

# Release Notes for Cisco UCS Platform Emulator, Release 2.2(1bPE1)

First Published: December 16, 2013 Part Number: OL-28288-02F0 Current Release: 2.2(1bPE1)

This document describes system requirements, new features, images information, known caveats and workarounds for Cisco UCS Platform Emulator, Release 2.2(1bPE1). 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 Changes

lable 1 Unline History Changes					
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 and Known Limitations	
				Added: CSCud75075	
OL-28288-02	C0	2.1(1aPE3)	February 21, 2012	Added: CSCud77593, CSCud93243, CSCue20944, CSCud92761, and CSCue27490.	
OL-28288-02	D0	2.1(2aPE1)	July 25, 2013	Updated release information to support Release 2.1(2aPE1).	
				Updated: New Hardware Features, New Software Features, Known Limitations,	
				Added: CSCui24389, CSCue30603 CSCuh85876, CSCue13729, and CSCui21714	
OL-28288-02	E0	2.1 (3aPE1)	September 11, 2013	Added:	
				New SmartPlay Bundles	
				New Intel Ivy Bridge Processors	
OL-28288-02	F0	2.2 (1bPE1)	December 17, 2013	Updated the following information to support UCS PE 2.2(1bPE1)	
				Updated: New Hardware Features, New Software Features, Known Limitations	
				Added: CSCul42638, CSCul28894, CSCul49145, CSCum00462 and CSCum05692	

## 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 2.2 (1bPE1) replaces Release 2.1(3aPE1). 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\_2.2.1bPE1.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 2.2(1bPE1), adds support for the following new hardware:

• SD card - All supported Compute servers now have SD card in their slot.

#### **New Software Features**

This section briefly describes the new features introduced in Cisco UCS Platform Emulator, Release 2.2(1bPE1). For detailed information about the features listed, see the documents listed in the "Related Documentation" section.

Cisco UCS Platform Emulator, Release 2.2(1bPE1) includes the following new features:

- Smartplay bundles with new bundle packs
- Second-level boot order support for Blade and Rack servers
- User-Space NIC (usNIC) support for Blade and Rack servers
- Firmware download support from a local file system
- Direct Connect Rack configuration feature in the Emulator GUI
- SD card firmware upgrade support for supported Compute servers
- From UCS PE 2.2(1bPE1) onwards, download of only the stripped-down version of UCS Firmware is supported. The stripped-down version is approximately 50 kB in size.
- Observation of fault behavior in the Emulator GUI

#### **Known Limitations**

Cisco UCS Platform Emulator, Release 2.2(1bPE1) has the following limitations:

- **Download of stripped-down version of UCS Firmware** From UCS PE 2.2(1bPE1) onwards, only the stripped-down version of size less than 50 KB is available for download. The download of regular (non-stripped version) version is not supported anymore.
- 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. If a user
  imports a system backup which consists of switch configurations such as VLAN, CallHome, and so
  on, the import operation fails.
- 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.
- Configuration of UCSC-PCIE-CSC-02 adaptor The Direct Connect Rack mode supports the UCS-PCIE-CSC-02 adaptor configuration only in SWM slot. The Emulator displays a configuration error message if the adaptor is configured to any other slot.

- 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.
- Import from Direct Connectivity set up The following list describes the limitations:
  - While importing from Direct Connect Rack set up, the Live Import feature imports only a pure set up (Rack servers are directly connected to the switch with no Fabric Extenders (FEX) or can have a dangling Fabric Extender (FEX) connected only to the switch). If there is a mixed configuration then, the import may fail to work.
  - While importing from Direct Connect Rack set up, the Live Import feature imports only the UCSC-PCIE-CSC-02 adaptor connected to the SWM slot of the server. The adaptors configured in other slots may not get imported.

# **Open Caveats for Release 2.2 (1bPE1)**

This section lists the open caveats for this release.

Bug ID	Symptom	Workaround
CSCul42638	In rare occasions, after performing an auto-install, CIMC and adaptors of a few servers will show status as "Pending next boot".	Restart UCSPE with "DB reset" and trigger auto-install again.
CSCul28894	On performing an auto-install two or more times subsequently, a few bios firmwares do not get updated and show a failure.	Restart UCSPE and perform auto-install directly to the firmware version desired.
CSCul49145	In rare occasions, after performing an auto-install, some adaptors fail to update with the error "Adaptor: repo lookup failed".	Restart UCSPE and perform auto-install again.
CSCum00462	Unpacking the regular (non-stripped) UCSM bundle fails and UCS Platform Emulator is unresponsive.	Factory Reset operation is required to recover the setup.
CSCum05692	On auto-install, some servers might show up a major fault with board controller firmware update failing.	Update firmware for that specific server using service profile or restart UCSPE and try auto-install again.

### **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 *What's New in Cisco Product Documentation* at: http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html.

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**Related Documentation**