升級UCS Manager

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簡介

本文檔介紹如何升級Cisco UCS Manager。

必要條件

需求

思科建議您瞭解以下主題:

• 對Cisco UCS的基本瞭解。

採用元件

本文中的資訊係根據以下軟體和硬體版本:

- 軟體版本4.2(2e)
- 軟體版本4.3(3a)
- 交換矩陣互聯6454 (UCS-FI-6454)

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。

背景資訊

本指南中的示例演示一對思科交換矩陣互聯6454,並使用Cisco UCS基礎設施軟體A捆綁包執行從版本4.2(2e)到4.3(3a)的升級。

此捆綁包包括更新這些元件所需的韌體映像:

• Cisco UCS管理器軟體

- 交換矩陣互聯的核心和系統韌體
- I/O模組韌體

繼續進行本練習之前,請閱讀交換矩陣互聯的特定型號和韌體版本的Cisco官方文檔。

設定

在<u>Cisco UCS Manager升級/降級支援表</u>網站上驗證當前軟體版本的升級路徑。

CISCO Cisco UCS Manager Upgrade/Downgrade Support Matrix

This page provides Cisco UCS Manager software upgrade and downgrade information based on your current release. The provided upgrade paths have been tested and validated by Cisco. Use this tool as a reference for supported software.

To get a complete overview of all the possible upgrade paths in Cisco UCS Manager, see the Cisco UCS Manager Upgrade and Downgrade <u>matrix</u>.

For Release Notes and other documentation, see the Cisco UCS Manager documents landing page.

To download Cisco UCS Manager Software bundles, see the Software Download landing page.

To provide feedback on this tool, send your comments to ucs-docfeedback@external.cisco.com.

Upgrade	Choose upgrade or downgrade info			
4.2(2)	Current release of Cisco UCS Manager			
4.3(3)	Target release of Cisco UCS Manager			
Current release: 4.2(2)				
Target release: 4.3(3) [Z]				
Recommended path: Direct path from Current Release. [Show All]				
Procedure:				
 Upgrade the Infrastructure A bundle. After the Infrastructure A bundle is upgraded successfully, upgrade the B and C bundles for all servers. 				
Recommended software for target release:				

Cisco IMC version: 4.3(3)-All M7, All M6, All M5.

1個支援管理員

提交服務請求時,可以透過支援案例管理器獲得進一步的韌體升級建議(使用韌體升級TAC助手工 具時)。



2支援案例管理器

從思科軟體下載中心網站下載適用於您特定交換矩陣互聯型號的所需韌體捆綁包。

使用您的思科帳戶登入以進行下載。

請注意,FI-6454使用與FI-64108交換矩陣互聯相同的韌體映像,因為它們都是6400系列交換矩陣 互聯。

接受思科的一般條款,開始下載。

Q Search	UCS Infrastructure and UCS Manager Software					
Expand All Collapse All	Release 4.3(3a)	Related Links a Release Note for 4.3	nd Documentation			
Suggested Release						
4.3(3a) 오						
4.2(3j) 🔿	File Information	Release Date	Size			
4.1(3m) <mark>O</mark>	The UCS Infrastructure Software Bundle contains: - NX-OS software for the UCS 6332 Fabric Interconnects - Firmware for the	15-Feb-2024	1472.60 MB	+		
Latest Release	fabric extenders and I/O modules - UCS Manager - Chassis Management Controller - UCSM Capability Catalog.					
4.3(3c)	ucs-6300-k9-bundle-infra.4.3.3a.A.bin Advisories					
4.2(3) 🔿	The UCS Infrastructure Software Bundle contains: - NX-OS	15-Feb-2024	2602.95 MB			
4.1(3m) 🔿	software for the UCS 6454 Fabric Interconnects - Firmware for the			-		
4.0(4o)	fabric extenders and I/O modules - UCS Manager - Chassis Management Controller - UCSM Capability Catalog.					
All Release	ucs-6400-k9-bundle-infra.4.3.3a.A.bin Advisories C					
4.3	The UCS Infrastructure Software Bundle contains: - NX-OS	15-Feb-2024	2643.70 MB	+		
4.2	software for the UCS 6536 Fabric Interconnects - Firmware for the fabric extenders and I/O modules - UCS Manager - Chassis					
4.1 0	Management Controller - UCSM Capability Catalog.					
4.0	Advisories C					

下載完成後,使用交換矩陣互聯集群IP地址或完全限定的域名(帳戶具有管理員許可權)登入到 UCS Manager Web介面。

導航到裝置>韌體管理>安裝的韌體。

展開UCS Manager並確認正在運行的UCS Manager韌體版本。

導航到下載任務,然後點選下載韌體。

	Main Topology View	Fabric	Interconn	ects	Servers	Thermal	Decommission	ned	Firmw	vare Manage	ment	Policies	Faults
_	Installed Firmware	Firmwar	e Auto Ins	tall	Catalog Pac	kage	Download Tasks	Pack	ages	Images	Upg	rade Validation	Faults
	Ty Advanced Filter	+ Export	🖶 Print	🛞 Do	wnload Firmwa	re							
	Filename				Path				Tran	sfer State			

5下載任務

在彈出窗口中,按一下「選擇檔案」

Download Firmware				
Location of the Image File:				
Local File System Remote File System				
Filename : Choose file No file chosen				
6選擇檔案				

瀏覽至下載的交換矩陣互聯捆綁包儲存的目錄,選擇Infra A,捆綁包檔案,按一下Open並OK(打開)。

< > ≡ • ∞ •	Downloads	Q Search	
Name		Size	Kind

🕒 ucs-6400-k9-bundle-infra.4.3.3a.A.bin	2,73 GB	Ma
	Cancel Open	

7開啟檔案

在下載的捆綁包已導入到UCS Manager後,點選韌體自動安裝,在操作下選擇安裝基礎設施韌體。

Equipment	
Main Topology View Fabric Interconnects Server Installed Firmware Firmware Auto Install Catalog	s Thermal Decommissioned Firmware Management Policies Faults Diagnostics Package Download Tasks Packages Images Upgrade Validation Faults
General FSM	
Status	Infrastructure Firmware
Firmware Installer : 🛉 Ready	Package Version : 4.2(2e)A Backup Version : Startup Version : 4.2(2e)A Service Pack Running Version : 4.2(2)SP0(Default) Service Pack Startup Version : ************************************
Actions Install Infrastructure Firmware Install Chassis Firmware Install Server Firmware Clear StartUp Version Prepare for Firmware Install	Owner : Local

8安裝韌體

在繼續之前,請仔細檢視所有警告並解決彈出窗口中的任何待處理問題(如果需要)。全選忽略,然 後點選下一步

		Install Infrastructure Firmware	?	×
0	Prerequisites Install Infrastructure Firmware	What happens during this stage: • This wizard will enable you to perform infrastructure firmware upgrade, which would upgrade UCS Manager and the UCS interconnects. • If the backup version is set through Prepare for Firmware Install and is the same as the selected infra firmware version, the backup version is not set earlier, the selected firmware version is set as the backup version. • If the backup version is not set earlier, the selected firmware version is set as the backup version. • If the backup version is not set earlier, the selected firmware version is set as the backup version. This version is then set startup version. • Ompleting this stage will result in a reboot. The system has performed a sanity check and found the following issues. Suggestions about fixing these issues are also displayed. Please go through the list of issues and suggested fixes carefully, and take appropriate action.	} fabric he t as the	B
		Warnings 1) Cirkical and major faults exist. Proceeding without fix might lead the system in unexpected state. Cick here to see the existing critical and major faults. Construction Construction Construction Construction Construction Construction Construction Construction Construction Construction)

9全部忽略,下一個

從下拉選單中選擇相應的Infra Pack,然後選中Upgrade Now覈取方塊。按一下「Finish」(結束)。

		Install Infrastructure Fi	rmware	? ×
	Prerequisites	Firmware System Status	Properties	
1	Prerequisites Install Infrastructure Firmware	Firmware System Status Firmware Installer : * Ready Actions Cancel Infrastructure Upgrade	Properties Name Name Infra Description Infrastructure Pack Backup Version Infra Pack 4.3(3a)A Service Pack <a a="" href="mailto: Service Pack <a href=" mailto:<=""> Force Infrastructure Upgrade Schedule Infrastructure Upgrade Schedule Admin State . Max Number Of Concurrent Tasks: Untriggered Start Time: 2024-05-17 01:39:2	
			< Prev Next > Finish C	ancel

10立即升級,完成

按一下Yes以忽略未選擇Service Pack的警告。 按一下「OK」(確定)。

Prerequisites	Firmware System Status	Properties
	Firmware Installer : † Ready	Name : default
Install Infrastructure Firmware	Actions	Description : Infrastructure Pack
		Infra Pack : 4.3(3a)A
		Service Pack : <pre><rue></rue></pre>
		Force :
Install Service Press V or Can	I Infrastructure Firmware e Pack has not been selected, so any Serv Yes to disregard the warning and submit c iccel to make changes to the current config	Vice Pack if already installed in the system, will be removed. thanges, No to quit the wizard guration. No Cancel

要監控升級進度,請按一下FSM頁籤。升級會在幾分鐘後開始。

強烈建議啟用Evacuate選項,以確保在升級過程中資料流在交換矩陣互聯之間移動並避免資料流中 斷。

這通常首先在輔助交換矩陣互聯上完成。

▼ Equipment	General	Physical Ports	Fans	PSUs	Physical Display	FSM	Neighbors	Faults	Events 5
Chassis Rack-Mounts	Fault Summ	nary		_	Physical Display				
Fabric Interconnects Fabric Interconnect A (primary)	0		0			-		leveleveleve	dendena feranen
Fabric Interconnect B (subordinate)	Status		0	6	Up 🖬 Admin Down 📕 Fail 📕 Link Down				
 Policies Port Auto-Discovery Policy 	Overall Sta Thermal Ethernet M FC Mode Admin Eva Oper Evac	tus : † Ope : † OK lode : End Hos : End Hos c Mode : On Mode : Off	rab Cor st Ad st For	nngu figure E min Evac ce	ac Mode : On Off				F
	Actions Configure E Configure U Internal Fab LAN Uplinks NAS Applia SAN Uplinks	vacuation Inified Ports ric Manager s Manager nce Manager s Manager	ŀ	OK Apply Cancel		Cancel (Help		
	SAN Storag	e Manager		VI AN Port Count					

12配置和應用

驗證路徑是否正常工作(從UCS角度)以及任何虛擬路徑和/或虛擬機器、虛擬NIC或HBA。

這可確保升級過程中流量不受影響。

如果任何vNIC或vHBA發生故障,請在升級前檢驗影響並解決該問題。

根據設計,UCS基礎設施升級會在輔助交換矩陣互聯上啟動升級。

當輔助交換矩陣互聯的升級即將完成時,您會被UCS系統臨時註銷。

出現這種情況的原因是UCS Manager正在升級且管理進程已關閉,但資料層面會保持開啟狀態,因 為它與管理層面分離。

如果已配置SNMP,則可能會收到有關管理平面狀態的警報。

這是正常現象,因此建議在升級期間停用SNMP通知,並在完成本練習後重新啟用。

當系統再次可用時,UCS Manager元件的升級完成。

透過FSM頁籤,您可以重新登入到UCS Manager以監控其餘的升級

Al v	Equipment					
Equipment	Main Topology View Fabr	ic Interconnects Servers T	hermal Decommissioned	Firmware Management Po	licies Faults Diagnostics	
* Chassis	Installed Firmware Firmw	are Auto Install Catalog Packag	e Download Tasks Packa	ages Images Upgrade \	Validation Faults	
+ Chassis 1 🛞	General FSM					
 Rack-Mounts 	FSM Status	In Progress				
 Fabric Interconnects 	Description					
 Fabric Interconnect A (primary) 	Current FSM Name	Deploy				
	Comditited at					
 Fabric Interconnect b (Inapplicable) 	Progress Status		90%			
 Policies 	Remote Invocation Result	Not Applicable				
Port Auto-Discovery Policy	Remote Invocation Error Code :	None				
	Remote Invocation Description :					
	 Step Sequence 					
	Order	Name	Description	Status	Timestamp	Retried
	1	Deploy Wait For Deploy	Waiting for Deploy to begin(F	Success	2024-05-18T11:35:31Z	0
	2	Deploy Resolve Distributable	Resolving distributable name	Skip	2024-05-18T11:35:31Z	0
					2024-05-18711-35-317	

13韌體自動安裝

從屬交換矩陣互聯及其對應的機箱IO模組然後完成各自的升級。

All 👻	Equipment /	Fabric In	terconnec	cts / Fabr	ic Interc	onnect B (inapplicabl	e)		
▼ Equipment	General	Physics	al Ports	Fans	PSUs	Physical Display	FSM	Neighbors	
Chassis Chassis	Fault Sum	mary				Physical Display			
► Fans	8	V		0					
 IO Modules IO Module 1 	1	2	0	1		Up Admin Dow	m 📕 Fail 📕	Link Down	
► IO Module 2 🚫	Status					Properties			
PSUs Servers	Overall Status : V Inoperable Thermal : OK					Name : B Product Name : Cisco UCS 6454			
 Rack-Mounts 	Ethernet N FC Mode	Mode :	End Host End Host			Vendor :	Cisco Sys	tems, Inc.	
 Fabric Interconnects Eabric Interconnect A (primap) 	Admin Eva	c Mode :	Off			Revision :	0		
Fabric Interconnect B (inapplicable)	Actions	: Mode :	Off			Locator LED :	55.560 (G	в)	
Policies	Configure 8	Evacuation				+ Part Details			
Port Auto-Discovery Policy	Configure Unified Ports					Local Storage Information			

14個交換矩陣互聯

完成後,透過選擇subordinateFabric Interconnect驗證新韌體版本是否安裝在subordinateFabric Interconnector上

(在這種情況下,導航窗格的Fabric InterconnectBin部分顯示「Equipmentation」)。

向下捲動「一般」標簽下。在Firmwareection中,觀察從屬交換矩陣互聯上新安裝的韌體版本。

	Al v	Equipment / Fabric Interconnects / Fabric Interco	onnect B (subordinate)	Pending Activities ×	
f	Equipment	General Physical Ports Fans PSUs	Physical Display FSM Neig	There are activities in the system requiring reboot. Click the Pending Activities button on the toolbar to acknowledge	
	* Chassis	Configure Unified Ports	Local Storage Information	Do not show again	
	Chassis 1 (3)	Internal Fabric Manager	-		_
	 Rack-Mounts 	LAN Uplinks Manager	Access		
	 Fabric Interconnects 	NAS Appliance Manager			
	 Fabric Interconnect A (primary) 	SAN Uplinks Manager	High Availability Details		
ſ	Fabric Interconnect B (subordinate)	SAN Storage Manager	(a) VI AN Part Count		
1	* Policies	Enable Ports *	() VENT POIL COUNT		
	Port Auto-Discovery Policy	Disable Ports *	FC Zone Count		
		Set Ethernet Switching Mode	Firmware		
		Set FC End-Host Mode			
		Set FC Switching Mode	Boot-loader Version : v05.47(04/2	(8/2022)	
		Activate Firmware	System Version : 9.3(5)(43(3)		
		Management Interfaces	Service Pack Version : 4.3(3)SP0(0	Pefault)	
		Turn on Locator LED	Package Version 4.3(3a)A		
		Install Secure PPGA	Startup Kernel Version : 9.3(5)(43(3a	a	
			Activate Status : Ready	~	
			Startup System Version : 9.3(5)(43(3a)	u l	
			Activate Status : Ready		
			Startup Service Pack Version : 4.3(3)	SP0(Default)	
			Activate Status : Ready		

14個交換矩陣互聯

為了完整起見,主交換矩陣互聯需要升級並重新啟動。

系統會發出警告,要求重新引導才能進行有效的更改。



附註:此步驟非常重要。在重新啟動交換矩陣互聯A之前,驗證所有路徑在物理和虛擬上均 在運行,以及兩個交換矩陣互聯中的高可用性。

這是確保成功和避免任何停機或中斷的關鍵。作業系統或虛擬機器似乎正在運行,但其輔助路徑未 完全啟動。

如果出現這種情況,則在交換矩陣互聯A重新啟動後,作業系統或虛擬機器可能會由於無法找到路 徑而失去連線。

所有都透過驗證後,繼續安全地重新啟動矩陣互聯A。

按一下右上角的Pending Activities彈出窗口

(Pending Activities	X
Decommissi	There are activities in the system requiring reboot. Click the Pending Activities button on the toolbar to acknown Do not show again	wledge.

14個交換矩陣互聯

選擇Fabric Interconnects。 按一下Reboot Now。 在彈出窗口中選擇Yes,然後按一下OK關閉彈出 窗口。

Pending Activities			×
User Acknowledged Activities	Scheduled Activities		
Service Profiles Fabric Intere	connects Servers	Chassis Profiles	
Actions			
Reboot now			
Pending Disruptions : defaultValu Pending Changes :	0		
 Details 			
Modified at : 2024-05 Acknowledgment State : Waiting Schedule : fi-reboo	5-18T03:21:02Z For User ot		
Schedule : fi-reboo	For User ot		

ок

Cancel

Help

此操作將重新啟動主交換矩陣互聯以完成韌體升級。

在此重新啟動過程中,系統的集群領導角色由從屬裝置接管,因此您暫時從UCS Manager註銷。

UCS Manager		Connection Error		
Al	Equipment	Unable to connect to the	server. The application wi	I now exit.
Equipment	Main Topology View Fabric Ir			Management Policies
* Chassis	Installed Firmware Firmware Auto ins	Catalog Package	Download Tasks P	ackages images Upgrade Validation
Chassis 1 ⊗	General FSM			
 Rack-Mounts 	Contra Co			
* Fabric Interconnects	Status	Intr	rastructure Firmware	
Fabric Interconnect A (primary) 💿	Firmware Installer : CIn Progress	Pa	ckage Version	: 4.3(3a)A,4.2(2e)A
 Fabric Interconnect B (subordinate) 		Ba	ckup Version	:
* Policies		st St	artup Version	: 4.3(3a)A
Dard Auto Discourse Dation		Se	rvice Pack Running Version	: 4.3(3)SP0(Default),4.2(2)SP0(Default)
Port Auto-Discovery Policy		Se	rvice Pack Startup Version	:
	Actions	0	wher	: Local
	Install Infrastructure Firmware			
	Install Chassis Firmware			
	Install Server Firmware			

18連線錯誤

恢復對UCS Manager GUI的訪問後,重新登入。

再次監控FSM以驗證升級進度。

Equipment	Main Topology View	Fabric Interconnects	Servers Therma	Decommissioned	Firmware Managemen	t Policies	Faults Diagnostics
* Chassis	Installed Firmware	Firmware Auto Install	Catalog Package	Download Tasks Pac	kages Images L	Ipgrade Validation	Faults
Chassis 1 😨	General FSM	<u>ן</u>					
* Rack-Mounts	FSM Status	: In Progress					
Enclosures	Description	1					
FEX	Current FSM Name	Deploy					
Servers	Completed at	-					
· Eshris Internegente	Progress Status	:		90%	*		
Party Intercornects	Remote Invocation Result	it : Not Applicable					
 Fabric Interconnect A (subordinate) (S) 	Remote Invocation Error	r Code : None					
 Fabric Interconnect B (primary) 	Remote Invocation Desi	pription :					
* Policies	Step Sequence						

19個交換矩陣互聯A

升級完成後, previousprimaryFabric Interconnectassume在群集中配置子縱座標。

驗證

要驗證UCS Manager升級是否成功,請在導航窗格的裝置部分選擇交換矩陣互聯。

在Installed Firmware頁籤下,點選展開所有加號(+)圖示。

Cisco UC		Equipment / Fabric Interconnects						
	Equipment Chassis	Fabric Interconnects IO Modules	Thermal Power Fans	Capability Catalog	s Events Performance		c	0
ಕೆಕ	 Rack-Mounts 	Name	Model	Package Version	Running Version	Startup Version	Activate Status	_
	Fabric Interconnects	w UCS Manager						-
-	 Fabric Interconnect A (subordinate) 	UCS Manager Service Pack	(4.3(3)SP0(Default)	4.3(3)SP0(Default)	Ready	
=	 Fabric Interconnect B (primary) 	UCS Manager System		4.3(3a)A	4.3(3a)	4.3(3a)	Ready	
	 Policies 	+ Fabric Interconnects						
	Port Auto-Discovery Policy	w Fabric Interconnect A (subordi	Cisco UCS 6454					
1		Kernel		4.3(3a)A	9.3(5)43(3a)	9.3(5)43(3a)	Ready	
-0		Service Pack			4.3(3)SP0(Default)	4.3(3(SP0(Default)	Ready	
		System		4.3(3a)A	9.3(5)+43(3a)	9.3(5)(43(3a)	Ready	
			Cisco UCS 6454					
		Kernel		4.3(3a)A	9.3(5)43(3a)	9.3(5)(43(3a)	Ready	
		Service Pack			4.3(3)SP0(Default)	4.3(3(SP0(Default)	Ready	
		System		4.3(3a)A	9.3(5)(43(3a)	9.3(5)(43(3a)	Ready	

20個安裝的韌體

已成功升級UCS Manager。

如果之前配置了疏散設定,請記住現在停用它。

Enclosures	Ø	V	0		nices levers
FEX	0	0	0		
Servers				Up 📕 Admin Down 📕 Fail 📕 Link Down	
* Fabric Interconnects	Status			Configure Evacuation ×	
 Fabric Interconnect A (subordinate) 	Overall Stat	us :	t Operab		
Fabric Interconnect B (primary)	Thermal		т ок	Configure Evacuation	
	Ethernet Mo	de :	End Host	Artmin Func Morte : On Of	P
* Policies	FC Mode		End Host		
Port Auto-Discovery Policy	Admin Evac	Mode :	On	Force : U	S
	Oper Evac M	Mode :	On		т
	Actions		_		
	Configure Ev	acuatio	n	OK Apply Cancel Help	
	Configure Ur	nified Po	orts	(+) Local Storage Information	
	Internal Fabr	ic Mana	ger		

21管理模式關閉

如果需要,您可以在local-mgmt模式下使用以下CLI命令更改集群潜在顧客:

#cluster引線a

FI-B# connect local-mgmt Cisco Nexus Operating System (NX-OS) Software TAC support: http://www.cisco.com/tac Copyright (c) 2009, Cisco Systems, Inc. All rights reserved. The copyrights to certain works contained in this software are owned by other third parties and used and distributed under license. Certain components of this software are licensed under the GNU General Public License (GPL) version 2.0 or the GNU Lesser General Public License (LGPL) Version 2.1. A copy of each such license is available at http://www.opensource.org/licenses/gpl-2.0.php and http://www.opensource.org/licenses/lgpl-2.1.php

-FI-B(local-mgmt)# cluster lead a

22連線集群主管

鍵入Yes繼續。然後,您會暫時從CLI和GUI例項註銷。

重新登入到UCS Manager以驗證集群主用裝置現在是否是您之前的主交換矩陣互聯。

您的UCS Manager升級現已完成。

關於此翻譯

思科已使用電腦和人工技術翻譯本文件,讓全世界的使用者能夠以自己的語言理解支援內容。請注 意,即使是最佳機器翻譯,也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準 確度概不負責,並建議一律查看原始英文文件(提供連結)。