AnyConnect:安裝自簽名證書作為受信任的來源

目標

本文的目的是指導您在Windows電腦上建立和安裝自簽名證書作為受信任源。這將消除 AnyConnect中的「不受信任的伺服器」警告。

簡介

Cisco AnyConnect Virtual Private Network(VPN)Mobility Client為遠端使用者提供安全 的VPN連線。它提供思科安全套接字層(SSL)VPN客戶端的優點,並支援基於瀏覽器的 SSL VPN連線無法使用的應用程式和功能。AnyConnect VPN通常由遠端工作人員使用 ,它使員工可以像在辦公室那樣連線到公司網路基礎設施,即使他們不在辦公室也是如 此。這提高了員工的靈活性、移動性和工作效率。

證書在通訊過程中非常重要,用於驗證個人或裝置的身份、驗證服務或加密檔案。自簽 名證書是由其自己的建立者簽名的SSL證書。

首次連線到AnyConnect VPN移動客戶端時,使用者可能會遇到「Untrusted Server(不 受信任的伺服器)」警告,如下圖所示。



按照本文中的步驟在Windows電腦上安裝自簽名證書作為受信任源,以消除此問題。

應用匯出的證書時,請確保將其放在安裝了Anyconnect的客戶端PC上。

AnyConnect軟體版本

• AnyConnect - v4.9.x(下載**最新版**)

作為前提條件,您需要確保您的路由器具有正確的時間設定,包括時區和夏令時設定。

步驟1

導覽至System Configuration > Time。



步驟2

確保一切設定正確。

Time

Current Date and Time:	2019-0	ct-21, 1	0:51:2	1 PST							
Time Zone:	(UTC	-08:00) Pacific	Time	(U	S & Car	nada)				•
Set Date and Time:	O Auto	• N	lanual								
Enter Date and Time:	2019-10-21 (yyyy-mm-dd)										
	10	• : 5	51 v	: 10		• (24	hh:mr	m:ss)			
Daylight Saving Time:											
Daylight Saving Mode:	 By D 	ate C	Recu	rring							
From:	Month	3 ,	Day	10	۲	Time	02	•:	00	۲	(24hh:mm)
To:	Month	11	Day	03	۲	Time	02	•:	00	۲	(24hh:mm)
Daylight Saving Offset	+60	▼ Min	utes								

建立自簽名證書

登入到RV34x系列路由器,然後導航到Administration > Certificate。



步驟2

按一下「Generate CSR/Certificate」。

Import Certificate	Generate CSR/Certificate	Show Built-in 3rd-Party CA Certificates	Select as Primary Certificate	
步 驟 3				

填寫以下資訊:

- Type: 自簽名證書
- 證書名稱:(您選擇的任何名稱)
- •使用者替代名稱:如果要在WAN埠上使用IP地址,請在框下選擇**IP Address**,如果要使用 完全限定的域名,請選擇**FQDN**。在框中,輸入WAN埠的IP地址或FQDN。
- 國家/地區名稱(C):選擇裝置所在的國家/地區

•省或州名稱(ST):選擇裝置所在的州或省

Generate CSR/Certificate.

- 地區名稱(L):(可選)選擇裝置所在的位置。這可能是一個城鎮、城市等等。
- 組織名稱(O):(選用)
- 組織單位名稱(OU):公司名稱
- •一般名稱(CN):此名稱必須與設定為主題備用名稱的內容匹配
- 電子郵件地址(E):(選用)
- •金鑰加密長度:2048
- 有效持續時間:這是證書的有效時間。預設值為360天。您可以將此值調整為任意值,最 長為10,950天或30年。

按一下Generate。

步駆	Import Certificate Generate CSR/Certificate Show Built-in 3rd-Party CA Certificates Select as Primary Certificate 步驟4								
Cert	選擇 ificate Tab	剛建立的證書 le	書,然後按一	-下 選擇為主	要證書。				
۱ ا	Index \$	Certificate 🗢	Used By 🖨	Туре 🗢	Signed By ≑	Duration 🗢	Details	Action	
	1	Default	WebServer,	Local Certifi	Self Signed	From 2012-Jul-12, 00:00:00 PST To 2042-Jul-05, 00:00:00 PST		<u>1</u>	
S	2	SEAR	-	Local Certifi	Self Signed	From 2019-Oct-21, 00:00:00 PS To 2029-Aug-29, 00:00:00 PST		1	

步驟5

mport Certificate..

刷新Web使用者介面(UI)。 由於它是新證書,因此需要重新登入。登入後,請轉至VPN > SSL VPN。

Show Built-in 3rd-Party CA Certificates.

Select as Primary Certificate.



步驟6

將Certificate File變更為新建立的憑證。

Mandatory Gateway Settings



安裝自簽名證書

要在Windows電腦上安裝自簽名證書作為受信任的源,消除AnyConnect中的「不受信任 的伺服器」警告,請執行以下步驟:

步驟1

登入到RV34x系列路由器,然後導航到Administration > Certificate。



選擇預設自簽名證書,然後按一下Export按鈕下載證書。

Ce	rti	ificate								
C	erti	ficate Tat	ole							^
1	Ŵ									
		Index 🖨	Certificate 🖨	Used By 🖨	Туре 🖨	Signed By 🖨	Duration 🗢	Details	Action	
	☑	1	Default	WebServer,	Local Certifi	Self Signed	From 2019-Feb-22, 00:00:00 GN To 2049-Feb-14, 00:00:00 GMT			
										\sim

步驟3

在「*Export Certificate*」視窗中,輸入憑證的密碼。在*Confirm Password*欄位中重新輸入密碼,然後按一下**Export。**

Export Cert	ificate			ж
• Export as PKCS	#12 format			
Enter Password	•••••	1		
Confirm Password	•••••	2		
O Export as PEM f	ormat			
Soloct Dostination t	o Evport:			
• PC	o Export.			
			3	
			Export	Cancel
₽ 驟 4				

您將看到一個彈出視窗,通知已成功下載證書。按一下「OK」(確定)。

Information

Success
Ok 步驟5
將證書下載到PC後,找到該檔案,然後按兩下該檔案。 ▶│
 ← → ∽ ↑ ▶ This PC > Downloads ✓ ↑ ▶ This PC > Downloads ✓ Name ✓ Default
Downloads 分聚6

將會出現「*Certificate Import Wizard*」視窗。對於*Store Location*,選擇**Local Machine** 。按「**Next**」(下一步)。

Welcome to the Certificate Import Wizard

This wizard helps you copy certificates, certificate trust lists, and certificate revocation lists from your disk to a certificate store.

A certificate, which is issued by a certification authority, is a confirmation of your identity and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept.

	Store Location
	O Current User
1	Local Machine

To continue, dick Next.



第7步

將在以下螢幕上顯示證書位置和資訊。按「Next」(下一步)。

File to Import

Specify the file you want to import.

C:\Users\k	\Downloads\Default.p12	Browse
lote: More that	an one certificate can be stored in a single file	in the following format:
lote: More that	an one certificate can be stored in a single file	in the following format
lote: More that Personal Inf	an one certificate can be stored in a single file formation Exchange- PKCS #12 (.PFX,.P12)	in the following format
lote: More that Personal Inf	an one certificate can be stored in a single file formation Exchange- PKCS #12 (.PFX,.P12)	in the following format:
lote: More the Personal Inf Cryptograph	an one certificate can be stored in a single file formation Exchange- PKCS #12 (.PFX,.P12) hic Message Syntax Standard- PKCS #7 Certifi	in the following format
lote: More the Personal Inf Cryptograph	an one certificate can be stored in a single file formation Exchange- PKCS #12 (.PFX,.P12) hic Message Syntax Standard- PKCS #7 Certifi	in the following format: icates (.P7B)

Next	Cancel

步驟8

輸入您為憑證選擇的Password,然後按一下Next。

Private key protection

To maintain security, the private key was protected with a password.

Ľ	Display Password
Imp	ort options:
	Enable strong private key protection. You will be prompted every time the private key is used by an application if you enable this option.
C	Mark this key as exportable. This will allow you to back up or transport your keys at a later time.
	Protect private key using virtualized-based security(Non-exportable)
5	Include all extended properties.

步驟9

在下一個螢幕上,選擇Place all certificates in the following store,然後按一下Browse。

←	🐓 Certificate Import Wizard
	Certificate Store
	Certificate stores are system areas where certificates are kept.
	Windows can automatically select a certificate store, or you can specify a location for the certificate.
	O Automatically select the certificate store based on the type of certificate
	OPlace all certificates in the following store
	Certificate store: Browse
牛肉	§ 10

選擇Trusted Root Certification Authorities,然後按一下OK。

Select Certificate Store

 \times

Select the certificate s	store you	want to	use.
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步驟11

按「Next」(下一步)。

🔶 🍠 Certificate Import Wizard

Certificate Store

Certificate stores are system areas where certificates are kept.

Windows can automatically select a certificate store, or you can specify a location for the certificate.

O Automatically select the certificate store based on the type of certificate

Place all certificates in the following store

Certificate store:

Trusted Root Certification Authorities

Browse...



步驟12

將顯示設定的摘要。按一下Finish匯入證書。

Completing the Certificate Import Wizard

The certificate will be imported after you click Finish.

You have specified the following settings:					
	Certificate Store Selected by User	Trusted Root Certification Authorities			
	Content	PFX			
	File Name	C:\Users\	\Downloads\Default.p12		
L					

	Finish Cancel

步驟13

您將看到證書已成功匯入的確認。按一下「OK」(確定)。

Certificate Import Wizard imes



步驟14

開啟Cisco AnyConnect並再次嘗試連線。不應再看到不受信任的伺服器警告。

結論

你拿到了!現在,您已成功學習了在Windows電腦上安裝自簽名證書作為受信任源的步驟,從而消除AnyConnect中的「不受信任的伺服器」警告。

其他資源

基本故障排除 AnyConnect管理員指南4.9版 AnyConnect發行說明 — 4.9 思科業務VPN概述和最佳 實踐