# 配置中介模型以同步CUCM與智慧帳戶

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## 簡介

本文檔介紹將您的思科統一通訊管理器(CUCM)與智慧帳戶同步的中間模式配置。

## 必要條件

#### 需求

思科建議您瞭解以下主題:

- 思科整合通訊管理員(CUCM)版本12.0
- 思科智慧軟體管理員(CSSM)衛星

#### 採用元件

本文中的資訊係根據以下軟體和硬體版本:

- Cisco Call Manager版本12.0
- 智慧軟體管理器衛星

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。

背景資訊

思科智慧軟體許可可簡化整個企業的許可體驗,從而更輕鬆地購買、部署、跟蹤和續訂思科軟體。 它透過單一、簡單的使用者介面提供對許可證擁有和使用的可視性。



- 您在思科商務工作空間下訂單,並將訂單與智慧帳戶關聯。此資訊會填入位於Cisco.com上的 「軟體管理員」中。現在,您可以完整檢視您的訂單與採購。
- 2. 已啟用智慧許可的產品(透過CLI或GUI)、註冊到CSSM以及向CSSM報告許可證使用情況。

有兩個型號可以報告使用情況:

- 直接模式-客戶許可資訊中安全不是主要考慮因素。您可以使用HTTPS代理或傳輸網關 以允許裝置透過專用網路與通訊。它成為CSSM的集中式存取點。所有這些都是 HTTPS,因此受到保護。
- 中介部署模式-適用於有安全顧慮的客戶。您不想讓您的裝置直接從您的私人網路與 Cisco.com通訊。您可以在駐留在您本地的VM上安裝CSSM衛星,並充當CSSM。它可 以在Cisco.com上與CSSM同步(每月、每週或完全斷開)。如果您的網路沒有網際網路 連線,您可以上傳和下載檔案。它只需要同步即可知道軟體權利檔案,因為建議是在 30天內進行同步。

#### 在哪裡建立智慧帳戶

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- 要建立客戶智慧帳戶,請使用您的CCO ID登入CSC,並發起客戶智慧帳戶申請。
- 要建立合作夥伴暫持智慧帳戶,請使用您的CCO ID登入CSC,並發起合作夥伴暫持帳戶申請

 在CCW中訂購時,您還可以啟動任一型別的智慧帳戶的申請。但是,建議的最佳實踐是主動 設定智慧帳戶。

💊 注意:沒有上限;您可以根據需要建立任意數量的虛擬帳戶。

Cisco Smart License Manager服務

思科智慧許可證管理器服務是一項僅在CUCM發佈伺服器上運行的網路服務。由於這是網路服務 ,因此它始終運行,不能從UI或CLI啟動或停止。由於使用者上沒有運行任何服務,因此無法從子裝 置執行任何智慧許可操作。CLI命令也不提供子上的任何輸出,

UCM中的智慧許可狀態

智慧許可有兩種主要狀態:

註冊狀態:有3種註冊狀態型別:

- 1. 未辨識/未註冊
- 2. 已註冊
- 3. 未註冊已過期

授權狀態:

- 沒有使用中的許可證
- 評估模式
- 評估已過期
- 已獲授權的
- 不合規
- 授權已過期

Registration Status	Authorization Status	Evaluation period(90 days)	Overage period(90 days)	Enforcement? (Do not allow provisioning of users/devices)	Comments	Message on UI
Unregistered OR Registration Expired	Evaluation Mode	Start with 90 and will decrement if UCM is consuming licenses	.NA	No	Evaluation period is used when you consume licenses	Smart Software Licensing: The system is currently unregistered and running in Evaluation mode with 89 days remaining. Register with Smart Software Manager or Smart Software Manager satellite to avoid losing the ability to provision users and devices.
Unregistered OR Registration Expired	Evaluation Expired	0 days	NA	Yes		Smart Software Licensing: The system is currently unregistered and the evaluation period has expired. Register with Smart Software Manager or Smart Software Manager satellite to avoid losing the ability to provision users and devices.
Registered OR Unregistered OR Registration Expired	No Licenses in Use	NA	NA	No		
Registered	Authorized	NA	NA	No		
Registered	000	NA	Overage period remaining	No till overage period is applicable Yes after overage days(90 days) are over		Smart Software Licensing: The system is operating with an insufficient number of licenses. Configure additional licenses in Smart Software Manager within 90 days to avoid losing the ability to provision users and devices.
Registered	Authorization Expired	NA	Same as above	Same as above		Smart Software Licensing: The system has not connected to <u>Smart Software Manager</u> or <u>Smart Software Manager</u> satellite for 90 days and the license authorization has expired. Please check the network connection and renew the license authorization within 90 days to avoid losing the ability to provision users and devices.

除了之前的智慧許可狀態外,UCM還提供了90天的超額期(這是一個在傳統許可的12.0之前已經存 在的概念。UCM還可以透過智慧許可繼續為客戶提供超額期)。

## 配置(中介部署)

#### 必要條件

必須啟用以下埠才能與CSSM通訊:

- 使用者介面:HTTPS(埠8443)
- 產品註冊:HTTPS(埠443)、HTTP(埠80)
- 與CSSM的通訊:HTTPS(tools.cisco.com、api.cisco.com、cloudsso.cisco.com),埠443

在中介部署模式下有2個部署選項,

使用代理伺服器連線:在這裡,您可以使用代理伺服器來促進CUCM和智慧帳戶之間的連線。

斷開連線:在CUCM/衛星無法直接連線到Cisco.com時使用。必須使用手動上傳和下載檔案完成智 慧帳戶同步。

配置(衛星)

1. 登入到衛星。配置為新衛星。驗證網路設定。配置有效的NTP伺服器。



注意:如果是第一次登入,則衛星登入的預設憑據為Admin/Admin!23。



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2. 在<u>智慧軟體管理器</u>中登入智慧帳戶

3. 導航到智慧軟體管理器部分下的Satellites,然後按一下New Satellite...按鈕Add a new satellites。將新建立的虛擬帳戶與衛星關聯。完成此操作後,生成授權檔案。

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Clisco Bothware Central > Smart Software Licensing Smart Software Licensing	English [Change] 🚨 Hello, Divya Jain 💼 BU Produ Feedback Sug	uction Test port Help
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No Records Found		
	No Records	s to Display

- 要完成註冊過程,請導航到衛星登入並上傳授權檔案。衛星重新啟動。現在,衛星已同步到虛 擬帳戶。
- 5. 登入到衛星並生成令牌。
- 6. 導航到CUCM管理頁面>系統>許可>許可證管理>檢視/編輯許可Smart Call Home設定,然後 將SSM衛星URL設定為<u>裝置請求處理程式</u>(所配置的衛星的IP地址為10.106.81.131)並儲存 ,如圖所示。

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$\bigcirc$ Direct - product communicates directly with Cisco licensing servers.			
URL : https://tools.cisco.com/its/service/oddce/services/D  Transport Gateway - provy data via Transport Gateway or Smart Software M	DCES	ervice r satell	ite
URL : .81.131:443/Transport Gateway/services/DeviceRequ	JestHa	ndler'	ice.
O HTTP/HTTPS Proxy - send data via an intermediate HTTP or HTTPS Proxy.			
IP Address/Host Name :			
Port : 443			
	S	ave	Close

7. 按一下Register並貼上步驟6中生成的令牌。

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組態(代理伺服器)

- 您也可以使用代理伺服器,而不是使用衛星伺服器。如果CUCM已透過直接方法或衛星註冊 ,請首先註銷並導航到系統>許可>許可證管理。您可以在此找到「操作」頁籤,選擇「取消 註冊」。
- 如果CUCM未註冊,請直接選擇View/Edit作為許可的Smart Callhome設定。此處增加代理伺服器詳細資訊,並確保代理伺服器連線到tools.cisco.com,以便透過代理伺服器將CUCM同步 到虛擬帳戶。

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i) Status: Ready				
onfigure how the p	roduct instance will communicate with Cisc	<b>o</b> .		
Direct - product comm	nunicates directly with Cisco licensing servers.			
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Transport Gateway - p	proxy data via Transport Gateway or Smart Software M	lanager sa	atellite.	
URL	. :			
HTTP/HTTPS Proxy - s	end data via an intermediate HTTP or HTTPS Proxy.			
IP Address/Host Name				
Port				
	8080			

3. 從虛擬帳戶生成令牌請求。

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4. 導航到CUCM。在此,按一下register並貼上步驟3中複製的令牌。

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-ucense Usage keport	Reregister this product instance if it is already registered Register Close	ess and may take several minutes to complete, depending on I
Update Usage Details Usage Details Last Updated: 2018-01-29 13:28:34		

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License Management							
- Smart Software Licensing							
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Registration Status		Registered		Actions			
License Authorization Status	<b>1</b>	Authorized (Friday, January 26, 2018 3:12:59 PM IST)					
Smart Account	BUT	Production Test					
Transport Settings	Dire	ect View/Edit the Licensing Smart Call Home settings					
Licensing Mode	Ente	erorise					
License Usage Report							
Below is a summary of current license usage on the system	Current usage details for each type are available	e by pressing "Update Usage Details". Note that collecting these data is a resource i	intensive process and may take several minutes to complete, depending of	on the size of your deployment.			
View All Lineares Trees Descriptions And Descriptions				,,			
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## 顯示許可證摘要。

已啟用智慧許可。

Registration: Status: REGISTERED Smart Account: BU Prod Virtual Account: TAC-( Last Renewal Attempt: Next Renewal Attempt:	uction Test ollabTesting None Jul 25 15:11:23 2018 IST
License Authorization: Status: AUTHORIZED Last Communication At Next Communication At	empt: SUCCEEDED empt: Feb 25 15:12:59 2018 IST
License Usage:	
License	Entitlement Tag
66d0d1cf-4863-4761-91 ef827a2f-f4ae-4ebb-88	regid.2017-02.com.cisco.UCM_CUWL,12.0_cc59375a-1cd8-4b36-8366-6f4d2abba96 regid.2016-07.com.cisco.UCM_EnhancedPlus,12.0_d8372792-588c-4caa-b279-858 0-d01d3eb1949aregid.2016-07.com.cisco.UCM_Enhanced,12.0_66d0d1cf-4863-4761-91d0 f-052737063d3aregid.2016-07.com.cisco.UCM_Basic,12.0_ef827a2f-f4ae-4ebb-887f-0! regid.2016-07.com.cisco.UCM_Essential,12.0_25f9c396-c67c-4519-aa98-d4b3a0 regid.2016-07.com.cisco.UCM_TelePresenceRoom,12.0_d9a71418-29e9-4c9a-9d3

### 顯示許可證UDI。

UDI: PID:UCM,SN:37624,UUID:6fe83addc80240bc92dc071ac7a37624

### 顯示全部許可證。

Smart Licensing Status \_\_\_\_\_ Smart Licensing is ENABLED Registration: Status: REGISTERED Smart Account: BU Production Test Virtual Account: TAC-CollabTesting Export-Controlled Functionality: Allowed Initial Registration: SUCCEEDED on Jan 26 15:11:23 2018 IST Last Renewal Attempt: SUCCEEDED on Jan 26 15:11:23 2018 IST Next Renewal Attempt: Jul 25 15:11:23 2018 IST Registration Expires: Jan 26 15:06:21 2019 IST License Authorization: Status: AUTHORIZED on Jan 26 15:12:59 2018 IST Last Communication Attempt: SUCCEEDED on Jan 26 15:12:59 2018 IST Next Communication Attempt: Feb 25 15:12:59 2018 IST Communication Deadline: Apr 26 15:06:59 2018 IST **Evaluation Period:** Evaluation Mode: Not In Use EVALUATION PERIOD EXPIRED on Nov 9 23:46:35 2017 IST License Usage License Authorization Status: AUTHORIZED as of Jan 26 15:12:59 2018 IST (regid.2017-02.com.cisco.UCM\_CUWL,12.0\_cc59375a-1cd8-4b36-8366-6f4d2abba965) Description: null Count: 0 Version: 12.0 Status: Init (regid.2016-07.com.cisco.UCM\_EnhancedPlus,12.0\_d8372792-588c-4caa-b279-8587e5ce2f82) Description: null Count: 0 Version: 12.0 Status: Init UC Manager Enhanced License (12.x) (regid.2016-07.com.cisco.UCM\_Enhanced,12.0\_66d0d1cf-4863-4761-91d0-d Description: UC Manager Enhanced License Count: 5 Version: 12.0 Status: InCompliance UC Manager Basic License (12.x) (regid.2016-07.com.cisco.UCM\_Basic,12.0\_ef827a2f-f4ae-4ebb-887f-052737 Description: UC Manager Basic License Count: 2 Version: 12.0 Status: InCompliance (regid.2016-07.com.cisco.UCM\_Essentia],12.0\_25f9c396-c67c-4519-aa98-d4b3ad18f805) Description: null Count: 0 Version: 12.0 Status: Init (regid.2016-07.com.cisco.UCM\_TelePresenceRoom, 12.0\_d9a71418-29e9-4c9a-9d3a-1366ebe38e7c) Description: null Count: 0 Version: 12.0

Status: Init

## 疑難排解

收集與註冊相關的故障排除問題的日誌:

- 從CUCM CLI捕獲資料包
- 許可證管理器日誌
- 來自衛星的診斷日誌

已知的Bug

思科漏洞ID CSCvh16069 : 思科智慧許可衛星無法借用更高級別的許可證以使其相容。

思科漏洞ID CSCvf86710 : 思科智慧許可證管理器平台服務不運行。

思科漏洞ID CSCvc94366 :向CSSM註冊CUCM智慧許可證不接受代理埠443。

思科漏洞ID CSCvh72897



:在代理伺服器上啟用授權時,無法使用代理伺服器。

相關資訊

<u>智慧軟體管理器衛星安裝指南</u> <u>思科智慧軟體管理器衛星使用手冊</u>

<u>技術支援與文件 - Cisco Systems</u>

#### 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)。