

在Nexus平台上使用策略配置智慧許可

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簡介

本文檔介紹如何在Nexus 9K平台上配置使用策略(SLP)的智慧許可。

必要條件

需求

思科建議您瞭解以下主題：

- Nexus NX-OS軟體
- Cisco NX-OS許可選項
- 網域名稱系統(DNS)

採用元件

本文檔中的資訊基於帶NXOS版本10.2(5)的Cisco Nexus 9000。

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

智慧軟體許可(SL)為您所有的思科產品提供單一的標準化許可解決方案。它是基於雲的許可端到端平台，由授權使用和報告思科產品的工具和流程組成。它設計為在產品例項上運行，並透過Smart

Call Home傳輸介質與思科雲許可證服務通訊，以完成產品註冊和授權。

Cisco NX-OS版本10.2(1)F中引入了智慧許可使用策略(SLP)，至今它仍然是唯一受支援的許可模式。

使用策略的智慧許可是智慧軟體許可的增強版本，其總體目標是提供不中斷網路運行的許可解決方案，而是使合規性關係能夠說明您購買和使用的硬體和軟體許可證。

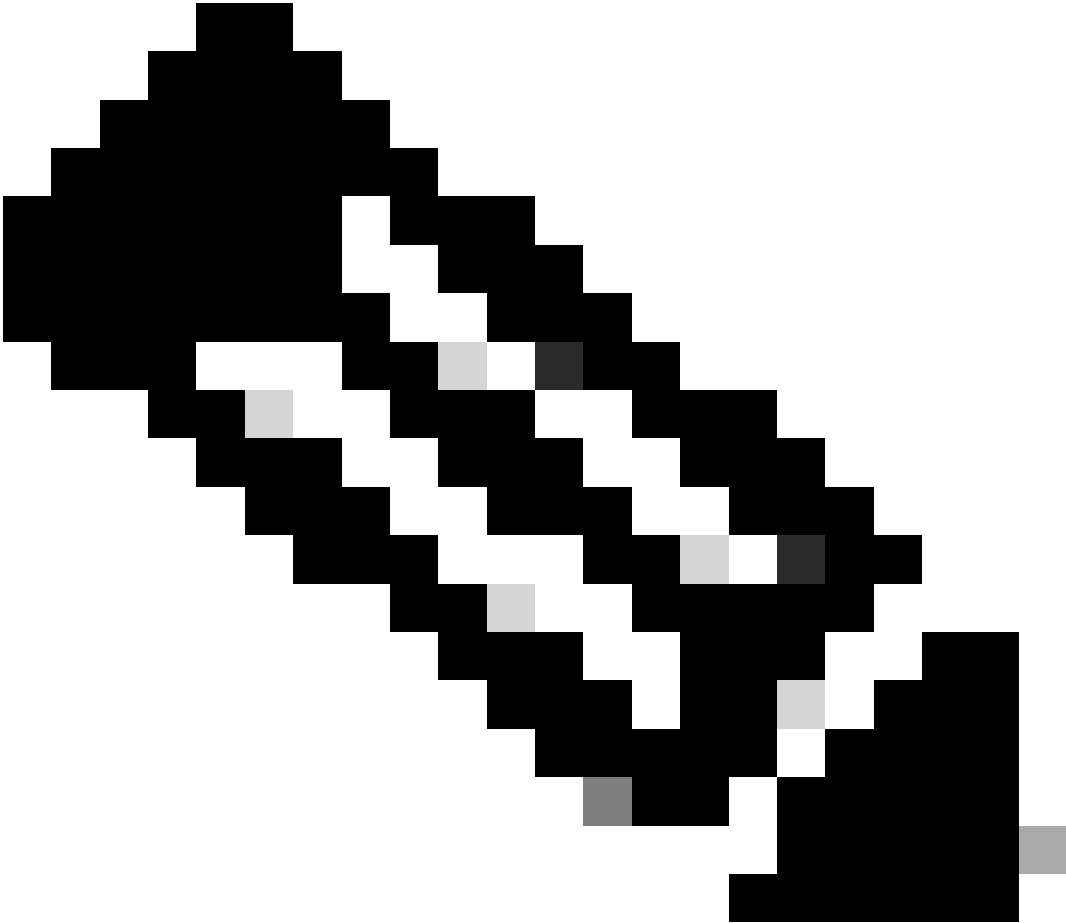
智慧許可使用策略基於榮譽。但是，許可證使用合規性要求軟體報告。

思科智慧軟體管理器(CSSM)負責管理帳戶和許可證例項。CSSM在[Cisco站點](#)上全天候運行。

方法

將Nexus交換機連線到CSSM的主要方法：

- 直接：您使用網際網路連線直接指向思科站點。
- 透過思科智慧許可實用程式(CSLU)：這是在您的電腦上運行的軟體應用程式。[安裝指南](#)。
- 透過內部許可證伺服器：運行思科提供的作業系統的專用伺服器。[安裝指南](#)。
- 離線：您在Nexus交換機上生成報告，並將檔案上傳到CSSM以生成確認檔案，然後需要將該檔案應用於Nexus交換機。



註：無論使用哪種方法，您都必須在接下來的90天內向CSSM提交第一份報告。稍後，每365天需要報告一次頻率，除非許可證使用發生更改，這需要在接下來90天內提交另一份報告。

組態

這些配置在Nexus 9K交換機上使用SLP的預設VRF管理VRF進行所有通訊。

方法1：直接連線

- 支援智慧和呼叫總部兩種傳輸模式。
- 在支援NXOS 10.2(2)F之前，在呼叫總部傳輸模式下僅支援管理VRF，同時支援NXOS 10.2(3)F非管理VRF。
- 在NXOS 10.3(2)F之前，智慧傳輸模式僅支援管理VRF。從NXOS 10.3(2)F開始，還支援非管理VRF。

步驟 1.配置DNS客戶端。

```
Nexus(config)# ip domain-lookup
Nexus(config)# vrf context management
Nexus(config-vrf)# ip name-server <dns server ip>
```

步驟 2. 配置智慧傳輸模式。

```
Nexus(config)# license smart transport smart
```

步驟 3. 指示CSSM URL。

```
Nexus(config)# license smart url smart https://smartreceiver.cisco.com/licservice/license
```

步驟 4. 在[思科站點](#)中建立信任代碼 (令牌) 。

登入到Cisco Software Central > Smart Software Licensing > Inventory > General。

按一下新建令牌.....。

Cisco Software Central > Smart Software Licensing InternalTestDemoAccount69.cisco.com

Smart Software Licensing SL Product Details Support Help

Alerts | **Inventory** | Convert to Smart Licensing | Reports | Preferences | On-Prem Accounts | Activity

Virtual Account: **CML - bpaez** 1 Major | Hide Alerts

General | Licenses | Product Instances | Event Log

Virtual Account

Description: Private virtual account for personal use of CML.
Default Virtual Account: No

Product Instance Registration Tokens

The registration tokens below can be used to register new product instances to this virtual account.

New Token...

Token	Expiration Date	Uses	Export-Controlled	Description	Created By	Actions
No Records Found						

The token will be expired when either the expiration or the maximum uses is reached

步驟4a. 填寫所需資訊並按一下Create Token。

Create Registration Token

This will create a token that is used to register product instances, so that they can use licenses from this virtual account. Once it's created, go to the Smart Licensing configuration for your products and enter the token, to register them with this virtual account.

Virtual Account: CML - bpaez

Description: SLP Test

* Expire After: 30 Days

Between 1 - 365, 30 days recommended

Max. Number of Uses: 10

The token will be expired when either the expiration or the maximum uses is reached

Allow export-controlled functionality on the products registered with this token ?

Create Token

Cancel

步驟4b. 按一下新建立的權杖。

Cisco Software Central > Smart Software Licensing

InternalTestDemoAccount69.cisco.com

Smart Software Licensing

[SL Product Details](#) [Support](#) [Help](#)

[Alerts](#) | [Inventory](#) | [Convert to Smart Licensing](#) | [Reports](#) | [Preferences](#) | [On-Prem Accounts](#) | [Activity](#)

Virtual Account: CML - bpaez

1 Major [Hide Alerts](#)

General | Licenses | Product Instances | Event Log

Virtual Account

Description: Private virtual account for personal use of CML.

Default Virtual Account: No

Product Instance Registration Tokens

The registration tokens below can be used to register new product instances to this virtual account.

New Token...

Token	Expiration Date	Uses	Export-Controlled	Description	Created By	Actions
NGFjYjcwMjYtZjlkNi0...	2023-Aug-21 02:58:42 (in 30 days)	0 of 10	Allowed	SLP Test	bpaez	Actions

The token will be expired when either the expiration or the maximum uses is reached

步驟4c. 按ctrl + c可將所選文本複製到剪貼簿。

Smart Software Licensing

SL Product Details Support Help

Alerts | Inventory | Convert to Smart Licensing | Reports | Preferences | On-Prem Accounts | Activity

Virtual Account: CML - bpaez

1 Major Hide Alerts

General Licenses Product Instances Event Log

Virtual Account

Description: Private virtual account for personal use of CML.

Default Virtual Account: No

product instances to this virtual account.

Press ctrl + c to copy selected text to clipboard.

Uses	Export-Controlled	Description	Created By	Actions
0 of 10	Allowed	SLP Test	bpaez	Actions

The token will be expired when either the expiration or the maximum uses is reached

步驟 5. 在Nexus交換機中安裝信任代碼。

```
Nexus# license smart trust idtoken <token from step 4> all force
Initiated trust establishment with backend. run show license status, for trust establishment status
```

步驟 6. 確保CSSM上存在Nexus。

登入思科軟體中心>智慧軟體許可>資產>產品例項。

Smart Software Licensing

SL Product Details Support Help

Alerts | Inventory | Convert to Smart Licensing | Reports | Preferences | On-Prem Accounts | Activity

Virtual Account: CML - bpaez

1 Major Hide Alerts

General Licenses Product Instances Event Log

Authorize License-Enforced Features...

Search by Device or by Product Type

Name	Product Type	Last Contact	Alerts	Actions
UDI_PID:N9K-C9336C-FX2; UDI_SN:FDO24400PT4;	N9300	2023-Jul-22 01:51:01		Actions

Showing 1 Record

步驟 7. 啟用任何需要您所需許可證的功能。在本示例中，啟用了一項需要NX-OS LAN企業服務許可證的功能。

注意：NX-OS始終要求許可證層次結構中的枝葉節點。
NX-OS始終要求基於功能的許可證，而不是基於層的許可證。

```
Nexus(config)# feature eigrp
```

步驟 8. 確認您使用的是預期的許可證（基於功能）。

```
Nexus# show license summary
```

```
License Usage:
```

License	Entitlement tag	Count	Status
LAN license for Nexus 9... (LAN_ENTERPRISE_SERVICES_PKG)		1	IN USE

```
Nexus# show license usage LAN_ENTERPRISE_SERVICES_PKG
```

```
Feature List:
```

```
eigrp
```

步驟 9. 驗證是否在Cisco站點上使用期望的許可證。

登入思科軟體中心>智慧軟體許可>資產>許可證。

Cisco Software Central > Smart Software Licensing InternalTestDemoAccount69.cisco.com

Smart Software Licensing

Alerts | Inventory | Convert to Smart Licensing | Reports | Preferences | On-Prem Accounts | Activity

Virtual Account: CML - bpaez 1 Major | Hide Alerts

General | Licenses | Product Instances | Event Log

Available Actions | Manage License Tags | License Reservation... | Show License Transactions | Search by License

By Name | By Tag

License	Billing	Available to Use	In Use	Substitution	Balance	Alerts	Actions
CML - Base	Prepaid	10	0	-	+10		Actions
CML - Nodes	Prepaid	2000	0	-	+2000		Actions
NXOS LAN for Nexus 9300 10G+ Leaf XF	Prepaid	1	1	-	0		Actions

登入思科軟體中心>智慧軟體許可>資產>許可證，從清單中按一下所需的許可證以檢視詳細資訊。

NXOS LAN for Nexus 9300 10G+ Leaf XF in CML - bpaez

Overview | Product Instances | Event Log | Transaction History

Product Instance	Product Type	Licenses used
UDI_PID:N9K-C9336C-FX2; UDI_SN:FDO24400PT4;	N9300	1

Showing 1 Record

Actions | Close

步驟 10. 驗證與思科站點的通訊是否成功。

```
Nexus# show license status
```

```
Utility:
```

```
Status: DISABLED
```

```
Smart Licensing using Policy:
```

```
Status: ENABLED
```

```
Data Privacy:
```

```
Sending Hostname: yes
```

```
Callhome Hostname Privacy: DISABLED
```

```
Smart Licensing Hostname Privacy: DISABLED
```


Version Privacy: DISABLED

Transport:

Type: Smart

URL: <https://smarterreceiver.cisco.com/licservice/license>

Proxy:

Not configured

Policy:

Policy in use: Merged from multiple sources

Reporting ACK required: Yes

Unenforced/Non-Export:

First report requirement (days): 90 (CISCO default)

Ongoing reporting frequency (days): 365 (CISCO default)

On change reporting (days): 90 (CISCO default)

Enforced (Perpetual/Subscription):

First report requirement (days): 0 (CISCO default)

Ongoing reporting frequency (days): 0 (CISCO default)

On change reporting (days): 0 (CISCO default)

Export (Perpetual/Subscription):

First report requirement (days): 0 (CISCO default)

Ongoing reporting frequency (days): 0 (CISCO default)

On change reporting (days): 0 (CISCO default)

Miscellaneous:

Custom Id: <empty>

Usage reporting:

Last ACK received: Jul 21 19:28:32 2023 UTC

Next ACK deadline: Jul 20 19:28:32 2024 UTC

Reporting push interval: 30 days

Next ACK push check: <none>

Next report push: Aug 20 19:23:33 2023 UTC

Last report push: Jul 21 19:23:33 2023 UTC

Last report file write: <none>

Trust Code installed: Jul 21 19:18:04 2023 UTC

Active: PID: N9K-C9336C-FX2, SN: FD024400PT4

Jul 21 19:18:04 2023 UTC

Nexus#

方法2 : CSLU

在NXOS 10.3(2)F之前，CSLU傳輸模式僅支援管理VRF。從NXOS 10.3(2)F開始，還支援非管理VRF。

步驟 1.配置DNS客戶端。

注意：如果在運行CSLU的主機上未使用完全限定域名(FQDN)，則可跳到步驟3。

```
Nexus(config)# ip domain-lookup
Nexus(config)# vrf context management
Nexus(config-vrf)# ip name-server <dns server ip>
```

步驟 2.在DNS伺服器上為cslu-local增加條目。

注意：Nexus會自動發現主機名cslu-local和cslu-local。 <domain>

步驟 3.確保配置了cslu傳輸。這是預設組態。

```
Nexus(config)# license smart transport cslu
```

步驟 4.指示CSLU傳輸URL。

```
Nexus(config)# license smart url cslu http://<ip address of the host running CSLU>:8182/cslu/v1/pi
```

步驟 5.啟用任何需要您所需許可證的功能。在本示例中，您啟用了一項需要NX-OS LAN企業服務許可證的功能。

注意：NX-OS始終要求許可證層次結構中的枝葉節點。
NX-OS始終要求基於功能的許可證，而不是基於層的許可證。

```
Nexus(config)# feature isis
```

步驟 6. 確認您使用的是預期的許可證（基於功能）。

```
Nexus# show license summary
License Usage:
License                               Entitlement tag                Count  Status
-----
LAN license for Nexus 9... (LAN_ENTERPRISE_SERVICES_PKG)  1      IN USE
Nexus# show license usage LAN_ENTERPRISE_SERVICES_PKG
```

Feature List:

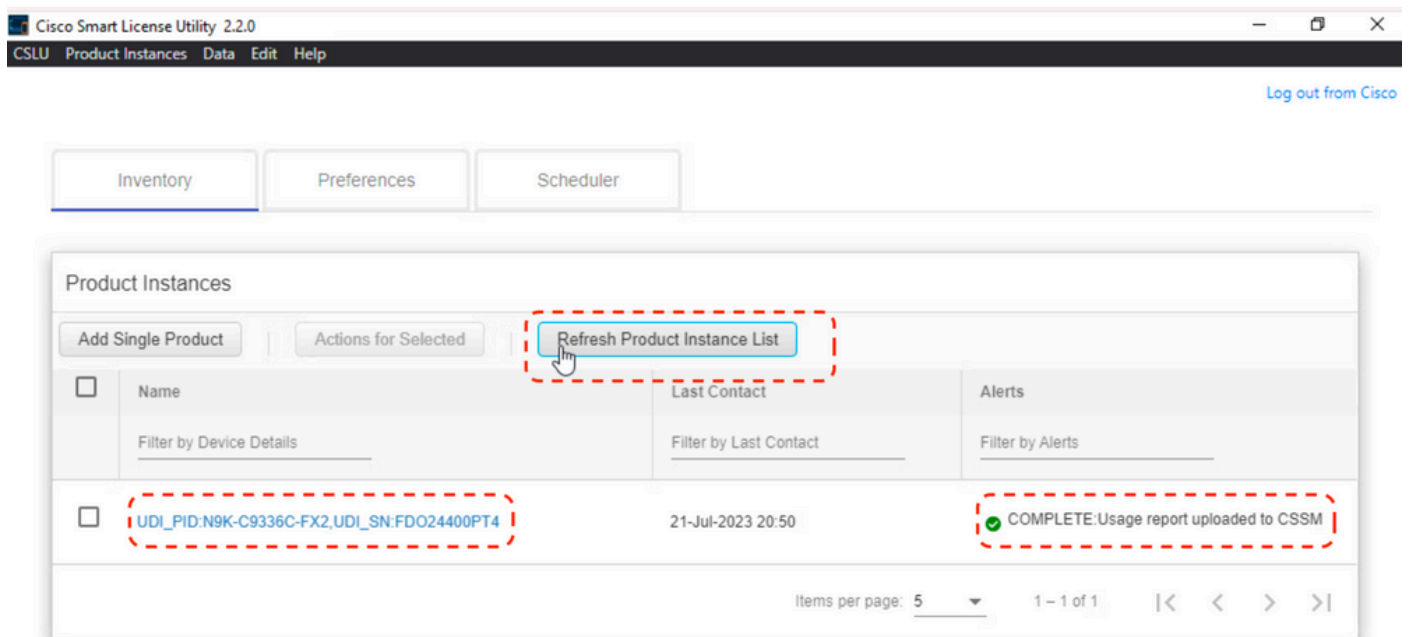
isis

步驟 7.將許可證使用情況報告（稱為RUM報告）傳送到CSSM。

```
Nexus# license smart sync all  
Initiated sync with backend.
```

步驟 8.按一下Refresh Product Instance List並驗證CSLU中是否存在產品例項，指示Complete：Usage report uploaded to CSSM。

打開CSLU > Inventory > Product Instances。



步驟 9.確保CSSM上存在Nexus。這確認了CSLU和CSSM之間的通訊正常工作。

登入思科軟體中心>智慧軟體許可>資產>產品例項。

Smart Software Licensing

[SL Product Details](#) [Support](#) [Help](#)[Alerts](#) | [Inventory](#) | [Convert to Smart Licensing](#) | [Reports](#) | [Preferences](#) | [On-Prem Accounts](#) | [Activity](#)Virtual Account: [CML - bpaez](#)1 Major | [Hide Alerts](#)

General Licenses **Product Instances** Event Log

Authorize License-Enforced Features... Search by Device or by Product Type

Name	Product Type	Last Contact	Alerts	Actions
UDI_PID:N9K-C9336C-FX2; UDI_SN:FDO24400PT4;	N9300	2023-Jul-22 01:51:01		Actions

Showing 1 Record

步驟 10. 驗證預期許可證已在CSSM內部本地伺服器上使用。

登入思科軟體中心>智慧軟體許可>資產>許可證。

Smart Software Licensing

[SL Product Details](#) [Support](#) [Help](#)[Alerts](#) | [Inventory](#) | [Convert to Smart Licensing](#) | [Reports](#) | [Preferences](#) | [On-Prem Accounts](#) | [Activity](#)Virtual Account: [CML - bpaez](#)1 Major | [Hide Alerts](#)

General **Licenses** Product Instances Event Log

Available Actions Manage License Tags License Reservation... Show License Transactions Search by License

By Name By Tag

License	Billing	Available to Use	In Use	Substitution	Balance	Alerts	Actions
<input type="checkbox"/> CML - Base	Prepaid	10	0	-	+10		Actions
<input checked="" type="checkbox"/> CML - Nodes	Prepaid	2000	0	-	+2000		Actions
<input checked="" type="checkbox"/> NXOS LAN for Nexus 9300 10G+ Leaf XF	Prepaid	1	1	-	0		Actions

登入思科軟體中心>智慧軟體許可>資產>許可證>點選許可證>產品例項。

NXOS LAN for Nexus 9300 10G+ Leaf XF in CML - bpaez

1 x

Overview **Product Instances** Event Log Transaction History

Product Instance	Product Type	Licenses used
UDI_PID:N9K-C9336C-FX2; UDI_SN:FDO24400PT4;	N9300	1

Showing 1 Record

Actions

Close

步驟 11. 驗證與思科站點的通訊是否成功。

```
Nexus# show license status
```

```
Utility:
```

```
Status: DISABLED
```

```
Smart Licensing using Policy:
```

```
Status: ENABLED
```

```
Data Privacy:
```

```
Sending Hostname: yes
```

```
Callhome Hostname Privacy: DISABLED
```

```
Smart Licensing Hostname Privacy: DISABLED
```

```
Version Privacy: DISABLED
```

```
Transport:
```

```
Type: CSLU
```

```
Cslu address: http://10.201.255.233:8182/cslu/v1/pi
```

```
Policy:
```

```
Policy in use: Merged from multiple sources
```

```
Reporting ACK required: Yes
```

```
Unenforced/Non-Export:
```

```
First report requirement (days): 90 (CISCO default)
```

```
Ongoing reporting frequency (days): 365 (CISCO default)
```

```
On change reporting (days): 90 (CISCO default)
```

```
Enforced (Perpetual/Subscription):
```

```
First report requirement (days): 0 (CISCO default)
```

```
Ongoing reporting frequency (days): 0 (CISCO default)
```

```
On change reporting (days): 0 (CISCO default)
```

```
Export (Perpetual/Subscription):
```

```
First report requirement (days): 0 (CISCO default)
```

```
Ongoing reporting frequency (days): 0 (CISCO default)
```

```
On change reporting (days): 0 (CISCO default)
```

```
Miscellaneous:
```

```
Custom Id: <empty>
```

```
Usage reporting:
```

```
Last ACK received: <none>
```

```
Next ACK deadline: Oct 20 01:09:12 2023 UTC
```

```
Reporting push interval: 30 days
```

```
Next ACK push check: Jul 22 01:18:02 2023 UTC
```

```
Next report push: Aug 21 01:13:03 2023 UTC
```

```
Last report push: Jul 22 01:13:03 2023 UTC
```

```
Last report file write: <none>
```

```
Trust Code installed: <none>
```

附註：

使用此方法時，系統將會在show license status中看到Trust Code Installed。

當您第一次與CSSM On-Prem同步時，將會在show license status中看到Last ACK。在第一次推送下次報告後，此情況將發生變化。

方法3：內部許可證伺服器

- 本地模式僅支援CSLU傳輸模式。
- 在NXOS 10.3(2)F之前，CSLU傳輸模式僅支援管理VRF。從NXOS 10.3(2)F開始，還支援非管理VRF。

步驟 1. 配置DNS客戶端。

```
Nexus(config)# ip domain-lookup
```



```
Nexus(config)# vrf context management
Nexus(config-vrf)# ip name-server <dns server ip>
```

步驟 2.確保配置了CSLU傳輸。這是預設組態。

```
Nexus(config)# license smart transport cslu
```

步驟 3.確定CSLU傳輸URL。

登入到CSSM本地>智慧軟體管理器本地>選擇本地虛擬帳戶 (右上角)。從下拉選單中選擇資產 >常規，然後按一下要複製的CSLU傳輸URL。

The screenshot shows the 'On-Prem License Workspace' interface. At the top, there is a navigation bar with 'On-Prem License Workspace' on the left, the Cisco logo in the center, and 'Admin Workspace' and user information on the right. Below the navigation bar, the breadcrumb 'Smart Software Manager On-Prem > Smart Licensing' is visible. The main content area is titled 'Smart Licensing' and has several tabs: 'Alerts', 'Inventory' (selected), 'Convert to Smart Licensing', 'Reports', 'Preferences', and 'Activity'. Under the 'Inventory' tab, there is a sub-section for 'Local Virtual Account: Default'. This section has sub-tabs for 'General', 'Licenses', 'Product Instances', 'SL Using Policy', and 'Event Log'. The 'General' sub-tab is active, showing a 'Local Virtual Account' section with a description and a 'Default Local Virtual Account' set to 'Yes'. Below this is a 'Product Instance Registration Tokens' section with explanatory text and a 'New Token...' button.

步驟 4.指示CSLU傳輸URL。

```
Nexus(config)# license smart url cslu https://<on-prem hostname>/cslu/v1/pi/<virtual account>
```

步驟 5.啟用任何需要您所需許可證的功能。在本示例中，啟用了一項需要NX-OS LAN企業服務許可證的功能。

注意：NX-OS始終要求許可證層次結構中的枝葉節點。

NX-OS始終要求基於功能的許可證，而不是基於層的許可證。

```
Nexus(config)# feature ospf
```

步驟 6. 確認您使用的是預期的許可證（基於功能）。

```
Nexus# show license summary
```

```
License Usage:
```

License	Entitlement tag	Count	Status
LAN license for Nexus 9... (LAN_ENTERPRISE_SERVICES_PKG)		1	IN USE

```
Nexus# show license usage LAN_ENTERPRISE_SERVICES_PKG
```

```
Feature List:
```

ospf

步驟 7.將RUM報告傳送到CSSM。

```
Nexus# license smart sync all  
Initiated sync with backend.
```

步驟 8.確保Nexus存在於本地CSSM上。

登入到CSSM本地>智慧軟體管理器本地>選擇本地虛擬帳戶 (右上角)。從下拉選單中，選擇資產 > SL Using Policy。

The screenshot shows the Cisco Smart Licensing interface. At the top, it says 'On-Prem License Workspace' and 'Admin Workspace Hello, Bidkar Herson Paez Lampon Log Out'. Below that, the breadcrumb is 'Smart Software Manager On-Prem > Smart Licensing'. The main heading is 'Smart Licensing'. There are tabs for 'Alerts', 'Inventory', 'Convert to Smart Licensing', 'Reports', 'Preferences', and 'Activity'. Under 'Inventory', there are sub-tabs for 'General', 'Licenses', 'Product Instances', 'SL Using Policy', and 'Event Log'. The 'SL Using Policy' tab is active. It shows a table with one record. The 'Name' column contains 'UDI_PID:N9K-C9336C-FX2:UDI_SN:FDO2434107N:UDI_VID:'. The 'Product Type' is 'N9300' and the 'Last Contact' is '2023-Jul-20 18:11:29'. The 'Alerts' column shows a green checkmark and the text 'Usage report from product instance'.

Name	Product Type	Last Contact	Alerts
UDI_PID:N9K-C9336C-FX2:UDI_SN:FDO2434107N:UDI_VID:	N9300	2023-Jul-20 18:11:29	Usage report from product instance

步驟 9.驗證預期許可證已在CSSM內部本地伺服器上使用。

登入至CSSM內部部署>智慧軟體管理器內部部署>從下拉選單選擇本地虛擬帳戶 (右上角) >資產 >許可證。

Smart Licensing

- Alerts
- Inventory**
- Convert to Smart Licensing
- Reports
- Preferences
- Activity

Local Virtual Account: **Default**

- General
- Licenses**
- Product Instances
- SL Using Policy
- Event Log

Available Actions Manage License Tags...

By Name By Tag

Search by License

Showing Page 1 of 1(6 Records)

License	Billing	Available to Use	In Use	Substitution	Balance	Alerts	Actions
NXOS LAN for Nexus 9300 10G+ Leaf XF	Prepaid	1	1	-	0	Insufficient Licenses	Actions

Showing Page 1 of 1(6 Records)

登入到CSSM本地>智慧軟體管理器本地>選擇本地虛擬帳戶 (右上角)。從下拉選單中選擇資產 >許可證。 從清單中按一下所需的許可證以檢視詳細資訊。

NXOS LAN for Nexus 9300 10G+ Leaf XF In Default

LAN license for Nexus 9300-XF

- Overview**
- Product Instances
- Event Log
- Transaction History

Product Instance	Product Type	Licenses Used
UDI_PID:N9K-C9336C-FX2;UDI_SN:FDO2434107N;UDI_VID::	N9300	1

Showing All 4 Records

Transfer License...



注意：使用此方法時，在show license status中會看到以<none>安裝的信任代碼。

在您第一次使用CSSM On-Prem同步時，預期會看到最後一個ACK接收為show license status。在第一次推送下次報告後，此情況將發生變化。

方法4：離線

步驟 1.停用智慧傳輸模式。

```
Nexus(config)# license smart transport off
```

步驟 2.啟用任何需要您所需許可證的功能。在本示例中，啟用了一項需要NX-OS LAN企業服務許可證的功能。



注意：NX-OS始終要求許可證層次結構中的枝葉節點。

NX-OS始終要求基於功能的許可證，而不是基於層的許可證。

如果沒有啟用的許可功能，則無法儲存RUM報告。RUM報告捕獲裝置中的許可事務以供上傳。在綠地裝置上，沒有要報告的內容，因此它是空的，不會生成。

```
Nexus(config)# feature bgp
```

步驟 3. 確認您使用的是預期的許可證（基於功能）。

```
Nexus# show license summary
```

```
License Usage:
```

License	Entitlement tag	Count	Status

LAN license for Nexus 9...	(LAN_ENTERPRISE_SERVICES_PKG)	1	IN USE

```
Nexus# show license usage LAN_ENTERPRISE_SERVICES_PKG
Feature List:
bgp
```

步驟 4.生成並儲存RUM報告。

```
Nexus# license smart save usage all bootflash:all_rum.txt
Success: Saved in bootflash:/all_rum.txt.
```

步驟 5.將步驟4中的檔案複製到具有Internet連線的裝置。

步驟 6.將RUM報告 (使用資料) 上傳到CSSM。

登入思科軟體中心>智慧軟體許可> 報告 > 使用資料檔案。

步驟6a.點選上傳使用情況資料。

Cisco Software Central > Smart Software Licensing InternalTestDemoAccount69.cisco.com

Smart Software Licensing

[SL Product Details](#) [Support](#) [Help](#)

[Alerts](#) | [Inventory](#) | [Convert to Smart Licensing](#) | **Reports** | [Preferences](#) | [On-Prem Accounts](#) | [Activity](#)

Reports

Report | **Usage Data Files** | Reporting Policy | Synch File for Device Controllers

Devices can be configured to report the features that they are using.
This usage then determines which licenses are needed, in order to be compliant.

Upload Usage Data... Search by File Name, Virtual Account

Usage Data File	Reported	Virtual Account	Reporting Status	Devices	Acknowledgement
-----------------	----------	-----------------	------------------	---------	-----------------

步驟6b.按一下Browse。

Upload Usage Data

Please select the Usage File you wish to upload.

* Usage Data File: **Browse** No File Chosen

Upload Data

Cancel

步驟6c. 在彈出窗口中選擇all_rum.txt，然後按一下Upload Data。

Upload Usage Data

Please select the Usage File you wish to upload.

* Usage Data File:

Browse

all_rum.txt

Upload Data

Cancel

步驟6d. 從下拉選單中選擇接收已上傳檔案的虛擬帳戶，然後按一下Ok。

Select Virtual Accounts



Some of the usage data files do not include the name of the virtual account that the data refers to, or the virtual account is unrecognized.

Please select an account:

Select one account for all files:

Select a virtual account per file:

Select VA

Ok

Cancel

Select Virtual Accounts



Some of the usage data files do not include the name of the virtual account that the data refers to, or the virtual account is unrecognized.

Please select an account:

Select one account for all files:

Select a virtual account per file:

Select VA

CML - bpaez

OK

Cancel

Select Virtual Accounts



Some of the usage data files do not include the name of the virtual account that the data refers to, or the virtual account is unrecognized.

Please select an account:

Select one account for all files:

Select a virtual account per file:

CML - bpaez

Ok

Cancel

步驟 7. 等待 Reporting Status 更改為 No errors，然後按一下 Download 獲取 ACK 檔案。

Smart Software Licensing

[SL Product Details](#) [Support](#) [Help](#)[Alerts](#) | [Inventory](#) | [Convert to Smart Licensing](#) | [Reports](#) | [Preferences](#) | [On-Prem Accounts](#) | [Activity](#)

Reports

Report **Usage Data Files** Reporting Policy Synch File for Device Controllers

Devices can be configured to report the features that they are using.
This usage then determines which licenses are needed, in order to be compliant.

Upload Usage Data...

Usage Data File	Reported	Virtual Account	Reporting Status	Devices	Acknowledgement
all_rum.txt	2023-Jul-22	CML - bpaez	Data Being Processed	0	Pending

Smart Software Licensing

[SL Product Details](#) [Support](#) [Help](#)[Alerts](#) | [Inventory](#) | [Convert to Smart Licensing](#) | [Reports](#) | [Preferences](#) | [On-Prem Accounts](#) | [Activity](#)

Reports

Report **Usage Data Files** Reporting Policy Synch File for Device Controllers

Devices can be configured to report the features that they are using.
This usage then determines which licenses are needed, in order to be compliant.

Upload Usage Data...

Usage Data File	Reported	Virtual Account	Reporting Status	Devices	Acknowledgement
all_rum.txt	2023-Jul-22	CML - bpaez	No Errors	1	Download

步驟 8. 確保CSSM上存在Nexus。

Smart Software Licensing

[SL Product Details](#) [Support](#) [Help](#)[Alerts](#) | [Inventory](#) | [Convert to Smart Licensing](#) | [Reports](#) | [Preferences](#) | [On-Prem Accounts](#) | [Activity](#)Virtual Account: [CML - bpaez](#)**1** Major | [Hide Alerts](#)

General Licenses **Product Instances** Event Log

Authorize License-Enforced Features...

Name	Product Type	Last Contact	Alerts	Actions
UDI_PID:N9K-C9336C-FX2; UDI_SN:FDO24400PT4;	N9300	2023-Jul-22 01:51:01		Actions

Showing 1 Record

步驟 9. 驗證在Cisco站點上是否使用了預期的許可證。

登入到思科軟體中心>智慧軟體許可>資產>許可證。

Smart Licensing

Alerts **Inventory** Convert to Smart Licensing Reports Preferences Activity

Local Virtual Account: Default

General Licenses **Product Instances** SL Using Policy Event Log

Available Actions Manage License Tags...

By Name By Tag

Search by License

10 Showing Page 1 of 1(6 Records)

License	Billing	Available to Use	In Use	Substitution	Balance	Alerts	Actions
<input type="checkbox"/> NXOS LAN for Nexus 9300 10G+ Leaf XF	Prepaid	1	1	-	0	⚠ Insufficient Licenses	Actions

10 Showing Page 1 of 1(6 Records)

登入思科軟體中心>智慧軟體許可>資產>許可證，點選清單中的預期許可證以檢視詳細資訊。

NXOS LAN for Nexus 9300 10G+ Leaf XF In Default

LAN license for Nexus 9300-XF

Overview **Product Instances** Event Log Transaction History

Product Instance	Product Type	Licenses Used
UDI_PID:N9K-C9336C-FX2;UDI_SN:FDO2434107N;UDI_VID::	N9300	1

Showing All 4 Records

Transfer License...

步驟 10.將步驟7中的ACK檔案上傳到Nexus交換機。

步驟 11.在Nexus交換機中安裝ACK檔案。

```
Nexus# license smart import bootflash:ACK_all_rum.txt
Done smart import.
```

步驟 12.驗證是否已成功安裝ACK。

注意：使用此方法時，在show license status輸出中應該會看到安裝為<none>的信任代碼。

```
Nexus# show license status
Utility:
  Status: DISABLED

Smart Licensing using Policy:
  Status: ENABLED

Data Privacy:
  Sending Hostname: yes
  Callhome Hostname Privacy: DISABLED
  Smart Licensing Hostname Privacy: DISABLED
  Version Privacy: DISABLED

Transport:
  Type: Off

Policy:
  Policy in use: Merged from multiple sources
```

Reporting ACK required: Yes
Unenforced/Non-Export:
 First report requirement (days): 90 (CISCO default)
 Ongoing reporting frequency (days): 365 (CISCO default)
 On change reporting (days): 90 (CISCO default)
Enforced (Perpetual/Subscription):
 First report requirement (days): 0 (CISCO default)
 Ongoing reporting frequency (days): 0 (CISCO default)
 On change reporting (days): 0 (CISCO default)
Export (Perpetual/Subscription):
 First report requirement (days): 0 (CISCO default)
 Ongoing reporting frequency (days): 0 (CISCO default)
 On change reporting (days): 0 (CISCO default)

Miscellaneous:
 Custom Id: <empty>

Usage reporting:
 Last ACK received: Jul 21 20:29:40 2023 UTC
 Next ACK deadline: Oct 19 20:29:40 2023 UTC
 Reporting push interval: 30 days
 Next ACK push check: <none>
 Next report push: Jul 21 20:02:40 2023 UTC
 Last report push: <none>
 Last report file write: <none>

Trust Code installed: <none>

相關資訊

- [Cisco NX-OS許可選項指南](#)
- [使用策略的Cisco Nexus 9000和3000系列NX-OS智慧許可使用手冊](#)

關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。