

Esempio di DNA Spaces con configurazione locale CMX

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Introduzione

In questo documento viene descritto come configurare Cisco DNA Spaces con Cisco Connected Mobile Experience (CMX) on-prem.

Prerequisiti

Requisiti

Cisco raccomanda la conoscenza dei seguenti argomenti:

- Accesso da CLI (Command Line Interface) o GUI (Graphical User Interface) ai controller wireless AireOS
- Cisco DNA Spaces
- Cisco CMX

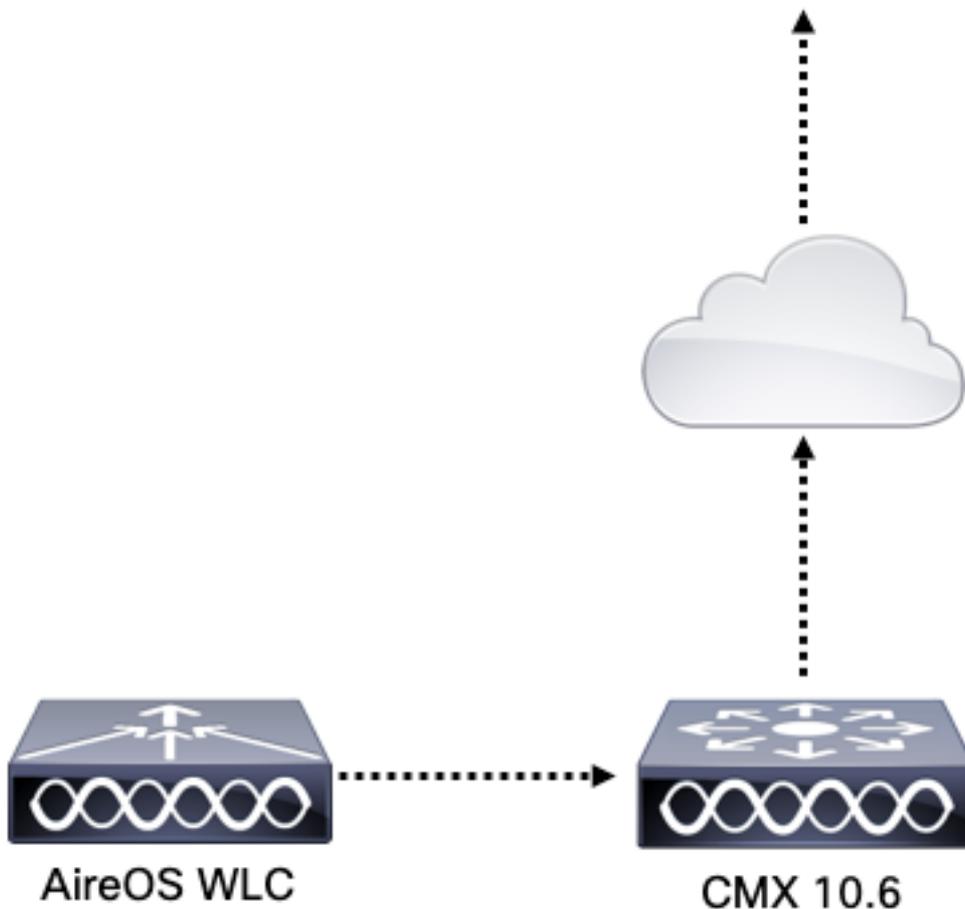
Componenti usati

Le informazioni fornite in questo documento si basano sulle seguenti versioni software e hardware:

- 5520 Wireless LAN Controller (WLC) versione 8.8.120.0
- Cisco CMX 10.6.1-47

Configurazione

Esempio di rete



Configurazioni

Per connettere CMX a Cisco DNA Spaces, CMX deve essere in grado di raggiungere il cloud Cisco DNA Spaces tramite HTTPS.

Configurazione proxy in uscita

Questa configurazione è necessaria se CMX è dietro un proxy.

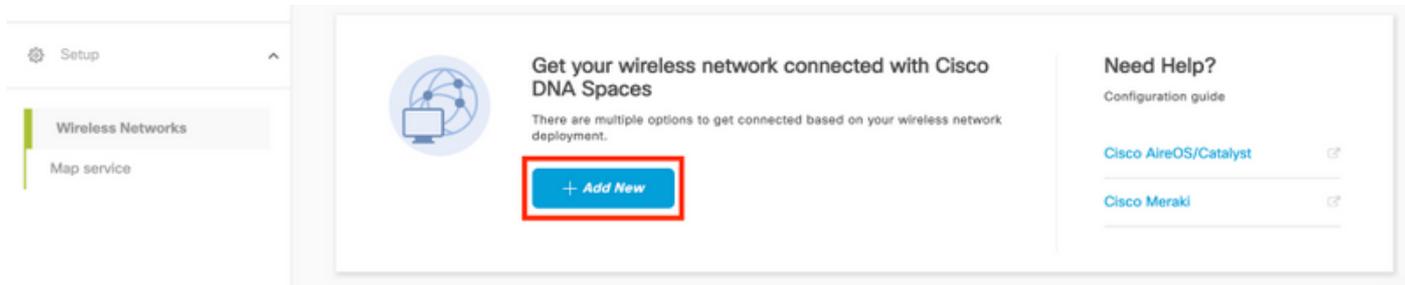
Passaggio 1. Connettersi alla CLI CMX ed eseguire i seguenti comandi:

```
[cmxadmin@CMX-andressi ~]$ cmxos sysproxy http_proxy http://<proxy-server-address>:80/  
[cmxadmin@CMX-andressi ~]$ cmxos sysproxy https_proxy https://<proxy-server-address>:443/  
[cmxadmin@CMX-andressi ~]$ cmxos sysproxy no_proxy 127.0.0.1,localhost  
[cmxadmin@CMX-andressi ~]$ cmxctl stop -a  
[cmxadmin@CMX-andressi ~]$ cmxctl agent start  
[cmxadmin@CMX-andressi ~]$ cmxctl start
```

Genera il token su Cisco DNA Spazi

Passaggio 1. Generare il token negli spazi DNA.

Accedere a Cisco DNA spaces e selezionare **Setup > Wireless Setup > Add New** (Impostazione wireless > Aggiungi nuovo)



Passaggio 2. Selezionare **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.

Passaggio 3. Scegliere **Via CMX locale**, quindi selezionare la versione di CMX.

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.

Passaggio 4. Fare clic su **Personalizza impostazione**

Great!

Based on your inputs, we have customized setup to help you connect your wireless network to Cisco DNA Spaces using CMX On-Prem Tethering

Prerequisites for CMX On-Prem Tethering

- 1 You must have WLC version 8.0 and above.
- 2 You must have CMX 10.6 and above.

Customize Setup

Passaggio 5. Fare clic su **Create New Token**.

Connect via CMX Tethering

Tethering is an easy way to get your wireless network connected to Cisco DNA Spaces

- 1 **Upgrade your CMX to Version 10.6 or above**
You must have CMX 10.6 and above to establish a connection
- 2 **Configure Token in CMX**
You will need a token to configure in CMX dashboard. You need to connect to https://<your cmx ip> from a browser to configure the token.

No CMX Tokens Configured yet[Create New Token](#)
[View Tokens](#)
- 3 **Add CMX into Location Hierarchy**
Once CMX connected to Cisco DNA Spaces, you can add them into the location hierarchy.

0 Campus(s) imported to location hierarchy[Add CMX](#)
[View Location Hierarchy](#)

Need Help?

Access the below links to view detailed help.

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

Passaggio 6. Immettere il nome e la descrizione del token e fare clic su **Salva**.

Passaggio 7. Nella nuova pagina "**Personalizza impostazione**", sotto la sezione **Configura token in CMX**, fare clic su **Visualizza token**. Passare il mouse sul token creato di recente e fare clic sull'icona della chiave:

CMX Tethering Tokens

Cisco CMX [+ Add New CMX](#)

Name	Description	Last Heard	First Heard	Actions
CMX-Andressi	Token for Andressi's CMX		Jul 2, 2019, 3:51:05 PM	🔑 ✎ 🗑️

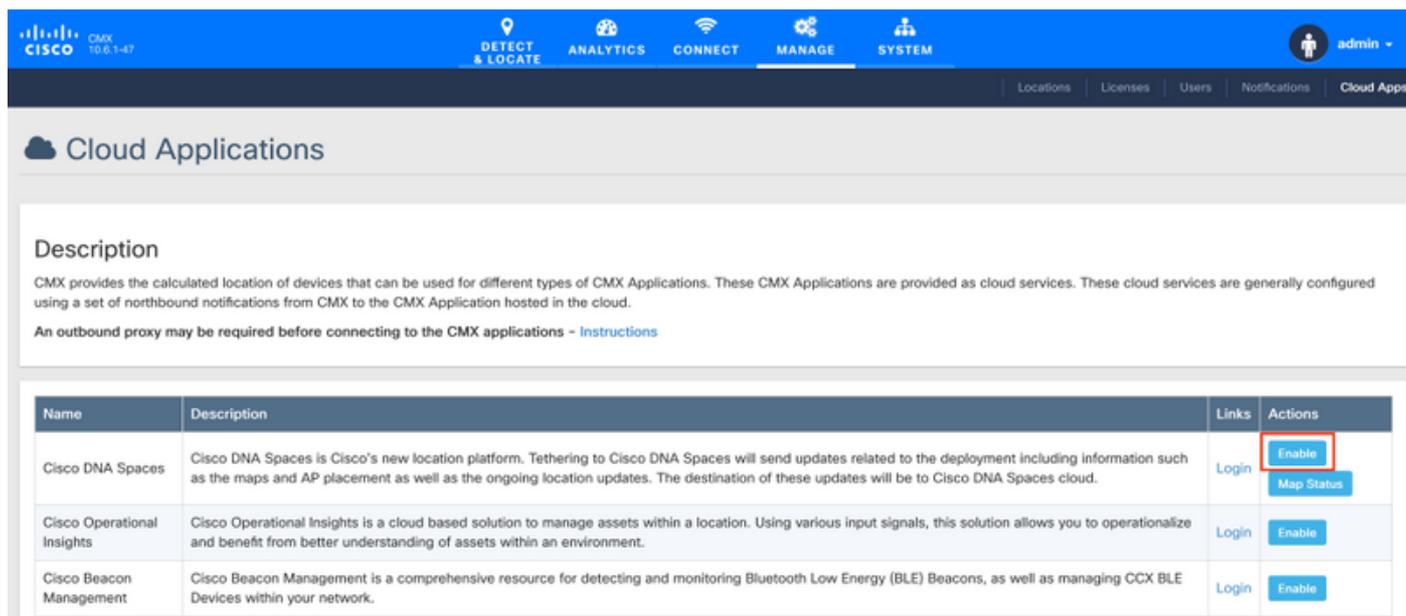
First | Previous | **1** | Next | Last

(1 - 1 of 1) : 1 pages

Passaggio 8. Immettere le credenziali di Cisco DNA Spaces per visualizzare e copiare il token visualizzato nella schermata seguente.

Configurazione del token su CMX

Passaggio 1. Accedere a Cisco CMX, selezionare **Manage > Cloud Apps**. Fare clic su **Enable**, incollare il token e fare clic su **Save**.



Cloud Applications

Description

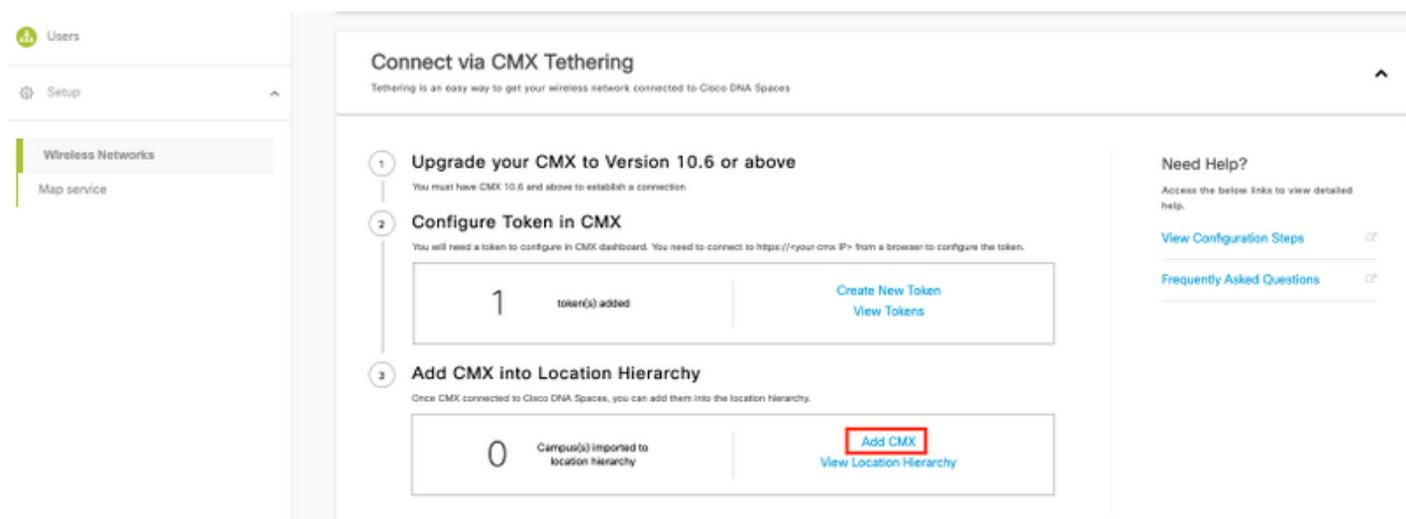
CMX provides the calculated location of devices that can be used for different types of CMX Applications. These CMX Applications are provided as cloud services. These cloud services are generally configured using a set of northbound notifications from CMX to the CMX Application hosted in the cloud.

An outbound proxy may be required before connecting to the CMX applications - [Instructions](#)

Name	Description	Links	Actions
Cisco DNA Spaces	Cisco DNA Spaces is Cisco's new location platform. Tethering to Cisco DNA Spaces will send updates related to the deployment including information such as the maps and AP placement as well as the ongoing location updates. The destination of these updates will be to Cisco DNA Spaces cloud.	Login	Enable Map Status
Cisco Operational Insights	Cisco Operational Insights is a cloud based solution to manage assets within a location. Using various input signals, this solution allows you to operationalize and benefit from better understanding of assets within an environment.	Login	Enable
Cisco Beacon Management	Cisco Beacon Management is a comprehensive resource for detecting and monitoring Bluetooth Low Energy (BLE) Beacons, as well as managing CCX BLE Devices within your network.	Login	Enable

Aggiungi CMX alla gerarchia di posizioni Cisco DNA Spaces

Passaggio 1. Passare a **Setup > Wireless Networks** on DNA spaces e fare clic su **Add CMX**:



Connect via CMX Tethering

Tethering is an easy way to get your wireless network connected to Cisco DNA Spaces

- 1 Upgrade your CMX to Version 10.6 or above**
You must have CMX 10.6 and above to establish a connection.
- 2 Configure Token in CMX**
You will need a token to configure in CMX dashboard. You need to connect to <https://your-cmx-ip/> from a browser to configure the token.
1 token(s) added [Create New Token](#)
[View Tokens](#)
- 3 Add CMX into Location Hierarchy**
Once CMX connected to Cisco DNA Spaces, you can add them into the location hierarchy.
0 Campus(s) imported to location hierarchy [Add CMX](#)
[View Location Hierarchy](#)

Need Help?
Access the below links to view detailed help.
[View Configuration Steps](#) [CF](#)
[Frequently Asked Questions](#) [CF](#)

Passaggio 2. Scegliere il percorso in cui importare CMX e fare clic su **Avanti**. Se è la prima volta che si importa un CMX, è possibile che venga visualizzata la posizione predefinita, ad esempio il nome dell'account Cisco DNA Spaces.

Add CMX to Location Hierarchy



Where do you want to import CMX?

Choose a location that you want to import.

☰ Search Locations

AndresSilva 

Nota: Cisco DNA Spaces non consente di aggiungere due nodi CMX con lo stesso punto di accesso.

Passaggio 3. Configurare il **nome visualizzato** e selezionare Campus, Building e Floors che si desidera aggiungere da CMX alla gerarchia di posizioni. Quindi, fare clic su **Import**.

Add CMX to Location Hierarchy



DISPLAY NAME

Display name

Choose the Sites you want to import

Campus	Building	Floor
<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All
<input checked="" type="checkbox"/> Cisco Mexico	<input checked="" type="checkbox"/> MXC10	<input checked="" type="checkbox"/> 14th floor

Cisco DNA Spaces organizza la gerarchia di posizioni in base ai siti selezionati e include gli AP associati a ciascun sito.

Passaggio 4. Configurare il fuso orario per campus/edificio/piano in base all'ubicazione. Passare a **Gerarchia posizione** in Cisco DNA Spaces. Posizionare il mouse sul campus, sull'edificio o sul pavimento, quindi fare clic su **Informazioni posizione**. Immettere i valori e fare clic su **Aggiorna**.

Nota: Il fuso orario definito influisce sulle regole e sui report di Cisco DNA Spaces.

Verifica

Per verificare che il proxy in uscita sia configurato su CMX, eseguire questo comando:

```
[cmxadmin@CMX-andressi ~]$ cmxos sysproxy show
```

Per confermare che CMX sta comunicando con Cisco DNA Spaces, passare a **Gestisci > App cloud** su CMX e vedere le statistiche della notifica in direzione nord:

Name	Description	Links	Actions
Cisco DNA Spaces	Cisco DNA Spaces is Cisco's new location platform. Tethering to Cisco DNA Spaces will send updates related to the deployment including information such as the maps and AP placement as well as the ongoing location updates. The destination of these updates will be to Cisco DNA Spaces cloud.	Login	Disable Update Map Status
Cisco Operational Insights	Cisco Operational Insights is a cloud based solution to manage assets within a location. Using various input signals, this solution allows you to operationalize and benefit from better understanding of assets within an environment.	Login	Enable
Cisco Beacon Management	Cisco Beacon Management is a comprehensive resource for detecting and monitoring Bluetooth Low Energy (BLE) Beacons, as well as managing CCX BLE Devices within your network.	Login	Enable

Notifications

Name	Notification Receiver	Total Sent	Acknowledged Count	Unacknowledged Count	Success Percent	Failure Percent	Latency(in ms)	Actions
DNASpaces-all	https://cmx.dnaspaces.io:443/api/v1/cmx/notifications/locationUpdate	9	9	0	100.00%	0.00%	548	Reset

Per verificare che la gerarchia di posizioni sia configurata come in CMX, passare a **Gerarchia di posizioni** in Spazi DNA e fare clic sul nome CMX:

The screenshot shows the 'Location Hierarchy' section of the Cisco DNA Spaces interface. The left sidebar contains navigation options: Home, Location Hierarchy (selected), Monitoring & Support, Users, and Setup. The main content area displays a search bar for 'Search Locations' and a tree view of the location hierarchy. The hierarchy is as follows: AndresSilva (1 2 3 4 5) -> CMX-Andressi (1 2 3 4 5) -> Cisco Mexico (1 2 3 4 5) -> MXC10 (1 2 3 4 5) -> 14th floor (1 2 3 4 5). Each level of the hierarchy has a set of five small circular icons representing different views or actions.

Risoluzione dei problemi

Al momento non sono disponibili informazioni specifiche per la risoluzione dei problemi di questa configurazione.

Informazioni su questa traduzione

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