# 使用SDM的基本路由器配置

# 目錄

簡介 必要條件 需求 採用元件 慣例 設定 網路圖表 介面組態 NAT配置 路由配置 其他配置 CLI組態 驗證 疑難排解 SDM與64位作業系統的相容性 無法通過Web瀏覽器啟動SDM 錯誤: java.bling堆疊溢位 相關資訊

# <u>簡介</u>

本文說明如何使用<u>思科安全裝置管理員(SDM)</u>設定路由器的基本組態。這包括 IP 位址、預設路由、 靜態和動態路由、靜態和動態 NAT、主機名稱、橫幅標語、secret 密碼、使用者帳戶等的組態。 Cisco SDM允許您使用易於使用的基於Web的管理介面,在包括小型辦公室(Small Office Home Office, SOHO)、分支機構(Branch Office, BO)、區域辦公室、中心站點或企業總部在內的各種 網路環境中配置路由器。

# <u>必要條件</u>

## <u>需求</u>

本檔案假設Cisco路由器已完全運行並配置為允許Cisco SDM進行配置更改。

**注意:**請參閱<u>允許SDM進行HTTPS訪問</u>,以便允許SDM配置路由器。

### <u>採用元件</u>

本文中的資訊係根據以下軟體和硬體版本:

- 採用Cisco IOS的Cisco 3640路由器<sup>?</sup>軟體版本12.4(8)
- 思科安全裝置管理員(SDM)版本2.3.1

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。

**注意:如**果您使用思科整合服務路由器(ISR),請參閱<u>使用思科配置專業版的基本路由器配置</u>,瞭解 具有更強大功能的類似配置詳細資訊。有關Cisco CP支援哪些路由器的資訊,請參閱*Cisco Configuration Professional 2.5發行說明*的<u>支援的路由器</u>部分。

### <u>慣例</u>

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>

本節提供為網路中的路由器配置基本設定的相關資訊。

#### <u>網路圖表</u>

本檔案會使用以下網路設定:



**注意:**此配置中使用的IP編址方案在Internet上不能合法路由。它們是<u>RFC 1918</u>,已在實驗室環境 中使用。

#### <u>介面組態</u>

完成這些步驟,設定思科路由器的介面。

1. 按一下「Home」以轉到SDM首頁。SDM首頁提供路由器硬體和軟體、功能可用性和配置摘要 等資訊。綠色圓圈顯示此路由器支援的功能,紅色圓圈顯示不支援的功能。

co Router and Security	Device Manager (SDM):	172.16.1.2				
Edit View Tools He	lp					
Home	onligure 🥳 Monito	Refresh	) Save	Q Search He	)lp	
About Your Router				Host Name:		Rou
	Hardware		More	Software		More
	Model Type:		Cisco 3640	IOS Versio	n:	12.4(8
	Available / Total Memo	ry(MB):	49/128 MB	SDM Versio	onc	2.1
	T d I FI - L O		48 MB			
Cisco 3640	Total Flash Capacity:					
Cisco 3640 Configuration Overview	Total Flash Capacity: Feature Availability:	IP 💽 Fir	ewall 🔕 V	PN 🥥 IPS	O NAC O	View Running Config
Cisco 3640 Configuration Overview	Feature Availability:	IP 💽 Fir	ewall 🔇 🕔 O I Total Si	PN 📀 IPS Down (5) Japported WAN:	O NAC O	View Running Config 4(Serial Sync/Async)
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Cisco 3640 Configuration Overview Configuration Overview Configured LAN: Configured LAN Interf DHCP Server: Configured LAN Interf	nnections	IP S Fir C Up (1) 2 1 Not Configured C Up (0) 0 0 0	ewall 🔇 🕔 Total Si Total W GRE ow Easy VI	PN 📀 IPS Down (5) upported WAN: AN Connection er IPSec: *N Remote:	S:	View Running Config 4(Serial Sync/Async) 1(HDLC) 0 0
Cisco 3640 Configuration Overview Configuration Overview Configured LAN: Configured LAN Interf DHCP Server: Configured LAN Interf Configured LAN In	Interfactors Inter	IP S Fir C Up (1) 2 1 Not Configured C Up (0) 0 0 0 0	ewall 😒 📏 Total Si Total W GRE ow Easy Vi No. of A	PN 📀 IPS Down (5) upported WAN: AN Connection er IPSec: PN Remote: ctive VPN Clien	<ul> <li>NAC ♥</li> <li>s:</li> <li>dts:</li> </ul>	View Running Config 4(Serial Sync/Async) 1(HDLC) 0 0 0
Cisco 3640 Configuration Overview Interfaces and Co Total Supported LAN: Configured LAN Interf DHCP Server: VPN IPSec (Site-to-Site): Xauth Login Required No. of DMVPN Clients Solve Routing	rotal Hash Capacity: Feature Availability: mmections ace:	IP S Fir C Up (1) 2 1 Not Configured C Up (0) 0 0 0 0 0	ewall 🔇 🔌 Total Si Total W GRE ow Easy VI No. of A	PN 📀 IPS Down (5) apported WAN: AN Connection er IPSec: PN Remote: ctive VPN Clien	<ul> <li>NAC ♥</li> <li>s:</li> <li>tts:</li> </ul>	View Running Config 4(Serial Sync/Async) 1(HDLC) 0 0 0 0
Cisco 3640 Configuration Overview Configuration Overview Configured LAN: Configured LAN Interf DHCP Server: Configured LA	nections	IP 💽 Fir C Up (1) 2 1 Not Configured C Up (0) 0 0 0 0 0 0 0 0 0 0 0 0 0	ewall 🔇 🕚 Total Si Total W GRE ow Easy VI No. of A	PN 📀 IPS Down (5) upported WAN: AN Connection er IPSec: PN Remote: ctive VPN Clien	<ul> <li>S:</li> </ul>	View Running Config 4(Serial Sync/Async) 1(HDLC) 0 0 0 0

 選擇Configure > Interfaces and Connections > Create Connection以配置介面的WAN連線。 例如,對於串列介面2/0,選擇Serial選項,然後按一下Create New Connection。註:對於其 他型別的介面(如乙太網),請選擇相應的介面型別,然後按一下Create New Connection按鈕 繼續操作。



3. 按一下Next以在出現此介面後繼續。



4. 從Available Interfaces選項中選擇**Serial interface 2/0**(需要),然後按一下**Next**。

Serial Wizard		×
WAN Wizard	Select interface	
	Select an Interface for the WAN connection.	
	Available Interfaces: Serial2/0(Syncl/Async)	
	< Back Next > Finish Cancel H	Help

5. 選擇串列介面的封裝型別,然後按一下Next。

Serial Wizard - Serial2/0(Syn	c/Async)	×
WAN Wizard	Configure Encapsulation	
	Interface:Serial2/0	
	Choose the encapsulation type for this connection. The High-Level Data Link Control (HDLC) connection connects a synchronous serial port (also known as a leased line) on a router, access server to connect to a router, access server, or corporate network. These routers or access servers must be Cisco devices.	
	C Frame Relay	
7/	C Point-to-Point Protocol	
	High-Level Data Link Control	
	< Back Next > Finish Cancel He	elp

6. 使用介面的相應子網掩碼指定靜態IP地址,然後按一下**下一步**。

Serial Wizard - Serial2/0(Syn	ic/Async)	X
WAN Wizard	IP address: Enter the IP address for this connection	
	Static IP address     IP address:     192.168.1.1	
	subnet mask: 255.255.255.0 or 24	
	CIP Unnumbered to: Ethernet0/0	
	You can configure this interface to perform dynamic DNS updates by checking the checkbox below.	
	Enable Dynamic DNS Dynamic DNS	
	< Back Next > Finish Cancel Hel	p

7. 使用ISP提供的可選引數(如下一跳IP地址(根據網路圖192.168.1.2))配置預設路由,然後按 一下**Next**。

Serial Wizard - Serial2/0(Syn	c/Async)	×
Serial Wizard - Serial2/0(Syn WAN Wizard	Advanced Options There is no static route configured on the router. A default static route ensures that outgoing traffic will always be sent to another router on the network.          Image: Default Static Route         Image: Default Static Route	×
	LAN Interface to be translated:     FastEthernet1/0	
	< Back Next > Finish Cancel He	qls

出現此視窗並顯示使用者配置的配置摘要。按一下「Finish」(結束)。

Serial Wizard - Serial2/0(Syn	nc/Async)	X
WAN Wizard	Summary	
	Please click Finish to deliver to the router	
Alat	Selected Interface :Serial2/0 A Encapsulation : HDLC IP address: Static IP address : 192.168.1.1 Subnet mask :255.255.25.0	
	Default Route: Destination Prefix: 0.0.0.0 Destination Prefix Mask: 0.0.0.0 Forwarding IP address (Exit Interface):192.168.1.2	
	۲ ۲	
	Test the connectivity after configuring	
	< Back Next > Finish Cancel	Help

出現此視窗,並顯示命令到路由器的傳送狀態。否則,如果命令交付由於不相容命令或功能不 受支援而失敗,將顯示錯誤。

Commands Delivery Status	×
Command Delivery Status:	
Preparing commands for delivery Submitting 6 commands, please wait Configuration delivered to router.	4
	<b>.</b>
<b>▼</b>	
<u>OK</u>	

8. 選擇Configure > Interfaces and Connections > Edit Interfaces/Connections以新增/編輯/刪除 各種介面。

🜠 Cisco Router and	d Security Device Manager							1	
File Edit View Tools Help									
ổ Home	Configure	Monitor Ø	Save	Q Search	<b>ှ</b> Help				Cisco Sv
Tasks	🛼 Interfaces and Co	nnections							
	Create Connection Edit	t Interface/Connection							
Interfaces and Connections	Interface List		⊕Add• ⊡	Edit 📋 D	)elete 🔳	Summary	🕰 Details	Disable	疑 Test Conne
•	Interface	IP	Туре		Slot	Status	Description		
Firewall and ACL	Ethernet0/0 FastEthernet1/0	no IP address 172.16.1.2	Ethernet 10/100Ethern	et	0	오 Dow 🔷 Up			
~~	Serial2/0	192.168.1.1	Serial Sync/As	sync	2	🔆 Up			
- <u>6</u>	Serial2/1 Serial2/2	no IP address	Serial SynciAs Serial SynciAs	sync	2	O Dow			
VPN	Serial2/3	no IP address	Serial SynciAs	sync Wae	2	O Dow			
EN Security Audit			oenaroynen.	,,	-				
Routing									
4	Details about Interface:8	Gerial2/0				🝚 Admi	nistratively Up	) 🔍 Adm	iinistratively Do
NAT	Item Name			Ite	m Value		2.0		
M	Encansulation	ĸ		HD	1168/11/12 LC	05.233.25	5.0		
	NAT			<n(< th=""><th>one≻</th><th></th><th></th><th></th><th></th></n(<>	one≻				
Intrusion Prevention	Access Rule - inbound			<n(< th=""><th>one≈</th><th></th><th></th><th></th><th></th></n(<>	one≈				
	Access Rule - outbound			<n(< th=""><th>one≻</th><th></th><th></th><th></th><th></th></n(<>	one≻				

突出顯示要更改的介面,如果要編輯或更改介面配置,請按一下**Edit**。您可以在此處更改現有 的靜態IP地址。

erface Feati	ure Edit Dialog -Serial2/0	
Connection	Association NAT General Application Service	
Encapsula	tion: HDLC	
IP ad	dress Static IP address 💌	
IP add	Iress: 192.168.1.1	
Subnet	t mask: 255.255.255.0 or 24	
Dynamic	DNS Method:	
	OK Cancel Help	

# <u>NAT配置</u>

<u>動態NAT配置</u>

完成這些步驟,在Cisco路由器中配置動態NAT。

1. 選擇**Configure > NAT > Basic NAT**,然後按一下**Launch the selected task**以配置基本 NATing。



Basic NAT Wizard		)
NAT Wizard Network Address Translation	Welcome to the Basic NAT Wizard This wizard lets you connect the PCs and hosts on your LAN to the Internet.	
	To connect the PCs and hosts to the Internet, you must perform these tasks: * Choose the interface that is connected to the Internet or to your Internet service provider. * Choose the networks on the LAN that are to share the Internet connection.	
	< Back Next > Finish Cancel Hel:	p

3. 選擇連線到Internet或ISP的介面,並選擇共用Internet訪問的IP地址範圍。

#### Basic NAT Wizard

# NAT Wizard Network Address Translation



#### Sharing the Internet Connection

If this router has a connection to the Internet, specify how you want PCs and hosts on the LAN to share this connection.

Choose the interface that connects to the Internet or your Internet service provider:

Serial2/0 Details...

The following ranges of IP addresses are allocated to networks directly connected to the router. Check the box next to each network that is to share the connection that you specified:

	IP address range	Connected Through	Comment
<b>.</b>	172.16.1.0 to 172.16.1.255	FastEthernet1/0	
	192.168.1.0 to 192.168.1.255	Serial2/0	

Note: To configure NAT on an interface marked as Designated, exit this wizard, click Edit NAT Configuration, and uncheck that interface in the Designate NAT Interfaces window. For details see help.

< Back Next > Finish Cancel

Help

4. 出現此視窗並顯示使用者配置的配置摘要。按一下「Finish」(結束)。 Jasic NAT Wizard



5. Edit NAT Configuration(編輯NAT配置)視窗顯示已配置的動態NAT配置,其中已轉換的IP地 址過載(PATing)。 如果要使用地址池配置動態NATing,請按一下**Address Pool**。

Create NAT Configurati	on Edit NAT Configura	ation		
Designate NAT Inte	rfaces		Address Pool	Translation Timeouts
Network Address	s Translation Rules			
Inside Interface(s	): FastEthernet1/0			
Outside Interface	s): Serial2/0			
Original add	iress	Translated address	Rule Type	Add
172.16.1.0-1	72.18.1.255	192.168.1.1	Dynamic	
				Edit
				Delete
				View Route MAP

6. 按一下「Add」。

ldre	SSES.	,	
	Pool Name	Address	
			Add
			Edit
			Delete
	lawa a stasta d Ew	w.on field	

了池名稱和帶網路掩碼的IP地址範圍等資訊。有時池中的大多數地址都已分配,並且IP地址池 已接近耗盡。發生這種情況時,PAT可與單個IP地址配合使用,以滿足對IP地址的其他請求。 如果希望路由器在地址池接近耗盡時使用PAT,請檢查**埠地址轉換(PAT)**。

供

Add Address Pool
Pool Name: pool1
Port Address Translation(PAT)
IP address: 192.168.1.3 192.168.1.10
Network Mask: 255.255.255.0 or 24
OK Cancel Help

7. 按一下「Add」。

ddress Pools		
Address Pools are use addresses.	d to configure Dynamic Network	Address Translation
Pool Name	Address	
pool1	192.168.1.3 - 192.168.1.10	Add
		Edit
		Delete
Clone selected Ent	ry on Add	
	K Cancel Hel;	2
安一下「Edit」。		
Create NAT Configuration Edit NA	Configuration	
Designate NAT Interfaces		Address Pool Translation Tin
Network Address Translation	Rules	
Inside Interface(s): FastEt	iernet1/0	
Outside Interface(s): Serial2	/0	
Original address	Translated address	Rule Type Add

9. 在Type欄位中選擇Address Pool,以pool1的形式提供地址池的名稱,然後按一下OK。

Delete

Edit Address Translation Rule	
C Static C Dynamic	
Direction: From inside to outside	]
Translate from interface	
Inside Interface(s): FastEthernet	1/0
ACL Rule: 1	
Translate to interface	
Outside Interface(s): Serial2/0	
Type: Address Po	ol
Interface: Address Poo	
Address Pool: pool1	

10. <u>此視窗顯示了使用地址池進行動態NAT的配置。按一下Designate NAT Interfaces。</u>

6 <sup>7</sup> No.			
Create NAT Configuration Edit NAT Configuration			
Designate NAT Interfaces		Address Pool	Translation Timeouts
Network Address Translation Rules			
Inside Interface(s): FastEthernet1/0			
Outside Interface(s): Serial2/0			
Original address	Translated address	Rule Type	Add
172.16.1.0-172.16.1.255	192.168.1.3-192.168.1.10	Dynamic	<u></u>
			Edit
			Delete

使用此視窗可以指定要在NAT轉換中使用的內部和外部介面。NAT在解釋轉換規則時使用內 部和外部標識,因為轉換是從內部執行到外部,或從外部執行到內部。指定後,這些介面將 用於所有NAT轉換規則。指定的介面顯示在主NAT視窗中的Translation Rules清單上方。

NAT Interf Select the inside / o	ace Settine e list of inte utside.	g Irfaces th	nat you wa	ant to (	designati	: e as
inte	face	insic	le(trusted)	)	outsid	e(untruste
FastEthe	ernet1/0		•			
Serial2/0	)					<b>v</b>
•						
	ОК		Cancel		Help	

#### 靜態NAT配置

完成這些步驟,以便在Cisco路由器中配置靜態NAT。

1. 選擇Configure > NAT > Edit NAT Configuration,然後按一下Add以配置靜態NATing。

Create NAT Configuration Edit NAT Configuration			
Designate NAT Interfaces		Address Pool	Translation Timeouts.
Network Address Translation Rules			
Inside Interface(s): FastEthernet1/0			
Outside Interface(s): Serial2/0			
Original address	Translated address	Rule Type	Add
			Edit
			Boloto

2. 選擇Direction(從內部到外部或從外部到內部),在Translate from Interface下指定要轉換的 內部IP地址。在Translate to Interface區域中選擇Type。如果要將Translate from Address轉換 為IP Address欄位中定義的IP地址,請選擇IP Address。如果希望Translate from Address使用 路由器上介面的地址,請選擇Interface。Translate from Address將轉換為分配給您在 Interface欄位中指定的介面的IP地址。如果您要在轉換中包括內部裝置的埠資訊,請選中 Redirect Port。這樣,只要為每台裝置指定的埠不同,就可以對多個裝置使用相同的公共IP地 址。您必須為該「轉換到」地址的每個埠對映建立一個條目。如果這是TCP埠號,請按一下 TCP,如果是UDP埠號,請按一下UDP。在Original Port欄位中,輸入內部裝置上的埠號。在 Translated Port欄位中,輸入路由器用於此轉換的埠號。請參閱<u>設定網路位址轉譯:的允許</u> Internet存取內部裝置一節快速入門

Static C Dynami	c		
Direction: From inside to	outside 🔽		
— Translate from interfac	e		
Inside Interface(s):			
IP address:	172.16.1.1		
Network Mask(optional):		or	
Translate to interface			
Outside Interface(s):			
Туре:	IP address	•	
Interface	FastEthernet1/0		
IP address:	192.168.1.3		
Redirect Port			
TCP CUDP			
Original Port:	8080 Translate	d Port: 80	

¯窗顯示了啟用了埠重定向的靜態NATing配置。

NAT			
Create NAT Configuration Edit NAT Co	nfiguration		
Designate NAT Interfaces		Address Pool	Translation Timeouts
	es		
Incide Interface(c):			
maide monace(a).			
Outside Interface(s):			_
Original address	Translated address	Rule Type	Add
172.16.1.1 (8080)	192.168.1.3 (80)	Static	
			Edit
			Delete
			Mew Peute M&P
			View Route mar

## 路由配置

#### 靜態路由配置

完成這些步驟,在思科路由器中設定靜態路由。

# 

JI	- Routing						
	Static Routing			$\supset$	Edit	Delete De	lete All
	Destination Network		Forwarding	0	Optional		
	Prefix	Prefix Mask	Interface or IP address		Distance	Permanent Route	Track I
L	0.0.0	0.0.0	192.168.1.2		1	No	None

2. 輸入帶有掩碼的目標網路地址,然後選擇傳出介面或下一跳IP地址。

Ade	d IP Static R	loute					
Γ	— Destinat	tion Network—					
	Prefix:		10.1.1.0				
	Prefix Mas	k:	255.255.255.0				
	🥅 Make th	is as the defaul					
[	Forward	ing(Next Hop)					
	C Interface	e:	Ethernet0/0	7			
	IP Addre	ess:	192.168.1.2				
	Optional Distance r	I	ute: 1				
	口罢的新能败	OK 0K	Cancel Help		此視窗	顯示為10.	1.1.0網
哈肖	ll 旦 ロン	田,丹中192.10	0.1.2TF	Lo			
Stat	tic Routing			Add	Edit	Delete	Delete All
De	stination Network		Forwarding	Optio	nal		
Pr	efix 1.1.0	Prefix Mask	Interface or IP address	Dist	lance	Permanent Ro	ute Track
10.	1.1.0	200.200.200.0	192.100.1.2			140	none

## <u>動態路由配置</u>

完成這些步驟,在思科路由器中設定動態路由。

- 1. 選擇Configure > Routing > Dynamic Routing。
- 2. 選擇RIP,然後按一下Edit。

Tasks	🔹 Routing						
÷	Static Routing			Add	Edit	Delete D	elsta Al
Interfaces and	Destination Netwo	rk	Forwarding		Optional		
Connections	Prefix	Prefix Mask	Interface or IP address		Distance	Permanent Route	Trac
<b>3</b> .							
Fiewall and ACL							
En							
Security Audit	•						
400	Dynamic Routing					>	Edit
Routing	Item Name	Item Value					
2.	RIF	Disabled					
NRT	OSPF	Disabled					
0	EIGRP	Disabled					

3. 選中Enable RIP,選擇RIP版本,然後按一下Add。

RIP OSPF EIGRP	
Enable RIP	
RIP Version C Version 1 • Version2	C Default
IP Network List	
172.1.0.0	Add Delete
Available Interface List Make the Interf	ace Passive
FastEthernet1/0	
Serial2/1  Serial2/2  Serial2/3	
OK Cancel	Help
Add a Network Network: 172.1.1.0 OK Cancel	

	Dynamic Routi	ng		
RIF	OSPF EIG	RP		
	Enable RI	Р ———		
	RIP Version	C Version 1	Version2	C Default
	IP Networ	k List		
	172.1.0.0			Add
				Delete
	Available I	nterface List	Make the Inter	face Passive
	Ethernet0/0			1
	FastEthernet1.	/0		1
	Serial2/0			1
	Serial2/1			1
	Serial2/2			1
	Serial2/3			1
	ОК	Cance	1	Help

6. 按一下「**Deliver**」將命令傳送到路由器。

Deliver Con	liguration	n to Router						
Deliver de	Deliver delta commands to the router's running config.							
Preview c	Preview commands that will be delivered to the router's running configuration.							
router rip version 2 no auto-s network exit	router rip version 2 no auto-summary network 172.1.0.0 exit							
<b>I</b>								
The different router is to The Save ru	<ul> <li>The differences between the running configuration and the startup configuration are lost when router is turned off.</li> <li>Save running config. to router's startup config.</li> <li>This expertise can take coveral minutes.</li> </ul>							
		Deliver	Cancel	Save to file	Help			
此視窗顯示	了動態RIF							
Tasks	** Routing							
Sec.	Static Housing	abuark	Forwarding		III DETRIC LITERETAVE			
Interfaces and Connections	Prefix	Prefix Mask	Interface or IP address	Distanc	e Permanent Route Track			
Firewall and RCL								
Security Audi	•							
ૡઙૢૻૢ૾ૡ	Dynamic Rout	ng			Edit			
Routing	Item Name	Item Value						
NRT	RIP Version Network Passive Interfa	Version2 172.1.0.0 ice None						

# <u>其他配置</u>

完成這些步驟,在思科路由器中設定其他基本設定。

1. 如果要更改路由器的主機名、域名、標語和啟用加密口令屬性,請選擇Configure > Additional Tasks > Router Properties,然後按一下Edit。

🕼 Additional Tasks			
E-CS Router Properties	Device Properties		Edit
	Item Name	Item Value	
	Hostname	Router	
	Domain Name		
E-	Banner	None	
- 🚮 User Accounts/View	Enable Secret Password	None	
🍪 Management Access			
SSH			
😚 Secure Device Provisioning			
DNS			
Dynamic DNS Methods			
Port to Application Mappings			
H-19 URL Filtering			
te- 📬 AAA			
🌈 Local Pools			
😚 Router Provisioning			
🕀 🚞 Configuration Management			

 2. 選擇Configure > Additional Tasks > Router Access > User Accounts/View以向路由器新增/編 輯/刪除使用者帳戶。

Additional Tasks

E- 😁 Router Properties	User Accoun	Add Edit Delete					
NTP/SNTP	Username		Password	Privilege Level	View Name		
	sdmsdm		********	15	<none></none>		
- P Netflow		Add an Acco	unt		×		
Netflow     Router Access     Secure Device Provisioning     DHCP     DNS     Dynamic DNS Methods     ACL Editor     Port to Application Mappings     URL Filtering     AAA     Coal Pools     Router Provisioning     Configuration Management		Add an Accor Enter the u Username Passwo New Pa Confirm I Encrypt Privilege L View Na	unt isemame and password : vord ord issword: i New Password: t password using MD5 has evel: sociate a View with the use sociate a View with the use	<none> Algorithm</none>	×		
			OK Cancel	Help			

3. 選擇File > Save Running Config to PC...將配置儲存到路由器的NVRAM和PC並將當前配置重置為預設(工廠)設定。

🚅 Cisco Router and S	ecurity Device Mana	ger (SDM): 172.16.1.2				
File Edit View To	ols Help					
Save Running Confl Write to Startup Con	lg to PC	🗿 Monitor 🛛 🚳 Reliesh	G ( Save Se	≷ ∲ arch Help		Cisco Systems attiliaaattiliaa
File Nanagement	and	Connections				
Exit	tion	Edit Interface/Connection	<u>ــــــــــــــــــــــــــــــــــــ</u>			
Interfaces and Connections	Interface List		🚭 Add 🔹 💽 Edi	t 📋 Delete I	🖃 Summary 🛛 🖾 Detai	Is 🔾 Disable 🔏 Test Connection
<b>1</b>	Interface	IP	Туре	Slot	Status Descriptio	n
S 1 1	Ethernet0/0	no IP address	Ethernet	0	O Dow	
Firewall and RCL	FastEthernet1/0	172.16.1.2	10/100Ethernet	1	😜 Up	
	Serial2/0	192,168 1,1	Berial SynclAsync	2	OUp	
	Serial2/1	no IP address	Serial Sync/Async	2	O Dow	
UPN	Bertal2/2 Revtal2/2	no IP address	Bertal SynciAsync Revtal Data(Sound	2	O Dow	
Security Audit	our will be		outer of the office	-		
Routing						
NOT	Details about Interfa	ce:Serial2/0			C Administratively	Up 🔾 Administratively Down
	ftem Name			Item Value		
i 🔰 🗌	IP address/subnet m	nask		192.168.1.1	/255.255.255.0	
Intrusion Prevention	Encapsulation			HDLC		
D KINSKAT PIEVO KKAT	NAT			<none></none>		
1 😳 -	Access Rule - inbou	nd		<none></none>		
and states	Access Rule - 00000	uno		<none></none>		
clusiky of Service	Paec Policy			<notie*< td=""><td></td><td></td></notie*<>		

4. 前往工作列並選擇「編輯>首選項」以啟用以下「使用者首選項」選項:在將命令傳送到路由 器之前進行預覽。將簽名檔案儲存到快閃記憶體。退出SDM前確認。交換模式/任務時繼續監 控介面狀態。

To	okie in your browser. If cookies are disabled in your browser, it only applies to the current session. restore the default settings, click the Default button and then click OK.
	Preview commands before delivering to router.
	Save signature file to Flash.
	Confirm before exiting from SDM.
	Continue monitoring interface status when switching mode/task
	Maximum number of interfaces to monitor:

5. 如果您要執行以下操作,請從工作列中選擇**檢視**:檢視「首頁」、「配置」或「監控」頁。檢 視路由器的運行配置。檢視各種**show**命令。檢視SDM預設規則。如果通過CLI與SDM配置了 路由器配置,請選擇**Refresh**以同步路由器配置。



## <u>CLI組態</u>

路由器配置
Router# <b>show run</b>
Building configuration
Current configuration : 2525 bytes !
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Router
!
boot-start-marker
boot-end-marker
!
no logging buffered
enable password cisco
!
no aaa new-model
!
resource policy
!
!
!
ip cef
!
!
!
! RSA certificate generated after you enable the !

```
ip http secure-server command.
crypto pki trustpoint TP-self-signed-392370502
enrollment selfsigned
subject-name cn=IOS-Self-Signed-Certificate-392370502
revocation-check none
rsakeypair TP-self-signed-392370502
crypto pki certificate chain TP-self-signed-392370502
certificate self-signed 01
 3082023C 308201A5 A0030201 02020101 300D0609 2A864886
F70D0101 04050
 30312E30 2C060355 04031325 494F532D 53656C66 2D536967
6E65642D 43657
 69666963 6174652D 33393233 37303530 32301E17 0D303530
39323330 34333
 375A170D 32303031 30313030 30303030 5A303031 2E302C06
03550403 13254
 532D5365 6C662D53 69676E65 642D4365 72746966 69636174
652D3339 32333
 35303230 819F300D 06092A86 4886F70D 01010105 0003818D
00308189 02818
 C86C0F42 84656325 70922027 EF314C2F 17C8BBE1 B478AFA3
FE2BC2F2 3C272
 A3B5E13A 1392A158 73D8FE0D 20BFD952 6B22890C 38776830
241BE259 EE2AA
 CF4124EA 37E41B46 A2076586 2F0F9A74 FDB72B3B 6159EEF7
0DEC7D44 BE489
 9E351BF7 F5C808D9 2706C8B7 F5CE4B73 39ED8A61 508F455A
68245A6B D072F
 02030100 01A36630 64300F06 03551D13 0101FF04 05300301
01FF3011 06035
 11040A30 08820652 6F757465 72301F06 03551D23 04183016
80148943 F2369
 ACD8CCA6 CA04EC47 C68B8179 E205301D 0603551D 0E041604
148943F2 36910
 D8CCA6CA 04EC47C6 8B8179E2 05300D06 092A8648 86F70D01
01040500 03818
 3B93B9DC 7DA78DF5 6D1D0D68 6CE075F3 FFDAD0FB 9C58E269
FE360329 2CEE3
 D8661EB4 041DEFEF E14AA79D F33661FC 2E667519 E185D586
13FBD678 F52E1
 E3C92ACD 52741FA4 4429D0B7 EB3DF979 0EB9D563 51C950E0
11504B41 4AE79
 ODD0BE16 856B688C B727B3DB 30A9A91E 10236FA7 63BAEACB
5F7E8602 0C33D
 quit
!
!
1
!--- Create a user account named sdmsdm with all
privileges.
username sdmsdm privilege 15 password 0 sdmsdm
1
```

1

```
interface Ethernet0/0
no ip address
shutdown
half-duplex
!--- The LAN interface configured with a private IP
address. interface FastEthernet1/0 ip address 172.16.1.2
255.255.255.0 !--- Designate that traffic that
originates from behind !--- the interface is subject to
Network Address Translation (NAT). ip nat inside
ip virtual-reassembly
duplex auto
speed auto
!
!--- This is the WAN interface configured with a
routable (public) IP address. interface Serial2/0 ip
address 192.168.1.1 255.255.255.0 !--- Designate that
this interface is the !--- destination for traffic that
has undergone NAT. ip nat outside
ip virtual-reassembly
1
interface Serial2/1
no ip address
shutdown
interface Serial2/2
no ip address
shutdown
interface Serial2/3
no ip address
shutdown
!
!--- RIP version 2 routing is enabled. router rip
version 2 network 172.1.0.0 no auto-summary !--- This is
where the commands to enable HTTP and HTTPS are
configured. ip http server ip http secure-server ! !---
This configuration is for dynamic NAT.
!--- Define a pool of outside IP addresses for NAT. ip
nat pool pool1 192.168.1.3 192.168.1.10 netmask
255.255.255.0 !--- In order to enable NAT of the inside
source address, !--- specify that traffic from hosts
that match access list 1 !--- are NATed to the address
pool named pool1. ip nat inside source list 1 pool pool1
! !--- Access list 1 permits only 172.16.1.0 network to
be NATed. access-list 1 remark SDM_ACL Category=2
access-list 1 permit 172.16.1.0 0.0.0.255 ! !--- This
configuration is for static NAT
!--- In order to translate the packets between the real
IP address 172.16.1.1 with TCP !--- port 80 and the
mapped IP address 192.168.1.1 with TCP port 500. ip nat
inside source static tcp 172.16.1.1 80 192.168.1.3 500
extendable
!
!
```

'
'
'--- The default route is configured and points to
192.168.1.2. ip route 0.0.0.0 0.0.0.0 192.168.1.2 ! ! '-- The static route is configured and points to
192.168.1.2. ip route 10.1.1.0 255.255.255.0 192.168.1.2
! ! control-plane ! ! ! ! ! ! ! ! ! line con 0 line
aux 0 !--- Telnet enabled with password as sdmsdm. line
vty 0 4 password sdmsdm login ! ! end



選擇Configure > Interface & Connections > Edit Interface Connections > Test Connection以測試端 到端連線。如果按一下User-specified單選按鈕,則可以指定遠端終端IP地址。

onnectivity testing an	nd troubleshooting : Se	rial2/0			×
IP address / hostr	name				_
Select a ping opti	on, enter the required v	alue and click Start			
C Automatica	ally determined by SDM	User-specified	192.168.1.2		
					ĺ
					•
			📃 Summary	🕰 Details	
Activity	formation			× us	
Checking inter Checking inter Checking exit in Binging to doct	(i) Test Conr	ection successful!		p uccessful uccessful	
Finging to desi	The conne	action is up on the selec	ted interface.	uccession	
		OK			
Failure Reason(s	)	Recommende	d Action(s)		
Start	Save Repo	rt Close	H	Help	



<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 。

**註:在發**出debug命令前<u>,請先參閱</u>有關Debug命令的重要資訊。

您可以使用以下選項進行疑難排解:

• 從工作列中選擇「**Tools > Update SDM**」,以執行ping、Telnet操作並將SDM升級到最新版本。您可以從Cisco.com、本地PC或CD執行此操作。

📢 Lisco Router and	d Security Device Manager (	SDM): 172.16.1.2						_ [ ] )
File Edit View	Tools Help	_						
🔥 Home	Search Ping Tobad	nito: Ø Retresh	G 🔍 🔍 Save Sear	ah Help				CISCO SYSTEMS
Tasks	Teinet Cacudh Audit	ections						
- Interfaces and	Configuration Managemen	From Cisco.com	Add + Za Edit	🗊 Delete 🛛	🔳 Summary	🕰 Details	Disable	S Test Connection
Connections	Interface	From CD	Type	Slot	Status	Description		
Fiewell and RCL	Ethemet0/0 FastEthemet1/0	no IP address 172.18.1.2	Ethernet 10/100Ethernet	0	O Dow			
	Serial 2/0 Serial 2/1 Serial 2/2 Serial 2/2	192.158.1.1 no IP address no IP address po IP address	Serial Sync/Async Serial Sync/Async Serial Sync/Async Serial Sync/Async	2 2 2 2 2 2	C Up O Dow O Dow			
Security Audit	contract of	nes saless	control of non-office					
e Routing								
	Details about Interface:S	erial2/0			🖕 Admin	istratively Up	오 Adri	ninistratively Down
	Item Name			Item Value				
Intrusion Prevention	Encapsulation			HDLC «None»	1750 500 500	U		
: 👁 =	Access Rule - Inbound			≺None> ≪None>				
Guality of Service	IPSec Policy EasyVPN Remote			<none></none>				

• 選擇Help > About this Router,以檢視有關路由器硬體配置的資訊。



有關路由器中儲存的IOS映像的資訊。

Hardware/Software Details						
Hardware	Details Software Deta	ils				
G	IOS Image Name:	c3640-ik9s-mz.124-8.bin				
<b>~</b>	IOS Version:	12.4(8)				
	Boot From:	flash				
	Feature Sets:					
	<ul><li>✓</li></ul>	IP (Internet Protocol)				
	<ul><li>✓</li></ul>	VPN (DES, AES, 3DES, SEAL)				
	]					
	SDM Version:	2.1				
	,					
	CI	ose				

• Help選項提供有關SDM中用於配置路由器的各種可用選項的資訊。



### SDM與64位作業系統的相容性

具有64位作業系統的電腦上不支援SDM。您應該在路由器上安裝SDM,並通過Web瀏覽器訪問它 。

請參閱<u>任務4:安裝SDM檔案</u>,瞭解有關在路由器上安裝SDM檔案的詳細資訊。

#### <u>無法通過Web瀏覽器啟動SDM</u>

#### 問題

通過Web瀏覽器使用SDM時,會出現SDM start up錯誤消息。

#### 解決方案1

問題可能出在Java的版本上。Java更新可能與SDM版本不相容。如果Java的版本是Java 6更新 12,則解除安裝該版**本,然後安裝Java 6更新3**。這樣可解決該問題。有關相容性的詳細資訊,請 參閱<u>SDM 2.5發行說明的Web瀏覽器版本和Java運行時環境版本</u>一節。SDM版本2.5在Java版本6的 更新2和3下運行。

#### 解決方案2

啟用Allow active content to run in files on My Computer on Internet Explorer選項以解決問題。

1. 開啟Internet Explorer並選擇「工具」>「Internet選項」>「高級」。

在「安全」部分下,確保選中**允許活動內容在我的電腦上的檔案中運行**和**允許活動內容安裝軟** 體(即使簽名無效)選項旁邊的複選框。

3. 現在,按一下OK並重新啟動瀏覽器以使更改生效。

### <u> 錯誤:java.bling堆叠溢位</u>

#### 問題

我無法連線到SDM,收到以下錯誤消息:

java.bling stack over flow

#### 解決方案

此問題通常發生在使用Java代碼版本1.5.0\_06時。有關如何解決此問題的資訊,請參閱<u>使用者無法</u> 連線到安全裝置管理器(SDM)並收到java.bling stack over flow錯誤消息。

# 相關資訊

- 思科安全裝置管理器安裝指南
- 思科產品支援頁面 路由器
- <u>思科組態專業版支援頁面</u>
- <u>NAT支援頁面</u>
- 技術支援與文件 Cisco Systems