

在ESXI上部署SSM內部版本並註冊Catalyst 9000交換機

目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[設定](#)

[網路圖表](#)

[組態](#)

[在ESXI上部署SSM On-Prem](#)

[註冊Catalyst 9000系列交換器](#)

[相關資訊](#)

簡介

本檔案介紹如何在ESXI上部署SSM內部版本和註冊Catalyst 9000系列交換器。

必要條件

需求

思科建議您瞭解以下主題：

- VMware ESXi的基本配置。
- Cisco Catalyst 9000系列交換機的智慧許可使用策略。
- 熟悉Smart Software Manager On-Prem。

採用元件

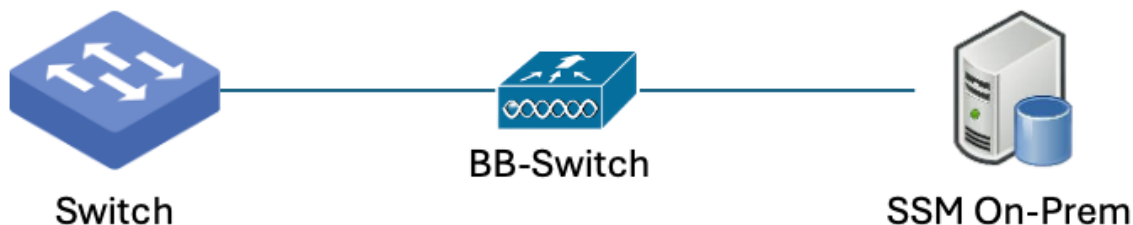
本文中的資訊係根據以下軟體和硬體版本：

- C9200
- C9300
- C9400
- C9500
- C9600
- Cisco IOS® XE & 17.X軟體

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

網路圖表

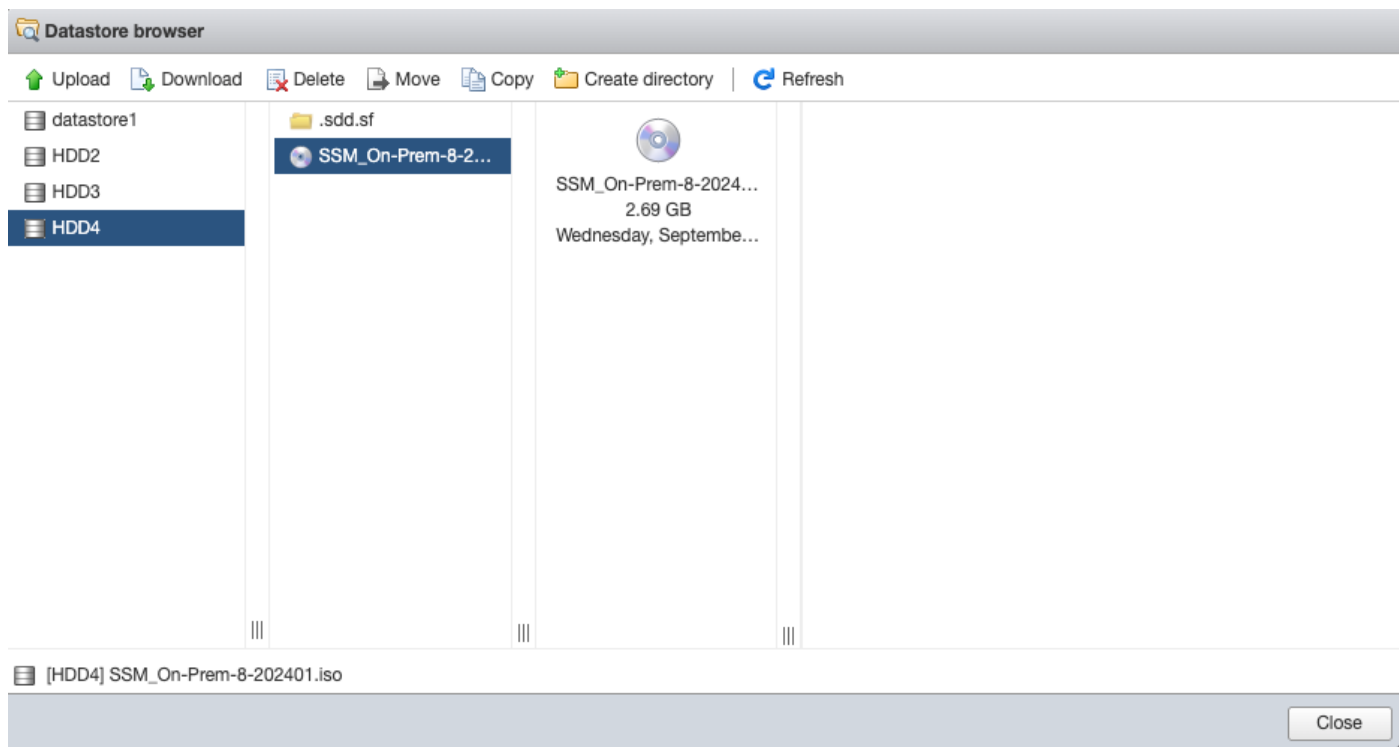


組態

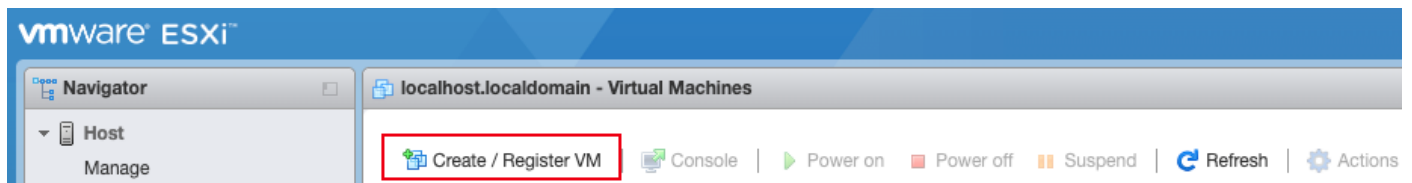
在ESXI上部署SSM On-Prem

1.從CCO下載ISO映像，然後將其上傳到ESXi資料儲存庫。

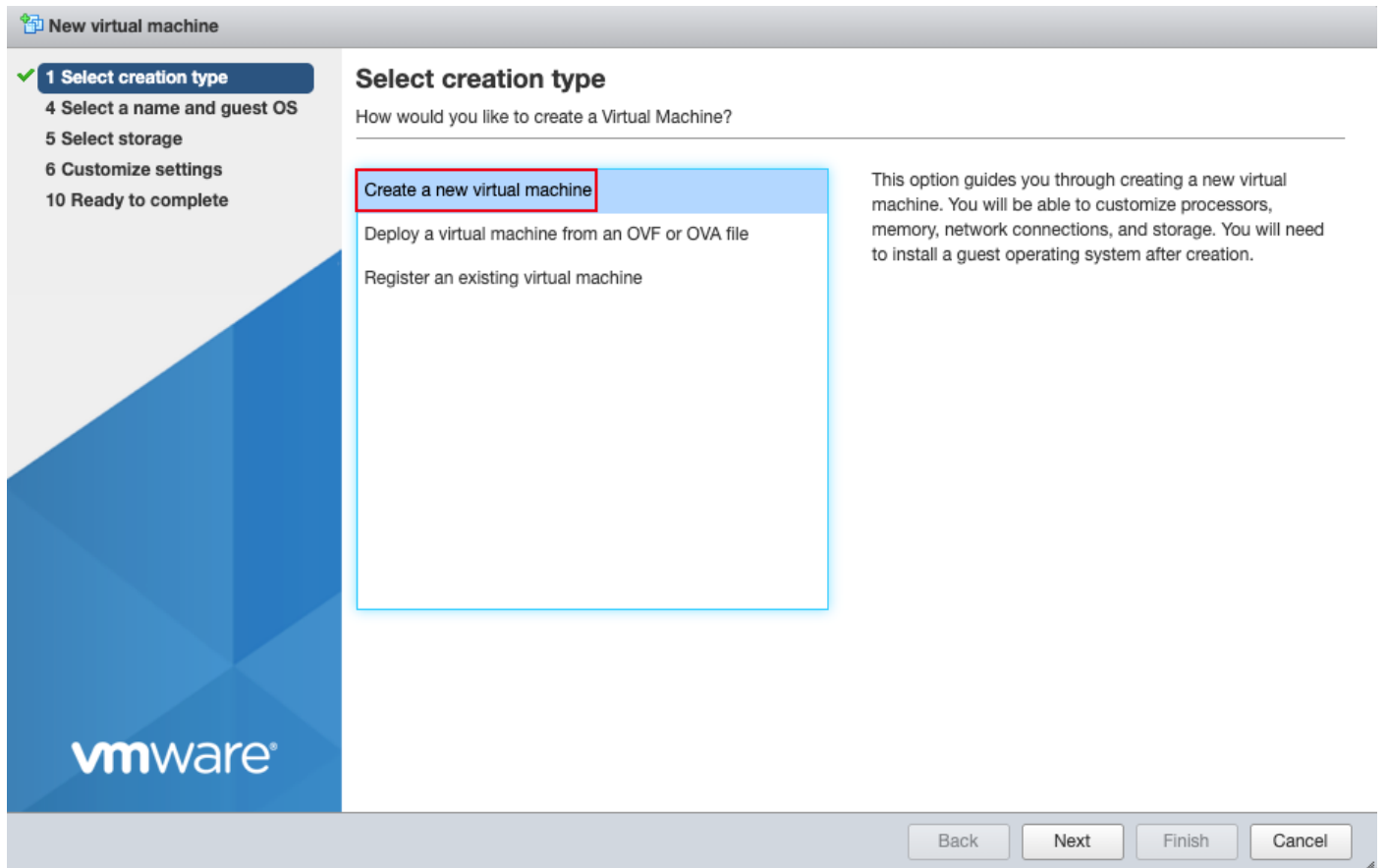
影象連結:[Smart Software Manager On-Prem - 8-202401](#)



2.按一下ESXI左上角的Create / Register VM以建立虛擬機器。



3.在「選擇建立型別」頁上，選擇「建立新虛擬機器」，然後按一下「下一步」以繼續執行下一步。



4.選擇VM名稱和guest OS，確保作業系統型別設定為Linux，並且來賓作業系統設定為CentOS 7 64 bit或Linux Other 64 bit。

New virtual machine - DEMO-SSM-ON-PREM (ESXi 6.5 virtual machine)

1 Select creation type
4 Select a name and guest OS
5 Select storage
6 Customize settings
10 Ready to complete

Select a name and guest OS

Specify a unique name and OS

Name
DEMO-SSM-ON-PREM

Virtual machine names can contain up to 80 characters and they must be unique within each ESXi instance.

Identifying the guest operating system here allows the wizard to provide the appropriate defaults for the operating system installation.

Compatibility
ESXi 6.5 virtual machine

Guest OS family
Linux

Guest OS version
Other Linux (64-bit)

Back Next Finish Cancel

5.選擇儲存以進行內部部署。請確保有足夠的空間。

New virtual machine - DEMO-SSM-ON-PREM (ESXi 6.5 virtual machine)

1 Select creation type
4 Select a name and guest OS
5 Select storage
6 Customize settings
10 Ready to complete

Select storage

Select the datastore in which to store the configuration and disk files.

The following datastores are accessible from the destination resource that you selected. Select the destination datastore for the virtual machine configuration files and all of the virtual disks.

Name	Capacity	Free	Type	Thin pro...	Access
datastore1	922.75 GB	918.34 GB	VMFS5	Supported	Single
HDD2	930.25 GB	67.65 GB	VMFS6	Supported	Single
HDD3	930.25 GB	284.38 GB	VMFS6	Supported	Single
HDD4	930.25 GB	928.83 GB	VMFS6	Supported	Single

4 items

Back Next Finish Cancel

6.配置虛擬機器硬體和虛擬機器其他選項，虛擬機器的配置必須滿足表中列出的這些配置要求。

	Small	Medium	Large	Maximum
Products	4000	50,000	100,000	300,000
Hard Disk	200 Gig	200 Gig	200 Gig	200 Gig
Memory	8 Gigabyte	8 Gigabyte	16 Gigabyte	16 Gigabyte
vCPU	2 vCPU	4 vCPU	6 vCPU	8 vCPU

New virtual machine - DEMO-SSM-ON-PREM (ESXi 6.5 virtual machine)

- 1 Select creation type
- 4 Select a name and guest OS
- 5 Select storage
- 6 Customize settings**
- 10 Ready to complete

Customize settings

Configure the virtual machine hardware and virtual machine additional options

Virtual Hardware
VM Options

Add hard disk
 Add network adapter
 Add other device

CPU	4		
Memory	8	GB	
Hard disk 1	200	GB	
SCSI Controller 0	LSI Logic Parallel		
USB controller 1	USB 2.0		
Network Adapter 1	VM Network		☒ Connect
CD/DVD Drive 1	Datastore ISO file		
Status	☒ Connect at power on		
CD/DVD Media	[HDD4] SSM_On-Prem-8-202401.iso		Browse...
Virtual Device Node	IDE controller 0	Master	
Video Card	Specify custom settings		

Back Next Finish Cancel

7.完成嚮導之前，請檢視您的設定選擇。確認後，按一下Finish按鈕完成虛擬機器的部署。

New virtual machine - DEMO-SSM-ON-PREM (ESXi 6.5 virtual machine)

✓ 1 Select creation type
✓ 4 Select a name and guest OS
✓ 5 Select storage
✓ 6 Customize settings
✓ 10 Ready to complete

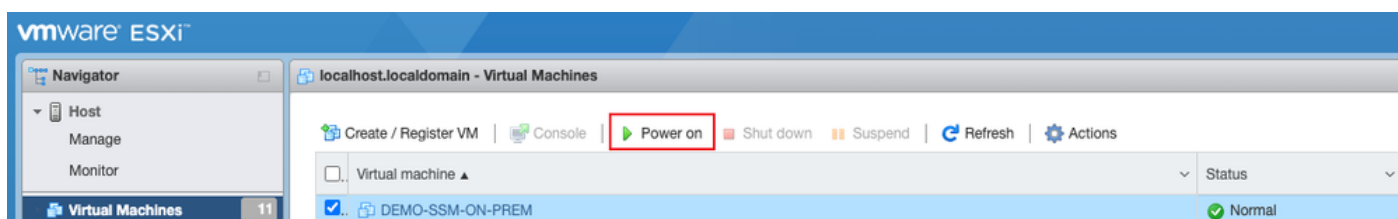
Ready to complete

Review your settings selection before finishing the wizard

Name	DEMO-SSM-ON-PREM
Datastore	HDD4
Guest OS name	Other Linux (64-bit)
Compatibility	ESXi 6.5 virtual machine
vCPUs	4
Memory	8 GB
Network adapters	1
Network adapter 1 network	VM Network
Network adapter 1 type	E1000
IDE controller 0	IDE 0
IDE controller 1	IDE 1
SCSI controller 0	LSI Logic Parallel
Hard disk 1	
Capacity	200GB
Datastore	[HDD4] DEMO-SSM-ON-PREM/
Mode	Dependent
Provisioning	Thick provisioned, lazily zeroed
Controller	SCSI controller 0 : 0
CD/DVD drive 1	
Backing	[HDD4] SSM_On-Prem-8-202401.iso
Connected	Yes
USB controller 1	USB 2.0

Back Next Finish Cancel

8.接下來，請開啟新部署的虛擬機器以開始安裝過程。找到您在ESXI的虛擬機器中剛剛建立的VM，選擇它，然後按一下上面的Power On。



9.開啟VM的控制檯，然後選擇Install Cisco Sm On-Prem。此狀態將保持約1分鐘，然後進入基本設定頁面。

Cisco Smart Software Manager On-Prem

Install Cisco SSM On-Prem

Test this media & install Cisco SSM On-Prem

Troubleshooting



Press Tab for full configuration options on menu items.

Automatic boot in 44 seconds...

```
DEMO-SSM-ON-PREM Actions X
```

```
- Press the <ENTER> key to begin the installation process.
```

```
[ 8.404971] dracut-pre-udev[342]: modprobe: ERROR: could not insert 'floppy':  
No such device  
[ OK ] Started Device-Mapper Multipath Device Controller.  
Starting Open-iSCSI...  
[ OK ] Started Show Plymouth Boot Screen.  
[ OK ] Reached target Paths.  
[ OK ] Reached target Basic System.  
[ OK ] Started Open-iSCSI.  
Starting dracut initqueue hook...  
[ 9.693637] sd 2:0:0:0: [sda] Assuming drive cache: write through  
[ 12.293693] dracut-initqueue[693]: mount: /dev/sr0 is write-protected, mounting read-only  
[ OK ] Started Device-Mapper Multipath Device Controller.  
Starting Open-iSCSI...  
[ OK ] Started Show Plymouth Boot Screen.  
[ OK ] Reached target Paths.  
[ OK ] Reached target Basic System.  
[ OK ] Started Open-iSCSI.  
Starting dracut initqueue hook...  
[ 12.293693] dracut-initqueue[693]: mount: /dev/sr0 is write-protected, mounting read-only  
[ OK ] Created slice system-checkisomd5.slice.  
Starting Media check on /dev/sr0...  
/dev/sr0: 291881cc07d4c6c648635e41e57a0dc5  
Fragment sums: 11fef97cf5478a6814e7cbb2aeb8d8c5cf9cc145d61362bd82d24826b23d  
Fragment count: 20  
Press [Esc] to abort check.  
Checking: 013.3%_
```

10.在此頁面上，您需要填寫一些SSM內部配置，例如hostname、ip、dns等。

DEMO-SSM-ON-PREM Cisco SSM On-Prem Installation

System Settings:

Hostname: **SSM-On-Prem**

Message Of The Day: UNCLASSIFIED Security Profile: Standard FIPS 140-2 Mode: Enablec

Hardware Settings:

CPU Model: Intel(R) Xeon(R) CPU E5-2640 0 @ 2.50GHz CPU Threads: 4 Architecture: 64-bit
Total System Memory: 8174688 kB Free Memory: 7414008 kB
Available Disks: ☒ sda (200Gb) Encrypt Drive with LUKS: Disabled Enable USB: Disabled

Network Settings:

Network Device: ens33

IPv4 Configuration

Method: Static

Address:

Netmask:

Gateway:

IPv6 Configuration

Method: Disabled

Address:

Prefix:

Gateway:

Configure DNS: Specify more than one with commas

Help OK

11.按一下「確定」後，系統將要求您設定密碼。您輸入兩次的密碼必須相同。此密碼稍後用於登入CLI。

DEMO-SSM-ON-PREM Cisco SSM On-Prem Installation

System Settings:

Hostname: SSM-On-Prem

Message Of The Day: UNCLASSIFIED Security Profile: Standard FIPS 140-2 Mode: Enabled

Hardware Settings:

CPU Model: Intel(R) Xeon(R) CPU E5-2640 0 @ 2.50GHz CPU Threads: 4 Architecture: 64-bit
Total System Memory: 8174688 kB Free Memory: 7414008 kB

Available Disks: ☒ sda (200Gb) Encrypt Drive with LUKS: Disabled Enable USB: Disabled

Network Settings:

Network Device: ens33

IPv4 Configuration

Method: Static

Address: 192.168.1.1
Netmask: 255.255.255.0
Gateway: 192.168.1.254

Prefix:
Gateway:

Configure System Password

Password:
Verify Password:

Cancel OK

Configure DNS: Specify more than one with commas

192.168.1.253

Help OK

12. 然後SSM內部安裝將繼續進行，整個過程大約需要30分鐘。完成後，VM將自動啟動。然後，繼續安裝SSM預裝。

```
DEMO-SSM-ON-PREM
Starting automated install....
Checking software selection
Generating updated storage configuration
Checking storage configuration...

=====
Installation

1) [x] Language settings                2) [x] Time settings
   (English (United States))           (Etc/UTC timezone)
3) [x] Installation source              4) [x] Software selection
   (Local media)                       (Custom software selected)
5) [x] Installation Destination         6) [x] Kdump
   (Custom partitioning selected)      (Kdump is enabled)
7) [x] Network configuration
   (Wired (ens32) connected)

=====
Progress
Setting up the installation environment
.
Creating disklabel on /dev/sda
.
Creating xfs on /dev/sda1
.
Creating lvm pv on /dev/sda2
.
Creating xfs on /dev/mapper/vg1-lv_home
.
Creating xfs on /dev/mapper/vg1-lv_audit
.
Creating xfs on /dev/mapper/vg1-lv_log
.
Creating xfs on /dev/mapper/vg1-lv_var

[anaconda] 1:main* 2:shell 3:log 4:storage-log 5:program-log  Switch tab: Alt+Tab | Help: F1
```

13.重新啟動完成後，您可以登入到CLI進行驗證。使用者名稱為admin，密碼是您剛設定的密碼。

```
SSM-On-Prem login:
#####
#                               #
#           Authorized access only!           #
#                               #
# Disconnect IMMEDIATELY if you are not an authorized user!!! #
#           All actions Will be monitored and recorded           #
#                               #
#####

SSM-On-Prem login: admin
Password:
Last login: Tue Sep  2 06:24:16 UTC 2025 on tty1
Last login: Tue Sep  2 06:40:51 on tty1
admin@SSM-On-Prem ~1$
```

14.安裝完成後，您可以使用瀏覽器登入到<https://x.x.x.x:8443>，然後繼續執行下一步。當顯示登入螢幕時，使用以下憑證登入 — admin/CiscoAdmin!2345，這是首次登入本地網路的初始密碼。



Log into an Existing Account

User Name

Password

Log In

[Forgot Password](#)

Welcome to Smart Software Manager On-Prem where you can locally manage Smart Licensing and perform local Account Management functions for your organization.

15. 按一下登入後，本地部署進入下一階段，從系統語言選擇開始。

Welcome to Cisco Smart Software Manager On-Prem

STEP 1

System Language Selection

STEP 2

Temporary Password Reset

STEP 3

Host Common Name

STEP 4

Review and Confirm

Please select your preferred system wide language from the list of supported languages here. Your language selection may be changed latter in the Settings widget under the Language tab.

After you select and save a language, refresh the screen by navigating to another screen and then return to your original screen. The screen will now open in your selected language.

Select the default language

English



Next

16. 在「Temporary Password Reset」頁面上，此步驟重置GUI密碼。

Welcome to Cisco Smart Software Manager On-Prem

STEP 1
System Language Selection

STEP 2
Temporary Password Reset

STEP 3
Host Common Name

STEP 4
Review and Confirm

The one-time temporary password has been provided to allow for initial access to Cisco SSM On-Prem installation. For your security, the temporary password may only be used once, and must now be changed in order to continue the configuration procedure.

The new password may not be the same as the default, and must be at least 15 characters. It should include at least 1 uppercase letter, 1 lowercase letter, and 1 number. Passwords are case-sensitive. It may include symbols, but not these: = ? < > () ' * / \ &. When all requirements are met, you will be able to change the password. Securely store the password as it will be needed each time the admin user logs in.

Once you have successfully changed the temporary password, you will be directed back the Login Screen.

Password *

Reenter Password *

Back

Next

17.接下來，請設定主機公用名。

Welcome to Cisco Smart Software Manager On-Prem

STEP 1
System Language Selection

STEP 2
Temporary Password Reset

STEP 3
Host Common Name

STEP 4
Review and Confirm

Products that support String SSL Cert Checking require the SSM On-Prem's "Host Common Name" to match the "destination" URL address. For example:

- Products using Smart Transport must use both the "license smart url" configuration and the "10.124.38.112" value in the URL string.
- Legacy products using Smart Call Home must use both the "destination address http" configuration and the "10.124.38.112" value in the URL string.

If the above URLs do not match expectations, refer to the SSM On-Prem AdminWorkspace -> Security Widget to change the Host Common Name to the correct value.

The option to configure alternative names (SAN) is available in Admin Console under Security -> Certificates and can be configured after the initial setup.

* Host Common Name

10.124.38.112

Back

Next

18.最後，在「Review and Confirm」頁面，請檢查剛進行的配置。

Welcome to Cisco Smart Software Manager On-Prem

STEP 1 System Language Selection	STEP 2 Temporary Password Reset	STEP 3 Host Common Name	STEP 4 Review and Confirm
-------------------------------------	------------------------------------	----------------------------	------------------------------

Once you click "Apply", you will be redirected to the login page where you will need to login with your new password. Please ensure you have securely stored your password for future logins.

Review and Confirm

Language Selected: English
Password Reset: Yes
Host Common Name: 10.124.38.112

Back

Apply

19. 按一下Apply按鈕後，頁面將跳動。請使用您的新密碼登入。SSM內部安裝現已完成。

Log into an Existing Account

User Name
admin

Password

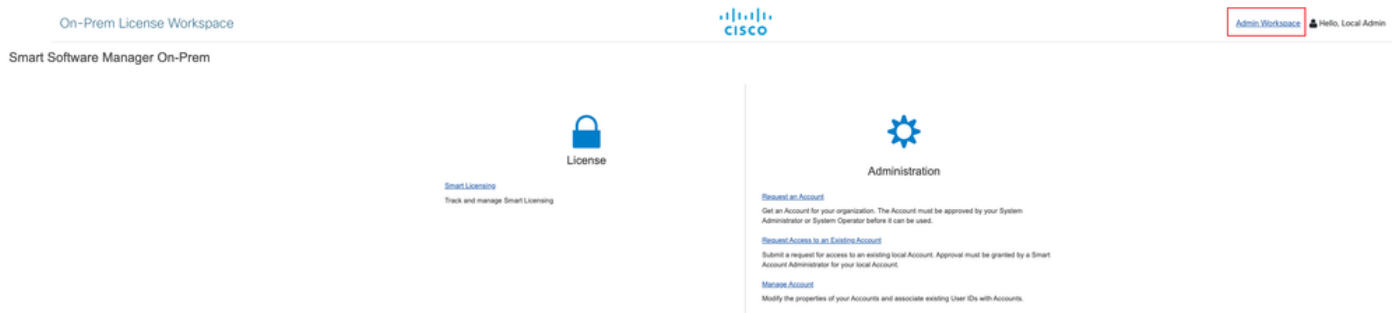
Log In

[Forgot Password](#)

Welcome to Smart Software Manager On-Prem where you can locally manage Smart Licensing and perform local Account Management functions for your organization.

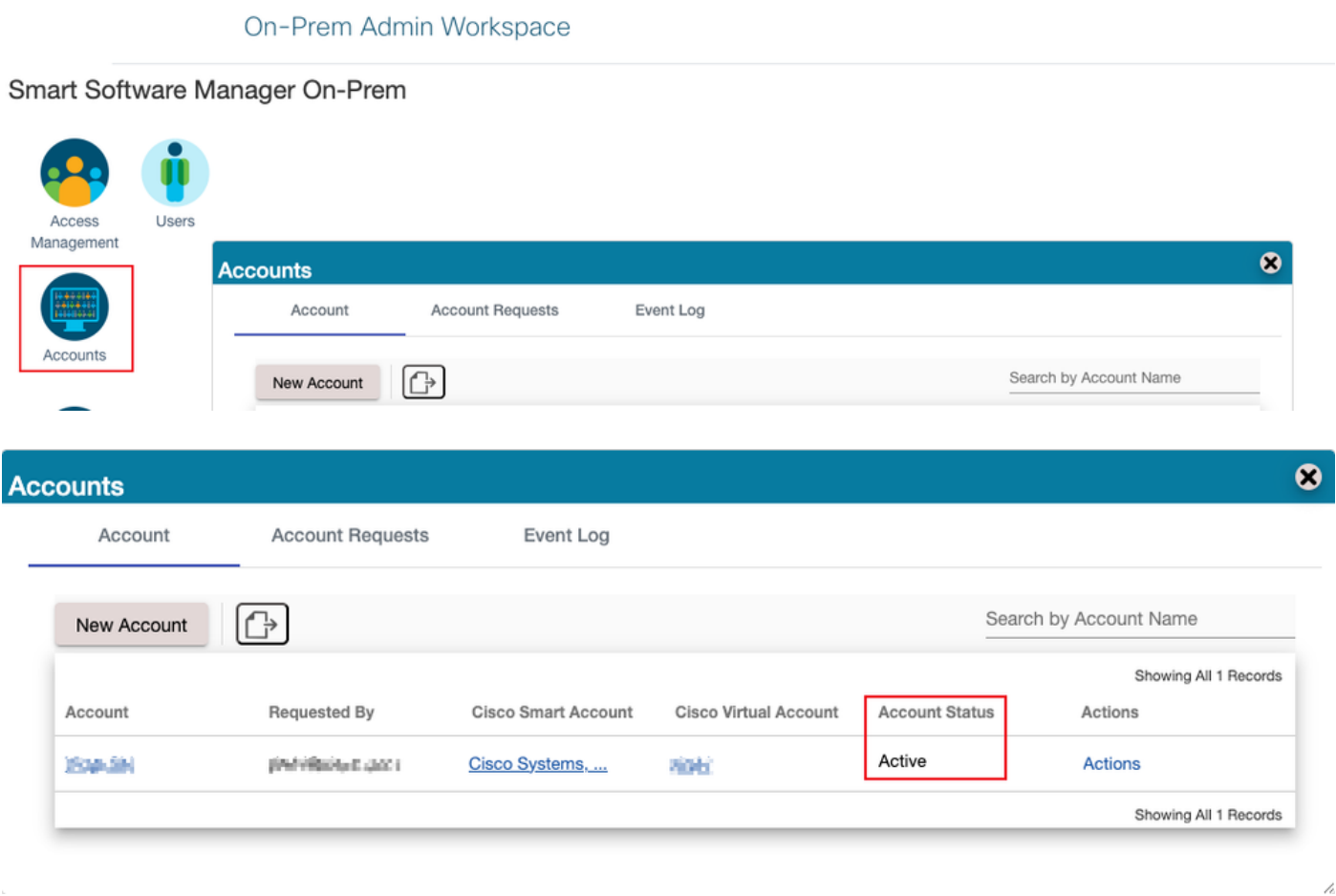
註冊Catalyst 9000系列交換器

1. 按一下右上角的Admin Workspace以進入本地管理工作區。



2. 按一下左側的Accounts，建立一個帳戶並啟用它，請確保帳戶狀態為Active。有關如何建立新本

地帳戶和重新註冊帳戶的資訊，請參閱[思科智慧軟體管理器本地使用手冊](#)第77至82頁。



3.確保產品例項啟動的通訊的網路可達性。

```
#conf t
(config)#ip http server
(config)#ip http secure-server
(config)#ip http secure-trustpoint SLA-TrustPoint
(config)#ip http client source-interface g x/x/x
(config)#ip name-server x.x.x.x
(config)#ip domain lookup source-interface g x/x/x
(config)#ip domain name xxx

(config)#crypto pki trustpoint SLA-TrustPoint
(ca-trustpoint)#enrollment terminal
(ca-trustpoint)#revocation-check none

(config)#exit
#copy running-config startup-config
```

4.從Smart Software Manager On-Prem > Smart Licensing > Inventory > General中檢索傳輸URL。



按一下CSLU Transport URL後，On-Prem將返回此產品註冊URL。

Product Registration URL



https://10.10.10.10/cslu/v1/pi/xxxxx%xxxx-x

Press ctrl + c to copy selected text to clipboard.

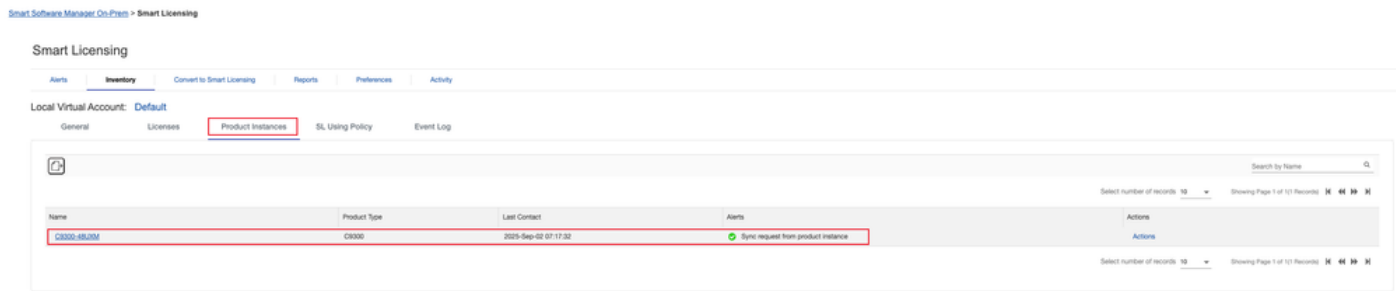
5.在Catalyst交換機上設定傳輸型別、URL。

```
#conf t
(config)#license smart transport cslu
(config)#license smart url cslu https://x.x.x.x/cslu/v1/pi/xxxxx%xxxx-x
(config)#exit
#copy running-config startup-config
```

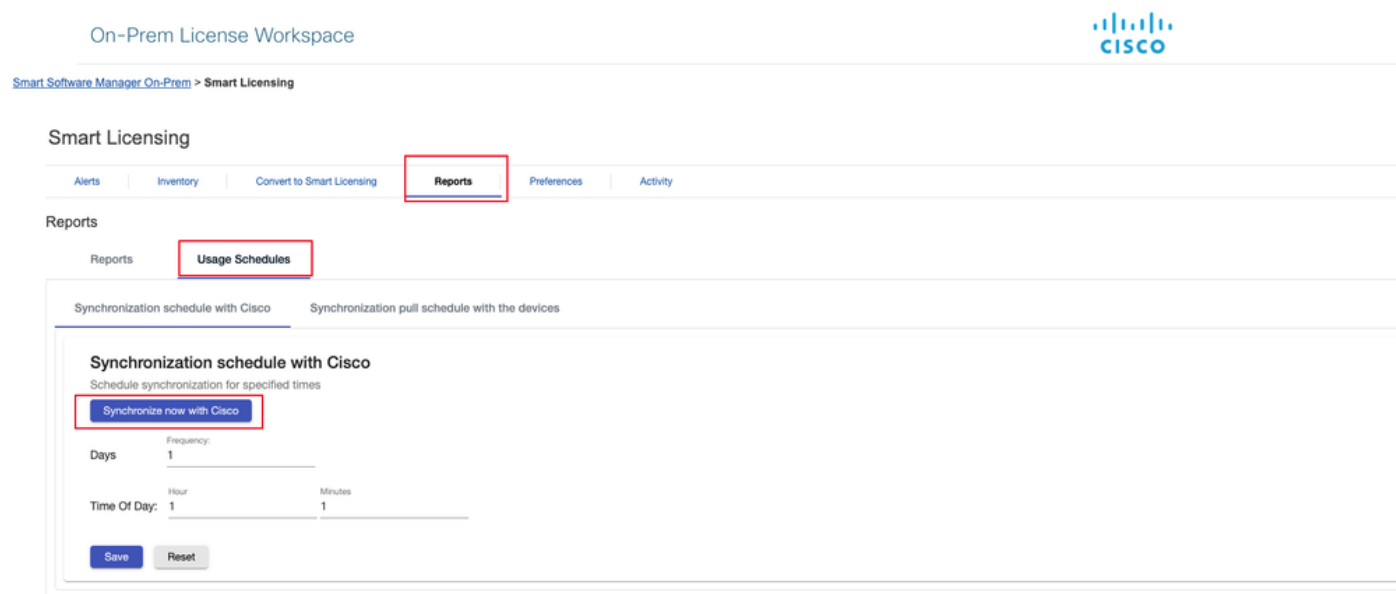
6.將產品例項與SSM On-Prem同步，交換機將主動啟動與SSM On-Prem的同步。

```
#license smart sync all
```

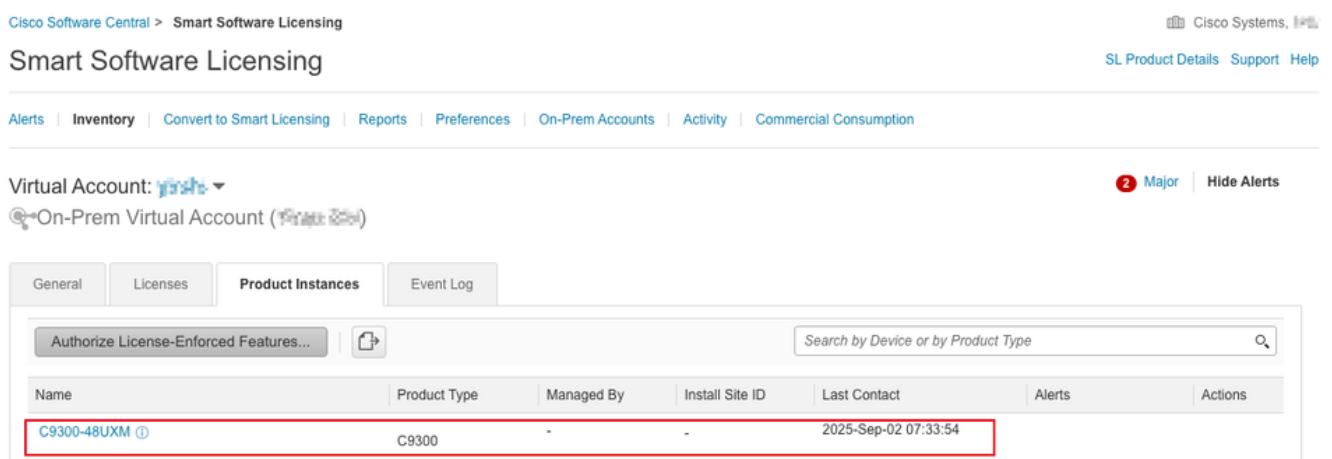
7.檢查SSM On-Prem的產品例項，可以觀察交換機資訊，這意味著交換機已成功與SSM On-Prem同步。



8. 接下來，在 Smart Software Manager On-Prem > Smart Licensing > Reports > Usage Schedules 中，將 SSM 上的使用資訊與思科 SSM (CSSM) 同步。



9. 登入 [智慧軟體管理器](#)，檢查與 SSM 本地同步是否成功。



相關資訊

- [Cisco Smart Software Manager 本地使用手冊](#)
- [Cisco Smart Software Manager On-Prem 快速入門安裝指南](#)

- [Cisco Catalyst 9000系列交換機的智慧許可使用策略](#)

關於此翻譯

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