PIX/ASA — 使用ASDM或CLI升级软件映像

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<u>简介</u>

本文档介绍如何使用 Cisco 自适应安全设备管理器 (ASDM) 升级 Cisco ASA 5500 系列自适应安全 设备上的软件映像。

如果将安全设备软件从 7.0 直接升级到 7.2(或反向降级)或将 ASDM 软件从 5.0 直接升级到 5.2(或反向降级),则 ASDM 不起作用。升级需要按递增顺序进行。

示例:要执行从5.0到5.2的ASDM软件升级,首先从5.0升级到5.1,然后从5.1升级到5.2。同样,对于安全设备,首先从7.0升级到7.1,然后从7.1升级到7.2。

注:如果要从版本7.1.(x)升级或降级到版本7.2(x),反之亦然,则必须执行此步骤,因为旧版本的安 全设备映像无法识别新的ASDM映像,而新的安全设备映像无法识别旧的ASDM映像。要详细了解 升级过程,请参阅 <u>Cisco PIX 安全设备发行版本注释 7.2(2) 版的升级到新软件版本部分。</u>

注意:您不能将ASA 5550降级到早于7.1(2)的软件版本。 同样,您不能将ASA 5505降级到低于 7.2的软件版本。有关详细信息,请参阅<u>Cisco ASA 5500系列和PIX 500系列安全设备硬件和软件兼</u> 容性。

注意:在多情景模式下,不能使用copy tftp flash命**令升**级或降级所有情景中的PIX/ASA映像;仅在 System Exec 模式下支持此操作。

<u>先决条件</u>

本文档没有任何特定的要求。

<u>使用的组件</u>

本文档中的信息基于以下软件和硬件版本:

- Cisco ASA 5500 7.0 及更高版本
- Cisco ASDM 5.0 及更高版本

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原 始(默认)配置。如果您使用的是真实网络,请确保您已经了解所有命令的潜在影响。

<u>相关产品</u>

此配置还可与 Cisco PIX 500 系列安全设备软件版本 7.0 及更高版本配合使用。

<u>规则</u>

有关文档约定的更多信息,请参考 Cisco 技术提示约定。

<u>下载软件</u>

您可以使用以下链接下载所需的ASA软件映像和ASDM软件映像版本:

- <u>Cisco ASA软件版本下载</u>(仅<u>限注</u>册客户)
- <u>Cisco ASDM软件版本下载</u>(仅<u>限注</u>册客户)

注意:要从Cisco.com下载此软件,您需要有有效的思科用户凭证。

使用 ASDM 5.x 升级软件映像

完成以下这些步骤,以使用 ASDM 升级 ASA 5500 上的软件映像。

1. 从 ASDM 的主窗口中选择 Tools > Upgrade Software...。

Cisco ASDN	4 5.2 for ASA - 172.16.33.1						
File Options	Tools Wizards Help			Sea	rch:		F
Home	Command Line Interface Packet Tracer	ck Forward Packet Trace	Refresh	Save Help		(isco Sys
-Device Inf	Ping Traceroute		Interface Status	•			
General	File Management		Interface	IP Address/Mask	Line	Link	Kibps
Host Nam	Upgrade Software	alid	inside	172.16.33.1/16	🖸 up	🕤 up	1
ASA Ven	Upload ASDM Assistant Guide	ww. fid tib 2m 47s	outside	40.30.30.30/26	😑 down	😑 down	0
ASDM Ve Firewal N	System Reload Adde: Routed Context M	e: ASA 5510 ode: Single					
Total Flas	h: 64 MB Total Memo	ory: 256 MB	Select an interfa	ce to view input and outpo	ut Kbps		
VPN Statu KE Tunnel	8 s: 0 WebVPN Tunnels:	0 SVC Turnels: 0	Connections Po	r Second Usage			
CPU	CPU Usage (percent)		2 1 0 02:41.07	• • • • • • • • • • • • • • • • • • • •		• • • • • •	·····
	0		UDP: 0	TCP: 0	Total:	0	
02:42:07	02:41:07		'outside' Interfa	oe Traffic Usage (Kbps)			
68MB	Memory Usage (MB)		2	Interfac	e is down.	,	
02:42:07	02:41:07		input Klops:	📕 Outp	ut Klops:		

2. 从下拉菜单中选择要上载的映像类型。

Iome	Configuration Monitoring	Back Forward Packet	💐 💽 Tracer Refresh	Save Help			CISCO SYST
Device Inform	nation		-Interface Statu	8			
General Lice	nee		Interface	IP Address/Mas	Line	Link	Klaps
Host Name	ASA5510.default.domai	in.invalid	inside	172.16.33.1/16	\varTheta սր	🖸 up	1
ACC Manada			outside	40.30.30.30/26	😐 dawn	🗢 down	0
Total Flash:	Please wait for the operation	n to finish.					
Totel Flash: /PH Status KE Tunnels: System Res CPU	Please wat for the operation Image to upload: Local File Path.	ASA Application Profile Customization ASA ASDM Client Secure Desirtop (CSD) SSL VPN Client (SVC)	n Framework (APCF)	Browse Loo	al Files		

- 3. 单击 Browse Local Files... 或在 Local File Path 字段中键入路径,以指定该软件映像在计算机 上的位置。
- 4. 单击**Browse Flash...**。随后将出现 Browse Flash Dialog 窗口,其中自动输入了相应的文件名 。如果不显示文件名,请在 File Name 字段中手动输入该文件名。完成后单击 **OK。**

mage to upload:	ASA		*	ink
ocal File Path	C Documents and S	ettinos\Administrator\Desktop\Prabu\Pl	X Browse Local Fi	p ow
ilash File System Path:	Flash filename		Browse Flash	<u> </u>
	Folders ————————————————————————————————————	Files FileName -	Size (bytes)	Date Modified
	Folders ————————————————————————————————————	Files FileName > asdm-52034.bin	Size (bytes) 6,002,680	Date Modified 12/21/06 03:58:30
	Folders ————————————————————————————————————	Files FileName asdm-52034.bin asa722-k8.bin	Size (bytes) 6,002,680 8,312,832	Date Modified 12/21/06 03:58:30 12/07/06 06:08:02
	Folders ————————————————————————————————————	Files FileName ≥ asdm-52034.bin asa722-k8.bin asa721-24-k8.bin	Size (bytes) 6,002,680 8,312,832 8,294,400	Date Modified 12/21/06 03:58:30 12/07/06 06:08:02 12/07/06 05:47:20
	Folders — 💓 disk0;	Files FileName ≥ asdm-52034.bin asa722-k8.bin asa721-24-k8.bin asdm-521.bin	Size (bytes) 6,002,680 8,312,832 8,294,400 5,539,756	Date Modified 12/21/06 03:58:30 12/07/06 06:08:02 12/07/06 05:47:20 02/12/07 00:14:18
	Folders ————————————————————————————————————	Files FileName > asdm-52034.bin asa722-k8.bin asa721-24-k8.bin asdm-521.bin asdm-522.bin	Size (bytes) 6,002,680 8,312,832 8,294,400 5,539,756 5,623,108	Date Modified 12/21/06 03:58:30 12/07/06 06:08:02 12/07/06 05:47:20 02/12/07 00:14:18 02/12/07 00:23:48
	Folders — 📚 clisk0;	Files FileName ≥ asdm-52034.bin asa722-k8.bin asa721-24-k8.bin asdm-521.bin asdm-522.bin asa702-k8.bin	Size (bytes) 6,002,680 8,312,832 8,294,400 5,539,756 5,623,108 5,124,096	Date Modified 12/21/06 03:58:30 12/07/06 06:08:00 12/07/06 05:47:20 02/12/07 00:14:18 02/12/07 00:23:48 01/01/03 00:06:22
	Folders — 🗶 diskû;	Files FileName ≥ asdm-52034.bin asa722-k8.bin asa721-24-k8.bin asdm-521.bin asdm-522.bin asa702-k8.bin pix712.bin	Size (bytes) 6,002,680 8,312,832 8,294,400 5,539,756 5,623,108 5,124,096 6,764,544	Date Modified 12/21/06 03:58:30 12/07/06 06:08:03 12/07/06 05:47:20 02/12/07 00:14:18 02/12/07 00:23:48 01/01/03 00:06:22 12/07/06 05:34:50

5. 指定本地和远程文件名后,单击 Upload Image。

mage to upload:	ASA]
.ocal File Path:	C:\Documents and Settings\Administrator\Desktop\Prabu\PIX	Browse Local Files
lash File System Path:	disk0:/pix722.bin	Browse Flash
	Upload Image	

ASDM 向闪存写入映像的同时将显示 Status 窗口。

age to upload:	ASA	-
ocal File Path: 🔂 🔂	itatus	se Local Files
ash File System Pa	Please wait while ASDM is uploa may take few minutes.	ading the file. Upload process

完成后将显示 Information 窗口,指示上载成功。

mage to upload:	ASA	
.ocal File Path:	C:'Documents and Settings'Administrator'Desktop'Prabu'PIX Br	owse Local Files
flash File System Path:	Information X	Browse Flash
	ASA image is uploaded to flash successfully.	
	OK	

- 6. 在 Information 窗口中单击 OK,然后单击 Upload Image from Local PC 窗口中的 Close。
- 7. 选择 Configuration > Properties > Device Administration > Boot Image/Configuration > Edit 以更改引导映像位置。

Configuration > Properties > Devic	e Administration > Boot Im	hage/Configuration	
Startup Wizard AAA Setup AAA Setup Anti-Spoofing ARP Auto Update Client Update	oot Image/Configuration Boot Configuration Configure boot images for the boot system. Or the first image in the lis	from an external TFTP server and flash file system. Up to fo nly one TFTP boot image can be configured. The TFTP boot i t.	our images can be configured mage, if configured, must be
E-Si Certificate	Boot Order	Boot Image Location	
Pevice Access	1 disk0	:/ssa721-24-k8.bin	
Banner			
Boot Image/Confid			E06
CLI Prompt			
Occk			Delete
- ansole			
🖧 CSD Setup			- Move (Ip
- Jevice	:		
IFTP Mode			Mave Down
CMP Rules			
Management Acc			
- INIP Inip Decoword	Boot Config File Path:		Browse Flash
- Secure Copy		· ·	
SMTP	10010		
SNMP	ASUM Image Configuration		
TFTP Server	ASDM Image File Path:	disk0:/asdm-521.bin	Browse Flash
User Accounts		,	

单击 Browse Flash 以选择或指定 ASA 映像文件。然后单击 OK。

Browse Flash Dialog			×	۲
Folders	Files			Add
💮 🔤 🥏 disk0:	FileName A	Size (bytes)	Date Modified	
	asdm-52034.bin	6,002,680	12/21/06 03:58:30	Eon
	asa722-k8.bin	8,312,832	12/07/06 06:08:02	Delate
	asa721-24-k8.bin	8,294,400	12/07/06 05:47:20	Delete
	asdm-521.bin	5,539,756	02/12/07 00:14:18	
	asdm-522 bin	5,623,108	02/12/07 00:23:48	Move up
	asa702-k8.bin	5,124,096	01/01/03 00:06:22	Moste Desare
				8 41 41 41 41 41 41
				Browse Flast
File Nam	e: asa722.bin			
and the second of the second second				Browse Flas

8. 选择 File > Save Running Configuration to Flash,以便向闪存存储配置。



9. 从主窗口选择 Tools > System Reload,以重新加载设备。

Cisco ASDM	15.2 for ASA - 172.16.33.1						
e Options	Tools Wizards Help					Se	arch:
्र्ये Home	Command Line Interface Packet Tracer) ack	Forward	Racket Tracer	Refresh	Save Help	
Device Inf	Ping Traceroute				-Interface Statu	8	
General	File Management				Interface	IP Address/Mask	Line
Host Nam	Upgrade Software	alid			inside	172.16.33.1/16	🖸 up
ASA Ver	Upload ASDM Assistant Guid	de me	0d 0b 58m	20.5	outside	40.30.30.30/26	😐 dow
ACDM V-	System Reload		ACA 5540	200			
ASUM VE			ASA 5510				
Firewall M	ode: Routed Co	ntext Mode:	Single				
Total Flash	r 64 MB Tot	tal Memory:	256 MB		Select an interf	ace to view input and outp	ut Kbps
VPN Status IKE Tunnels System Re	sources Status	nnels: O	SVC Tunn	els: O	Connections P	er Second Usage	
0%	100				0 00:41:21	00.43.01	Int
00:46:11	00:41:21 00:43:0	1	10:44:41	00:46:01	c'outside' Interfa	ce Traffic Usage (Kbps)	-
- Memory-	Memory Usage (MB)				2	Interfa	oe is down.
00:46:11	0)1 (0:44:41	00:46:01	Input Kbps:	Outs	out Klaps:

10. 此时显示一个新窗口,要求验证重新加载的详细信息。选择 Save the running configuration at the time of reload,然后选择重新加载的时间。Now — 立即重新启动设备。Delay By — 指定从现在起多少分钟或小时后重新加载设备。Schedule at — 指定重新加载设备的时间和 日期。还可以指定如果计划的重新加载失败,设备是否应立即强制重新加载。选择 On Reload failure, force an immediate reload after,然后指定最大保持时间。这是安全设备在关 闭或重新启动之前等待通知其他子系统的时间。经过此时间后,将进行快速(强制)关闭/重 新启动。单击 Schedule Reload。

stem F	Reload	
Schedul	e a system reload or cancel a pending one.	
Reload	Scheduling	
Con	nfiguration State:	
	Save the running configuration at time of reload	
	C Reload without saving the running configuration	
Rek	oad Start Time:	
	© Now	
	C Delay by: hh : mm or mmm	
	C Schedule at: hh : mm February ▼ 12 ▼ 2007 ▼	
Rek	oad Message:	-
Г	On reload failure, force an immediate reload after:	
	Schedule Reload	
Reload	I Status	
	No reload is scheduled.	
	Cancel Reload Refresh Details	
	Last Updated: 2/12/07 1:2/	8:37 Ph

11. 重新加载期间,将显示 Reload Status 窗口,表明正在执行重新加载。还提供退出 ASDM 的 选项。**注意:**在ASA重新加载后再次启动ASDM。

🚰 Reload Status	×
Notification (2712701 1.01.201 W). ***	A
*** START GRACEFUL SHUTDOWN	
Notification (2/12/07 1:31:26 PM):	
*** SHUTDOWN NOW	
Notification (2/12/07 1:31:27 PM):	
*** SHUTDOWN NOW	
Notification (2/12/07 1:31:27 PM):	
*** SHUTDOWN NOW	_
	<u> </u>
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	

使用 ASDM 5.x 升级 ASDM 映像

完成以下这些步骤,以使用 ASDM 升级 ASA 5500 上的 ASDM 映像。

1. 从 ASDM 的主窗口中选择 Tools > Upgrade Software...。

Options Tools Wizards Help			Search:	En
Commond Line Interface Packet Tracer Commond Line Interface C	O Q Forward Packet Tracer Ref	🕨 🔚 🧖		ISCO SYST
Device Inf Traceroute	Interfa	ce Status		
General File Management	inte	erface P Address/	Mask Line Link	Klops
Host Nam Upgrade Software alid	Inside	172.16.33.1/16	😔 up 🛛 up	1
ASA Ver Upload ASDM Assistant Guide mer	Ad Bb 38m 18s	40.30.30.30/26	🧶 down 🔍 down	0
System Reload				
ASDM VeJe:	ASA 5510			
Firewall Mode: Routed Context Mode:	Single			
Total Flash: 64 MB Total Memory:	256 MB Select	an interface to view input a	nd output Kbps	
/PN Status	Traffic	Status		
KE Tunnels: 0 WebYPN Tunnels: 0	SYC Tunnels: 0	eotions Per Second Usage-		
System Resources Status		2		
CPU CPU Usage (percent)				
100		1		
50 -		0		· · · ·
2%) Total: 0	
00:10:01 00:18:51	_'outri	to' Interface Turffic Hange (k	(had)	
00:10:01 00:10:51	-'outsi	de' Interface Traffic Usage (P	(bps)	
00:10:01 00:10:51 Memory Usage (MB)	-'outsi	de' Interface Traffic Usage ()	latadana is dava	
00:10:01 00:18:51 Memory Usage (MB) 268	-'outsi	de' Interface Traffic Usage () 2 1	bps) Interface Is down.	
00:10:01 0 00:10:01 00:10:51 Memory Usage (MB) 250 128 128		de' Interface Traffic Usage ()	bps) Interface Is down.	
00:10:01 00:19:51 Memory Usage (MB) 259 128 00:18:01 00 259 128 00:18:01 00 128 00:18:01 00 128 00:18:01 00 128 00:19:01 00 00:19:01 00 00:19:00 00 00:19:000 00:19:00 00 00:19:00 00 00:19:00 00:19:00 00:19:00 00 00:19:00 00:10:19:00 00:10:10:100	·····	de' Interface Traffic Usage ()	bps) Interface is down.	

2. 从下拉菜单中选择要上载的映像类型。

1	isco ASDM	5.2 for ASA - 1	72.16.33.1						
File	Options	Tools Wizards	Help					Se	arch
	ổ Home	Configuration	[] Monitoring	Back	O Forward	Recket Tracer	Refresh	Gave Help	
Г	Device Info	rmation					Interface Statu	8	
	General	icense					Interface	IP Address/Mask	Line
	Host Name	ASA551	0.default.dom	ain.invalid			inside	172.16.33.1/16	Oup
	ASA Versi	tingrade S	oftware				outside	40.30.30.30/26	😑 down
	ASDM Ver	s opgrade s	ontware						
	Firewall Mo	Upload a fi	e from local cor	mputer to flash	file system or	h the device. The	e upload process i	might take a few minutes.	
	Total Flash	Please wai	t for the operati	on to finish.					
	VPN Status								
	IKE Tunnels	Image to up	oload:	Application	on Profile Cus	tomization Fram	ework (APCF)	*	
	System Re			Applicatio	on Profile Cus	tomization Frame	ework (APCF)		
	CPU	Local File P	Path:	ASA				Browse Local	Files
				Client Sec	cure Desktop	(CSD)			
	0 %			SSL VPN	Client (SVC)				
	00:19:21	Flash File S	System Path:	Flash file	name			Browse Fla	sh
	Memory	-							
	69MB					Upload Image			

- 3. 单击 Browse Local... 或在 Local File Path 字段中键入路径,以指定 ASDM 映像在计算机上的 位置。
- 4. 单击**Browse Flash...**。随后将出现 Browse Flash Dialog 窗口,其中自动输入了相应的文件名
 - 。如果不显示文件名,请在 File Name 字段中手动输入该文件名。完成后单击 OK。

Upload a file from local comp Please wait for the operation Image to upload:	uter to flash file system on the to finish.	e device. The upload process might to	nke a fevv minutes.	
Local File Path:	C Documents and Settings	sVAdministrator/Desktop/Prabu/PIX	Browse Local Files	
Flash File System Path:	Iders	Files		
	📚 disk0:	FileName +	Size (bytes)	Date Modified
		asdm-52034.bin	6,002,680	12/21/06 03:58
		asa722-k8.bin	8,312,832	12/07/06 06:08
		asa721-24-k8.bin	8,294,400	12/07/06 05:47
		asdm-521.bin	5,539,756	02/12/07 00:14
		asa702-k8.bin	5,124,096	01/01/03 00:06
масмподал	F.			
	- File Mamer	asdm-522 kin		
	T HO PROFILE	Concern of a source		

5. 指定本地和远程文件名后,单击 Upload Image。

rease wait for the operation	on to milish.	
mage to upload:	ASDM]
Local File Path:	C:\Documents and Settings\Administrator\Desktop\Prabu\PIX	Browse Local Files
Flash File System Path:	disk0:/asdm-522.bin	Browse Flash

ASDM 向闪存写入映像的同时将显示 Status 窗口。

age to upload:	ASDM]
ocal File Path:	C:/Documents and Settings/Administrator/Desktop/Prabu/PIX	Browse Local Files
ash File System Path:	disk0:/asdm-522.bin	Browse Flash
	Please wait while ASDM is uploading the file. Uploat may take few minutes.	x d process

完成后将显示 Information 窗口,指示上载成功。

ease wait for the operation	on to finish.				
	· · · · · · · · · · · · · · · · · · ·				
age to upload:	ASDM			•	
ocal File Path:	🔯 Informatio	on		× wse	Local Files
	~				
	(i)	ASDM image is uploaded	to flash successful	ly	
lash File System Path:	· · · · · · · · · · · · · · · · · · ·			Brow	se Flash
		OK			

- 6. 在 Information 窗口中单击 OK, 然后单击 Upload Image from Local PC 窗口中的 Close。
- 7. 选择 Configuration > Properties > Device Administration > Boot Image/Configuration,以更改 配置中的 ASDM 映像文件名。

Configuration > Properties > Devi	ce Administration > Boot In	nage/Configuration	
Startup Wizard	Boot Image/Configuration		
AAA Setup Spaceting Arti-Spaceting ARP Arto Update	Boot Configuration Configure boot images for the boot system. O	from an external TFTP server and flash file system. Up nly one TFTP boot image can be configured. The TFTP	p to four images can be configured boot image, if configured, must be
— 🛃 Client Update	the first image in the its	п.	
E Certificate	Boot Order	Boot Image Location	Add
B Bevice Administration	1 diskD	t/asa721-24-k8.bin	
Banner			Edit
CLI Prompt			Delete
-Octock			
Console			Mountile
CSD Setup			move up
FTP Mode			Mave Dawn
- CMP Rules			
Management Acc	Boot Config File Path:		Browse Flash
Secure Copy	ASDM Image Configuration		
TFTP Server	ASDM Image File Path	disk0:Jasom-521.bin	Browse Flash

单击 Browse Flash 以选择或指定 ASDM 映像文件。然后单击 OK。

Browse	: Flash	Dialog	

——————————————————————————————————————	FileName 🔺	Size (bytes)	Date Modified
	asdm-52034.bin	6,002,680	12/21/06 03:58:30
	asa722-k8.bin	8,312,832	12/07/06 06:08:02
	asa721-24-k8.bin	8,294,400	12/07/06 05:47:20
	asdm-521.bin	5,539,756	02/12/07 00:14:18
	asdm-522.bin	5,623,108	02/12/07 00:23:48
	asa702-k8 bin	5,124,096	01/01/03 00:06:22
File N	ame: asdm-522.bin		

х

8. 选择 File > Save Running Configuration to Flash,以便向闪存存储配置。



9. 从主窗口选择 Tools > System Reload,以重新加载设备。

Cisco ASDM	1 5.2 for ASA - 172.16.33.1						
e Options	Tools Wizards Help					Ser	arch:
	Command Line Interface	D	\odot	1	Q	2	
Home	Packet Tracer	ick	Forward	Packet Tracer	Refresh	Save Help	
Device Inf	Ping Traceroute				Interface Statu	9	
General	File Management				Interface	P Address/Mask	Line
Host Nam	Upgrade Software	alid			inside	172.16.33.1/16	😧 up
ASA Ver	Upload ASDM Assistant Gu	ide me	0d 0h 58m	20e	outside	40.30.30.30/26	😐 dov
000000	System Reload		101 1140				
ASUM VE		let	ASA 5510				
Firewall M	lode: Routed C	ontext Mode:	Single		1		
Total Flash	n: 64 MB To	otal Memory:	256 MB		Select an interfe	sce to view input and outp	ut Kbps
VPN Status					Traffic Status		
IKE Tunnels	s: 0 WebVPN To	unnels: 0	SVC Tunne	sis: 0	Connections P	er Second Usage	
System Re	esources Status				2		
CPU	CPU Usage (percent)				1		
	¹⁰⁰ T						
0%	50				00:41:21	00:43:01	
	0	******			UDP: 0	TCP: 0	Tot
00546211	00:41:21 00:43	01 0	00:44:41	00:48:01	r'outside' Interfa	ce Traffic Usage (Kbps)	
Memory	Memory Usage (MB)				2 T		
	250 T				1	📃 Interfa	ce is down
801/0	128						
COLOR		• • • • • • • •			01		· ·
	0	·					

10. 此时显示一个新窗口,要求验证重新加载的详细信息。单击 Save the running configuration at the time of reload,然后选择重新加载的时间。Now — 立即重新启动设备。Delay By — 指定从现在起多少分钟或小时后重新加载设备。Schedule at — 指定重新加载设备的时间和 日期。还可以指定如果计划的重新加载失败,设备是否应立即强制重新加载。选择 On Reload failure, force an immediate reload after,然后指定最大保持时间。这是安全设备在关 闭或重新启动之前等待通知其他子系统的时间。经过此时间后,将进行快速(强制)关闭/重 新启动。单击 Schedule Reload。

Schedule a system reload or cancel a	a pending one.
Reload Scheduling	
Configuration State:	
Save the running config	uration at time of reload
C	
Reload Start Time:	he running configuration
G New	
1* NOW	
C Delay by:	hh : mm or mmm
C Schedule at:	hh:mm February ¥ 12 ¥ 2007 ¥
Reload Message:	
On reload failure, force an in	nmediate reload after: hh : mm or mmm
	Schedule Reload
Reload Status	
Reload Status No reload is scheduled.	
Reload Status No reload is scheduled.	
Reload Status No reload is scheduled.	

11. 重新加载期间,将显示 Reload Status 窗口,表明正在执行重新加载。还提供退出 ASDM 的 选项。**注意:**在ASA重新加载后再次启动ASDM。

🚰 Reload Status	×
*** *** *** START GRACEFUL SHUTDOWN	1
Notification (2/12/07 1:31:26 PM): *** *** SHUTDOWN NOW	
Notification (2/12/07 1:31:27 PM): *** *** SHUTDOWN NOW	
Notification (2/12/07 1:31:27 PM): *** *** SHUTDOWN NOW	*
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	

<u>使用 ASDM 6.x 升级软件映像</u>

注意:ASDM 6.x仅在ASA软件映像8.x及更高版本上受支持。

完成以下这些步骤,以使用 ASDM 升级 ASA 5500 上的软件映像:

1. 从 ASDM 的主窗口中选择 Tools > Upgrade Software from Local Computer...。

File	View Tor	ols Wizards Windo	w Help		
÷	ome (Command Line Inter Show Commands Ig	face nored by ASDM on Device	Back O Forw	ard ? Help
Device List	Devi	Packet Tracer Ping Traceroute			Interface Status
	Ger	File Management			Interface
	He	Upgrade Software f	rom Local Computer		inside
	A	Upgrade Software f	rom Cisco.com	m 46s	outside
	Fil	System Reload Administrator's Aleri	to Clientless SSL VPN Users	0	
	_	Preferences			Select an interface t
	VPN	ASDM Java Console			Traffic Status
	IKE: 0	IPsec: 0	Clientless SSL VPN: 0	SSL VPN Client: 0	-Connections Per
	System CPU	Resources Status — -CPU Usage (per	:ent)		0.
	096	10		1	12:08

2.	从下	拉菜单	中选择要	上载的明	限人工。
----	----	-----	------	------	------

minutes. Please wait for	the operation to finish.	
(mage to Upload:	Application Profile Customization Framework (APCF)	
Local File Path:	Application Profile Customization Framework (APCF)	Browse Local Files
Local mon dan	ASA	
Flash File System Path:	ASDM	Browse Flash
	Client Secure Desktop (CSD)	

3. 单击 Browse Local Files... 或在 Local File Path 字段中键入路径,以指定该软件映像在计算机 上的位置。此时将自动确定和显示 Flash File System 中的文件路径。如果未显示 Flash File System 中的文件路径,可以手动键入路径,或单击 Browse Flash,然后选择路径。

e	×
l computer to flash file system on the device. The upload pro or the operation to finish.	cess might take a few
ASA	
C:\Program Files\Tftpd32\asa803-k8.bin	Browse Local Files
: disk0:/asa803-k8.bin	Browse Flash
Upload Image Close Help	
	e I computer to flash file system on the device. The upload pro or the operation to finish. ASA C:\Program Files\Tftpd32\asa803-k8.bin Upload Image Close Help

4. 同时指定两个文件路径后,单击 **Upload Image**。ASDM 向闪存写入映像的同时将显示 Status 窗口。



5. 完成后,将出现 Information 窗口,指示上载成功,并要求将此映像设置为引导映像。如果要 将新映像设置为引导映像,则单击 Yes;否则,单击 No。

🔂 Upgrade So	oftware	×
📬 ASA		×
i	Image has been uploaded to flash successfully. Do you want to set this image as the boot image?	
1	Ves No Vpload Image Close Help	

6. 如果单击 Yes,则将新映像设置为引导映像,并会显示 Information 框。Click OK.

Your device configuration is updated to use the new image.

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.



7. 从主窗口选择 Tools > System Reload,以重新加载设备。

Home Home	Command Line Interface Show Commands Ignored by ASDM on Device	G Back O Forw	ard ? Help
Devi	Ping Traceroute		Interface Stat
	File Management Upgrade Software from Local Computer Upgrade Software from Cisco.com	m 56s	DMZ inside outside
Fi	System Reload	0	
To	Administrator's Alert to Clientless SSL VPN Users.		
	Preferences		Select an interfa
VPN	ASDM Java Console		Traffic Status
IKE: 0	IPsec: 0 Clientless SSL VPN: 0	SSL VPN Client: 0	-Connections

8. 此时显示一个新窗口,要求验证重新加载的详细信息。选择 Save the running configuration at the time of reload,然后选择重新加载的时间。Now — 立即重新启动设备。Delay By — 指定 从现在起多少分钟或小时后重新加载设备。Schedule at — 指定重新加载设备的时间和日期。 还可以指定如果计划的重新加载失败,设备是否必须立即强制重新加载。选择 On Reload failure, force an immediate reload after,然后指定最大保持时间。这是安全设备在关闭或重新 启动之前等待通知其他子系统的时间。经过此时间后,将进行快速(强制)关闭/重新启动。 单击 Schedule Reload。

X

record scheduling		
Configuration State:		
Save the running confi	guration at time of reload	
C Reload without saving	the running configuration	
Reload Start Time:		
Now		
C Delay by:	hh : mm or mmm	
C Schedule at:	hh : mm January	/ <u>•</u> 4 <u>•</u> 2008 <u>•</u>
Reload Message:		
Con reload failure, force an	immediate reload after:	hh : mm or mmm
	Schedule Reload	i
Reload Status		
~		
		1
	Wassel Parkend Brown	

9. 重新加载期间,将显示 Reload Status 窗口,表明正在执行重新加载。还提供退出 ASDM 的 选项。单击 Exit ASDM,然后在重新加载设备后重新启动 ASDM。

termination in the local division of the loc					
	Da	-		-	 -
	RE	0750			
- 2000	1000	1000	and the second	1000	

Votification	(1/4/08 1:07:35 PM):	-
*** SHU	TDOWN NOW		
Notification	(1/4/08 1:07:35 PM):	
*** SHU	TDOWN NOW		
Notification	(1/4/08 1:07:35 PM):	
*** SHU	TDOWN NOW		
Notification	(1/4/08 1:07:35 PM):	
*** SHU	TDOWN NOW		-

X

使用 ASDM 6.x 升级 ASDM 映像

注意:ASDM 6.x仅在ASA软件映像8.x及更高版本上受支持。

完成以下这些步骤,以使用 ASDM 升级 ASA 5500 上的 ASDM 映像:

1. 从 ASDM 的主窗口中选择 Tools > Upgrade Software from Local Computer...。

File	View T	ools Wizards Windo	w Help		
<u>م</u>		Command Line Inter Show Commands Igr	face nored by ASDM on Device	Back Forwa	ard ? Help
] Device List	Devi	Packet Tracer Ping Traceroute			Interface Status
	Get	File Management			Interface
	He	Upgrade Software fi	rom Local Computer		inside
	AS	Upgrade Software fr	rom Cisco.com	m 46s	outside
	Fil	System Reload Administrator's Alert	to Clientless SSL VPN Users	0	
		Preferences			Select an interface t
	VPN	ASDM Java Console			Traffic Status
	IKE: 0	IPsec: 0	Clientless SSL VPN: 0	SSL VPN Client: 0	-Connections Per
	Syster	n Resources Status			
	-CPU-			0	
	096	10 · 5 ·		1	12:08

2. 从下拉菜单中选择要上载的映像类型。

the operation to finish.	rocess might take a row
Application Profile Customization Framework (APCF)	
Application Profile Customization Framework (APCF) ASA	Browse Local Files
ASDM	Browse Flash
Client Secure Deckton (CSD)	1
Clienc Decare Desktop (CDD)	
	the operation to finish. Application Profile Customization Framework (APCF) Application Profile Customization Framework (APCF) ASA ASDM Client Secure Decktop (CSD)

3. 单击 Browse Local Files... 或在 Local File Path 字段中键入路径,以指定 ASDM 映像在计算 机上的位置。此时将自动确定和显示 Flash File System 中的文件路径。如果未显示 Flash File System 中的文件路径,可以手动键入路径,或单击 Browse Flash,然后选择路径。

🚰 Upgrade Software		×
Upload a file from local minutes. Please wait fo	computer to flash file system on the device. The upload pro r the operation to finish.	ocess might take a few
Image to Upload:	ASDM	
Local File Path:	C:\Program Files\Tftpd32\asdm-603.bin	Browse Local Files
Flash File System Path:	disk0:/asdm-603.bin	Browse Flash
	Upload Image Close Help	

4. 同时指定两个文件路径后,单击 **Upload Image**。ASDM 向闪存写入映像的同时将显示 Status 窗口。

🚰 Upgrade Softwar	e	×
Upload a file 🚺 Stati minutes. Ple	us	e a few
Image to Up Local File Pa Flash File St	Please wait while ASDM is uploading the file. The upload process may take a few minutes.	al Files ash

5. 完成后,将出现 Information 窗口,指示上载成功,并要求将此映像设置为默认的 ASDM 映像。如果要将新映像设置为 ASDM 映像,则单击 **Yes;**否则,单击 **No。**

Upgrade So	oftware	× ×
	Image has been uploaded to flash successfully. Do you want to set this image as the ASDM image?	
1	Yes No Upload Image Close Help	

6. 如果选择 Yes 以使用新映像作为 ASDM 映像,则会出现 Information 框。Click OK.



7. 单击窗口顶部的 Save,以便将运行中的配置保存到闪存。

Tisco ASDM 6.0 for ASA - 10.77.241.142	
File View Tools Wizards Window Help	
Home Configuration Antioning Save Refresh Save Refresh Save Refresh Home	rd 🦻 Help
Device Dashboard Rirewall Dashboard	Interface Status
e Device Information	Interface Status
General License	Interface
	DMZ
Host Name: CiscoASA.cisco.com	inside

8. 此时将出现一个对话框,要求您进行确认。单击 Apply。

🚰 Save Rur	nning Configuration to Flash	×
	Do you want to save the running configuration to flash memory?	
	Apply Capcel	1

9. 单击窗口顶部的 File, 然后选择 Exit 关闭 ASDM。

ile	View Tools Wizards Window Help			
	Refresh ASDM with the Running Configuration on the Device Reset Device to the Factory Default Configuration	E2	Back O Forw	vard 🧖 Help
	Show Running Configuration in New Window			
	Save Running Configuration to Flash	<u>C</u> trl+S		Interface Stal
	Save Running Contiguration to TETP Server			Interface
	Save Running Configuration to Standby Unit			DMZ
	Save Internal Log Buffer to Flash		7-	inside
	Print	<u>C</u> trl+P	175	outside
	Clear ASDM Cache			
	Clear Internal Log Buffer			
	Exit	Alt+F4		Select an interfa
	VPN Tunnels			Traffic Status
	IKE: 0 IPsec: 0 Clientless SSL VPN: 0	SSL	VPN Client: 0	-Connections

10. 此时将出现一个对话框,请求您进行确认。单击 Yes。

Exit ASD	M X
?	Are you sure you want to exit Cisco ASDM? Click Yes to exit ASDM or No to continue using ASDM. I Always display this dialog before exiting from ASDM.
	Yes No

11. 再次运行 ASDM 以加载新的 ASDM 映像。有关详细信息,请参阅此视频:<u>如何使用思科自</u> 适应安全设备管理器(ASDM)升级思科自适应安全设备(ASA)上的软件映像

此视频发布到思科<u>支持社区</u>,介绍如何使用ASDM升级Cisco ASA上的软件映像:<u>如何使用思科自</u> 适应安全设备管理器(ASDM)升级思科自适应安全设备(ASA)上的软件映像



使用 CLI 升级软件映像和 ASDM 映像

升级或降级软件映像以及 PIX/ASA 的 ASDM 映像需要使用 TFTP 服务器。要详细了解 TFTP 服务器的选择,请参阅 <u>TFTP 服务器的选择和使用。</u>

使用 copy tftp flash 命令,可以通过 TFTP 将软件映像下载到防火墙的闪存中。对任何安全设备型 号都可以使用 copy tftp flash 命令。所下载的映像将在下次重新加载(重新启动)时提供给安全设 备。

以下是 copy tftp flash 命令产生的输出:

copy tftp[:[[//location] [/tftp_pathname]]] [[flash/disk0][:[image | asdm]]] **注意:**对于ASA,关键字*disk0将*替换copy命令中的flash。

如果使用该命令时未指定位置或路径名可选参数,则会通过一系列问题(类似于 Cisco IOS® 软件 提出的问题)以交互方式从用户那里获得位置和文件名。如果只输入冒号,则从 **tftp-server 命令设** 置中获取参数。如果提供了其他可选参数,则使用这些值代替相应的 **tftp-server 命令设置。**如果提 供了任一可选参数(如冒号和其后的任何内容),则命令在运行时不提示用户输入。

位置是 IP 地址或通过安全设备命名解析机制解析为 IP 地址的名称,当前该机制是通过 name 和 names 命令进行静态映射。安全设备必须了解如何通过其路由表信息到达此位置。此信息由 IP address、route 或 RIP 命令确定。具体使用哪个命令取决于您的配置。

除了服务器上文件的路径的最后一部分之外,路径名可以包括任何目录名称。路径名不能包含空格 。如果目录名称有在 TFTP 服务器而非 copy tftp flash 命令中设置为目录的空格,并且如果将 TFTP 服务器配置为指向从中下载映像的系统上的目录,则只需要使用该系统的 IP 地址和映像文件名。 TFTP 服务器接收命令,并根据其根目录信息确定文件的实际位置。然后,服务器将 TFTP 映像下 载到安全设备。 升级软件映像以及 ASDM 映像需要使用这些命令,下次重新加载时,这些命令还将此映像作为引导 映像。

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

示例:

ASA5510#copy tftp disk0:

ASA5510#**show disk0:**

-#-	length		da	ate/ti	ime	path
6	5124096	Jan	01	2003	00:06:22	asa702-k8.bin
7	5623108	Feb	12	2007	00:23:48	asdm-522.bin
10	5539756	Feb	12	2007	00:14:18	asdm-521.bin
11	8294400	Dec	07	2006	05:47:20	asa721-24-k8.bin
12	6002680	Dec	21	2006	03:58:30	asdm-52034.bin
13	8312832	Feb	12	2007	22:46:30	asa722-k8.bin

23949312 bytes available (38932480 bytes used)
!--- Command to set "asa722-k8.bin" as the boot image. ASA5510(config)# boot system
disk0:/asa722-k8.bin
!--- Command to set "asdm-522.bin" as the ASDM image. ASA5510(config)# asdm image disk0:/asdm522.bin
ASA5510# write memory
ASA5510# reload

注意:当您尝试从FTP服务器升级ASA上的映像时,可以使用copy ftp flash**命令进**行升级。此命令 允许您指定参数,如远程IP地址和源文件名。此过程类似于TFTP。但是,其中一个限制是您无法修 改远程IP/源接口(与TFTP一样)。在TFTP模式下,可以提取并执<u>行使用tftp-</u>server命令指定的选 项。但是,使用FTP时,没有这种选择。默认情况下,源接口应始终为*outside*,该接口无法修改。 即,FTP服务器应可从外部接口访问。

<u>验证</u>

使用本部分确认软件升级是否成功。

<u>命令输出解释程序(仅限注册用户)(OIT) 支持某些 show 命令。</u>使用 OIT 可查看对 show 命令输 出的分析。 ASA 重新加载,并且您已成功再次登录到 ASDM 后,可以验证设备上运行的映像的版本。有关此 信息,请参阅主窗口上的 General 选项卡。

Cisco ASDM 5.2 fo	or ASA - 172.	16.33.1					139000	
e Options Tools	Wizards He	elp			Sea	rch:		Find
Home Cor	anguration 1	Monitoring Back	Forward Packet Trac	er Refresh	Save Help			CISCO SYSTEM
Device Information	on			Interface Status				
General License				Interface	P Address/Mask	Line	Link	Klops
Host Name:	ASA5510.de	efault.domain.invalid		inside	172.16.33.1/16	? nia	? nia	nía
ASA Version	7 3/41/9.4	Device Unline:		outside	40.30.30.30/26	? nia	? n/a	nís
A34 (6150)	1.2(1)24	Device optime.						
ASDM Version	5.2(1)	Device Type:	ASA 5510					
Firewall Mode:	Routed	Context Mode.	Single					
Total Flash:	64 MB	Total Memory:	256 MB					
VPN Status				Traffic Status				
KE Tunnels:	W	ebyPN Tunnels:	SVC Tunnels:	-Connections Pr	er Second Usage			
System Resource	es Status			2				
CPU CPU	Usage (percent			1				
100	⁾ тт			0				
9% 50				05:25:16				
06:06:16			·····	UDP: 0	TCP: 0	Total	0	
00.20.10 05:	25215	***************		"outside' Interfa-	oe Traffio Usage (Kbps)			
Memory Mem	ory Usage (MB))		2 J				
250	°TT			1	Interfac	e is down.		
09MB 128	;			0				
) <mark></mark>							
05:25:15 05:	25:15			Input Kops:	Outp	ut Klaps:		
-								
Latest ASDM S	yslog Messa	iges				Con	tigure ASDM	Systog Filters

以下CLI命令用于验证升级:

- 1. Show version 显示ASA启动的当前映像。
- 2. Show bootvar 显示重新加载后要使用的映像的优先级。
- 3. Show asdm image 显示ASA使用的当前asdm映像。

<u>故障排除</u>

目前没有针对此配置的故障排除信息。

相关信息

- <u>将软件或配置文件下载到闪存,Cisco 安全设备命令行配置指南</u>
- Cisco ASA 5500 系列自适应安全设备产品支持
- Cisco 自适应安全设备管理器产品支持
- Cisco PIX 防火墙软件
- Cisco Secure PIX 防火墙命令参考
- <u>安全产品 Field Notices(包括 PIX)</u>
- TFTP 服务器的选择和使用
- 备份和还原 PIX 配置文件
- <u>请求注解 (RFC)</u>
- ASA 8.3升级 您需要了解的内容

• <u>技术支持和文档 - Cisco Systems</u>