Release Notes for Cisco UCS Platform Emulator, Release 2.1(2aPE1)

This document describes system requirements, new features, images information, known caveats and workarounds for Cisco UCS Platform Emulator, Release 2.1(2aPE1). 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.

Contents

This document includes the following sections:

Revision History

Table 1 shows the revision history:

Table 1   *Online 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	B0	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.
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

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.

Note   Cisco UCS Platform Emulator, Release 2.1(2aPE1) replaces Release 2.1(1aPE3). 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_2.1.2aPE1.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(2aPE1), adds support for the following new hardware:

- Rack-Mount Servers
  - Cisco UCS C260 M2 Rack Server
  - Cisco UCS C460 M2 Rack Server
  - Cisco UCS C420 M3 Rack Server
- Blade Servers
  - Cisco UCS B-420 M3 Blade Server
- Network Adaptors
  - Cisco UCS CNA M73KR-E Emulex Adapter
  - Cisco UCS CNA M73KR-Q Qlogic Adapter

New Software Features

This section briefly describes the new features introduced in Cisco UCS Platform Emulator, Release 2.1(2aPE1). For detailed information about the features listed, see the documents listed in the "Related Documentation"section.

Cisco UCS Platform Emulator, Release 2.1(2aPE1) includes the following new software features:

- Auto Install —Firmware download and upgrade is now supported. New firmware can be downloaded either from the Cisco Developer Network or any other source and installed on the Platform Emulator. Upgrade of installed firmware is supported only for B-Series and C-Series components such as bios, adaptor, CIMC, and storage controller. Installation can also be done using Host Firmware Pack and Auto Install feature.

- Single Wire Management—Added new tab called Single Wire Management under the Navigation Pane of the UCS Platform Emulator Control Panel

- Templates— Templates are pre-configured blade and rack servers with loaded equipments. You can drag and drop the templates on either a rack box or chassis. The templates merge with the present configuration

- Adding multiple objects in a single instance—Options to add multiple objects in a single drag and drop instance of equipments.

- Range of slot numbers—Option to enter slot range while adding:
  – DIMM, HDD, CPU, or PSU on rack servers and chassis
  – Fans on chassis

- Random statistics generation—Statistics are randomly for the following components:
  – Fabric Interconnect—envstats, Psu input-stats, sysstats, Network stats
  – Chassis—Fan Stats, Psu input-stats
  – FEX—envstats

- SmartPlay bundles—Added a new icon under the working pane of Startup Inventory page.

Known Limitations

Cisco UCS Platform Emulator, Release 2.1(2aPE1) has the following limitations:

- **Auto Install**—You must download firmware one at a time. Multiple downloads in the same instance is not supported. Download subsequent firmware only after the first download is completely done. Auto Install for infrastructure packages (UCS Manager, Fabric Interconnect, IO Modules) is not supported.

- **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.

- **SmartPlay Bundles in Mozilla Firefox**— Loading of SmartPlay Bundles in Mozilla Firefox is not supported.

- **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.

- **Hardware changes**—The following list describes the hardware changes:

    – 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.

Open Caveats for Release 2.1(2aPE1)

This section lists the open caveats for this release.

Bug ID	Symptom	Workaround
CSCui24389	Upon upgrade of an M3 Rack Server BIOS to a new version, if a re-acknowledgement of the server is performed, the new BIOS version changes back to the older version.	None
CSCue30603	When a read-only user is created on the UCS Manager, a critical fault is generated.	None
CSCuh85876	Error displayed when a Physical Ethernet FI port is configured as uplink port.	
CSCue13729	IOM connectivity to FI fails in some cases and throws up a "Fabric Unsupported Conn" fault on UCSM	Restart UCSPE with DB reset
CSCui21714	Upon firmware upgrade of CIMC of B-Series and C-Series servers using Auto Install or UCS Central, the upgrade may fail in a few cases showing an error message "Image Version Not Found"	Manually update CIMC of the server instead of using Auto Install

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.

Subscribe to *What's New in Cisco Product Documentation*, which lists all new and revised Cisco technical documentation, as an RSS feed and deliver content directly to your desktop using a reader application. The RSS feeds are a free service.

his document is to be used in conjunction with the documents listed in the "Related Documentation" section.