Upgrade CIMC on APIC

Contents

ntroduction	
Prerequisites	
Requirements	
Components Used	
<u>Sefore You Upgrade</u>	
Procedure	

Introduction

This document describes how to upgrade the Cisco Integrated Management Controller (CIMC) on UCS C Series Servers running the Cisco APIC.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Unified Computing System (UCS) Servers
- Application Policy Infrastructure Controller (APIC)

Components Used

The information in this document is based on APIC servers running on UCS C Series Servers.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Before You Upgrade

Upgrading the software version of the ACI Fabric can set new requirements on the CIMC version running on your Fabric, therefore, it is always advised to check the release notes of the APIC software version to know the list of supported CIMC software versions for a specific APIC release.

1. Check APIC Release notes, and confirm to which CIMC software image you need to upgrade to. Link to <u>APIC Release notes</u>.

2. Obtain Software image from Cisco.com site.

3. Confirm that the MD5 Checksum of the image matches the one published on Cisco.com site.

4. The time needed for the process of upgrading a CIMC version varies based on the speed of the link between the Local Machine and the UCS-C chassis, and source/target software image and other internal

component versions.

5. CIMC upgrade does not impact the production network as APICs are not in the Data Path of the traffic.

6. When you upgrade the CIMC version it can also require changes to the Internet Browser, and Java Software version to run the Kernal-based Virtual Machine (vKVM).

To upgrade the APIC CIMC you can also use the <u>Cisco Host Upgrade Utility Based on Guide</u>.

APIC servers running on UCS C Series Servers. Cisco UCS 220 M5, Cisco UCS 220 M4 (second generation appliances APIC-SERVER-M2 and APIC-SERVER-L2) or Cisco UCS 220 M3 (first generation appliance APIC-SERVER-M1 and APIC-SERVER-L1), with a minor difference that servers manufactured with an image secured with Trusted Platform Module (TPM), certificates and an APIC product ID (PID).

APIC Platform	Corresponding UCS Platform	Description
APIC- SERVER- M1	UCS-C220-M3	Cluster of three Cisco APIC first generation controllers with medium size CPU, hard drive, and memory configurations for up to 1000 edge ports.
APIC- SERVER- M2	UCS-C220-M4	Cluster of three Cisco APIC second generation controllers with medium size CPU, hard drive, and memory configurations for up to 1000 edge ports.
APIC- SERVER- M3	UCS C220 M5	Cluster of three Cisco APIC second generation controllers with medium size CPU, hard drive, and memory configurations for up to 1000 edge ports.
APIC- SERVER- L1	UCS-C220-M3	Cluster of three Cisco APIC first generation controllers with large size CPU, hard drive, and memory configurations for more than 1000 edge ports.
APIC- SERVER- L2	UCS-C220-M4	Cluster of three Cisco APIC second generation controllers with large size CPU, hard drive, and memory configurations for more than 1000 edge ports.
APIC- SERVER- L3	UCS C220 M5	Cisco APIC with large CPU, hard drive, and memory configurations (more than 1200 edge ports).

Procedure

Step 1. First Determine the APIC model.

You can check this in the CIMC GUI to verify the PID displayed under Server> Summary.

cisco Integrated Management Controller						
Overall Server Status	C J J O M Server Summary	0 0				
Server Admin Storage Summary Inventory Sensors Remote Presence BXOS Power Policies Faults and Logs Troubleshooting	Actions Power On Server Shut Down Server Shut Down Server Power Cycle Server Hand Reset Server Currch KVM Console Tum On Locator LED	Server Properties Product Name: Serial Number PDC UUD: BOOS Version: Description: Server Status Power Status	FCHL825V0FT APIC-SERVER-L1 83191E68-2354-4908-A80F-05E9281480AE C220M3.2.0.9a.0 (Build Date: 11/30/2015)			

Step 2. Download Software.

From Cisco <u>Download Software</u> page, Navigate to Select a Product > Downloads > Home Servers -Unified Computing > UCS C-Series Rack-Mount Standalone Server Software > Choose UCS 220 M3/M4/M5 based on the generation of APIC > Unified Computing System (UCS) Server Firmware.

ly Previous Downloads				Most Popular
Product	Software Type	Latest Rolesse	Last Downloaded	ASA 5575-X IPS Security Services Proc
Application Centric Infrastructure Simulator	Application Centric Infrastructure (ACI) Simulator Software	3 2(34)	3.2(54)	ASA SE25-X PS Security Services Proc ASA SE25-X PS Security Services Proc ASA SE22-X PS Security Services Proc
2504 Weeless Controller	Window LAN Controller Software		8.5.105-0	AnyConnect Secure Nobility Client v4.x Jubber for Windows
UCS C220 M3 Reck Server Software	United Computing System (UCS) Server Fermeare		3.000	
New all 24 Describeds +				
elect a Product	0. 905 0229			Droese al
	UCS C030 M3 Rack Server Software			
	UCS C220 M& Back Server Software			

Note: Ensure you check the recommended <u>CIMC Version and Software Release Guide</u> to download the recommended CIMC firmware version for your current ACI software release.

Use CIMC APIC recommended firmware only instead of the latest or recommended one for that UCS model.

Step 3. Launch the KVM console from CIMC GUI.





Note: If you are having problems opening the KVM console, this is generally an issue with your JAVA version. Do read the Release Notes for your CIMC version to learn the different workarounds available.

Step 4. In order to activate the virtual device, navigate to **Virtual Media** > **Activate Virtual Devices** as shown in the image.



Step 5. In order to map the downloaded ISO image as a CD/DVD, navigate to **Virtual Media** > **Map CD/DVD** as shown in the image.



Step 6. Browse the ISO Image from the local machine and then click Map Device as shown in the image.



Step 7. In order to Reboot, navigate to **Power > Reset System** (warm boot) as shown in the image.



Step 8. In order to get into the Boot menu, press F6 after the system reboots as shows in the image.

Step 9. Insert password set by user or use the default password which is **password**.

Ē	inter	Passw	ord—	
_				

Note: You must set a BIOS Administrator password before performing this procedure. To set this password, press the **F2** key when prompted during system boot to enter the BIOS Setup utility. Then navigate to **Security > Set Administrator Password** and enter the new password twice as prompted.

Step 10. Choose the boot device **vKVM mapped vDVD1.22** as shown in the image.

I and I to move selection ENTER to select boot device ESC to boot using defaults Step 11. Now, Cisco UCS Host Upgrade Utility starts as shown in the image.

Step 12. Read the License agreement and click **I** Agree as shown in the image.

Step 13. In order to upgrade all components, click **Update All** which upgrades Current Version to Updated Version.

Note: During the upgrade, APIC can show disconnections.

ADDRESS DOMES	and the physical section of the sect	H 📲 Deschol instart					
the time Marrie Look Frank	Cace Heat	Approde USBKy x0.0.4					
C le lineane	(AC) and (Canadi Stream	and here here	- 2 mile links				
1.100.00	NR. 1999	1-104	100				
1 1 101	ter. Considerate a service	DOM: NO COMPLETE CONTROL	10.00				
C D Real Provide Long Street S	The Collection of the I	Sector and	1.16				
The second second second	and a state						
	tenne anne tenne terrer bering bering bererteting an te						
Earned Address Rectigation in Program							
Strategie Strategie <t< th=""></t<>							
an and four fighters, but we ap	to married	1.000					

Step 14. Do not enable Cisco IMC secure boot.

A pop up appears to enable Cisco IMC Secure Boot. Select **NO**, otherwise refer to the <u>Introduction to Cisco</u> <u>IMC Secure Boot</u> section in the Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 4.0.

A MARKED AND AND ADDRESS	arts fis	nyakiraka 🛛 🕷	l 🖉 Doerbaal insults W	the state of the local division of the local
In the Aster Sale Aster Stat	-	•		
		Clean Heat Upgrade	USBY VLD.4	
perga.	_			
a Course	0.000	Careed Henry	Tanks means	- Inclusion Disalton
a transmi	-	1494	100	
a s ann		COMPLETE AND DESCRIPTION OF	COMPANY OF ANY ADDRESS	100
at a solar some some		Manager and Control of States	10.000.000	100
T 1. Description with states				No.
	1.55	complete and second as	a gen agan	
		 The case initial and boot and investigation in the second 	y reprod (Inco. BC) Amount	
		3 Top cannot make and not	Chem-Bell versions prior lines 2.5	
		The second dealer as an	and taken and	
		A had some probably ()	ex. maps of its summittee.	
1.000		MOTOR READING	transfer with the beauty boat	
		spine marine article for a	a first sector to sector of	
1900 1900 P	-	when the Artman Ampleira I	a company and you have	
Carport Academic		when the stage		
		NOTE A DRY Repartment of	a drophy matters from "Ro"	
		the second second second		
Construction .		Depresent to make their	kil sasara baat?	
CONTRACTOR OF A CARD BALL MANAGEMENT	-			15
Coloring has not storate some	-			
Contracting they want the contraction	-			
print parties a descent	_			n
I not told in 100 allant doctored.		and conductor		
Contenting States, Concerning and Links of	1000	ratio tecnoly cogine		12
- Domators				2
and there is an an an an an an				
			6.6.9.9	ann ann anns 🖌

Step 15. HUU upgrades each component individually. Once it is done it reboots the unit, and then you can access the chassis using GUI and CLI.

When the server reboots, you are pushed out of the CIMC GUI. You need to log back into the CIMC and verify the upgrade has completed successfully. In order to do this, you can verify via the GUI, or boot up the CIMC host Upgrade Utility and select **Last Update Verify** to ensure all components passed the upgrade successfully.

A 104 AL20 KM Core	*		-35-		- (=(R) X
		Case Heat Upp	tada Utility v2.5	de .	
	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Conservations Co	1 1000 0 1 1000 0 1 1000 0 1 1000 1 1000		1000 hata 1000 1000 1000 1000
	34540-540	tenanj janton	-ar unter pati	ana orcana)	
Constitution of the International of the second se		Trans In Notes A			
In case of the local division of		-9	er.]		

Step 16. In order to verify the successful upgrade of this version, log on to the CIMC GUI and navigate to **Admin > Firmware Management** and check the **Cisco IMC Firmware** as shown in the image.

cisco Entegra	sted Management Controller	Chara (MC Hardmanne) Indeed with 1 work1 Lagged in an administration (10.149-13.149 Lag On
-Decred Server Status	C S & O 0 0 0	
	Firmware Management	
Server Advant Storage	La Instal Case IMC Remains Brough Browser Class	
User Management	📥 Initial Class (H) Fernance from Remarks Server	
Notech .	Actuals Class INC Fernans	
Certificate Nervices	📥 Install 2021 Ferman Drough Browner Chert	
Event Nanagement	1 Instal 800 Fernance from Remote Server	
Firmware Management		
(USI-Des	Gaos 100 Ferminate	
	Rumming Standards 3.06(4)	
	Backup Increase: 3.40(4) Back Inclusion: 3.40(4).38	
	Cours INC Secure Boot Doubled New	
	And Occu INC Fermane Instal	
	Status: Completed Incomutally	
	Allow Diversity	
	Units Constituted Insurandular	