
 — Similarly to SNMP and IPMI interfaces, serial over LAN, TFTP, FTP, and Telnet access (through user-facing or management-plane-facing Ethernet interfaces) is not available because they bypass the management software and are considered cut-through access. SSH is supported only to the Cisco UCS Platform Emulator management IP through the config user for Cisco UCS Manager CLI access.
- **Keyboard/Video/Mouse** (KVM)— KVM is a cut-through interface. Cisco UCS Platform Emulator does not support KVM because there are no physical servers attached to the emulation system to which KVM could connect. Launching the KVM console does not display an error message.

- Emulation of high-availability failover— No failover scenario is supported. If one management process dies, the other does not take over.
- AAA-based authentication (LDAP, RADIUS, TACACs)— In emulation mode, Cisco UCS
 Manager accepts security configuration changes, but does not enforce local or remote password
 authentication. Any username and password combination can successfully log in to the Cisco UCS
 Manager GUI with administrator privileges. If a local user is created with a role and locale, Cisco
 UCS Platform Emulator enforces role, privilege, and locale definitions for the user logging in,
 allowing an end user to test how roles, privileges, and locales function in Cisco UCS Manager.
- Remote monitoring (SNMP, Syslog, Call Home, Smart Call Home)—Cisco UCS Platform
 Emulator does not support remote monitoring of Cisco UCS Manager on any interface except the
 Cisco UCS Manager XML API. You can configure SNMP (traps or gets), local or remote syslog,
 Call Home, and Smart Call Home remote monitoring in Cisco UCS Platform Emulator but you
 cannot send or query data through those interfaces.
- Cisco UCS Manager database backup and restore—Cisco UCS Platform Emulator does not support full- state back up or restore configurations from within Cisco UCS Manager.
- Install-all feature—The install-all feature does not work as it does in Cisco UCS Manager.
- Capability catalog—Cisco UCS Platform Emulator does not support updating the capability catalog in Cisco UCS Manager. Cisco UCS Platform Emulator supports only the original capability catalog.
- Hardware changes—The following list describes the hardware changes:
 - PSUs, fans, and HDDs added to rack servers do not appear in the Cisco UCS Manager GUI.
 - The Cisco UCS C460 server, Cisco UCS C260 server, Cisco UCS C420 M3 server and Cisco UCS B420 M3 server are not supported in Cisco UCS Platform Emulator, Release 2.1(1aPE3).
 - Cisco UCS Platform Emulator does not support adding or removing hardware, such as servers, chassis, I/O modules, and power supplies, dynamically in the Cisco UCS Platform Emulator control panel. Adding, modifying, or removing hardware in the Cisco UCS Platform Emulator startup hardware configuration requires you to restart the Cisco UCS Platform Emulator application software.

Resolved Caveats for Release 2.1(1aPE3)

This section lists the resolved caveats for this release.

Bug ID	Description
	When using Cisco UCS Platform Emulator Release 2.0 and later, an error may occur with the hwRevision class where <> characters are added in the property description. This may cause validation or integration errors.

Open Caveats for Release 2.1(1aPE3)

This section lists the open caveats for this release.

Bug ID	Symptom	Workaround	
CSCtz52645	Recommissioning the chassis fails.	None.	
CSCua26748	The Power State option is not available in the GUI.	None.	
CSCua87628	Decommissioned blade servers can not be recommissioned. This issue occurs with single and/or multiple servers.	When performing a recommission operation, an error message is displayed indicating the process failed. Only rack servers can be recommissioned or decommissioned.	
CSCub78823	Domain Name Service (DNS) is not working.	None.	
CSCuc29879	The Boot Server option is disabled in the GUI.	None.	
CSCuc29957	Launching KVM console in the GUI does not display an error message.	None.	
CSCuc39084	HDDs, Fans, PSUs are not displayed in the GUI	None.	
CSCud75075	Upon setting the database persistence to Reset Database , rebooting the VM three times consecutively causes the HTTPD process to fail.	Another VM reboot fixes this problem.	
CSCud77593	Using Cisco UCS Platform Emulator, Release 2.1(1a), when the high availability configuration is stand-alone mode (Single Fabric Interconnect, no HA), all server discoveries fail in 'Discover Hag Connect' FSM. This occurrence affects the Cisco UCS Central scale testing.	CSCud77593	
CSCud92761	In some cases, the Cisco UCS B200 M3 Blade Server is not compatible with some I/O adaptors. You may see an Illegal FRU and Inoperable status error message.	None.	
CSCud93243	When the Cisco UCS B200 M3 Blade Server is configured with only a VIC-1280 I/O adptor, discovery of the server fails in Cisco UCS Manager.	The blade server configuration will not fail if you include a Cisco UCS 1240 Virtual Interface Card in the configuration.	
CSCue27490	UCS Platform Emulator loaded with more than 10 chassis and powered on for long durations causes the HTTPD process to fail and _the control panel will be inaccessible.	Perform a reboot of the VM.	

Related Documentation

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

- Link to bundle images document
- Cisco UCS Documentation Roadmap

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

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