在FMC中配置特定許可證保留(SLR)

目錄

簡介

本文檔介紹在FMC中配置特定許可證保留(SLR)的步驟。

必要條件

需求

思科建議您瞭解以下主題：

- Firepower威脅防禦
- Firepower管理中心

採用元件

- Firepower管理中心虛擬7.4.1
- Firepower威脅防禦虛擬7.2.5

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。

為SLR準備FMC

- 如果您當前使用的是常規智慧許可，請在實施特定許可證保留之前註銷FMC。

Smart License Status | Cisco Smart Software Manager ⊗ | De-register Firewall Management Center from Cisco Smart Software Manager
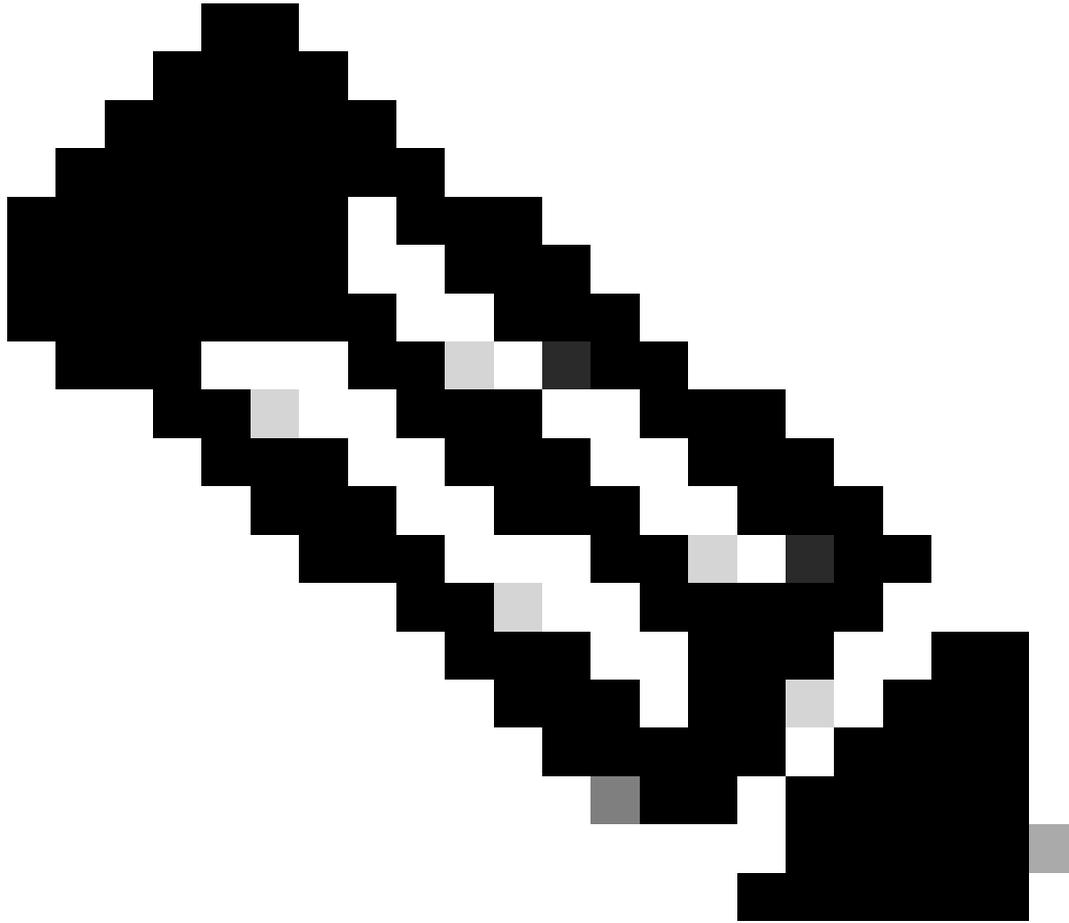
| Usage Authorization: | ✓ | Authorized (Last Synchronized On Jul 17 2024) |
Product Registration:	✓	Registered (Last Renewed On Jul 17 2024)
Assigned Virtual Account:		FPRCDN
Export-Controlled Features:		Enabled
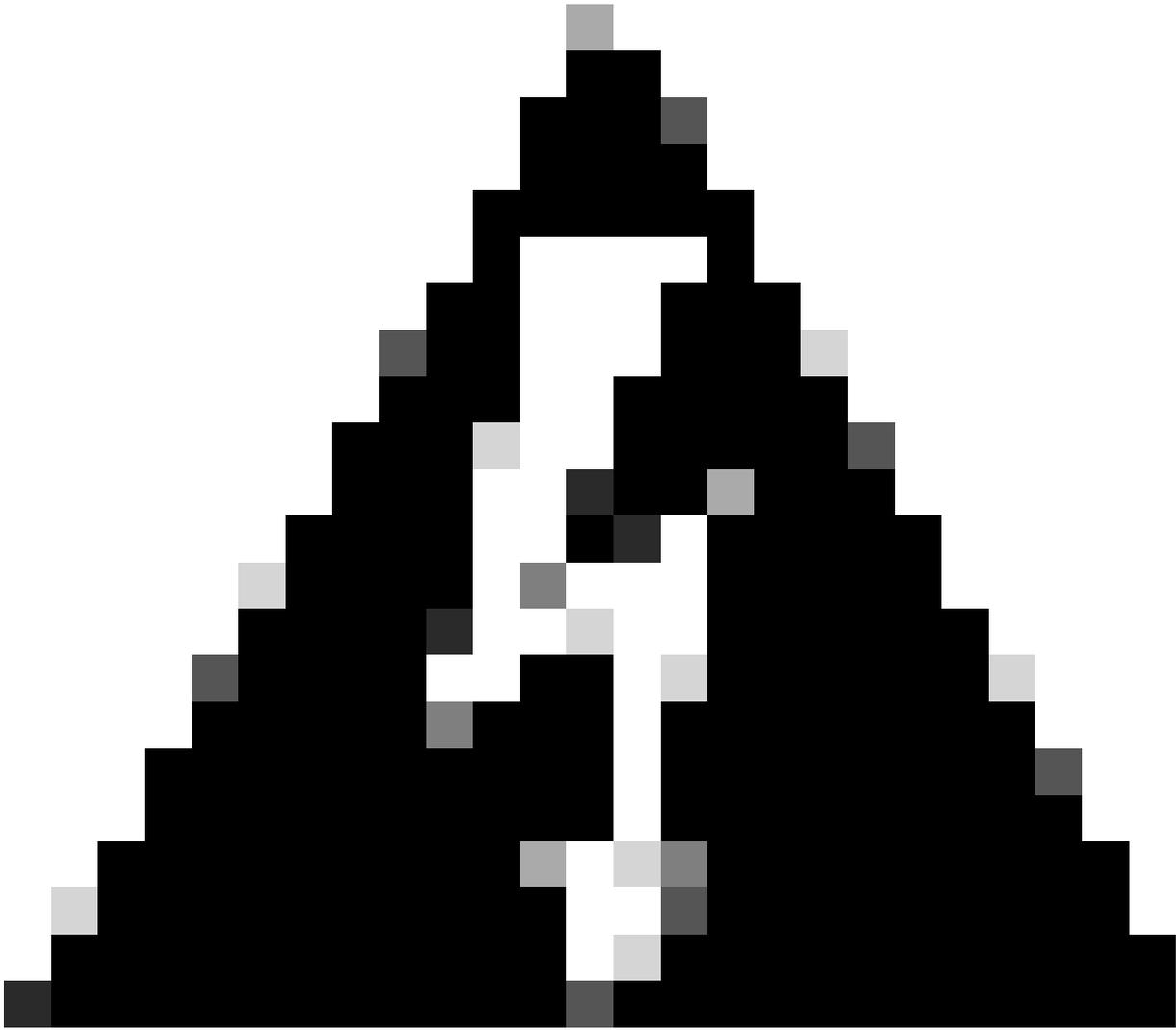
注意：當前部署到FMC的所有智慧許可證必須返回到帳戶中的可用許可證池，並且可以在實施特定許可證保留時重複使用這些許可證。此操作不會影響FTD處理的流量。

- 特定許可證保留使用與常規智慧許可相同的許可證。

- （建議）如果您在高可用性組態中部署FMCpair，請注意您必須：

    ◦ 在分配許可證之前配置高可用性。如果已向secondaryFMC上的裝置分配了許可證，請確保取消分配這些許可證。

◦ 繼續進行特定許可證保留之前，請確保在主和輔助FMC上取消分配許可證。

驗證智慧帳戶就緒性，以部署特定許可證預留

步驟 1	登入到智慧軟體管理器： https://software.cisco.com/#SmartLicensing-Inventory
步驟 2	如果適用，請從頁面右上角選擇正確的帳戶。
步驟 3	如果需要，請點選資產。
步驟 4	按一下許可證。
步驟 5	驗證： • 存在License Reservationbutton。 • 您必須部署的裝置和功能(包括裝置的FMC權利)具有足夠的平台和功能許可證（如果適用）。
步驟 6	如果有任何專案遺失或不正確，請連絡您的客戶代表以解決問題。

警告：在更正任何問題之前，不要繼續此過程。

設定

透過CLI在FMC上啟用特定許可

- 登入FMC CLI admin帳戶。 輸入 expert命令訪問Linux外殼。

- 執行命令以訪問特定許可證保留選項：sudo manage_slr.pl

```
> expert
admin@fmc:~$ sudo manage_slr.pl
Password:                              ←———————— Administrator Password

**************** Configuration Utility ***************

 1    Show SLR Status
 2    Enable SLR
 3    Disable SLR
 4    License requirement report
 0    Exit


****************************************************************
Enter choice: █
```

- 透過選擇選項2啟用特定許可證保留。選擇選項1驗證SLR狀態。
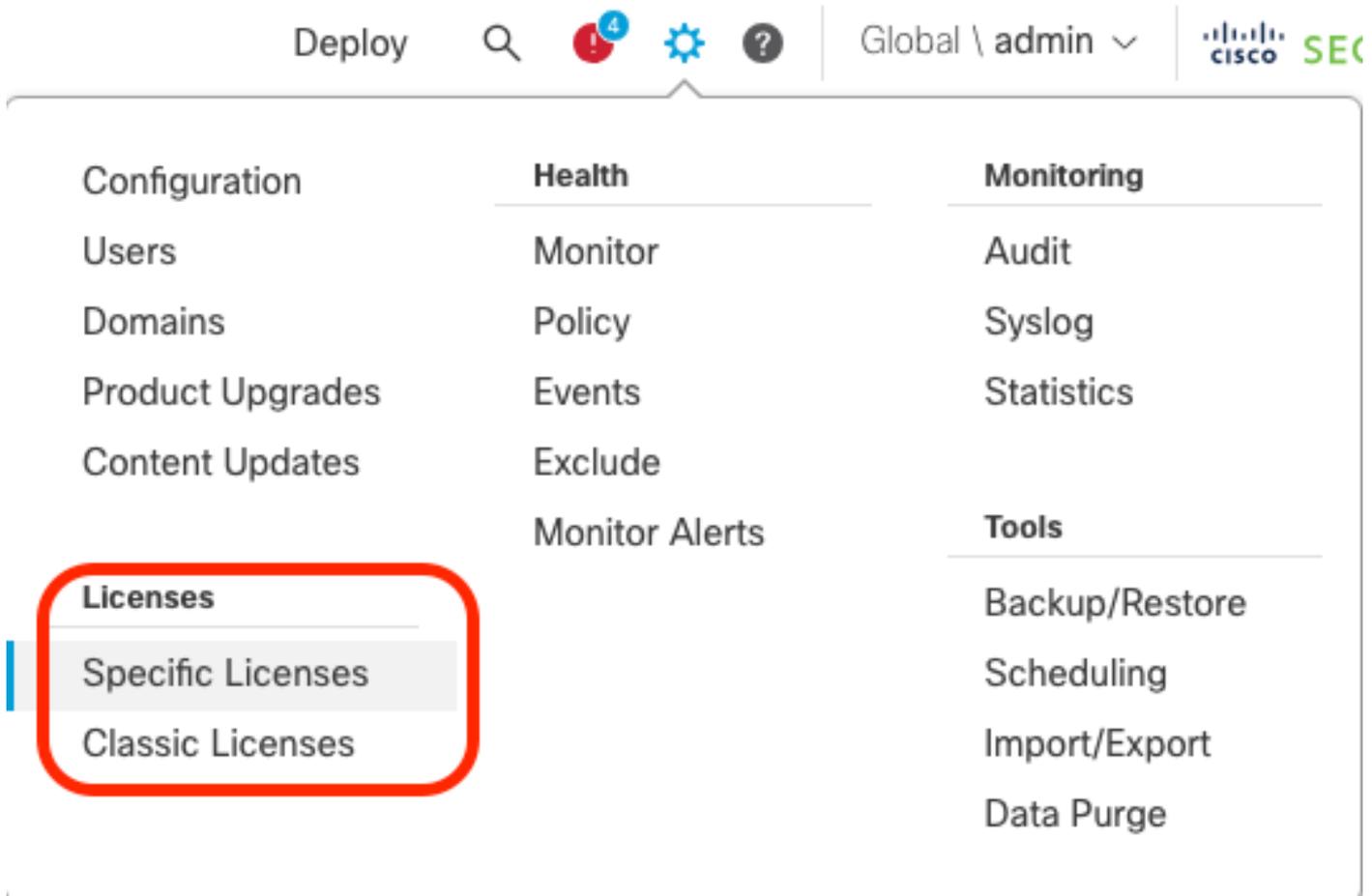
```
**************** Configuration Utility ***************

 1    Show SLR Status
 2    Enable SLR
 3    Disable SLR
 4    License requirement report
 0    Exit


****************************************************************
Enter choice: 1

SLR is enabled on FMC   ←—————————————
```

- 選擇選項0以退出manage_slr實用程式。 鍵入exit退出Linux shell。
- 刷新FMC網頁，透過導航至System > Licenses > Specific Licenses，驗證您是否可以訪問
  FMC Web介面中的Specific License Reservation頁面。

在FMC中輸入特定許可證預留授權碼(Specific License Reservation Authorization Code)

- 導航到系統 > 許可證 > 特定許可證生成預留請求代碼。點選生成，並記錄預留請求代碼。

Specific License Reservation

Specific License Reservation or SLR allows us to reserve and install licenses in a network that has no path to inbound or outbond internet traffic at all

1 Generate a request code

[   ]   [Generate] [Cancel Code]

2 Create or login into your Cisco Smart Software Manager account to generate an authorization code against the request code you have just created

3 Upload the authorization code file (.txt) and Install

[Choose File] No file chosen   [Install]

Specific License Reservation

Specific License Reservation or SLR allows us to reserve and install licenses in a network that has no path to inbound or outbond internet traffic at all

1 Generate a request code

CD-PFS-VMW-SW-K9,S3,U402d4a28-44e0-11e | Generate | Cancel Code

2 Create or login into your Cisco Smart Software Manager account to generate an authorization code against the request code you have just created

3 Upload the authorization code file (.txt) and Install

Choose File | No file chosen | Install

- 生成預留授權代碼。 轉到智慧軟體管理器。
- 導航到資產>許可證>許可證預留，將您從FMC生成的代碼輸入到預留請求代碼框中。按「Next」（下一步）。

Smart License Reservation ×

STEP **1** Enter Request Code	STEP **2** Select Licenses	STEP **3** Review and Confirm	STEP **4** Authorization Code

You can reserve licenses for product instances that cannot connect to the Internet for security reasons.
You will begin by generating a Reservation Request Code from the product instance.
To learn how to generate this code, see the configuration guide for the product being licensed.

Once you have generated the code:

    1) Enter the Reservation Request Code below
    2) Select the licenses to be reserved
    3) Generate a Reservation Authorization Code
    4) Enter the Reservation Authorization Code on the product instance to activate the features

* Reservation Request Code:

Upload File | Browse | Upload

Cancel | Next

- 選擇保留特定許可證。 在Quantity To Reserve下向下滾動並輸入您的部署所需的每個平台和功能許可證的數量。按「Next」（下一步）。

Smart License Reservation

STEP 1 ✓	STEP 2	STEP 3	STEP 4
Enter Request Code	**Select Licenses**	Review and Confirm	Authorization Code

FPR4150 Threat Defense URL Filtering	2025-Aug-05	10	10	0
FPR4150 Threat Defense URL Filtering				
FTDv Base 16 Gbps	2024-Nov-19	50	48	2
Cisco Firepower Threat Defense Virtual Base License, 16 Gbps				
FTDv Malware 16 Gbps	2024-Nov-19	50	48	2
Cisco Firepower Threat Defense Virtual Malware License, 16 Gbps				
FTDv Threat Protection 16 Gbps	2024-Nov-19	50	48	2
Cisco Firepower Threat Defense Virtual Threat Protection License, 16 Gbps				
FTDv URL Filtering 16 Gbps	2024-Nov-19	50	48	2
Cisco Firepower Threat Defense Virtual URL Filtering License, 16 Gbps				
Firepower MCv Device License	2025-Jan-07	5185	5184	1
Firepower MCv Device License				
Firepower MCv-300 Device License	2025-Feb-23	15000	15000	0
Cisco Firepower Management Center for 300 devices				
Firepower Threat Defense Base Features	- never -	0	unlimited	0
Firepower Threat Defense Base Features				

Cancel   Next

- 點選Generate Authorization Code。 下載授權碼,準備將其輸入FMC。

Smart License Reservation

STEP 1 ✓	STEP 2 ✓	STEP 3 ✓	STEP 4
Enter Request Code	Select Licenses	Review and Confirm	**Authorization Code**

UDI PID: FS-VMW-SW-K9

UDI Serial Number: 3

UUID: d4cd32d6-da7f-11ee-840e-b88231b3fd47

Authorization Code:

<specificPLR><authorizationCode><flag>A</flag><version>D</version><piid>6b06fba5-c272-4afa-852e-de92b548a3ab</piid><timestamp>1721257985935</timestamp><entitlements><entitlement><tag>regid.2015-02.com.cisco.FPRMCv-DEV,1.0_ddc8a630-4857-4590-823d-c9a38bb6681c</tag><count>2</count><startDate>2022-Apr-14 UTC</startDate><endDate>2025-Jan-07 UTC</endDate><licenseType>TERM</licenseType><displayName>Firepower MCv Device License</displayName><tagDescription>Firepower MCv Device License</tagDescription><subscriptionID></subscriptionID></entitlement><entitlement><tag>regid.2015-05.com.cisco.FPRTD-BASE,1.0_561236dd-931d-4642-a391-54fa937a9947</tag><count>2</count><startDate></startDate><endDate></endDate><licenseType>PERPETUAL</licenseType><displayName>Firepower Threat Defense Base Features</displayName><tagDescription>Firepower Threat Defense Base Features</tagDescription><subscriptionID></subscriptionID></entitlement><entitlement><tag>regid.2015-02.com.cisco.FTDv-

To learn how to enter this code, see the configuration guide for the product being licensed

Download as File   Copy to Clipboard   Close

- 在FMC中輸入授權碼。 在FMC中,點選瀏覽器以上傳包含從智慧軟體管理器生成的授權代碼 的文本檔案。

- 按一下「安裝」。

3   Upload the authorization code file (.txt) and Install

Choose File   AuthorizationCode_SN_3(5).txt   Install

- 驗證Specific License Reservation頁是否將Usage Authorization狀態顯示為已授權。

Specified License Reservation Status

Usage Authorization:	✅	Authorized (Last Synchronized On Jul 18 2024)
Product Registration:	✅	Registered (Last Renewed On Jul 18 2024)
Export-Controlled Features:		Enabled
Product Instance:	ℹ️	402d4a28-44e0-11ef-b394-4712f25a82da
Confirmation Code *:		67f1c6eb

* This confirmation code is generated against your last authorization code

- **點選預留許可證頁籤，驗證在生成授權代碼時選擇的許可證。**

為受管裝置分配特定許可證

- 選擇System > Licenses > Specific Licenses。按一下Edit Licenses。
- 根據需要向裝置分配許可證，然後按一下Apply。

Edit Licenses ❓

Malware Defense	IPS	URL	Carrier	Secure Client Premier	Secure Client Advantage	Secure Client VPN Only

Devices without license ↻

🔍 Search

FTD-Test
ftd.breakstuff.com

Add

Devices with license (2)

FTD-Test 🗑️
ftd.breakstuff.com 🗑️

Cancel   **Apply**

- 按一下Assigned Licenses 頁籤並驗證您的許可證已正確安裝在每個裝置上。

Assigned Licenses   Reserved Licenses

管理特定許可證預留

- 在FMC中，獲取此FMC的唯一產品例項識別符號，導航到系統 > 許可證 > 特定許可證。
- 記下「產品例項」值。

Specified License Reservation Status

Usage Authorization:	✓	Authorized (Last Synchronized On Jul 18 2024)
Product Registration:	✓	Registered (Last Renewed On Jul 18 2024)
Export-Controlled Features:		Enabled
Product Instance:	ℹ	402d4a28-44e0-11ef-b394-4712f25a82da
Confirmation Code *:		297a78fc

* This confirmation code is generated against your last authorization code

- 在智慧軟體管理器中，確定要更新的FMC。 轉到智慧軟體管理器。
- 導航到資產>產品例項，在Typecolumn中查詢hasFPin產品例項，並在Namecolumn中查詢通用SKU（非主機名）。

Virtual Account: FPRCDN   91 Major   385 Minor   Hide Alerts

| General | Licenses | **Product Instances** | Event Log |

Authorize License-Enforced Features... [ ]   FP   × 🔍

Name	Product Type	Last Contact	Alerts	Actions
UDI_PID:FPR-1140; UDI_SN:JMX2324G19P;	FP	2024-Apr-01 17:36:09	❌ Failed to Renew	Actions ▾
UDI_PID:FPR-1140; UDI_SN:JMX2324G19Q;	FP	2024-Apr-25 19:02:18	⚠ Failed to Connect	Actions ▾
UDI_PID:FPR-2110; UDI_SN:JMX2538X1M1;	FP	2024-Jan-04 21:08:36	❌ Failed to Renew	Actions ▾
UDI_PID:FPR-2130; UDI_SN:JMX2139Y0K5;	FP	2024-Jul-18 11:41:39		Actions ▾
UDI_PID:FS-VMW-SW-K9; UDI_SN:3;	FP	2024-Jul-18 17:35:39 (Reserved Licenses)		Actions ▾
UDI_PID:NGFWv; UDI_SN:9A6NGBM4MQ3;	FP	2024-Apr-01 19:56:37	❌ Failed to Renew	Actions ▾
UDI_PID:NGFWv; UDI_SN:9A9G12GAFES;	FP	2024-Jul-18 12:40:33		Actions ▾
UDI_PID:NGFWv; UDI_SN:9AVJWWJ8EJK;	FP	2024-Feb-06 11:16:11	❌ Failed to Renew	Actions ▾
vFMC-bheston.cisco.com	FP	2024-Jan-22 19:21:03	❌ Failed to Renew	Actions ▾
Vik-FMC	FP	2024-Jul-04 08:39:02		Actions ▾

| 100 ∨ | | | Showing Page 1 of 1 (92 Records) |◀ ◀ ▶ ▶| |

- 按一下Name。 在顯示正確UUID的頁面上，選擇操作 > 更新預留許可證。

License Usage   These licenses are reserved on this product instance **Update reservation**

License	Billing	Expires	Required
Firepower MCv Device License	Prepaid	2025-Jan-07	1

Showing 1 Record

- 根據需要更新預留許可證，點選生成授權代碼並下載授權代碼，準備將其輸入FMC。

- 保留Update Reservationpage處於打開狀態。您可以稍後在此程式中返回至它。

- 更新FMC中的特定許可證。 選擇系統 > 許可證 > 特定許可證，點選編輯SLR 並瀏覽，以上傳新生成的授權代碼。

Specified License Reservation Status

Usage Authorization: ✅   Authorized (Last Synchronized On Jul 18 2024)

Edit Authorizarion Code
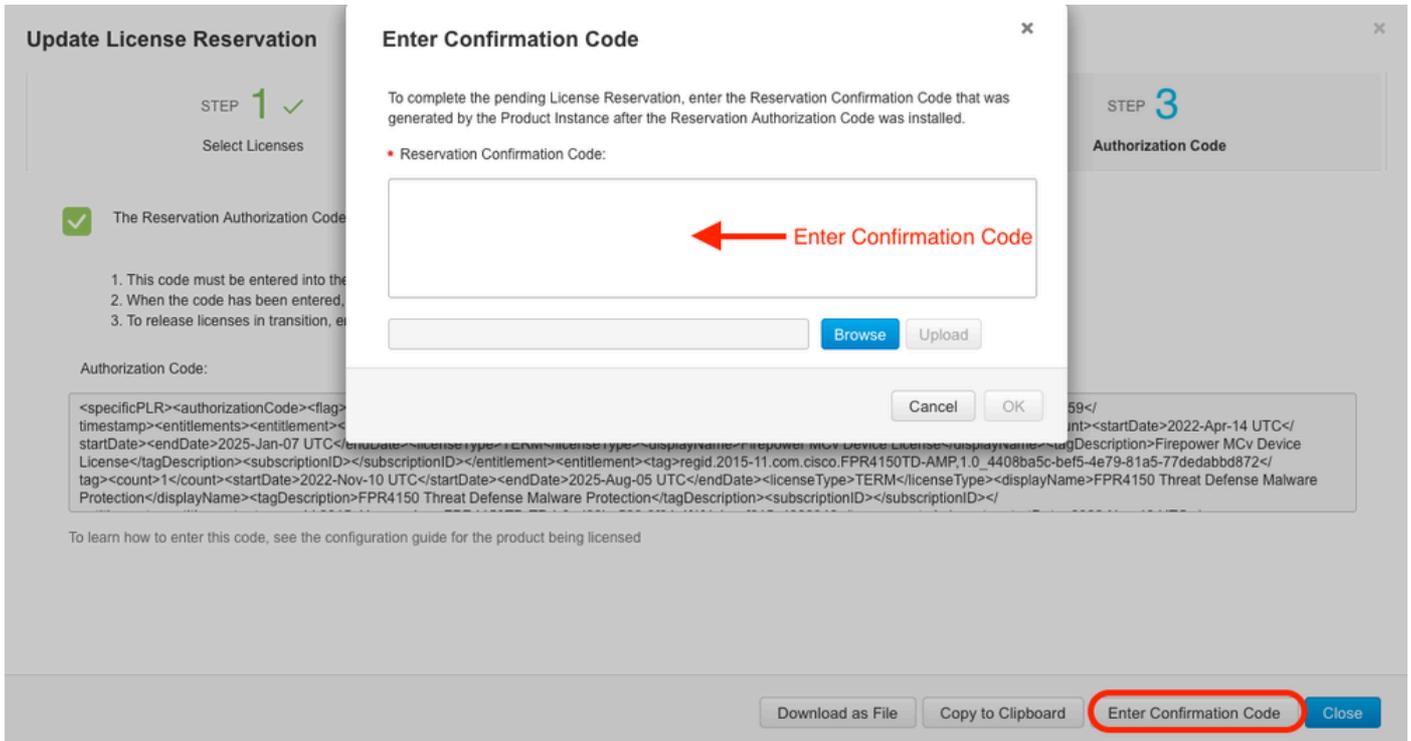
Upload the authorization code file (.txt) and Install

Choose File   No file chosen

Close   Install

- 成功安裝授權碼後，請記下確認碼。
- 在智慧軟體管理器的更新保留頁上輸入確認代碼，該頁面會故意保持打開狀態。

- 在FMC中，確保已按預期保留許可證。

停用並返回特定許可證預留

如果不再需要特定許可證，必須將其返回到智慧帳戶。如果您要註冊智慧許可帳戶，則必須停用特定許可證預留。

此程式會將與FMC相關聯的所有授權軟體釋放回虛擬帳戶。註銷後，不允許對許可功能進行更新或更改。

警告：如果不執行此過程的所有步驟，則許可證將保持使用中狀態，不能重新使用。

- 在FMC Web介面中，選擇System > Licenses > Specific Licenses。

Specified License Reservation Status

Usage Authorization:	✓	Authorized (Last Synchronized On Jul 18 2024)
Product Registration:	✓	Registered (Last Renewed On Jul 18 2024)
Export-Controlled Features:		Enabled
Product Instance:	ℹ	402d4a28-44e0-11ef-b394-4712f25a82da
Confirmation Code *:		d3262fe7

* This confirmation code is generated against your last authorization code

- 記下返回碼。

Specific License Reservation

Specific License Reservation or SLR allows us to reserve and install licenses in a network that has no path to inbound or outbond internet traffic at all

1 Generate a request code

[   ] [Generate] [Cancel Code]

2 Create or login into your Cisco Smart Software Manager account to generate an authorization code against the request code you have just created

3 Upload the authorization code file (.txt) and Install

[Choose File] No file chosen   [Install]

4 Cisco Smart Software Manager and use the Return Code to release your licenses.

[CJ5oPL-kovwbd-bZnS3u-Tp95qB-G3UTXn-mPnt] ⬅

- 在智慧軟體管理器中，確定要更新的FMC，轉到智慧軟體管理器。
- 導航到資產>產品例項，在Typecolumn中查詢hasFPin產品例項，並在Namecolumn中查詢通用SKU（非主機名）。
- 在顯示正確UUID的頁面上，選擇操作 > 刪除。

	General	Licenses	**Product Instances**	Event Log			

[Authorize License-Enforced Features...] [↪]				FP		× 🔍
Name		Product Type	Last Contact		Alerts	Actions
UDI_PID:FPR-1140; UDI_SN:JMX2324G19P;		FP	2024-Apr-01 17:36:09		❌ Failed to Renew	Actions ▾
UDI_PID:FPR-1140; UDI_SN:JMX2324G19Q;		FP	2024-Apr-25 19:02:18		⚠ Failed to Connect	Actions ▾
UDI_PID:FPR-2110; UDI_SN:JMX2538X1M1;		FP	2024-Jan-04 21:08:36		❌ Failed to Renew	Actions ▾
UDI_PID:FPR-2130; UDI_SN:JMX2139Y0K5;		FP	2024-Jul-18 11:41:39			Actions ▾
UDI_PID:FS-VMW-SW-K9; UDI_SN:3;		FP	2024-Jul-18 18:17:57 (Reserved Licenses)			Actions ▾
UDI_PID:NGFWv; UDI_SN:9A6NGBM4MQ3;		FP	2024-Apr-01 19:56:37		❌ Failed to	Transfer...
UDI_PID:NGFWv; UDI_SN:9A9G12GAFES;		FP	2024-Jul-18 12:40:33			Update Reserved Licenses...
UDI_PID:NGFWv; UDI_SN:9AVJWWJ8EJK;		FP	2024-Feb-06 11:16:11		❌ Failed to	Enter Confirmation Code...
vFMC-bheston.cisco.com		FP	2024-Jan-22 19:21:03		❌ Failed to	Remove...
Vik-FMC		FP	2024-Jul-04 08:39:02			Rehost Licenses from a Failed Product...
[100 ▾]					Showing Page 1 of 1 (92 Records) ⏮ ◀ ▶ ⏭	

- 將您從FMC生成的預留返回代碼輸入到Remove Product Instance對話方塊。

Remove Reservation

To remove a Product Instance that has reserved licenses and make those licenses once again available to other Product Instances, enter in the Reservation Return Code generated by the Product Instance. If you cannot generate a Reservation Return Code, contact Cisco Support

* Reservation Return Code:

CJ5oPL-kovwbd-bZnS3u-Tp95qB-G3UTXn-mPnteX-w6SYd1-QcSGPq-pfA

Remove Reservation　　Cancel

- 特定預留許可證將返回到智慧賬戶中的可用池，並且此FMC將從智慧軟體管理器產品例項清單中刪除。

在FMC Linux Shell中停用特定許可證

- 登入FMC CLI admin帳戶，輸入expert命令訪問Linux shell。

- 執行命令以訪問特定許可證保留選項：sudo manage_slr.pl

```
> expert
admin@fmc:~$ sudo manage_slr.pl
Password:                          ←━━━━━━━  Administrator Password

***************  Configuration Utility  **************

 1    Show SLR Status
 2    Enable SLR
 3    Disable SLR
 4    License requirement report
 0    Exit

*************************************************************
Enter choice: █
```

- 透過選擇選項3停用特定許可證保留。選擇選項0退出。

```
***************  Configuration Utility  **************

1    Show SLR Status
2    Enable SLR
3    Disable SLR
4    License requirement report
0    Exit

***********************************************************
Enter choice: 3

Successfully Disabled SLR
```

- Enter exit to 退出 Linux shell。

- Enter exit to 退出命令列介面。

相關資訊

- [Cisco Secure Firewall Management Center功能許可證](#)