通過SSH訪問AMP私有雲的CLI並通過SCP傳輸 檔案

目錄

簡介 必要條件 需求 採用元件 設定 使用PuTTY生成RSA金鑰對 使用Linux/Mac生成RSA金鑰對 將生成的公鑰新增到AMP私有雲管理門戶 使用生成的金鑰對通過PuTTY通過SSH連線到裝置 使用配置的金鑰對通過Linux通過SSH連線到裝置 使用WinSCP與AMP私有雲的檔案系統互動

簡介

本文檔介紹使用PuTTY和使用Linux外殼生成SSH金鑰對,將其新增到AMP,然後訪問CLI的過程。 AMP私有雲裝置使用基於證書的身份驗證通過SSH連線到裝置。此處詳細介紹快速產生金鑰對,以 便存取CLI以及透過SCP(WinSCP)與檔案系統互動的程式。

必要條件

需求

思科建議您瞭解以下主題:

- PuTTY
- WinSCP
- Linux/Mac shell

採用元件

本文件所述內容不限於特定軟體和硬體版本。

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。

設定

第一步包括使用PuTTY或Linux shell生成RSA金鑰對。之後,需要新增公鑰並由AMP私有雲裝置信 任。

使用PuTTY生成RSA金鑰對

步驟1.確保已完全安裝PuTTY。

步驟2.啟動隨PuTTY一起安裝的PuTTYGen以生成RSA金鑰對。

😴 PuTTY Key Generator		?	\times
File Key Conversions Help			
Key No key.			
Actions			
Generate a public/private key pair		Generate	
Load an existing private key file		Load	
Save the generated key	Save public key	Save private key	
Parameters Type of key to generate:	A O ED25519	◯ SSH-1 (RSA 2048	¥)

步驟3.點選Generate並隨機移動游標以完成金鑰對生成。

步驟4.選擇「Save public key」(儲存公鑰)和「Save private key」(儲存私鑰),這兩個選項將 在後面的部分中使用,如下圖所示。

😰 PuTTY Key Generator

File Key Conversions Help

Key				
Public key for pasting i	into OpenSSH authorized_keys file:			
ssh-rsa AAAAB3NzaC1yc2EA K3+2mXorinr4YP8S+c	AAABJQAAAQBan/DDbg8zkYWhaMfq0ilV1GcWLL7cfgv DsxN/b6QV899kC7z3sQevpXxC9sCiGuh+nvBWAunF	j8ajlpb		
+16912K71DuVyqhfcLH +ShZ8G110vxxenlin5y	I/vv5WPHJKaC47BqdWs+AuDrcCUqoDWOrHREWy Y3IUjm8B9xmsPY/norzytm	~		
Key fingerprint: ssh-rsa 2047 32:c3:07:60:8f:e4:75:e6:2d:b1:b4:1d:21:18:43:cb				
Key comment:	rsa-key-20190410			
Key passphrase:				
Confirm passphrase:				
Actions				
Generate a public/priv	rate key pair Gen	erate		
Load an existing privat	te key file La	ad		
Save the generated ke	ey Save public key Save pr	ivate key		
Parameters				
Type of key to generat RSA	te: DSA OECDSA OED25519 OSS	H-1 (RSA)		
Number of bits in a ger	nerated key: 2048			

步驟5.使用記事本開啟公鑰,因為需要修改該公鑰的格式才能在AMP私有雲管理門戶中接受該公鑰。

AMP-VPC - Notepad

File Edit Format View Help

---- BEGIN SSH2 PUBLIC KEY ----

Comment: "rsa-key-20190410"

AAAAB3NzaC1yc2EAAAABJQAAAQBan/DDbg8zkYWhaMfq0ilV1GcWLL7cfgvj8aj1 pbK3+2mXorinr4YP8S+oDsxN/b6QV899kC7z3sQevpXxC9sCiGuh+nvBWAunF+16 912K71DuVyqhfcLH/vv5WPHJKaC47BqdWs+AuDrcCUqoDWOrHREWy+ShZ8GII0vx xenIin5yY3IUjm8B9xmsPY/norzytm+Wh6h0HdQtfgyBAj6TxGbcdK5VcLFaxbMB CR8cEMx2yW61Ub2DSUwL78eDkfRhf1VWey07HbQ5zm/KPkijNXFCrk9BAmVXvPW4 w5FZSKKYQJgns1pjggcmpPbR879ib1xz7neUG+ktj16T4G3p ---- END SSH2 PUBLIC KEY ----

 \times

?

步驟6.刪除以「----BEGIN」開頭的前2行以及以「---- END」開頭的最後一行

步驟7.刪除所有換行符,使公鑰內容成為一條連續的線路。

步驟8.在檔案開頭輸入單詞「ssh-rsa」。儲存檔案。

AMP-VPC - Notepad
 File Edit Format View Help
 ssh-rsa AAAAB3HzaClyc2EAAAABJQAAAQBan/DDbg8zkYWhaMfq01lV1GcWLL7cfgvj8aj1pbK3+2mXorinr4YP8S+oDsxN/b6QV899kC7z3sQevpXxC9sCiGuh+nv8NAunF+16912K71DuVyqhfcLH/vv5NPHJKaC47BqdNs
+AuDrcCUqoDWOrHRENy+ShZ8GII0vxxenIin5yY3IUjm889xmsPY/norzyt
 wHh6h6HdQtfgyBAj6TxGbcdK5VcLFaxdWBCR8cENxzyW6IUb2DSUwL78eDkfRhf1VWey07HbQ5zm/KPkijHXFCrk98AmVXvPW4w5FZ5KKYQJgns1pjggcmpPbR879ib1xz7neUG+ktj16T4G3p

使用Linux/Mac生成RSA金鑰對

步驟1.在Linux/Mac CLI上,輸入命令「ssh-keygen」

步驟2.輸入所需的引數,這樣將在資料夾「~/.ssh」處生成RSA金鑰對

ABHSHA-M-23ZS:.ssh abhsha\$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/Users/abhsha/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /Users/abhsha/.ssh/id_rsa.
Your public key has been saved in /Users/abhsha/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:0X1PHyTf29K3CDyzDa6/w2l1/VxmL6b+sWfDClMWEQc abhsha@ABHSHA-M-23ZS
The key's randomart image is:
+[RSA 2048]+
I E+o I
· · · · *
I + ool
I o.+I
S * oo.+
I . Xo.o*I
.=+00=+
.=0 O=*
.0+==++.
+[SHA256]+
ABHSHA-M-23ZS:.ssh abhsha\$

步驟3.如果開啟公鑰id_rsa.pub的內容,可以看到該內容已經採用所需的格式。

ABHSHA-M-23ZS:.ssh abhsha\$ ABHSHA-M-23ZS:.ssh abhsha\$ ls id_rsa id_rsa.pub known_hosts ABHSHA-M-23ZS:.ssh abhsha\$ ABHSHA-M-23ZS:.ssh abhsha\$ cat id_rsa.pub ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQD12Brou9ABf5tLpZKZpF/nPxTnvs9I6cKC+tycnzC6iR1BT/zmqJ SSVCSmdhnbwOD9cbWzQ7RYgI46SFLa3JeFU11jFzSmAWqI94AHAjFHVp3W5idcZeq9xxsvSm9Z/NPD+roDEGLnRY+y VMT2wrHGEyxNyWZ0ZL04Vetmfqof1nx8ixIq+5SwXRdJGFsBNWF0hh8v5rhbxk1ByTVcqGYL3P4JCfMth4tCQDyPd/ CWA1A/263oVDwS4eWEL7haZS+zsqGyt0vrNpHnMeoHbc23LKwiFv1xQFy7WFDmxIAGiELVRAKqsv//onbHz/zG/K2J UL/grTai5am0Fq7f2njp abhsha@ABHSHA-M-23ZS ABHSHA-M-23ZS:.ssh abhsha\$

將生成的公鑰新增到AMP私有雲管理門戶

步驟1.導航到AMP私有雲管理門戶>配置> SSH

步驟2.按一下「新增SSH金鑰」

				📞 Support	? Help	🕩 Log	jout		
Configuration -	Operations -	Status 👻	Integrations *	Support 👻)m 🕴		•

This page allows you to add and remove SSH keys on your Sourcefire FireAMP Private Cloud device. SSH keys allow administrators remote root authentication to the device. Only trusted users should be granted access.

Add SSH Key

步驟3.新增公鑰的內容並儲存該內容。

SSH Key
AMP-TEST
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQD12Brou9ABf5tLpZKZpF/nPxTnvs9l6cKC+tycnzC6iR1BT/zmqJ5SVCSmdhnbwOD9cbWzQ7RYgI46SFLa3JeF U11jFzSmAWqI94AHAjFHVp3W5idcZeq9xxsvSm9Z/NPD+roDEGLnRY+yVMT2wrHGEyxNyWZ0ZLO4Vetmfqof1nx8ixIq+5SwXRdJGFsBNWF0hh8v5rhbx k1ByTVcqGYL3P4JCfMth4tCQDyPd/CWAIA/263oVDwS4eWEL7haZS+zsqGytOvrNpHnMeoHbc23LKwiFv1xQFy7WFDmxIAGiELVRAKqsv//onbHz/zG/K2 JUL/grTai5amOFq7f2njp abhsha@ABHSHA-M-23ZS

步驟4.儲存後,確保您正在「重新配置」裝置。





使用生成的金鑰對通過PuTTY通過SSH連線到裝置

步驟1.開啟PuTTY並輸入AMP私有雲管理門戶的IP地址。

🕵 PuTTY Configuration		? ×			
Category: Session Logging Teminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Colours Connection Proxy Telnet Rlogin SSH Serial About	Basic options for your PuTTY ses Specify the destination you want to connec Host Name (or IP address) 10.10.10.1	ssion ct to Port 22			
	Connection type: Raw Telnet Rlogin SSH Serial Load, save or delete a stored session Saved Sessions				
	Default Settings	Load Save Delete			
	Close window on exit: Always Never Only on close Open	ean exit Cancel			

步驟2.在左窗格中,選擇Connection > SSH,然後按一下Auth。

步驟3.選擇由PuTTYGen生成的私鑰。這是PPK檔案。





步驟4.點選Open(開啟),並在提示輸入使用者名稱時輸入「root」,您應該進入AMP私有雲的 CLI。

使用配置的金鑰對通過Linux通過SSH連線到裝置

步驟1。如果私有金鑰對和公共金鑰對正確儲存在~/.ssh路徑中,則您應該能夠通過SSH連線到 AMP私有雲裝置,只需發出ssh命令而不提示您輸入任何密碼。

ssh root@<AMP-IP-ADDRESS>

[abhishek@supecomputer .ssh]\$ ssh root@10.106.36.230 The authenticity of host '10.106.36.230 (10.106.36.230)' can't be established. RSA key fingerprint is SHA256:mvHHLqnMJhPBBBpPankbdXV7pjxBha5NE1h1GdBs1fg. RSA key fingerprint is MD5:27:78:7c:39:de:b9:b7:d8:45:87:8e:09:96:33:b6:db. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '10.106.36.230' (RSA) to the list of known hosts. Last login: Fri Mar 29 03:30:46 2019 from 173.39.68.177 [root@fireamp ~]# [root@fireamp ~]#

使用WinSCP與AMP私有雲的檔案系統互動

步驟1.在您的電腦上安裝WinSCP並啟動它。

步驟2.輸入AMP私有雲管理門戶的IP地址,並選擇「檔案協定」作為SCP。輸入使用者名稱root並 保留密碼欄位。

🌆 Login		- 🗆 X
New Site	Session File protocol: SCP Host name: 10.106.36.230 User name: root Save	Port number: 22 - sword: Advanced 🔻
Tools	🔁 Login 🛛 🔽	Close Help

步驟3.選擇Advanced > Advanced > SSH > Authentication

步驟4.選擇PuTTYgen作為私鑰生成的PPK檔案。

Advanced Site Settings		?	\times
Environment Directories Recycle bin Encryption SFTP SCP/Shell Connection Proxy Tunnel SSH Key exchange Authentication Bugs Note	 Bypass authentication entirely Authentication options Attempt authentication using Pageant Attempt 'keyboard-interactive' authentication Respond with password to the first prompt Attempt TIS or CryptoCard authentication (SSH-1) 		
	Authentication parameters Allow agent forwarding Private key file: Civers\abhishek\Downloads\AMP.ppk Display Public Key Tools	[
	GSSAPI		
Color 🔻	OK Cancel	Hel	þ

步驟5.按一下OK,然後Login。您應該能夠在接受提示後成功登入。