

# DNA空間直接連線配置示例

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## 簡介

本檔案介紹如何設定Cisco DNA Spaces Direct Connect，其中WLC直接連線到DNA Spaces，而無需通過CMX或DNA Spaces Connector

## 必要條件

### 需求

思科建議您瞭解以下主題：

- 對AireOS無線控制器的命令列介面(CLI)或圖形使用者介面(GUI)訪問
- Cisco DNA Spaces

### 採用元件

本文中的資訊係根據以下軟體和硬體版本：

- 5520無線LAN控制器(WLC)版本8.8.120.0
- DNA空間連結器版本1.0.188

## 設定

### 網路圖表



## 組態

若要將WLC連線到Cisco DNA Spaces，WLC必須能夠透過HTTPS連線至Cisco DNA Spaces雲端。

### 將DigiCert CA根憑證匯入WLC

如果WLC使用的根憑證未經DigiCert CA簽署，則會看到https:SSL證書問題：無法獲取本地頒發者證書錯誤。

步驟1. 前往連結<https://global-root-ca.chain-demos.digicert.com/info/index.html>，將根憑證內容複製到任何文字編輯器中，並使用.cer擴充模組（即CertCA.cer）儲存檔案

步驟2. 將.cer檔案複製到需要由WLC連線的TFTP伺服器。

步驟3. 登入到WLC CLI並運行以下命令：

```
(Cisco Controller) > transfer download datatype cmx-serv-ca-cert
(Cisco Controller) > transfer download mode tftp
(Cisco Controller) > transfer download filename <your_filename>.cer
(Cisco Controller) > transfer download path <path_to_file>
(Cisco Controller) > transfer download serverip <your_tftp_server_ip>
(Cisco Controller) > transfer download start
```

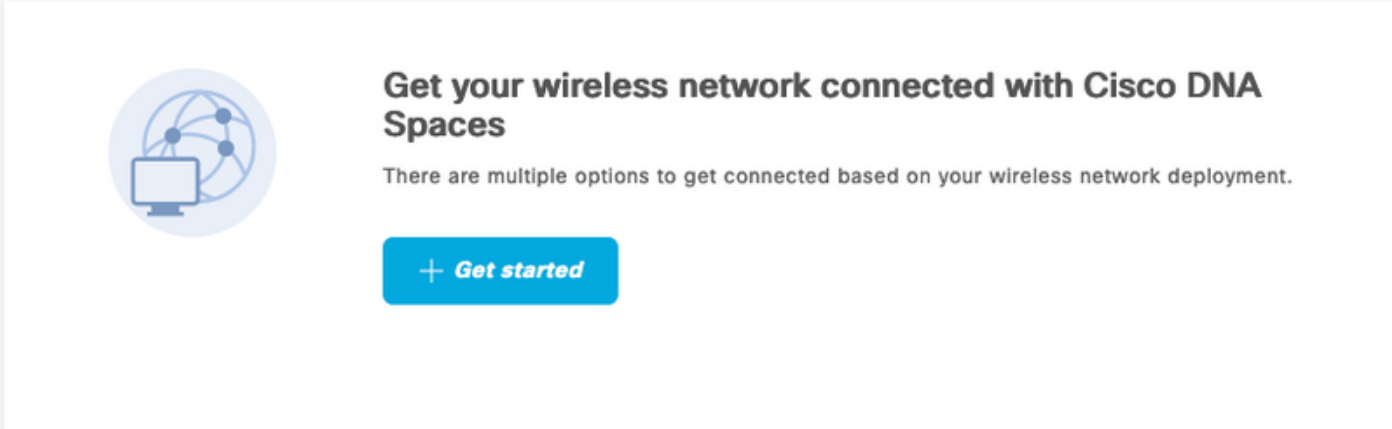
步驟4. 重新啟動WLC以使變更生效。

附註：如果網路部署包含錨點和外部設定中的WLC，則必須將證書匯入到兩個WLC

## 將WLC新增到Cisco DNA spaces

第1步：導覽至Setup > Wireless Networks > + Get Started。

Connect your wireless network Set up needed



The screenshot shows a user interface for connecting a wireless network. On the left is a circular icon with a globe and a computer monitor. To the right, the text reads 'Get your wireless network connected with Cisco DNA Spaces'. Below this, it says 'There are multiple options to get connected based on your wireless network deployment.' At the bottom center is a blue button with a plus sign and the text '+ Get started'.

步驟2.選擇Cisco AireOS/Catalyst。

## What type of wireless network do you have?

Cisco DNA Spaces works with most Cisco wireless networks including Cisco Meraki.

### Cisco AireOS/Catalyst

Choose this for Cisco Aironet Access Points with Cisco Wireless LAN Controllers (WLC) or Cisco Connected Mobile Experiences(CMX On-Prem).

Select

### Cisco Meraki

Choose this for Cisco Meraki networks with Meraki MR Access Points

Select

Need help? Use this planning guide to decide the best suited option based on your network.

步驟3.選擇直接連線WLC

## How do you want to connect to Cisco DNA Spaces?

### Via Spaces Connector

Requires you to install Spaces Connector on a virtual machine in order to connect your WLC to Cisco DNA Spaces cloud.

Note: Not compatible with Catalyst 9800 controller

Select

### Connect WLC directly

Requires WLC with software version 8.8 MR2 and above or Cisco Catalyst Wireless Controller with software version 16.12.2 and above. Wireless controller needs direct internet connectivity.

Select

### Via CMX On-Prem

Configure your CMX On-Prem dashboard to send location updates to Cisco DNA Spaces, either by configuring the Notification URL in the Cisco CMX dashboard or by manually uploading a JSON file that contains your location hierarchy.

Select

Need help? Use this planning guide to decide the best suited option based on your network

### 步驟4. 按一下Customize Setup

#### Prerequisites for WLC Direct Connect

- 1 You must have WLC version 8.3 & above and eWLC 16.10 & above releases
- 2 You must Install WLC Root Certificate

Customize Setup

< Back

### 步驟5. 按一下View Token以取得WLC的雲服務URL和雲服務伺服器ID權杖

### Connect via AireOS WLC Direct Connector

AireOS WLC Direct Connector is an easy way to get your wireless network connected to Cisco DNA Spaces. No need to upgrade Wireless LAN Controllers or reconfigure your wireless network.

- 1 Install Root Certificate**

You can install the certificate from WLC CLI  
[View root certificate](#)
- 2 Configure Token in WLC**

Configure the token in WLC to establish the connection.

No Controllers added | [View Token](#)
- 3 Import Controllers into Location Hierarchy**

Once the controllers are connected, you can import them into location hierarchy

No Controllers added | [Import Controllers](#)

#### Need Help?

Access the below links to view detailed help.

- [View Configuration Steps](#)
- [System Requirements](#)
- [Frequently Asked Questions](#)

### 步驟6. 登入到WLC CLI並運行以下命令：

```
(Cisco Controller) > config cloud-services cmx disable  
(Cisco Controller) > config cloud-services server url https://  
(Cisco Controller) > config cloud-services server id_token  
(Cisco Controller) > config network dns serverip
```

(Cisco Controller) > config cloud-services cmx enable

## 將WLC匯入Cisco DNA Spaces

步驟1.導覽至Setup > Wireless Networks，然後按一下Import Controllers

### Connect your wireless network

#### Connect via AireOS WLC Direct Connector

AireOS WLC Direct Connector is an easy way to get your wireless network connected to Cisco DNA Spaces. No need to upgrade Wireless LAN Controllers.

##### 1 Install Root Certificate

You can install the certificate from WLC CLI  
[View root certificate](#)

##### 2 Configure Token in WLC

Configure the token in WLC to establish the connection.

1

Total controller(s)

[View Token](#)

##### 3 Import Controllers into Location Hierarchy

Once the controllers are connected, you can import them into location hierarchy

No Controllers added

[Import Controllers](#)

步驟2.選擇要匯入控制器的位置，然後按一下下一步。如果這是您首次匯入控制器，您可能會看到預設位置，即Cisco DNA Spaces帳戶名稱

### Import Controllers

×

#### Where do you want to import this Controller

Choose a location that you want to import this controller.

🔍 Search Locations

AndresSilva

⊙

步驟3.檢查要新增的WLC的IP地址。然後按一下Next ( 下一步 )。

Select the Controller(s) that you want to import

NOTE: The Controller(s) will be added as a new WLC under "AndresSilva"

Search	
<input checked="" type="checkbox"/> 10.10.30.240	2 Aps

步驟4.選擇位置，然後按一下**完成**。

**附註：** Cisco DNA Spaces將根據接入點(AP)名稱的字首對其自動分組，並建立網路。如果要保持相同的分組，請選擇網路。如果位置與您的業務位置不一致，請取消選中**Select All**選項。如果接入點未分組，則不會顯示網路名稱。

### Locations

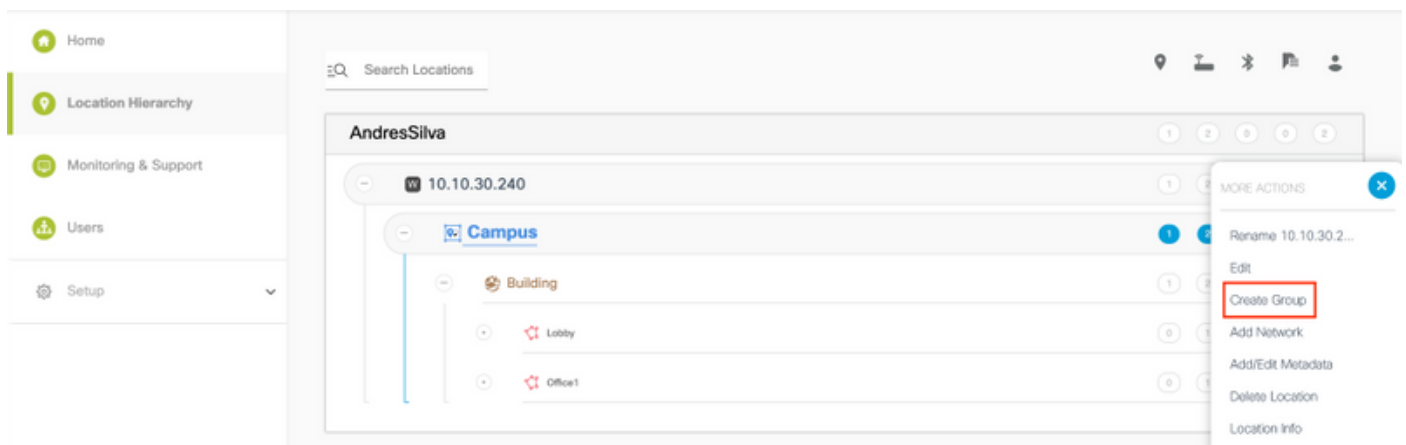
Following are auto discovered locations, select the locations which you wish to add.

No Networks are available

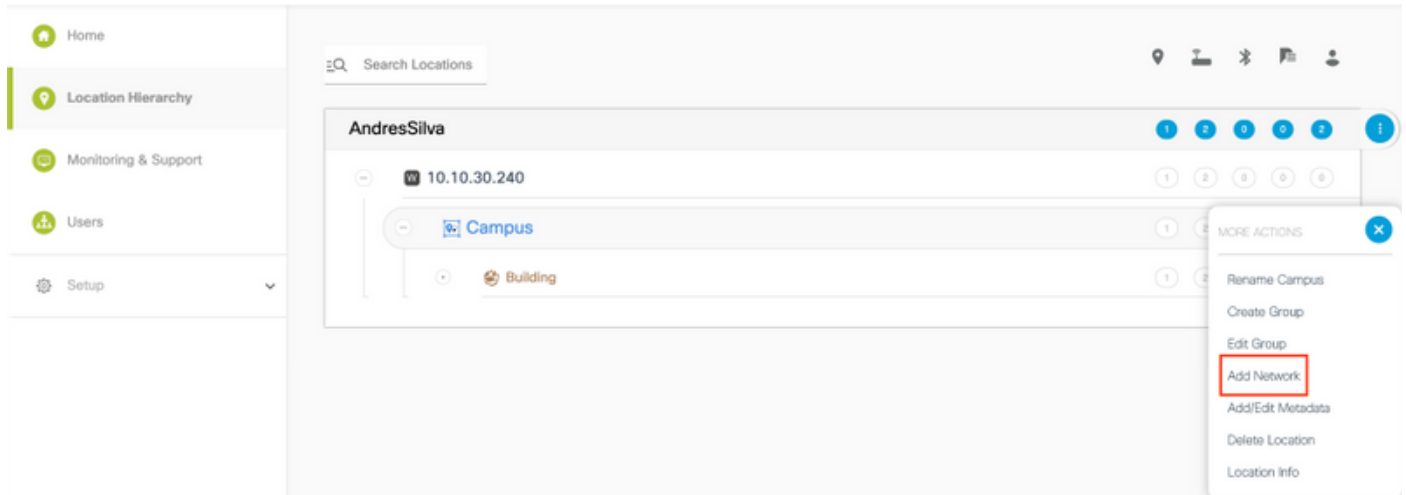
### 在Cisco DNA Spaces上組織位置層次結構

如果需要新的位置層次結構，或者如果在將WLC匯入Cisco DNA空間一節的步驟4中未新增位置，則您可以手動配置它們。

步驟1.導航到**位置層次結構**，將滑鼠懸停在現有無線控制器上並建立一個組。組根據地理位置、品牌或其他任何型別的分組（取決於業務）組織多個位置或區域。

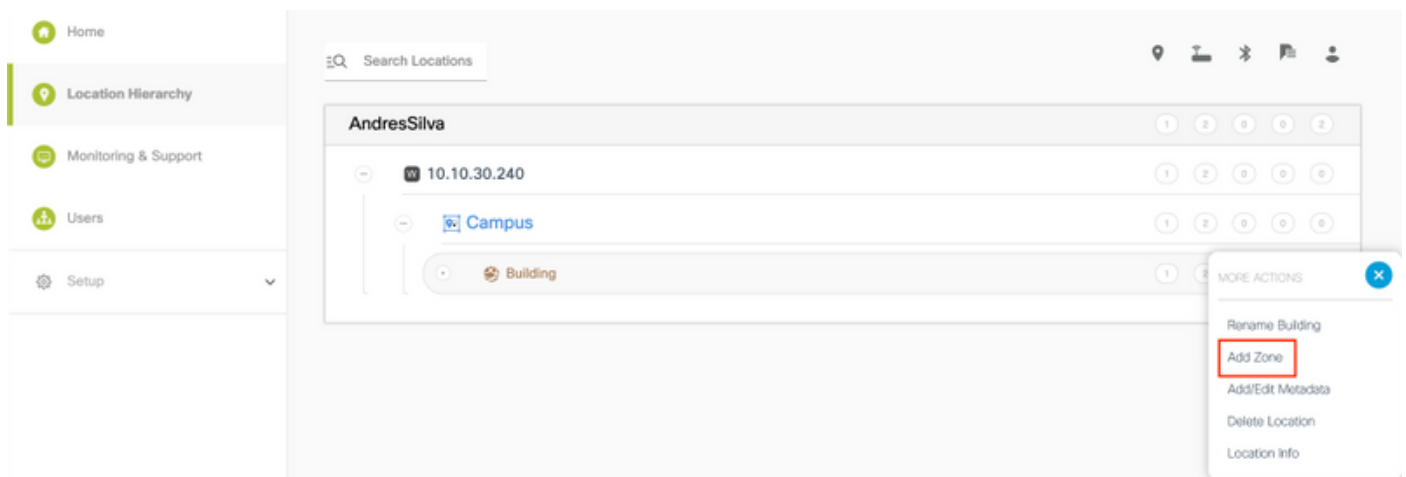


步驟2.將滑鼠懸停在組上，然後選擇**Add Network**。網路或位置在Cisco DNA Spaces中定義為物理建築物內所有接入點整合為位置。



**附註：**這是位置層次結構中最重要節點，因為業務見解和位置分析計算是從這裡生成的。

步驟3.將滑鼠懸停在「Network ( 網路 )」上，然後選擇「**Add Zone ( 新增區域 )**」。區域是建築物/位置部分中的接入點集合。它可以根據物理建築或組織中的部門進行定義。



步驟4.配置區域名稱並為區域選擇AP，然後按一下**Add**:

## Add Zone

Lobby

---

### Select Access Points

Network Access Points

- 14-MX-Lobby-1 (00:f2:8b:26:e5:d0)
- 14-MX-Office1-1 (f4:db:e6:34:4d:00)

**Add**

根據需要多次重複步驟3和4。

## 驗證

若要確認WLC和思科DNA空間之間的連線狀態，請運行`show cloud-services cmx summary`命令。結果應如下所示：

```
(Cisco Controller) > show cloud-services cmx summary
```

```
CMX Service
```

```
Server ..... https://andressilva.dnaspaces.io
IP Address..... 52.20.144.155
Connectivity..... https: UP
Service Status ..... Active
Last Request Status..... HTTP/1.1 200 OK

Heartbeat Status ..... OK
Payload Compression type ..... gzip
```

## 疑難排解

目前尚無適用於此組態的具體疑難排解資訊。



## 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）。