# 通过SSH访问AMP私有云的CLI,并通过SCP传 输文件

### 目录

简介 先决条件 要求 使用的组件 配置 使用PuTTY生成RSA密钥对 使用Linux/Mac生成RSA密钥对 将生成的公钥添加到AMP私有云管理门户 使用生成的密钥对使用PuTTY SSH连接到设备 使用已配置的密钥对使用Linux SSH连接到设备 使用WinSCP与AMP私有云的文件系统交互

# 简介

本文档介绍使用PuTTY和Linux外壳生成SSH密钥对、将其添加到AMP,然后访问CLI的过程。 AMP私有云设备使用基于证书的身份验证通过SSH连接到设备。此处详细介绍快速生成密钥对以访 问CLI和通过SCP(WinSCP)与文件系统交互的过程。

# 先决条件

### 要求

Cisco 建议您了解以下主题:

- PuTTY
- WinSCP
- Linux/Mac外壳

#### 使用的组件

本文档不限于特定的软件和硬件版本。

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。如果您的网络处于活动状态,请确保您了解所有命令的潜在影响。

### 配置

第一步是使用PuTTY或Linux外壳生成RSA密钥对。此后,需要添加公钥并由AMP私有云设备信任

#### 使用PuTTY生成RSA密钥对

步骤1.确保已完全安装PuTTY。

步骤2.启动与PuTTY一起安装的PuTTYGen以生成RSA密钥对。

😴 PuTTY Key Generator			?	×
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 put	olic key	Save private	key
Parameters Type of key to generate:	а ()	ED25519	○ SSH-1 2048	(RSA)

步骤3.点击Generate(生成)以随机移动光标以完成密钥对生成。

步骤4.选择"保存公钥"和"保存私钥",后面的部分将使用它们,如图所示。

### PuTTY Key Generator

#### File Key Conversions Help

Key					
Public key for pasting i	nto OpenSSH authorized_keys file:				
ssh-rsa AAAAB3NzaC1yc2EA K3+2mXorinr4YP8S+c +16912K71DuVyqhfcLH	AAABJQAAAQBan/DDbg8zkYWhaMfq0ilV1GcWLL7cfgvj8ajlpb DsxN/b6QV899kC7z3sQevpXxC9sCiGuh+nvBWAunF I/vv5WPHJKaC47BqdWs+AuDrcCUqoDWOrHREWy	^			
+ShZ8GII0vxxenlin5y	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	rsa-key-20190410			
Key passphrase:					
Confirm passphrase:					
Actions					
Generate a public/priv	ate key pair Generate				
Load an existing privat	e key file Load				
Save the generated ke	Save public key Save private key	у			
Parameters					
Type of key to generat RSA	te: DSA OECDSA OED25519 OSSH-1 (RS	SA)			
Number of bits in a ger	nerated key: 2048				

步骤5.使用记事本打开公钥,因为需要修改其格式,以便在AMP私有云管理门户中接受该公钥。

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 ----

 $\times$ 

?

步骤6.删除以" — BEGIN"开头的前2行和以" — END"开头的最后2行

步骤7.删除所有换行符,将公钥内容作为一条连续的换行符。

步骤8.在文件开头输入"ssh-rsa"一词。保存文件。

AMP-VPC - Notepad
 File Edit Format View Help
Ssh-rsa AAAAB3NzaCLyc2EAAAAB3QAAAQBan/DDbg8zkYWhaMfq0ilVIGcWLL7cfgvj8aj1pbK3+2mXorinr4YP8S+oDsxN/b6QV899kC7z3sQevpXxC9sCiGuh+nv8NAunF+16912K71DuVyqhfcLH/vv5NPHJKaC47BqdNs
+AuDrcCUqoDNOrHRENy+ShZ8GII0vxxenIin5yY3IUjm889xmsPY/norzyt
m+Mh6h0HdQtfgy8Aj6TxGbcdK5VcLFaxbM8CR8cENxzyW6IDb2DSUwL78e0kfRhf1VWey07HbQ5zm/KPkijNXFCrk98AmVXvPW4w5FZ5KKYQJgns1pjggcmpPbR879ib1xz7neUG+ktj16T4G3p

#### 使用Linux/Mac生成RSA密钥对

步骤1.在Linux/Mac CLI上,输入命令"ssh-keygen"

步骤2.输入所需参数,并在文件夹"~/.ssh"中生成RSA密钥对

```
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:QX1PHyTf29K3CDyzDa6/w2l1/VxmL6b+sWfDClMWEQc abhsha@ABHSHA-M-23ZS
The key's randomart image is:
+---[RSA 2048]----+
        .. E+o I
        . . . *..|
         . . + 00
             0.+
          . .
         S * oo.+l
           . Xo.o*I
           .=+00=+
           .=0 0=*|
          .0+==++.
   --[SHA256]----+
ABHSHA-M-23ZS:.ssh abhsha$
```

步骤3.如果打开公钥id\_rsa.pub的内容,您可以看到它已采用所需的格式。

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\$

### 将生成的公钥添加到AMP私有云管理门户

步骤1.导航至AMP私有云管理门户>配置> SSH

步骤2.点击"添加SSH密钥"

fireAM	Private Cloud	d Administratio	n Portal		Support ? He	p @	Logoi	ut
Configuration -	Operations -	Status -	Integrations -	Support -		<b>)</b> #	1	•

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

#### 步骤3.添加公钥的内容并保存此内容。

SSH Key
Name
AMP-TEST
Z Enabled
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQD12Brou9ABf5tLpZKZpF/nPxTnvs9l6cKC+tycnzC6iR1BT/zmqJ5SVCSmdhnbwOD9cbWzQ7RYgl46SFLa3JeF U11jFzSmAWql94AHAjFHVp3W5idcZeq9xxsvSm9Z/NPD+roDEGLnRY+yVMT2wrHGEyxNyWZ0ZLO4Vetmfqof1nx8ixlq+5SwXRdJGFsBNWF0hh8v5rhbx k1ByTVcqGYL3P4JCfMth4tCQDyPd/CWAIA/263oVDwS4eWEL7haZS+zsqGytOvrNpHnMeoHbc23LKwlFv1xQFy7WFDmxIAGiELVRAKqsv//onbHz/zG/K2 JUL/grTai5amOFq7f2njp abhsha@ABHSHA-M-23ZS
e
A Sava M Cancel

步骤4.保存完此信息后,请确保正在"重新配置"设备。





# 使用生成的密钥对使用PuTTY SSH连接到设备

步骤1.打开PuTTY并输入AMP私有云管理门户的IP地址。

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

步骤2.在左窗格中,选择Connection > SSH,然后点击Auth。

步骤3.选择由PuTTYGen生成的私钥。这是PPK文件。





步骤4.点击Open,当提示输入用户名时,输入"root",您应该登录AMP私有云的CLI。

# 使用已配置的密钥对使用Linux SSH连接到设备

步骤1.如果私钥对和公钥对正确存储在~/.ssh路径中,则您应该能够通过发出ssh命令而不提示输入 任何密码,从而对AMP私有云设备执行SSH。

```
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与AMP私有云的文件系统交互

步骤2.输入AMP私有云管理门户的IP地址,并选择File Protocol作为SCP。输入用户名为root并保留 密码字段。

🎦 Login		– 🗆 X
New Site	Session File protocol: SCP Host name: 10.106.36.230 User name: root Save	Port number:
Tools 🔻 Manage 🔻	E Login 🔽 Clos	e Help

步骤3.选择Advanced > Advanced > SSH > Authentication

步骤4.选择由PuTTYgen生成为私钥的PPK文件。

Advanced Site Settings		?	$\times$
Advanced site settings	<ul> <li>Bypass authentication entirely</li> <li>Authentication options</li> <li>Attempt authentication using Pageant</li> <li>Attempt 'keyboard-interactive' authentication</li> <li>Respond with password to the first prompt</li> <li>Attempt TIS or CryptoCard authentication (SSH-1)</li> <li>Authentication parameters</li> </ul>		
	Allow agent forwarding Private key file:  C:\Users\abhishek\Downloads\AMP.ppk Display Public Key Tools GSSAPI		
	Attempt GSSAPI authentication		
Color 🔻	OK Cancel	He	þ

步骤5.单击OK,然后单击Login。在接受提示后,您应该能够成功登录。