PIX/ASA 7.x及更高版本:使用Internet連線多個 內部網路的配置示例

目錄

簡介 必要條件 需求 採用元件 相關產品 慣例 設定 背景資訊 網路圖表 組態 使用ASDM配置PIX 使用CLI配置PIX 驗證 疑難排解 疑難排解指令 疑難排解程序 無法按名稱訪問網站 相關資訊

<u>簡介</u>

本文檔提供了使用命令列介面(CLI)或自適應安全裝置管理器(ASDM)5.x及更高版本連線到網際網路 (或外部網路)的多個內部網路的PIX/ASA安全裝置7.x及更高版本的配置示例。

有關如何通過PIX/ASA建立和排除連線故障的資訊,請參閱<u>通過思科安全裝置建立連線並排除連線</u> <u>故障</u>。

有關常見PIX命令的資訊,請參閱<u>在PIX上使用nat、global、static、conduit和access-list命令和埠重</u> <u>定向(轉發)</u>。

注意:其他ASDM版本中的某些選項可能與ASDM 5.1中的選項不同。有關詳細資訊,<u>請參閱</u> ASDM文檔。

<u>必要條件</u>



在PIX防火牆後面新增多個內部網路時,請記住以下幾點:

- PIX不支援輔助定址。
- •必須在PIX後面使用路由器,才能在現有網路和新新增的網路之間實現路由。
- •所有主機的預設網關都需要指向內部路由器。
- 在指向PIX的內部路由器上新增預設路由。
- •清除內部路由器上的地址解析協定(ARP)快取。

請參閱<u>允許ASDM進行HTTPS訪問</u>,以允許由ASDM配置裝置。

<u>採用元件</u>

本文中的資訊係根據以下軟體和硬體版本:

- PIX安全裝置515E,軟體版本7.1
- ASDM 5.1
- •採用Cisco IOS®軟體版本12.3(7)T的Cisco路由器

註:本文檔已通過PIX/ASA軟體版本8.x和Cisco IOS軟體版本12.4重新認證。

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。如果您的網路正在作用,請確保您已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安全裝置7.x版及更高版本配合使用。

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。

<u>設定</u>

本節提供用於設定本文件中所述功能的資訊。

註:使用Command Lookup Tool(僅供已註冊客戶使用)可獲取本節中使用的命令的詳細資訊。

此配置中使用的IP編址方案在Internet上不能合法路由。這些地址是在實驗室環境中使用的RFC 1918地址。

<u>背景資訊</u>

在此場景中,有三個內部網路(10.1.1.0/24、10.2.1.0/24和10.3.1.0/24)通過PIX連線到Internet(或 外部網路)。內部網路連線到PIX的內部介面。Internet連線是通過連線到PIX外部介面的路由器進 行的。PIX的IP地址為172.16.1.1/24。

靜態路由用於將資料包從內部網路路由到Internet,反之亦然。除了使用靜態路由,您還可以使用動 態路由協定,如路由資訊協定(RIP)或開放最短路徑優先(OSPF)。

內部主機使用動態NAT(IP地址池 — 172.16.1.5到172.16.1.10)將PIX上的內部網路轉換為網際網路進行通訊。如果IP地址池耗盡,PIX將PAT(使用IP地址172.16.1.4)內部主機訪問Internet。

有關NAT/PAT的詳細資訊,請參閱<u>PIX/ASA 7.x NAT和PAT語句</u>。

注意:如果靜態NAT使用外部IP(global_IP)地址進行轉換,則可能導致轉換。因此,在靜態轉換中 使用關鍵字interface而不是IP地址。

網路圖表

本檔案會使用以下網路設定:



10.1.1.0網路中主機的預設網關指向RouterA。在RouterB上新增了一條指向RouterA的預設路由。 RouterA具有指向PIX內部介面的預設路由。

<u> 組態</u>

本檔案會使用以下設定:

- <u>路由器A配置</u>
- RouterB組態
- PIX安全裝置7.1配置使用ASDM配置PIXPIX安全裝置CLI配置

路由器A配置 RouterA#show running-config Building configuration... Current configuration : 1151 bytes ! version 12.4 service config service timestamps debug uptime service timestamps log uptime no service password-encryption ! hostname RouterA !

```
interface Ethernet2/0
 ip address 10.2.1.1 255.255.255.0
 half-duplex
!
interface Ethernet2/1
ip address 10.1.1.2 255.255.255.0
half-duplex
1
ip classless
ip route 0.0.0.0 0.0.0.0 10.1.1.1
ip route 10.3.1.0 255.255.255.0 10.1.1.3
1
line con 0
line aux 0
line vty 0 4
!
end
RouterA#
RouterB組態
RouterB#show running-config
Building configuration...
Current configuration : 1132 bytes
1
version 12.4
service config
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
1
hostname RouterB
1
interface FastEthernet0/0
ip address 10.1.1.3 255.255.255.0
 speed auto
!
interface Ethernet1/0
 ip address 10.3.1.1 255.255.255.0
half-duplex
1
ip classless
ip route 0.0.0.0 0.0.0.0 10.1.1.2
1
control-plane
!
1
line con 0
line aux 0
line vty 0 4
!
end
RouterB#
```

如果要使用ASDM配置PIX安全裝置,但尚未引導裝置,請完成以下步驟:

- 1. 通過控制檯連線到PIX。
- 2. 在已清除的配置中,使用互動式提示來啟用ASDM以便從工作站10.1.1.5管理PIX。

PIX安全裝置7.1配置

```
Pre-configure Firewall now through interactive prompts
[yes]? yes
Firewall Mode [Routed]:
Enable password [<use current password>]: cisco
Allow password recovery [yes]?
Clock (UTC):
 Year [2005]:
 Month [Mar]:
 Day [15]:
 Time [05:40:35]: 14:45:00
Inside IP address: 10.1.1.1
Inside network mask: 255.255.255.0
Host name: OZ-PIX
Domain name: cisco.com
IP address of host running Device Manager: 10.1.1.5
The following configuration will be used:
        Enable password: cisco
        Allow password recovery: yes
        Clock (UTC): 14:45:00 Mar 15 2005
        Firewall Mode: Routed
         Inside IP address: 10.1.1.1
         Inside network mask: 255.255.255.0
        Host name: OZ-PIX
        Domain name: cisco.com
         IP address of host running Device Manager:
10.1.1.5
Use this configuration and write to flash? yes
        INFO: Security level for "inside" set to 100 by
default.
        Cryptochecksum: a0bff9bb aa3d815f c9fd269a
3f67fef5
965 bytes copied in 0.880 secs
        INFO: converting 'fixup protocol dns maximum-
length 512' to MPF commands
        INFO: converting 'fixup protocol ftp 21' to MPF
commands
        INFO: converting 'fixup protocol h323_h225
1720' to MPF commands
        INFO: converting 'fixup protocol h323_ras 1718-
1719' to MPF commands
        INFO: converting 'fixup protocol netbios 137-
138' to MPF commands
        INFO: converting 'fixup protocol rsh 514' to
MPF commands
        INFO: converting 'fixup protocol rtsp 554' to
MPF commands
         INFO: converting 'fixup protocol sip 5060' to
MPF commands
        INFO: converting 'fixup protocol skinny 2000'
to MPF commands
        INFO: converting 'fixup protocol smtp 25' to
MPF commands
        INFO: converting 'fixup protocol sqlnet 1521'
to MPF commands
```

```
INFO: converting 'fixup protocol sunrpc_udp

111' to MPF commands

INFO: converting 'fixup protocol tftp 69' to

MPF commands

INFO: converting 'fixup protocol sip udp 5060'

to MPF commands

INFO: converting 'fixup protocol xdmcp 177' to

MPF commands

Type help or '?' for a list of available commands.

OZ-PIX>
```

<u>使用ASDM配置PIX</u>

完成以下步驟,以便通過ASDM GUI進行配置:

- 1. 從工作站10.1.1.5開啟Web瀏覽器以使用ADSM(在本例中為https://10.1.1.1)。
- 2. 在憑證提示中按一下yes。
- 3. 使用先前配置的啟用密碼登入。
- 4. 如果這是第一次在PC上運行ASDM,系統將提示您使用ASDM啟動程式或ASDM作為Java應用 。在此示例中,選擇並安裝了ASDM啟動器。
- 5. 轉到ASDM Home視窗,然後按一下Configuration。

Device Information			Interface State	IS			
General License			Interface	IP Address/Mask	Line	Link	Current Kb
Host Name: pixfirewa	all.default.domain.invalid		Inside	10.1.1.1/24	💿 up	🔮 up	1
PIX Version: 7.1(1)	Device Uptime:	14d 6h 4m 4s					
ASDM Version: 5.1(1)	Device Type:	PIX 515E					
Firewall Mode: Routed	Context Mode:	Single					
Total Flash: 16 MB	Total Memory:	64 MB	Select an interfa	ace to view input and	output Kbp	JS	
VPN Status			Traffic Status				
IKE Tunnels: 0	IPSec Tunnels:	0	Connections P	er Second Usage			
1% 64 32 17.68:00 19.58:10 Memory Usa 38:48 32 16	ge (MB)		UDP: 0 'inside' Interfa	TCP: 0		otal: D	
17:58:59 17:58:10			_ Input Kbps	t O 📕	Output Kbps	1	
Latest ASDM Syslog Mess	ages				Co	nfigure AS	DM Syslog Filb
	Syslog Disabled						

6. 選擇Interface > Edit以配置外部介面。

Cisco ASDM	5.1 for PIX - 10.1.1.1				ir <u>s</u> e in	_ D ×
File Rules S	earch Options Tools Wizards	s Help	New York			P
C Home	Configuration Monitoring	Back Forward	Q Q Search Retresh	Save Help		uit this int the
_	Configuration > Interfaces					
Interfaces	● 査 筆 ■	e 18. 16. 16. 14				
Security Policy	Interface	Name Enabled	Security IP Address	s Subnet Mask	Management MTU Only	Add
2 Ac	Ethernet0	No		Ū.	No	Edit
NAT	Ethernet1	Inside Yes	10010.1.1.1	255.255.255.0	No 1500	Delete
93						
VPN						
Routing						
Richard Objects						
Properties						
	1			(
					<u></u>	
	Enable traffic between tw	vo or more interfaces w	which are configured with	same security levels		
			NDDA.	Reset		
	1		<admin></admin>	NA (15)	7/11/08	5:59:49 PM UTC

7. 輸入介面詳細資訊,完成後按一下**OK**。

Edit Interface		
Hardware Port:	Ethernet0	Configure Hardware Propertie
🗹 Enable Interface	Dedicate this interface to r	nanagement only
Interface Name:	outside	
Security Level:	0	
- IP Address		
Ose Static IP	C Obtain Address via DHCP	
IP Address:	172.16.1.1	
Subnet Mask:	255.255.255.0	ſ
2		
MTU:	1500	
Description:		
	OK Cancel	Help
Security Level Chang	je對話方塊中按一下 OK 。	
Security Level Char	ge	
Changi to beco traffic to	ng an interface's security level me invalid, causing the PIX to o pass through. Do you still wis	may cause your PIX configuration drop legal traffic or allow illegal h to proceed?
	[]	
	ОК	Cancel

9. 按一下「Apply」以接受介面組態。該配置也將推到PIX上。

Cisco ASDM !	i.1 for PIX - 10.1.1.1								_101 ×
File Rules 8	earch Options Tools Wizards	Help							
dine Home	Configuration Monitoring	O Back F	orward	Q Search	Retresh S	Save Help		Ca	SCO SYSTEMS
	Configuration > Interfaces			_					
Interfaces	● 主 軍 ■ 前 3 宅	6 6 7	5 9						
Security Policy	Interface	Name	Enabled	Security Level	IP Address	Subnet Mask	Management Only	MTU _	Add
2 de	Ethernet0	outside	Yes	0	172.16.1.1	255.255.255.0	No	1500	Edit
NAT	Ethernet1	inside	Yes	100	10.1.1.1	255.255.255.0	No:	1500	Delete
<u> </u>								1	
YPN									
428									
Routing									
8									
Properties									
r reportee									
						_		,	
	Enable traffic between two	ar more inf	terfaces wi	hich are c	onfigured with sar	me security levels			
					1				
			-	Арріу	Re	set			
	Je.			ſ	sarimin> NA	/15) L 🖓		701106.61	M-09 PM LITC

10. 在Features(功能)頁籤上選擇**Security Policy**(安全策略),以複查使用的安全策略規則。 在本示例中,使用預設內部規則。

	Cisco ASDM 5.1	.1 for PIX - 10.1.1.1				
Home Configuration Monitoring Back Forward Search Refresh Save Help	Home C	Configuration Monitoring	Back Forward	Q Q Search Refresh	Save Help	Cisco Systems
Configuration > Security Policy > Access Rules Netraces Netraces Socurity Policy Access Rules Access Rules Action Socurity Policy Rule Action Socurity Policy Rule R	Interfaces Security Policy NAT SPN VPN Stobal Objects Ciobal Objects Properties	Configuration - Security Po	Ilicy × Access Rules	s C Service Policy R Show All Destination HostNetwork any Reset	ules Rule Applied Interface To Traffic inside (outbound) @ Show Summar Advanced	Service Add Edit Delete y C Show Detail

11. 本示例使用NAT。取消選中**Enable traffic through the firewall without address translation**覈 取方塊,然後按一下**Add**以配置NAT規則。

Cisco ASDM	5.1 for PIX - 10 Search Option	L1.1.1	de Halp				
Home	Configuration	Monitoring	Back Forward	Q Q Search Refresh	調 🤗 Баме Неір	C	ISCO SYSTEMS
Interfaces	Contiguration Contig	on > NAT > Trans	lation Rules	s translation) option Rules Show All			
3	Rule	_	Original			Translated	Add
VPN	Туре	Interface	Source Network	Destination Network	Interface	Address	Edit
Routing Global Objects Properties							DSIGIE
	• Sta	tic NAT	Dynamic NAT 🛛 🖓 St	atic Policy NAT 🛛 🏭 (Dynamic Policy N	AT Manage Pools	
				Apply	Reset		
				<admin> N</admin>	A (15)	🍰 🛃 🛛 🔠 7/11/06 6	:02:29 PM UTC

12. 配置源網路。在本示例中,10.0.0.0用於IP地址,255.0.0.0用於掩碼。按一下**Manage Pools**以定義NAT池地址。

- 3333666	r cu	Jse Policy NAT			
Source Ho	ost/Network-				
		Interface: IP Address: Mask:	inside 10.0.0 255.0.0	•	
anslate Ad	idress on Inte	rface: outsi	Browse		NAT Options
Translate C י	Address To – Static □ Redirect r	IP Address;		*	
Translate C ۱۱۰	Address To – Static Redirect p © TCP © UDP	IP Address; port Original port	Translate	• d port.	
Translate C 1 ·	Address To – Static Redirect p © TCP © UDP Dynamic	IP Address; port Original port Address Pool;	Translate	▼ d port: Manage	Pools
Translate C 1	Address To – Static Redirect p C TCP C UDP Dynamic Pool ID	IP Address; port Original port Address Pool;	Translate	▼ d port: Manage	Pools
Translate C 中	Address To – Static Redirect p C TCP C UDP Dynamic Pool ID N/A	IP Address; port Original port Address Pool: No address po	Translate Same address Address ool defined	Dort: Manage	Pools

13. 選擇外部介面,然後按一下**Add**。

Interface	Pool ID	IP Add	ress(es)			
nside outside					Ad	d
					Ed	it
					Dele	ete
				Links	1	
	OK	Cancel		Help		
	ОК	Cancel		нер	J	
示例中,配置	OK 了Range和PAT地均	Cancel 止池。配置筆	」 ፤圍NAT池	Heip 3.地址,然後	」 ۇ按一下 O ⋫	ζ.,
示例中,配置 dd Global Po	OK 了Range和PAT地均 ol Item	Cance 止池。配置筆	】 ፤圍NAT池	Heip 3地址,然後	】 ŧ按一下 Ok	۲.
示例中,配置 dd Global Po	OK 了Range和PAT地均 ol Item	Cance 止池。配置筆	」	Heip 3地址,然後	」 〔按一下 Ok	۲.
示例中,配置 I <mark>dd Global Po</mark> Interface:	OK 了Range和PAT地均 ol Item outside	Cancel 止池。配置筆	型NAT池 空間NAT池 Pool ID	Heip 3地址,然後	」 ≹按一下 Ok	ζ.,
示例中,配置 dd Global Po Interface:	OK 了Range和PAT地址 ol Item outside	Cancel 止池。配置筆	2 國NAT池 Pool ID	Heip 3地址,然後	」 ≹按一下 Ok	ζ.,
示例中,配置 dd Global Po Interface:	ок J Range和PAT地共 ol Item outside	Cancel 止池。配置筆	2 國NAT池 Pool ID	Heip 3地址,然後	」 ≹按一下Ok	ζ.,
示例中,配置 dd Global Po Interface:	OK 了Range和PAT地均 ol Item outside	Cancel 止池。配置筆	2 国NAT池 Pool ID	Heip 3地址,然後	」 ≹按一下Ok	ζ.
示例中,配置 dd Global Po Interface: ⓒ Range ⓒ Port Add	ок 7 Range和PAT地 ol Item outside	Cancel 止池。配置筆 IIII	回NAT社 Pool ID	Heip 2地址,然後	」 €按一下OK	Ko.
示例中,配置 dd Global Po Interface: ⓒ Range ⓒ Port Add ⓒ Port Add	ок 7 Range和PAT地 ol Item outside lress Translation (P lress Translation (P	Cancel 止池。配置筆 (上) AT) AT) using th	國NAT원 Pool ID	Heip 2地址,然後 1	」 2按一下OK	ζ.
示例中,配置 dd Global Po Interface: ⓒ Range ⓒ Port Add ⓒ Port Add	ок 2 7 Range和PAT地 ol Item outside Iress Translation (P Iress Translation (P	Cancel 止池。配置筆 (上) AT) AT) using th	호교NAT처 Pool ID	Help 2地址,然後	」 き按一下Ok	C o
示例中,配置 dd Global Po Interface:	ок 3 Range和PAT地 ol Item outside Iress Translation (P	Cancel 止池。配置筆 (IL) AT) AT) using th	호교NAT처 Pool ID	Help 2地址,然後	」 き按一下Ok	C o
示例中,配置 dd Global Po Interface:	ок J Range和PAT地 ol Item outside Iress Translation (P Iress Translation (P	Cancel 止池。配置筆 AT) AT) using th	e IP addro	Help 2地址,然後 1. ess of the in 172.16.1.1	」 設 按 一下 Ok iterface	ζ.
示例中,配置 dd Global Po Interface: ① Range ① Port Add ① Port Add	ок 7 Range和PAT地 ol Item outside lress Translation (P lress Translation (P	Cancel 止池。配置筆 AT) AT) using th	e IP addro	Help 2地址,然後 ess of the in 172.16.1.1	」 設按一下OM	()
示例中,配置 dd Global Po Interface:	ок TRange和PAT地 ol Item outside Iress Translation (P Iress Translation (P Iress: 172.16.1.5 ork Mask (ontional):	Cancel 止池。配置筆 AT) AT) using th	e IP addro	Help 2地址,然後 1 ess of the ir	」 設在一下OK	C

15. 在步驟13中選擇外部介面以配置PAT地址。按一下「**OK」**

da alobari oc	a reem	
Interface:	outside Pool ID: 1	
C Range		
Port Addr	ess Translation (PAT)	
C Port Addr	ess Translation (PAT) using the IP address of the interface	
IP Add	rece: 172.16.1.4	
	=]	29
Networ	rk Mask (ontional): 255 255 255 0	
INCLIVIO	K Mask (optional).	
	OK Cancel Help	
	丝结	
ト OK」 以福 anage Global Ad	ane,o ddress Pools	
Global Address F	Pools	
Hobal Address P Iddresses.	ools are used to configure Dynamic Network Address Translation (NAT)
Interface	Pool ID IP Address(es)	
inside		bhA
outside outside	1 172.16.1.4	
		Edit
		- un
	D	elete
		elete

16. 在Edit Address Translation Rule(編輯地址轉換規則)視窗中,選擇要由配置的源網路使用

Source Ho	st/Network				
		Interface: IP Address:	inside 10.0.0.0		
		Mask.	255.0.0.0 Browse	¥	
					NAT Options
ranslate Ad	dress on Inte	rface: outsi	de 🗾		
Translate /	Address Io-				
Translate /	Address To – Static C Redirect r	IP Address: ort		3	
Translate /	Static Redirect p TCP CUDP	IP Address: oort Original port	Translated	port]
Translate / C 1/1	Static Redirect p TCP OUDP Dynamic	IP Address: port Original port Address Pool:	Translated	port.	3
Translate / C 1/1	Static Redirect p TCP OUDP Dynamic Pool ID	IP Address: port Original port Address Pool:	Translated 1 Address	port.	3

17. 按一下Apply以將配置的NAT規則推送到PIX。

	onfiguration	Monitoring	Back F	forward 1	Search Ret	esh:	Save Hel;	0	intillitiin
	· : 종	1 î 🔒	Pa (2, 6, 6)	5 I 4 I					
Interfaces	Enable	traffic through	the firewall with	rout addres	s translation:				
Security Policy	Transl	ation Rules	C Trans	lation Exem	ption Rules				
24	Show Ru	les for interfact	e: All Interfaces	3	• Show	AI			
NAT	Rule			Original				Translated	Ad
SA VPN	Туре	Interface	Source	Network	Destination	Network	Interface	Address	Ed
4 <u>2</u> 6	44	inside	£ ₽10.0.0.0/8		🦘 any		outside	172.16.1.4	Del
Routing			÷					Transformation and the	
Global Objects									
5.									
Properties									
	s Static	NAT 📲	Dynamic NAT	🖓 Sta	dic Policy NAT	. (d)	ynamic Policy N	NAT Manage Pools	
					Apply	Ϊ Ι	Reset	1	

Add」。

Home C	onfiguration Monitori	na	Back	Forward Se	arch Refre	h 🛄 sh Save	- Некр		CISCO SYST
Hterfaces	Configuration - Routin	9 > Routi	rg > Static R R R Static Ro Specify :	: Route	s Netmask	Gateway IP	Metric	Tunneled	Add
NAT VPN Routing Global Objects Properties	⊕ • ∰OSPF - ∰Proxy ARPs - ∰RIP - • ∳• Static Rowe								Edit
					0.	in l	Pacat	1	

Interface Name:	outside	•
IP Address:	0.0.0.0	
Mask:	0.0.0.0	•
Gateway IP:	172.16.1.2	
• Metric	1	
C Tunneled (Use	d only for default n	oute)
ок	Cancel	Help

20. 按一下Add,將路由新增到內部網路。

🚰 Add Static Route		×
Interface Name:	inside	-
IP Address:	10.2.1.0	
Mask:	255.255.255.0	•
Gateway IP:	10.1.1.2	
Metric	1	
C Tunneled (Used	l only for default rout	e)
ок	Cancel	Help 💼
🚰 Add Static Route		×
Mad Static Route	inside	×
Med Static Route	inside 10.3.1.0	
Add Static Route Interface Name: IP Address: Mask:	inside 10.3.1.0 255.255.255.0	
Mask:	inside 10.3.1.0 255.255.255.0 10.1.1.2	
Add Static Route Interface Name: IP Address: Mask: Gateway IP: Metric	inside 10.3.1.0 255.255.255.0 10.1.1.2 1	
Mask: Cateway IP: Metric	Inside 10.3.1.0 255.255.255.0 10.1.1.2 1 only for default route	× •)

21. 確認配置了正確的路由,然後按一下Apply。

File Rules S	5.1 for PIX - 10.1.1.1 earch Options Tools Wizard	s Help	×
S Home	Configuration Monitoring	Sack Forward Search Refresh Save Help	Cisco Systems
Interfaces Interfaces Security Policy NAT Security Policy NAT Security VPN Security Properties	Configuration > Routing > Ro Multicast Multicast MRoute Routing P* OSPF Proxy ARPs * RIP * Static Route	Interface IP Address Netmask Gateway IP Metric Tu Outside 0.0.0 0.00.0 172.16.1.2 1 Inside 10.2.1.0 255.255.0 10.1.1.2 1 Inside 10.3.1.0 255.255.0 10.1.1.3 1	nneler Add No NA Edit Delete
-)	<admin> NA (15) 🛛 🛃 🔂</admin>	🔒 7/11/06 7:48:40 PM UTC

使用CLI配置PIX

通過ASDM GUI的配置現已完成。

您可透過CLI看到此組態:

PIX安全裝置CLI pixfirewall(config)#write terminal PIX Version 7.0(0)102 names ! interface Ethernet0 nameif outside security-level 0 ip address 172.16.1.1 255.255.255.0 ! interface Ethernet1 nameif inside security-level 100 ip address 10.1.1.1 255.255.255.0 !--- Assign name and IP address to the interfaces enable password 2KFQnbNIdI.2KYOU encrypted passwd 2KFQnbNIdI.2KYOU encrypted asdm image flash:/asdmfile.50073 no asdm history enable arp timeout 14400 nat-control !--- Enforce a strict NAT for all the traffic through the Security appliance global (outside) 1 172.16.1.5-



選擇File > Show Running Configuration in New Window以檢視ASDM中的CLI配置。

File Tools Wizards Rules Search Options Help Refresh ASDM with the Running Configuration on the Device Reset Device to the Factory Default Configuration ... Show Running Configuration in New Window... Save Running Configuration to Flash Save Running Configuration to TFTP Server... Save Running Configuration to Standby Unit Save Internal Log Buffer to Flash Print... Clear ASDM Cache Clear Internal Log Buffer Exit

驗證

目前沒有適用於此組態的驗證程序。



<u>疑難排解指令</u>

<u>輸出直譯器工具</u>(僅供<u>已註冊</u>客戶使用)(OIT)支援某些**show**命令。使用OIT檢視**show**命令輸出的分析 。

附註:使用 debug 指令之前,請先參閱<u>有關 Debug 指令的重要資訊</u>。

- debug icmp trace 顯示來自主機的ICMP請求是否到達PIX。若要執行此偵錯,需要新增 access-list指令來允許組態中的ICMP。
- logging buffer debugging 顯示已建立和拒絕到通過PIX的主機的連線。該資訊儲存在PIX日 誌緩衝區中,可以使用show log命令檢視輸出。

<u>疑難排解程序</u>

ASDM可用於啟用日誌記錄以及檢視日誌:

1. 選擇Configuration > Properties > Logging > Logging Setup,選中Enable Logging,然後按一 下Apply。

Cisco ASDM 5.	1 for PIX - 10.1.1.1		and the second	_ [] ×
File Rules Se	arch Options Tools Wizards	Help		
Home C	Configuration Montoring	Back Forward Search Refree	sh Save Help	Cisco Systems
Nterfaces Security Policy NAT VPN Routing Global Objects Properties	Configuration × Properties × Lo Configuration × Properties × Lo Startup Wizard AAA Setup AAA Se	gging > Logging Setup Logging Setup Image: Construction of the Internal Sector Image: Construction of the Internal Sector Logging to Internal Buffer Specify the size of the Internal buffer Buffer Size: 4096 You can choose to save the buffer construction Save Buffer To: FTP Server Image: Flash ASDM Logging Specify the size of the queue for system Queue Size: 100	Enable logging or gs Send syslogs in t to which syslogs will be saved. W ontents before the buffer is overwri Configure FTP Settings Configure Flash Usage ogs Intended for viewing in ASDM.	n the failover standby unit EMBLEM format then the buffer fills up, it will itten.

2. 選擇Monitoring > Logging > Log Buffer > Logging Level,然後從下拉選單中選擇Logging Buffer。按一下「View」。



3. 以下是日誌緩衝區的示例

:

🔂 Log Buf	fer El a	
C Rem	ish 🔄 Save 🖙 Clea	r 🛄 Color Settings 📲 Create Rule 🔤 Brithwirkule Find:
This table	shows syslog messages	s in ASDM logging buffer as of now.
Severity	Time	Message ID: Description
<u>ê</u> 6	Jul 12 2006 13:08:11	605005: Login permitted from 10.1.1.5/1136 to inside:10.1.1.1/https for user "enable_15"
<u>4</u> 6	Jul 12 2006 13:08:11	725002: Device completed SSL handshake with client inside:10.1.1.5/1136
<u>ê</u> 6	Jul 12 2006 13:08:11	725003: SSL client inside:10.1.1.5/1136 request to resume previous session.
<u>1</u> 6	Jul 12 2006 13:08:11	725001: Starting SSL handshake with client inside:10.1.1.5/1136 for TLSv1 session.
<u>ê</u> 6	Jul 12 2006 13:08:11	302013: Built inbound TCP connection 545 for inside:10.1.1.5/1136 (10.1.1.5/1136) to NP Identity Ifc:10.
<u>1</u> 6	Jul 12 2006 13:08:10	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:10	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>4</u> 6	Jul 12 2006 13:08:10	110001: No route to 171.71.179.143 from 10.1.1.5
<u>i</u> 6	Jul 12 2006 13:08:09	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>4</u> 6	Jul 12 2006 13:08:09	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:08	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>1</u> 6	Jul 12 2006 13:08:08	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:07	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>4</u> 6	Jul 12 2006 13:08:07	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:06	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>4</u> 6	Jul 12 2006 13:08:06	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:05	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>*</u> 6	Jul 12 2006 13:08:05	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:04	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>*</u> 6	Jul 12 2006 13:08:04	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:03	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>4</u> 6	Jul 12 2006 13:08:03	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:02	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>4</u> 6	Jul 12 2006 13:08:02	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>i</u> 6	Jul 12 2006 13:08:01	302021: Teardown ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
<u>∔</u> 6 ∢]	Jul 12 2006 13:08:01	302020: Built ICMP connection for faddr 10.1.1.5/512 gaddr 10.1.1.1/0 laddr 10.1.1.1/0
0 Er	nergencies 🗿 Alerts	Critical Generational A Warnings A Notifications A Informational O Debugging

<u>無法按名稱訪問網站</u>

在某些情況下,內部網路無法使用Web瀏覽器中的名稱(使用IP地址)訪問Internet網站。此問題很 常見,通常在未定義DNS伺服器時發生,特別是在PIX/ASA是DHCP伺服器的情況下。此外,如果 PIX/ASA無法推送DNS伺服器或者無法訪問DNS伺服器,也可能會發生這種情況。

相關資訊

- Cisco PIX 500系列安全裝置
- Cisco ASA 5500系列調適型安全裝置
- <u>Cisco Secure PIX防火牆命令參考</u>
- 思科調適型資安裝置管理員
- 思科自適應安全裝置管理器(ASDM)故障排除和警報
- <u>要求建議 (RFC)</u>
- 技術支援與文件 Cisco Systems