使用ASDM或CLI配置ASA 9.X軟體映像升級

目錄 簡介 必要條件 需求 <u>採用元件</u> 相關產品 慣例 <u>下載軟體</u> ASA和ASDM之間的相容性 ASA升級路徑 使用ASDM 7.x升級ASA軟體映像 使用ASDM 7.x升級ASDM映像。 <u>通過直接從CCO下載映像升級ASA和ASDM</u> 使用CLI升級軟體映像和ASDM映像 驗證 疑難排解 相關資訊

簡介

本文檔介紹如何使用Cisco Adaptive Security Device Manager升級Cisco ASA 5500裝置上的軟體映像。

必要條件

需求

本文件沒有特定需求。

採用元件

本文中的資訊係根據以下軟體和硬體版本:

- Cisco ASA 5500和ASA 5500-X 9.1(2)及更高版本
- Cisco ASDM 7.1及更高版本

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。

相關產品

此配置還可以與Cisco ASA 5500-X系列安全裝置軟體版本9.x配合使用。

慣例

請參閱思科技術提示慣例以瞭解更多有關文件慣例的資訊。

下載軟體

要下載所需版本的ASA軟體映像和ASDM軟體映像,請使用以下連結:

- <u>Cisco ASA軟體版本下載</u>(僅限註冊客戶)
- Cisco ASDM軟體版本下載(僅限註冊客戶)

💊 注意:從Cisco.com下載此軟體需要有效的思科使用者憑證。

ASA和ASDM之間的相容性

顯示的連結會隨每個版本的ASA的相容性和思科建議的ASDM版本更新。

<u>ASA和ASDM相容性</u>

ASA升級路徑

所示的連結提供了ASA的升級路徑。某些版本需要臨時升級,然後才能升級到最新版本。

<u>ASA升級路徑</u>

使用ASDM 7.x升級ASA軟體映像

完成以下步驟,使用ASDM升級ASA 5500上的軟體映像。

1.當ASA處於單情景模式時,選擇 Tools > Upgrade Software from Local Computer... 在ASDM的Home視窗中。

Cisco ASDM 7.1 for ASA - 10.106.45.231						
File View	File View Tools Wizards Window Help					
Home C		Command Line Interface Show Commands Ignored by ASDM on Device	Back OFroward ? Help			
Add		Packet Tracer Ping	vall Dashboard			
		File Management Check for ASA/ASDM Updates				
		Upgrade Software from Local Computer Downgrade Software	⊕ ox	Device Uptime: 0d 0h 2m 51s Device Type: ASA 5512		
		Backup Configurations Restore Configurations		Context Mode: Single Total Flash: 4096 MB		
		System Reload Administrator's Alert to Clientless SSL VPN Users		Inclusion floor a	Patrik	
		Migrate Network Object Group Members	Neudess cor Ann: A	AnyConnect Clience 0	CC1882	
2		Preferences ASDM Java Console	oge Core Usage Details			

當ASA在多情景模式下運行時, Upgrade Software from Local Computer 下的選項 Tools 選單頁籤只能從「系 統」上下文中使用。

🧱 Cisco ASDM 7.1 for ASA - 10.106.45.231 System					
File View	Tools	Wizards Window Help			
Home @		Command Line Interface	🔿 Back 🕐 Forward	2 Help	
Device List		Show Commands Ignored by ASDM on Device		•	
Add m		Packet Tracer			
Finds		Ping			
-mu: □∎ 10.10		Traceroute		Contexts	
B		File Management			
		Check for ASA/ASDM Updates			
		Upgrade Software from Local Computer			
		Downgrade Software			
		System Reload		admin	
		Preferences			
		ASDM Java Console			

2.從下拉選單中選擇ASA作為要上傳的映像型別。

📧 Upgrade Software						
Upload a file from local computer to flash file system on the device. The upload process might take a few minutes. Please wait for the operation to finish.						
Image to Upload:	ASA 👻					
Local File Path:	Application Profile Customization Framework (APCF) ASA	Browse Local Files				
Flash File System Path:	ASDM Client Secure Desktop (CSD) Cisco AnyConnect VPN Client	Browse Flash				
[Upload Image Close Help					

3. 按一下 Browse Local Files... 或鍵入路徑 Local File Path 用於指定PC上軟體映像位置的欄位。

4.按一下Browse Flash...

5.系統隨即會顯示「瀏覽快閃記憶體」對話方塊,並自動輸入檔名。如果未顯示檔名,請手動在 File Name 欄位.按一下 完成後確定。

🔚 Upgrade Software	
Upload a file from local o minutes. Please wait for	computer to flash file system on the device. The upload process might take a few the operation to finish.
Image to Upload:	ASA 👻
Local File Path:	C:\Users\srmunaga\Downloads\asa916-smp-k8.bin Browse Local Files
Flash File System Path:	disk0:/asa916-smp-k8.bin Browse Flash
(Upload Image Close Help

6.指定本地和遠端檔名後,按一下 Upload Image.

🔄 Upgrade Software	X		
Upload a file from local computer to flash file system on the device. The upload process might take a few minutes. Please wait for the operation to finish.			
Image to Upload:	ASA		
Local File Path:	C: \Users \srmunaga \Downloads \asa916-smp-k8.bin Browse Local Files		
Flash File System Path:	disk0:/asa916-smp-k8.bin Browse Flash		
· (Upload Image Close Help		
asa 🔁	83		
i Image I the boo	has been uploaded to flash successfully. Do you wan't to set this image as it image?		
	Yes No		

7.當ASDM將映像寫入快閃記憶體時,將顯示狀態視窗。完成後,將顯示「資訊」視窗,指示上載 成功,並詢問是否將映像設定為啟動映像。選擇 Yes.

🔂 Upg	rade Software
Upload minute	a file from local computer to flash file system on the device. The upload process might take a few
Image	
Local F	Your device configuration is updated to use the new image.
Flash F	To use this ASA image, the ASA needs to be reloaded. Go to the menu item, Tools > System Reload to do this.
	Be sure that you upgrade the ASDM image to one that is compatible with the new ASA image.
	OK

按一下 ok 在「資訊」對話方塊中按一下 close 在Upload Image from Local PC對話方塊中。

8. 選擇 Tools > System Reload 從Home視窗重新載入裝置。

	Cisco ASDM 7.1 for ASA - 10.106.45.231					
E	ile <u>V</u> iew	Tools Wizards Window Help				
	Home G		<u>C</u> ommand Line Interface Show Commands <u>Ig</u> nored by ASDM on Device	Back 💽 Forward		
Fir	Add		<u>P</u> acket Tracer Pi <u>ng</u> <u>T</u> raceroute	vall Dashboard		
			File <u>M</u> anagement Check f <u>o</u> r ASA/ASDM Updates <u>U</u> pgrade Software from Local Computer <u>D</u> owngrade Software		Device Uptime: Device Type: Context Mode:	
			Backup Configurations Restore Configurations System Beload	Ф ок	Total Flash:	
L		-	Administrator's Alert to Clientless SSL VPN Users			
			- Migrate Network Object Group Members	lientless SSL VPN: 0	AnyConnect Cl	
L			Pre <u>f</u> erences			
			ASDM Java Console	age Core Usage Details		

此時會出現一個新視窗,用於驗證重新載入的詳細資訊。選擇 Save the running configuration at the time of reload 然後選擇重新載入的時間。時間選擇包括:

- 現在 立即重新啟動裝置。
- 延遲時間 指定從現在起重新載入裝置的分鐘數或小時數。
- Schedule at 指定重新載入裝置的時間和日期。

此外,指定當計畫的重新載入失敗時,裝置是否立即強制重新載入。支票 On Reload failure, force an immediate reload after 然後指定最大保持時間。這是安全裝置在關閉或重新啟動之前等待通知其他子系統的時間量。經過此時間後,會發生快速(強制)關機/重新啟動。按一下 Schedule Reload.

🔁 System Reload	×
Schedule a system reload or cancel a pending one.	
Reload Scheduling	
Configuration State:	
Save the running configuration at time of reload	
Reload without saving the running configuration	
Reload Start Time:	
Now	
O Delay by:	
Schedule at:	
Reload Message:	
On reload failure, force an immediate reload after: hh : mm or mmm	
Schedule Reload	
Reload Status]
Cancel Reload Refresh Details	
Last Updated: 4/9/15 2:32:06 PM	1
Close Help	

一旦重新載入正在進行中, Reload Status 視窗,指示正在重新載入。還提供了退出ASDM的選項。

✤ 注意:ASA重新載入後再次啟動ASDM。

	Re	load	Sta	tus
- CONT				_

Notification (4/9/15 9:08:35 AM):	
*** START GRACEFUL SHUTDOWN	
Notification (4/9/15 9:08:35 AM): Shutting down License Controller	ш
Notification (4/9/15 9:08:35 AM): Shutting down License Controller	
Notification (4/9/15 9:08:35 AM): Shutting down License Controller	
Notification (4/9/15 9:08:35 AM):	Ŧ
Don't show this dialog again. To view reload status in the future, go to Tools > System Reload and click the Details button.	
Refresh Force Immediate Reload Exit ASDM	

х

使用ASDM 7.x升級ASDM映像。

完成以下步驟,使用ASDM之一升級ASA 5500上的軟體映像。

1.選擇 Tools > Upgrade Software from Local Computer... 從 Home 視窗。

Cisco ASDM 7.1 for ASA - 10.106.45.231						
File View Tools Wigards Window Help						
Home C		<u>Command Line Interface</u> Show Commands Ignored by ASDM on Device	Back 💽 Forward 🢡 Help			
Add	Packet Tracer Pi <u>ng</u> Traceroute	Packet Tracer Ping	val Dashboard			
		-				
		Check for ASA/ASDM Updates				
		Upgrade Software from Local Computer		Device Uptime: Od Oh 51m 1s		
		Downgrade Software		Device Type: ASA 5512		
		Backup Configurations Restore Configurations	🗣 ок	Total Flash: 4096 MB		
L		System Reload				
ť –		Administrator's Alert to Clientless SSL VPN Users				
		Migrate Network Object Group Members	aentiess SSL VPN: 0	AnyConnect Client: 0	Details.	
		Preferences				
		ASDM Java Console	age Core Usage Details			

2.選擇 ASDM 作為要從下拉選單中上傳的映像型別。

🔁 Upgrade Software		—		
Upload a file from local computer to flash file system on the device. The upload process might take a few minutes. Please wait for the operation to finish.				
Image to Upload:	ASDM			
Local File Path:	Browse Local Files			
Flash File System Path:	ASDM	Browse Flash		
	Client Secure Desktop (CSD)			
	Cisco AnyConnect VPN Client			
(Upload Image Close Help			

3.按一下 Browse Local Files... 或鍵入路徑 Local File Path 用於指定PC上軟體映像位置的欄位。

按一下 Browse Flash....

A Browse Flash 對話方塊,並自動輸入檔名。如果檔名未顯示,請手動在 File Name 欄位.按一下 OK 完成時。

🔄 Upgrade Software					
Upload a file from local computer to flash file system on the device. The upload process might take a few minutes. Please wait for the operation to finish.					
Image to Upload:	ASDM 👻				
Local File Path:	C: \Users \srmunaga \Downloads \asdm-741.bin Browse Local Files				
Flash File System Path:	disk0:/asdm-741.bin Browse Flash				
(Upload Image Close Help				

4.按一下 ок 當使用新影象更新影象時。

æ,	Ipgrade Software	23
u	🔄 Information 📃	3
m Ir Le	Your device configuration is updated to use the new image. To use this ASDM image, you will need to exit and rerun to ASDM. Click the Save button in the toolbar if you want to save this change in flash and make it permanent.	
	OK	

5.選擇 File > Save Running Configuration to Flash 從 Home 視窗。

۰	G Cisco ASDM 7.1 for ASA - 10.106.45.231					
Eile	View Tools Wizards Window Help		_			
	<u>R</u> efresh ASDM with the Running Configuration on the Device Reset <u>D</u> evice to the Factory Default Configuration	FS	ok 🕐 Forward 🧳 Help			
	Show Running Configuration in New Window		lashboard			
	Save Running Configuration to Flash	Ctrl+S				
	Save Running Configuration to <u>T</u> FTP Server Save Running Configuration to Standby <u>Unit</u>	Si	ve Running Configuration to Flash			
	Print	Ctrl+P		Device Uptime:	0d 2h 27m 1s	
	Clear ASDM Cache			Context Mode:	Single	
	Clear ASDM Password Cache		de orc	Total Flash:	4096 MB	
	Clear Internal Log Buffer				1050110	
	Exit	Alt+F4				

退出ASDM並再次登入以管理具有升級的ASDM映像的ASA。

通過映像升級ASA和ASDM 下載 直接從CCO

完成以下步驟,直接從CCO升級ASA和ASDM映像。

1.選擇 Tools > Check for ASA/ASDM Updates... 從 Home 視窗。

📮 Cisco ASI	DM 7	.1 for ASA - 10.106.45.231		
File View	Too	ls Wizards Window Help		
Home G		Command Line Interface Show Commands Ignored by ASDM on Device	Back 🕐 Forward 🢡 Help	
Add		Packet Tracer Ping Traceroute	vall Dashboard	
		File Management Check for ASA/ASDM Updates Upgrade Software from Local Computer Downgrade Software Backup Configurations Restore Configurations	Ф ок	Device Uptime: 0d 0h 27m 5 Device Type: ASA 5512 Context Mode: Single Total Flash: 4096 MB
		Administrator's Alert to Clientless SSL VPN Users Migrate Network Object Group Members Preferences ASDM Java Console	lientiess SSL VPN: 0 age Core Usage Details	AnyConnect Client: 0
		1900 -		

2.顯示使用者名稱和密碼提示時,提供Cisco.com憑證並按一下 Login.



3. Cisco.com Upgrade Wizard 對話方塊。在 Overview 部分,按一下 Next.

Cisco.com Upgrade Wizard	
Steps 1. Overview 2. Select Software 3. Review Changes 4. Installation 5. Results	Overview Use this wizard to upgrade ASA and ASDM images. This wizard will allow you to upgrade software on your device.
	< Back Next > Cancel

4.在 Select Software 部分,檢查需要升級的軟體。如果需要升級ASA和ASDM,請選中這兩個選項。

Cisco.com Upgrade Wizard		X	
Steps	Select Software		
1. Overview	Select the software you would like to upgrade.		
2. Select Software	- 454		
3. Review Changes	Current ASA version 9.1(2)		
4. Installation	Upgrade to	9.1.3 👻	
5. Results	·		
	ASDM		
	Upgrade to	7.1.6 👻	
		,	
(< Back Next >	Cancel	

5.在「ASA版本」下拉選單中,選擇必須執行ASA升級的版本。

Cisco.com Upgrade Wizard			X
Steps	Select Software		
1. Overview	Select the software you would like to upgrade.		
 Select Software Review Changes 	ASA Current ASA version 9, 1(2)		
4. Installation	Upgrade to	9.1.6	-
5. Results	ASDM Current ASDM version 7.1(3)0	9.1.3 9.1.4 9.1.5 9.1.6 9.2.1 9.2.2.4 9.2.3 9.3.1	
	Click "NEXT" to continue.		
	< Back Next >	Canc	el

6.在ASDM版本下拉選單中,選擇必須執行ASDM升級的版本。按一下 Next 選擇適當的版本時。

Cisco.com Upgrade Wizard			×	
Steps	Select Software			
1. Overview	Select the software you would like to upgrade.			
2. Select Software	454			
3. Review Changes	Current ASA version 9.1(2)			
4. Installation	Upgrade to 9.1.6			
5. Results	L	<u></u>	4	
	ASDM			
	Current ASDM version 7.1(3)0			
	Upgrade to	7.4.1	-	
	`	7.2.1	×	
		7.2.2		
		7.3.1		
	Click "NEXT" to continue.	7.3.1.101		
		7.3.2	=	
		7.3.2.102		
	< Back Next >	7.3.3		
		7.4.1	Ŧ	

7.在 Review Changes 部分,檢視更改並按一下 Next.

Cisco.com Upgrade Wizard		×
StepsReview Changes1. OverviewReview the changes that will be made by the wize2. Select Software1) Download ASA 9.1.6 from Cisco.com3. Review Changes1) Download ASA 9.1.6 to the device4. Installation3) Set ASA 9.1.6 as boot image5. Results1) Download ASDM 7.4.1 from Cisco.com5. Results5) Upload ASDM 7.4.1 to the device6) Set ASDM 7.4.1 as device manager image		
	After reviewing these actions, click "NEXT" to continue, or "BACK" to make changes.	
	< Back Next > Canc	el

8.開始安裝映像,總體進度如圖所示。完成後,按一下 Finish. 在 Results 部分,請檢查 Save configuration and reload device now 選項。按一下 Finish.

Cisco.com Upgrade Wizard	
Steps	Results
1. Overview	The installation completed successfully.
2. Select Software	Changes will take effect next time the device is reloaded. It is
3. Review Changes	changes will take effect next time the device is reloaded. This
4. Installation	Save configuration and reload device now
5. Results	
	Click "FINISH" to exit the wizard and send any configuration
	< Back Next > Finish Cancel

9. Reload Status 裝置重新載入時會顯示對話方塊。

🔤 Reload Status	×
Notification (4/9/15 2:29:38 PM): Shutting down License Controller	*
Notification (4/9/15 2:29:38 PM): Shutting down License Controller	
Notification (4/9/15 2:29:39 PM): Shutting down File system	
Notification (4/9/15 2:29:39 PM):	=
*** SHUTDOWN NOW	
*** Message to all terminals:	
*** Upgrading system image	
Don't show this dialog again. To view reload status in the future, go to Tools > S Reload and click the Details button.	ystem
Refresh Force Immediate Reload Exit ASI	м

10.按一下 Exit ASDM 並在重新載入後裝置啟動時再次登入。

使用CLI升級軟體映像和ASDM映像

升級或降級軟體映像以及ASA的ASDM映像需要TFTP伺服器。請參閱<u>TFTP伺服器選擇和使用</u>以瞭 解有關TFTP伺服器選擇的詳細資訊。

其 copy tftp flash 命令允許通過TFTP將軟體映像下載到防火牆的快閃記憶體中。使用 copy tftp flash 命令時,可使用任何安全裝置型號。現在可以通過更改引導系統變數以指向此映像,在下次重新啟動時使用下載的映像。

這是 copy tftp flash 指令:

copy tftp[:[[//location] [/tftp_pathname]]] [[flash/disk0][:[image | asdm]]]

對於多情景模式,請在系統執行空間中執行這些步驟。

💊 註:對於ASA,關鍵字disk0替換了 copy 指令。

如果使用命令時沒有位置或路徑名可選引數,則位置及檔名將通過與Cisco IOS®軟體所顯示問題類 似的一系列問題以互動方式從使用者獲取。如果只輸入冒號,引數將從 tftp-server 命令設定。如果提 供了其他可選引數,則會使用這些值來代替關聯引數 tftp-server 命令設定。如果提供了任何可選引數 (如冒號及其後的任何內容),該命令將在不提示使用者輸入的情況下運行。

該位置是IP地址或由安全裝置名稱解析機制解析為IP地址的名稱,安全裝置名稱解析機制當前由 name 和 names 指令。安全裝置必須知道如何通過其路由表資訊到達此位置。此資訊由 IP address,其 route或 RIP 指令。視您的組態而定。

除了伺服器上檔案的路徑的實際最後一個元件之外,路徑名還可以包含任何目錄名。路徑名不能包 含空格。如果目錄名稱包含空格,則在TFTP伺服器中而不是在 copy tftp flash 指令。如果TFTP伺服器 配置為指向系統上的目錄,從中下載映像,則僅使用系統的IP地址和映像檔名。TFTP伺服器收到命 令並從其根目錄資訊確定實際檔案位置。然後伺服器將TFTP映像下載到安全裝置。

升級軟體映像以及ASDM映像並在下次重新載入時將其作為引導映像需要這些命令。

<#root>

ASA

#copy tftp [[flash:/disk0:][software image name/asdm image name]]

!--- Command to set an image as bootup or specify the
!--- ASDM image file.

ASA(config)

#boot system [flash:/disk0:]/[software image name]

!--- Save active configuration to the Flash.

ASA

#write memory

!--- Reboot the security appliance and load
!--- with the new boot image as per the configuration file.

ASA

#reload

範例:

<#root>

ASA-5512# copy tftp: disk0:

ASA-5512# sh disk0

--#-- --length-- ----date/time----- path

191	38191104	Nov 21 201	4 21:07:48	asa912-smp-k8.bin
192	17906032	Apr 08 20	15 22:33:44	asdm-713.bin
193	26350916	Apr 09 20	15 06:28:20	asdm-741.bin
194	38043648	May 10 20	15 02:14:06	asa916-smp-k8.bin

4118732800 bytes total (3556712448 bytes free)

!--- Command to set "asa916-smp-k8.bin" as the boot image.

ASA-5512(config)

boot system disk0:/asa916-smp-k8.bin

!--- Command to set "asdm-741.bin" as the ASDM image.

ASA-5512(config)

asdm image disk0:/asdm-741.bin

ASA-5512

write memory

ASA-5512

reload

註:當您嘗試從FTP伺服器升級ASA上的映像時,請使用 copy ftp flash 指令。此命令允許指定引 數,如遠端IP地址和源檔名。此程式與TFTP類似。但是,一個限制是您不能修改遠端IP/源介 面(就像使用TFTP時一樣)。在TFTP模式下,使用 tftp-server 命令可以被提取並執行。但若使 用FTP,則沒有此類選項。預設情況下,源介面始終為外部介面,不能對其進行修改。即,可 從外部介面訪問FTP伺服器。 使用本節內容,確認軟體升級是否成功。

<u>Cisco CLI Analyzer</u>(僅供<u>已註冊</u>客戶使用)支援 show 指令。使用Cisco CLI Analyzer檢視 show 命令輸出。

在ASA重新載入並再次成功登入到ASDM後,驗證裝置上運行的映像的版本。請參見 General 頁籤上的 Home 視窗。

Cisco ASDM 7.4 for ASA - 10.106.45.231		
File View Tools Wizards Window Help		
🚓 Home 🦓 Configuration 🔯 Monitoring 🔚 Save 🔇 Refresh 🔇 Back 🔇 Forward 🢡 Help		
Device List D P X Home		
🕈 Add 📋 Delete 🚿 Connect	Device Dashboard 🔃 Firewall Dashboard	
Find: Go	Device Information	
General License		
	Host Name: ASA-5512	
	ASA Version: 9.1(6) Device	Uptime: Od Oh 11m 6s
	ASDM Version: 7.4(1) Device	Type: ASA 5512
	Firewall Mode: Routed Conte	xt Mode: Single
	Environment Status: 🖶 OK Total F	Flash: 4096 MB

以下CLI命令用於驗證升級:

- 1. Show version 顯示用於啟動ASA的當前映像。
- 2. Show bootvar 顯示重新載入後要使用的映像的優先順序。
- 3. Show asdmimage 這顯示ASA使用的當前ASDM映像。

疑難排解

目前尚無特定資訊可用於排解此組態的疑難問題。

相關資訊

- <u>版本資訊</u>
- <u>Cisco ASA新功能(按版本)</u>
- Cisco ASA相容性
- <u>規劃升級</u>
- 升級主用/備用故障切換配置

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)。