

# 升級APIC上的CIMC

## 目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[升級之前](#)

[程式](#)

## 簡介

本文說明如何升級運行思科應用策略基礎設施控制器(APIC)的UCS C系列伺服器上的思科整合管理控制器(CIMC)。

## 必要條件

### 需求

思科建議您瞭解以下主題：

- UCS伺服器
- APIC

### 採用元件

本文檔中的資訊基於在UCS C系列伺服器上運行的APIC伺服器。

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

## 升級之前

升級ACI交換矩陣的軟體版本可能會對您的交換矩陣上運行的CIMC版本設定新的要求，因此，始終建議檢查APIC軟體版本的發行說明，以瞭解特定APIC版本支援的CIMC軟體版本清單。

- 1.檢查APIC發行說明，並確認需要升級至哪個CIMC軟體映像。連結至[APIC發行說明](#)。
- 2.從Cisco.com網站獲取軟體映像。
- 3.確認映像的MD5校驗和與在Cisco.com網站上發佈的映像相匹配。
- 4.升級CIMC版本所需的時間因本地電腦和UCS-C機箱之間的鏈路速度、源/目標軟體映像和其他內部元件版本而異。

5. CIMC升級不會影響生產網路，因為APIC不在流量的資料路徑中。

6.升級CIMC版本時，可能還需要更改Internet瀏覽器和Java軟體版本才能運行vKVM。

要升級APIC CIMC，您還可以使用[Cisco Host Upgrade Utility Based on Guide](#)。

在UCS C系列伺服器上運行的APIC伺服器。思科UCS 220 M5、思科UCS 220 M4（第二代裝置APIC-SERVER-M2和APIC-SERVER-L2）或思科UCS 220 M3（第一代裝置APIC-SERVER-M1和APIC-SERVER-L1），稍有差異，即使用受信任平台模組(TPM)、證書和APIC產品ID(PID)保護的映像來製造伺服器。

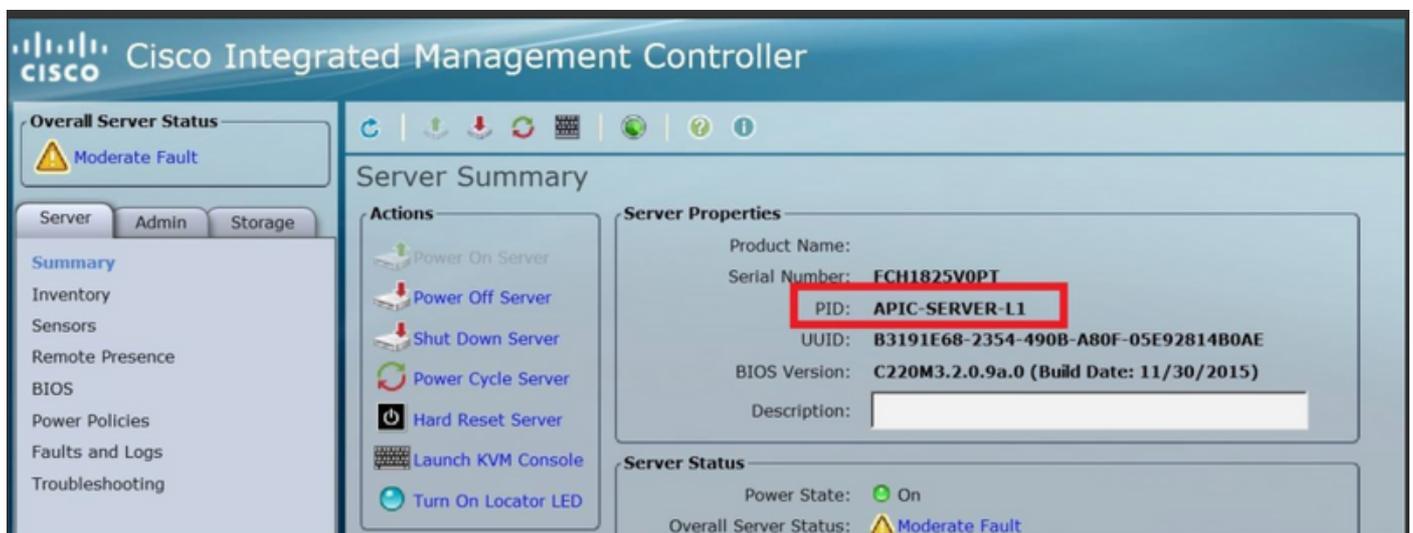
#### APIC平台 對應的UCS平台 說明

APIC-SERVER-UCS-C220-M3 M1	由三個思科APIC第一代控制器組成的集群，具有中型的CPU、硬碟和記憶體配置，最多可連線1000個邊緣埠。
APIC-SERVER-UCS-C220-M4 M2	由三個思科APIC第二代控制器組成的集群，具有中型的CPU、硬碟和記憶體配置，最多可連線1000個邊緣埠。
APIC-SERVER-UCS C220 M5 M3	由三個思科APIC第二代控制器組成的集群，具有中型的CPU、硬碟和記憶體配置，最多可連線1000個邊緣埠。
APIC-SERVER-UCS-C220-M3 L1	由三個思科APIC第一代控制器組成的群集，具有大型CPU、硬碟和記憶體配置支援1000多個邊緣埠。
APIC-SERVER-UCS-C220-M4 L2	由三個思科APIC第二代控制器組成的群集，具有大型CPU、硬碟和記憶體配置支援1000多個邊緣埠。
APIC-SERVER-UCS C220 M5 L3	具有大型CPU、硬碟和記憶體配置（超過1200個邊緣埠）的思科APIC

## 程式

步驟1.首先確定APIC模型。

您可以在CIMC GUI中選中此項，以驗證**Server > Summary**下顯示的PID。



步驟2. 下載軟體。

在思科下載軟體(Cisco Download Software)頁面中，導航至選擇產品(Select a Product)>下載(Downloads)>主伺服器(Home Servers)- Unified Computing)> UCS C系列機架式獨立伺服器軟體(UCS C-Series Rack-Mount Standalone Server Software)>根據生成APIC > **Unified Computing System(UCS)伺服器韌體(UCS)**選擇UCS 2220 M3/M4/M5。

## Software Download

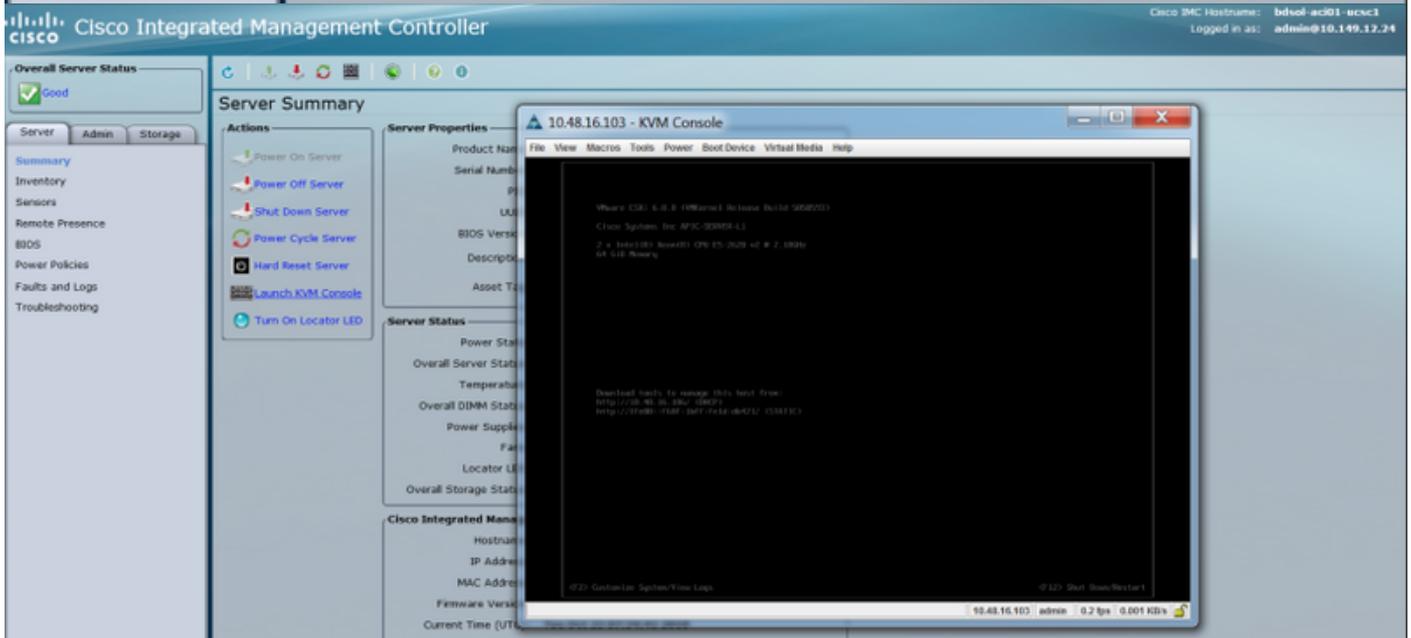
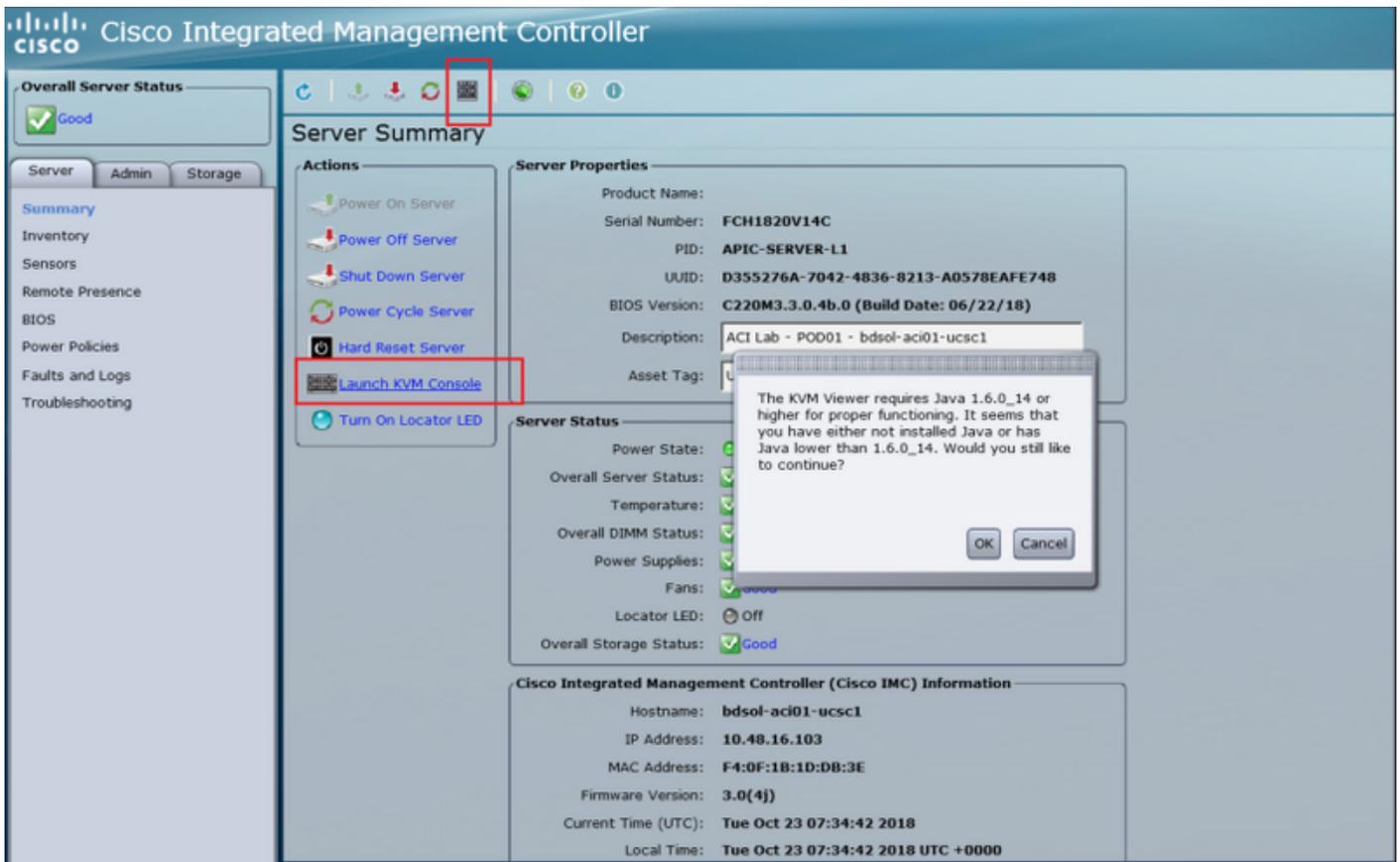
The screenshot shows the Cisco Software Download interface. On the left, there is a section titled "My Previous Downloads" with a table listing software products. On the right, there is a "Most Popular" section. Below these is a blue navigation bar with "Select a Product" and a search bar containing "UCS C220". A dropdown menu is open under the search bar, showing three options: "UCS C220 M3 Rack Server Software", "UCS C220 M4 Rack Server Software", and "UCS C220 M5 Rack Server Software".

Product	Software Type	Latest Release	Last Downloaded
Application Centric Infrastructure Simulator	Application Centric Infrastructure (ACI) Simulator Software	3.2(3o)	3.2(3n)
2504 Wireless Controller	Wireless LAN Controller Software	--	8.5.135.0
UCS C220 M3 Rack Server Software	Unified Computing System (UCS) Server Firmware	--	3.0(4j)

**附註：**確保檢查建議的[CIMC版本和軟體版本指南](#)，下載適用於當前ACI軟體版本的建議CIMC韌體版本。

僅使用CIMC APIC推薦的韌體，而不使用該UCS型號的最新或推薦的韌體。

步驟3. 從CIMC GUI啟動KVM控制檯。

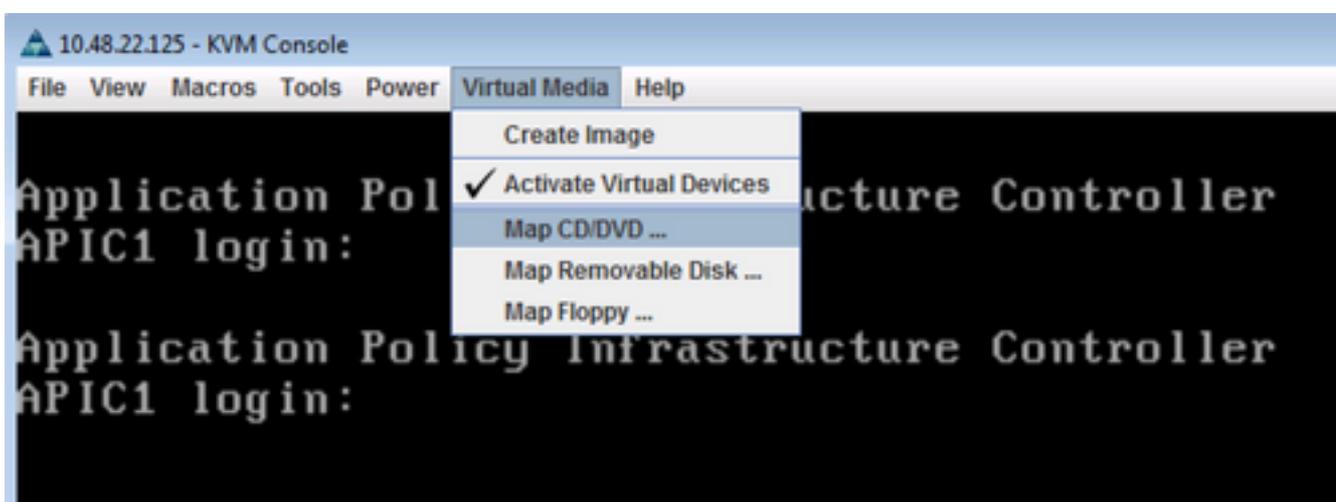


iKVMJAVA [CIMC](#)

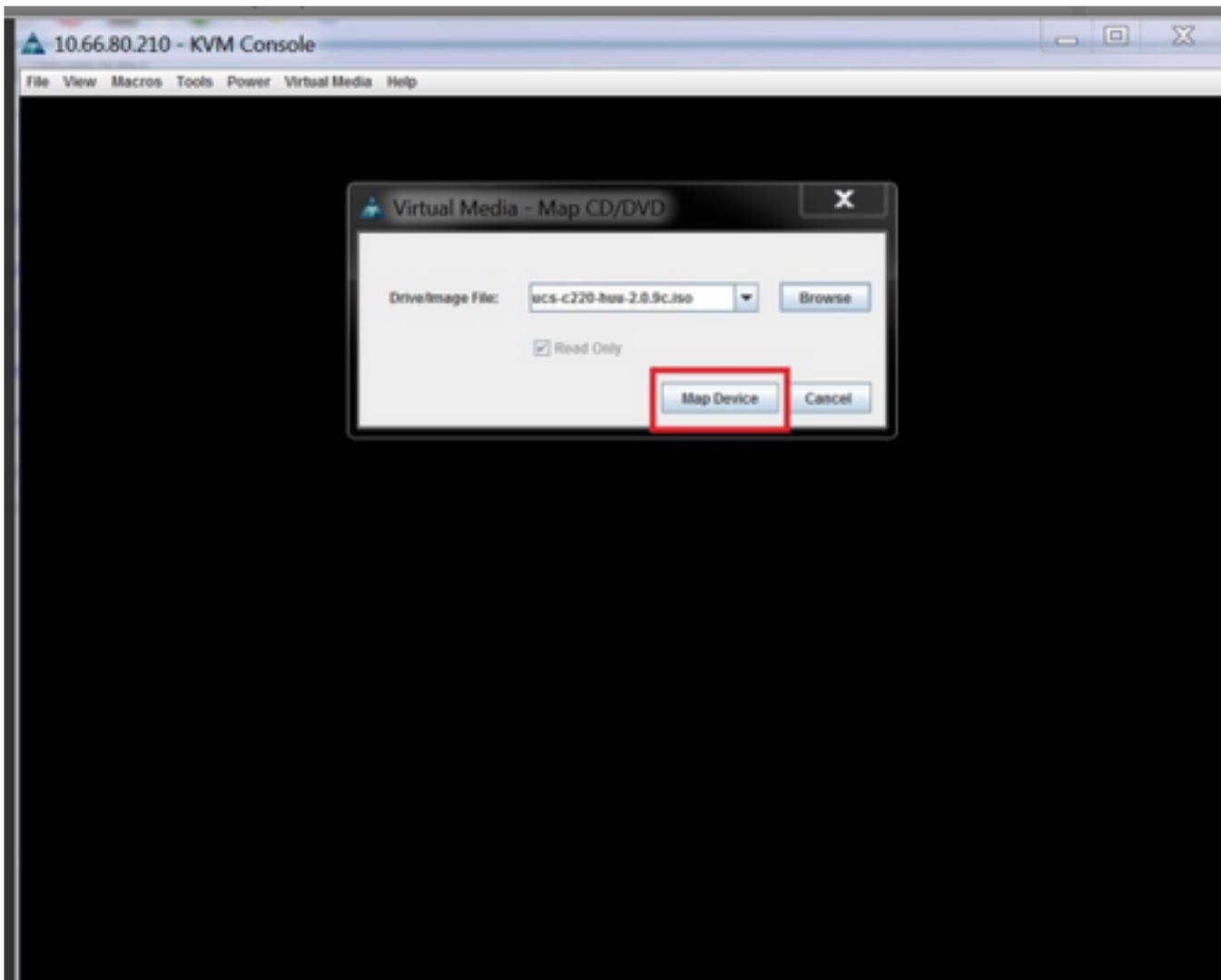
步驟4.若要啟用虛擬裝置，請導覽至Virtual Media > Activate Virtual Devices，如下圖所示。



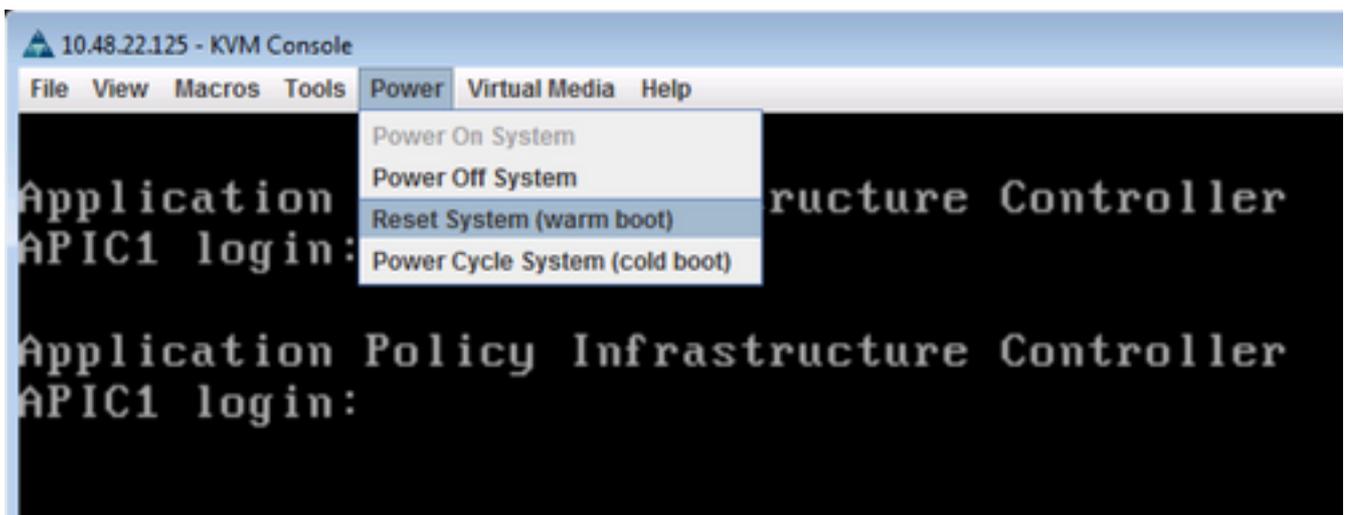
步驟5.若要將下載的ISO映像對映為CD/DVD，請導覽至Virtual Media > Map CD/DVD，如下圖所示。



步驟6.從本地電腦瀏覽ISO映像，然後按一下Map Device（如圖所示）。



步驟7. 若要重新開機，請導覽至Power > Reset System(warm boot)，如下圖所示。



步驟8. 若要進入「Boot」功能表，請在系統重新啟動後按F6，如下圖所示。



Press <F2> Setup, <F6> Boot Menu, <F7> Diagnostics, <F8>Cisco IMC Configuration,  
<F12> Network Boot

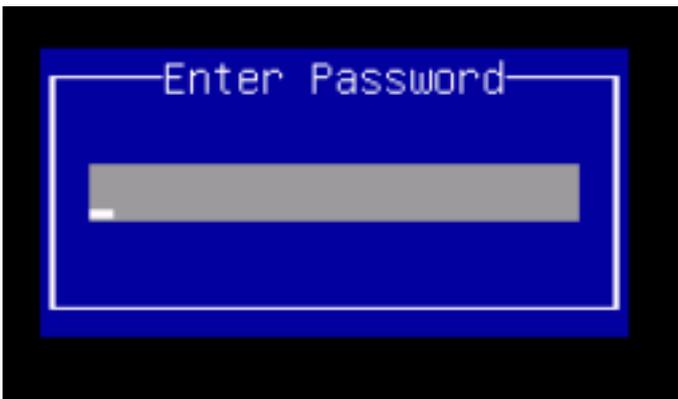
Bios Version : C220M3.2.0.8.0.071620152158  
Platform ID : C220M3

Cisco IMC IPv4 Address : 10.48.22.125  
Cisco IMC MAC Address : 88:1D:FC:99:EC:12

Total Memory = 64 GB Effective Memory = 64 GB  
Memory Operating Speed 1600 Mhz

Entering boot selection menu...

步驟9.插入使用者設定的密碼或使用預設密碼password。



**附註：**在執行此過程之前，必須設定BIOS管理員密碼。要設定此密碼，請在系統引導過程中出現提示時按F2鍵以進入BIOS設定實用程式。然後導覽至Security > Set Administrator Password，並根據提示輸入新密碼兩次。

步驟10.選擇引導裝置vKVM對映vDVD1.22，如下圖所示。

Please select boot device:

Cisco vKVM-Mapped vDVD1.22  
Cisco CIMC-Mapped vDVD1.22  
(Bus 81 Dev 00)PCI RAID Adapter  
Cisco NIC 8:0.0  
Cisco NIC 9:0.0  
IBA GE Slot 0100 v1553  
IBA GE Slot 0101 v1553  
UEFI: Built-in EFI Shell  
UNIGEN PSE4000CS1-BTB  
Cisco vKVM-Mapped vHDD1.22  
Cisco vKVM-Mapped vFDD1.22  
Cisco CIMC-Mapped vHDD1.22  
Enter Setup

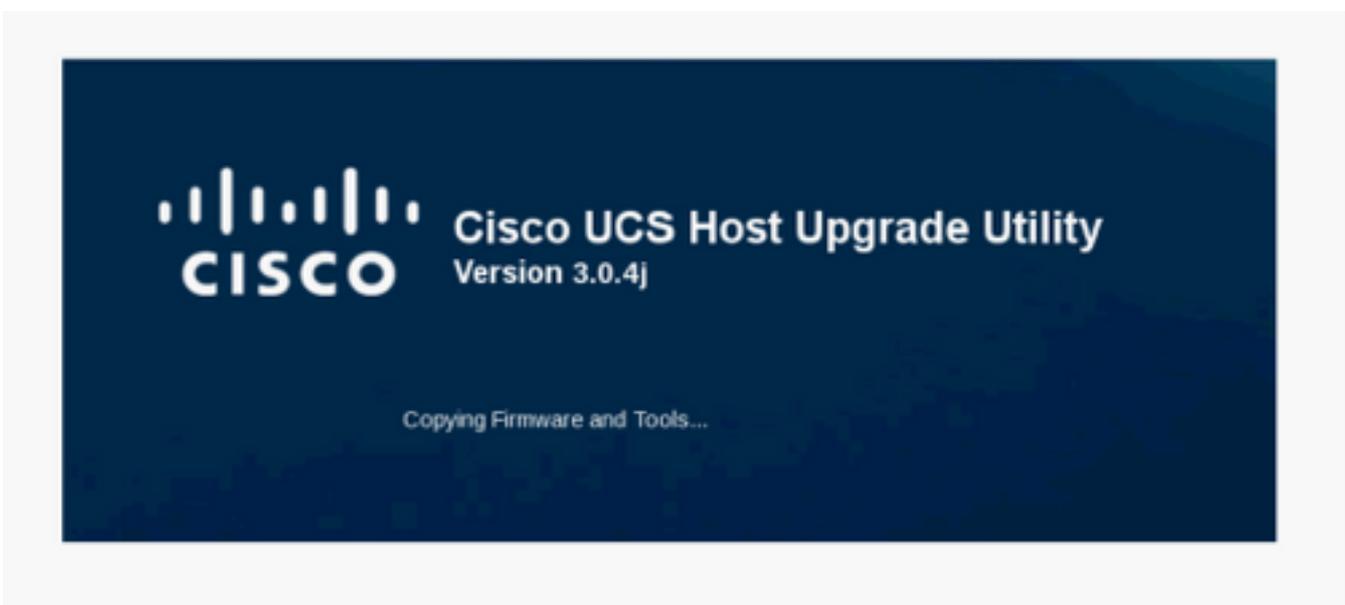
↑ and ↓ to move selection  
ENTER to select boot device  
ESC to boot using defaults

步驟11.現在Cisco UCS Host Upgrade Utility啟動，如下圖所示。



The image shows a black splash screen for the Cisco UCS Host Upgrade Utility. On the left is the Cisco logo, consisting of seven vertical bars of varying heights above the word "CISCO". To the right of the logo, the text "Cisco UCS Host Upgrade Utility" is displayed in a white, sans-serif font. In the center of the screen, there is a faint, glowing circular graphic.

CISCO Cisco UCS Host Upgrade Utility



This image shows a dark blue splash screen for the Cisco UCS Host Upgrade Utility. It features the Cisco logo on the left. To the right, the text "Cisco UCS Host Upgrade Utility" is shown in a white, sans-serif font, with "Version 3.0.4j" in a smaller font size directly below it. At the bottom center of the screen, the text "Copying Firmware and Tools..." is displayed in a small, white, sans-serif font.

CISCO Cisco UCS Host Upgrade Utility  
Version 3.0.4j

Copying Firmware and Tools...

步驟12.閱讀許可協定，然後按一下 **I Agree**，如下圖所示。

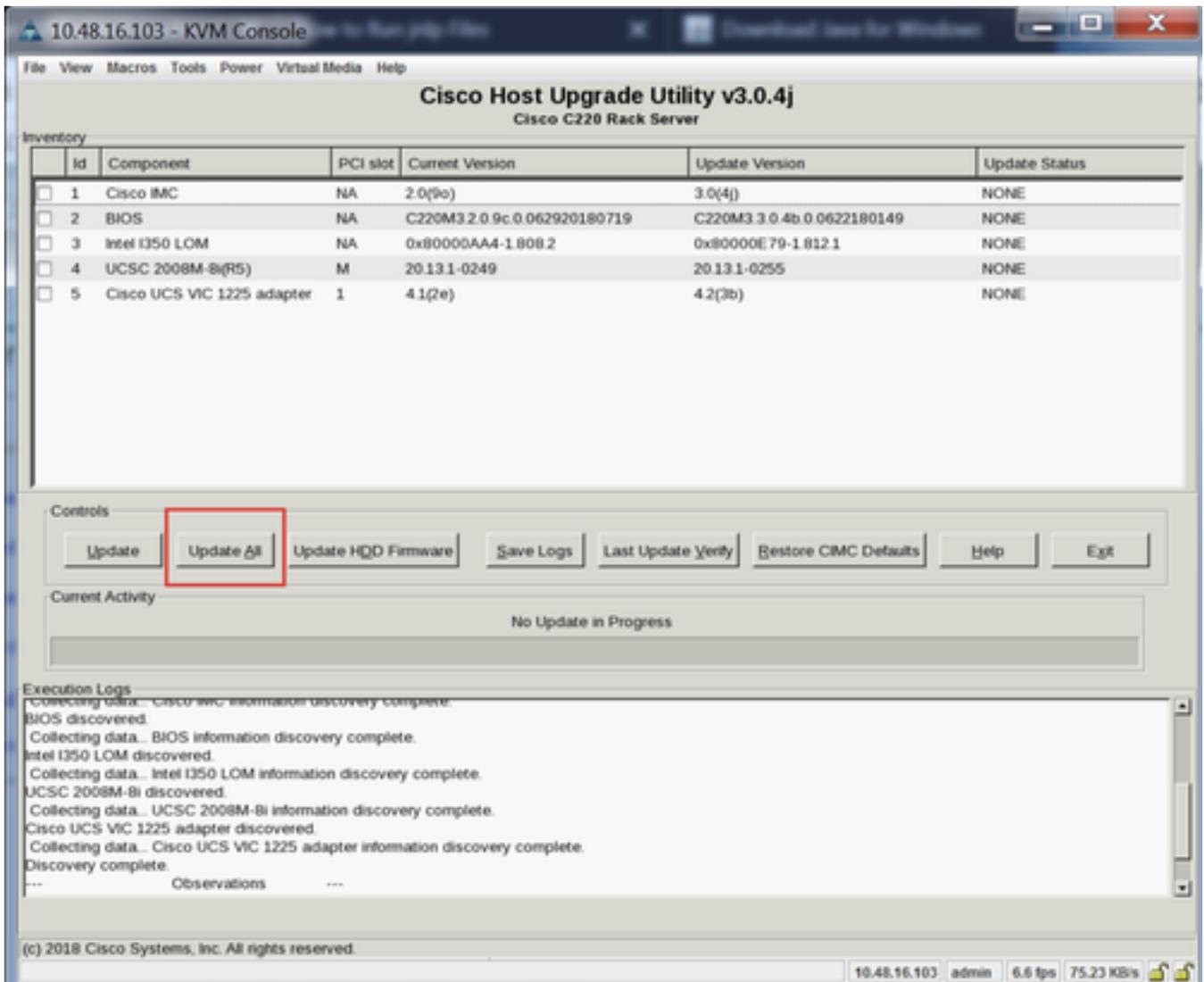
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步驟13.若要升級所有元件，請按一下Update All，將當前版本升級為更新版本，請注意，升級過程中APIC可能會顯示斷開連線。



步驟14.請勿啟用Cisco IMC安全啟動。

Cisco IMC NO Cisco UCS CGUI 4.0 [Introduction to Cisco IMC Secure Boot](#)

10.48.16.103 - KVM Console

File View Macros Tools Power Virtual Media Help

### Cisco Host Upgrade Utility v3.0.4j

Cisco C220 Rack Server

Inventory

	Id	Component	PCI slot	Current Version	Update Version	Update Status
<input checked="" type="checkbox"/>	1	Cisco IMC	NA	2.0(9a)	3.0(4j)	NONE
<input checked="" type="checkbox"/>	2	BIOS	NA	C220M3.2.0.9c.0.062920180719	C220M3.3.0.4b.0.0622180149	NONE
<input checked="" type="checkbox"/>	3	Intel I350 LOM	NA	0x80000AAA-1.808.2	0x80000E79-1.812.1	NONE
<input checked="" type="checkbox"/>	4	UCSC 2008M-8i(R5)	M	20.13.1-0249	20.13.1-0255	NONE
<input checked="" type="checkbox"/>	5	Cisco UCS VIC 1225 adapter				NONE

**Confirmation**

Enabling Cisco IMC Secure Boot option implies:

1. You can install and boot only signed Cisco IMC firmware images on the server.
2. You cannot install and boot Cisco IMC versions prior than 1.5 (3x).
3. You cannot disable this option later on.
4. Both running and backup CIMC images will be overwritten.

**IMPORTANT:** After installing the firmware with the Secure Boot option enabled, activate the image before performing regular server-based tasks. The Secure Boot option is enabled only when the firmware installation is complete and you have activated the image.

**NOTE:** If CIMC Secure boot was already enabled, then "No" will not have any effect.

Do you want to enable Cisco IMC secure boot?

Controls

Current Activity

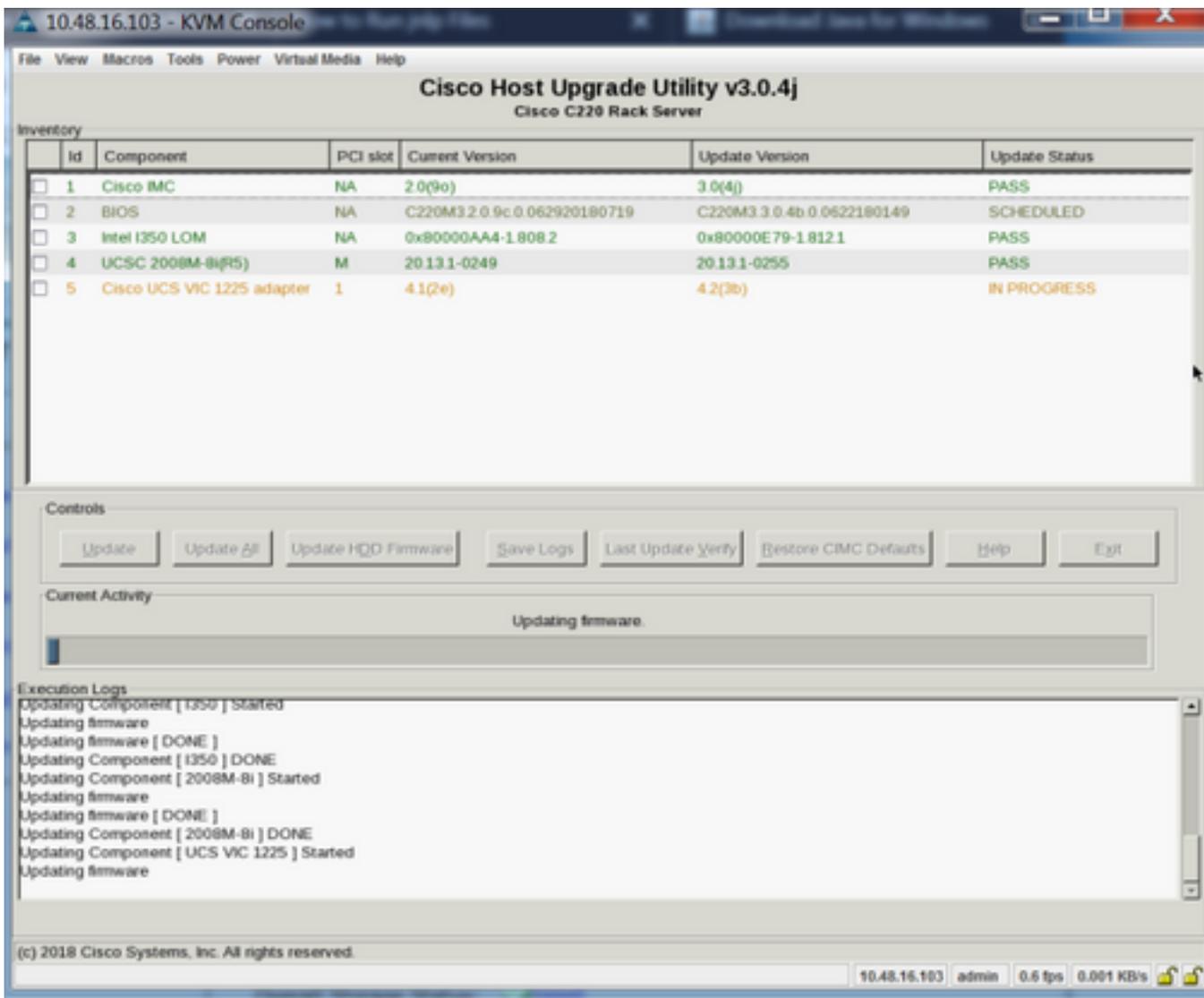
Execution Logs

```

Collecting data... Cisco IMC information discovery complete.
BIOS discovered.
Collecting data... BIOS information discovery complete.
Intel I350 LOM discovered.
Collecting data... Intel I350 LOM information discovery complete.
UCSC 2008M-8i discovered.
Collecting data... UCSC 2008M-8i information discovery complete.
Cisco UCS VIC 1225 adapter discovered.
Collecting data... Cisco UCS VIC 1225 adapter information discovery complete.
Discovery complete.
--- Observations ---
  
```

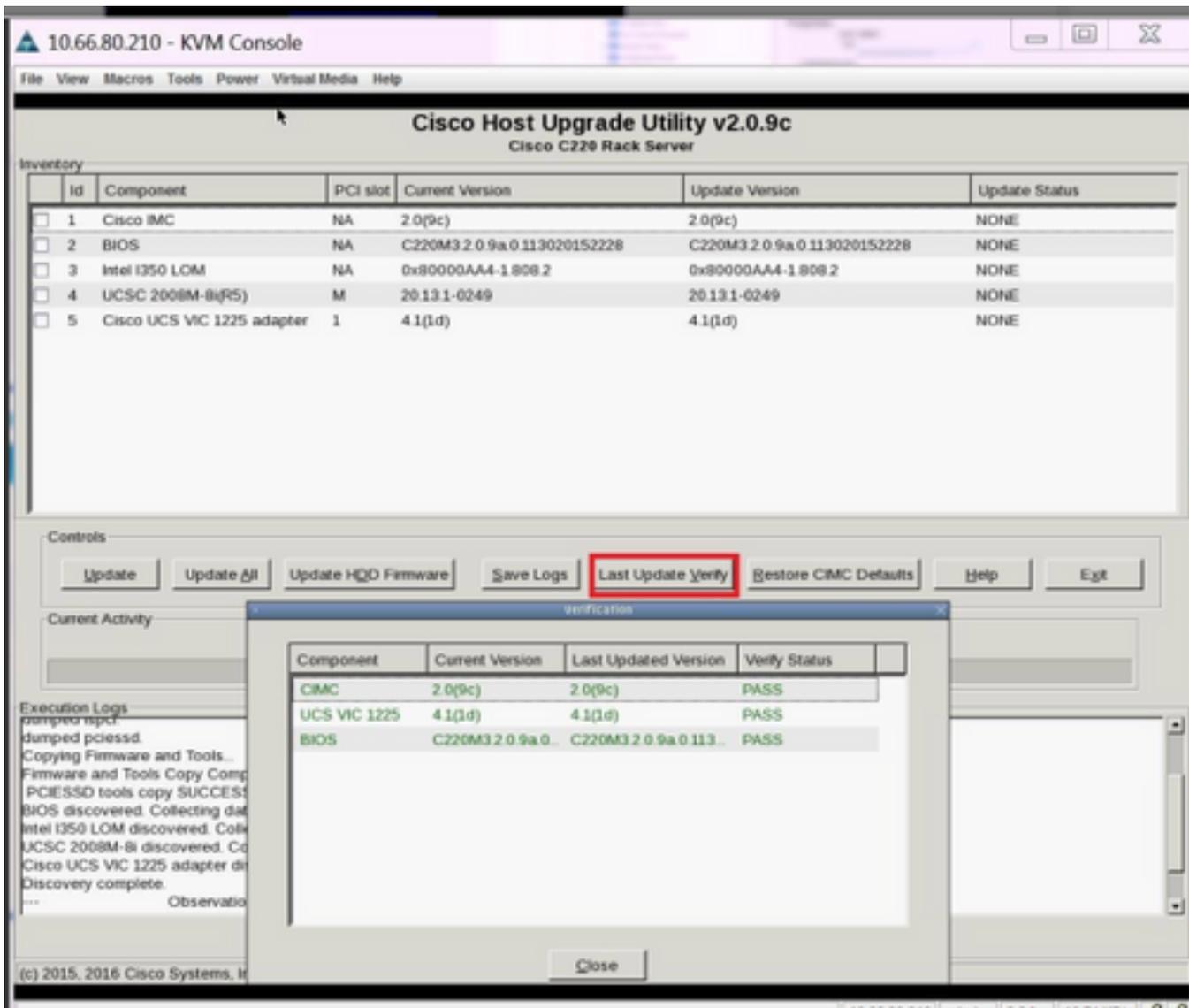
(c) 2018 Cisco Systems, Inc. All rights reserved.

10.48.16.103 admin 1.4 fps 21.658 KB/s



步驟15. HUU將在每個元件完成升級後重新啟動裝置，然後您可以使用GUI和CLI訪問機箱。

當伺服器重新啟動時，您將從CIMC GUI中推出，您需要重新登入到CIMC並驗證升級已成功完成。為此，您可通過GUI進行驗證，或啟動CIMC主機升級實用程式，然後選擇**Last Update Verify**以確保所有元件成功通過升級。



步驟16。若要確認此版本是否成功升級，請登入CIMC GUI並導覽至Admin > Firmware Management，然後檢查Cisco IMC韌體，如下圖所示。

