

使用IoT OD在IW AP上配置點對多點網路

目錄

簡介

本檔案介紹使用IoT Operations Dashboard中的範本在工業無線(IW) AP上設定單點對多點網路。

訪問IoT OD

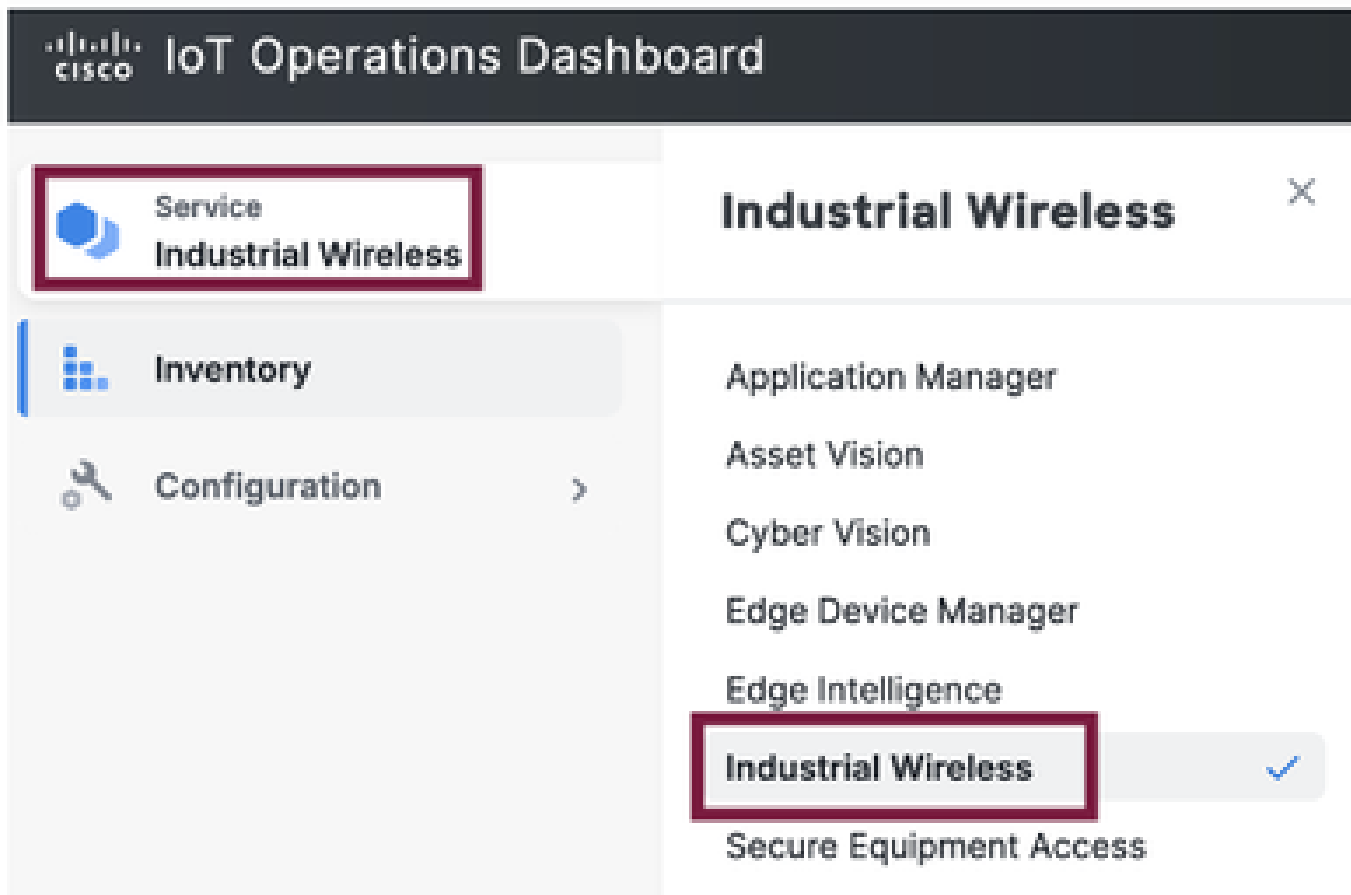
IW存取點(AP) (如IW9165和IW9167) 可以配置為CAPWAP或URWB模式。

在URWB模式下配置這些存取點時，可以使用IoT-Operations Dashboard或本地離線模式配置它們。根據租戶所在位置，可以使用這些連結訪問IoT Operations Dashboard。

<https://us.ciscoiot.com>

<https://eu.ciscoiot.com>

登入並選擇正確的租戶後，在Service下選擇Industrial Wireless以訪問CURWB無線電的功能集。



手動上線

可以從資產頁面將裝置手動註冊到IoT OD。

選擇Add Devices並選擇已增加裝置的PID。CSV檔案可以上傳，帶有其上裝置的序列號和MAC地址；每行都有一個條目。

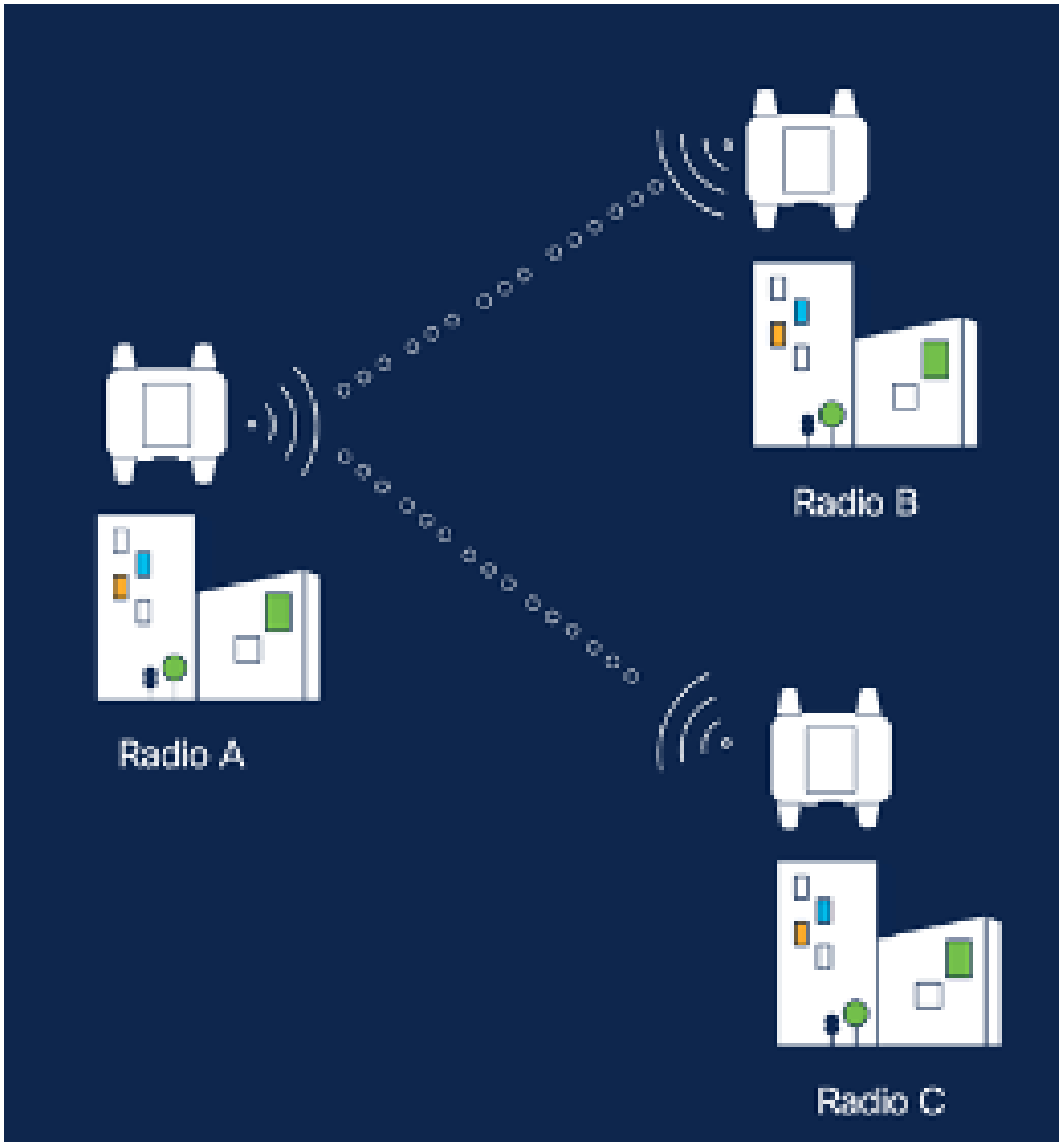
範例：SN001234，00：f1：ca：00:00:01

SN003457，00：f1：ca：00:00:02

上傳後，點選底部的Add devices（增加裝置），手動將裝置導入控制台。然後，它們將顯示在「資產」頁籤下。

IoT OD單點對多點配置

使用IW916x存取點的點對多點設定可透過IoT OD進行設定，只需幾個簡單的步驟。考慮使用三個AP，即無線電A充當網狀終端，無線電B和無線電C充當網狀點。



1. 將裝置增加到IoT OD且狀態為「聯機」後，可以透過選擇所需的裝置來編輯配置。按一下裝置並導航到「配置」頁籤，選擇「編輯」按鈕以更新配置。

Device Configuration [Edit](#) [Push IoT OB Configuration](#)

IoT OB Configuration

ID 0

Saved - 2024-06-24 10:49:38 am

Last heard configuration

ID -

Last heard - 2024-06-26 23:08:22 pm

 Last heard and IoT OB Configuration do not match.

[Review previous configurations](#)

Only show differences

- General
- Wireless Radio
- Advanced Radio Settings
- Key Control
- FullTAM
- Multicast
- SNMP
- Radios
- NTP

General

	IoT OB	Last Heard
Mode	Mesh Point	Mesh End
Radio off	Off	Off
Local IP Address	192.168.0.10	10.122.136.9
Local Netmask	255.255.255.0	255.255.255.192
Default Gateway		10.122.136.1
Local Dns 1		172.18.168.24
Local Dns 2		172.18.168.43

Edit Device Configuration

- General**
- Wireless Radio
- Advanced Radio Settings
- Key Control
- FluidMAX
- Multicast
- SNMP
- Radius
- NTP
- L2TP
- Vlan
- Fluidity
- Fluidity Advanced
- Fluidity Pole Proximity

General

Mode
•

Mesh Point

Radio off

Radio off mode
Select Value

Local IP Address
•
192.168.0.10

Local Netmask
•
255.255.255.0

- 對於PTMP配置，在「常規模式」部分，直接連線到物理網路（無線電A）的AP被配置為網狀終端，而連線到終端裝置（無線電B和無線電C）的兩個AP被配置為網狀點。

Edit Device Configuration

🔍 Search

- General
- Wireless Radio
- Advanced Radio Settings
- Key Control
- FluidMAX
- Multicast
- SNMP
- Radius
- NTP
- L2TP
- Vlan
- Fluidity
- Fluidity Advanced
- Fluidity Pole Proximity

General

● Mode
Mesh End

● Radio off

● Radio off mode
Fixed

● Local IP Address
10.122.136.9

Local Netmask
255.255.255.0

無線電A配置

Edit Device Configuration

🔍 Search

- **General**
- Wireless Radio
- Advanced Radio Settings
- Key Control
- FluidMAX
- Multicast
- SNMP
- Radius
- NTP
- L2TP
- Vlan
- Fluidity
- Fluidity Advanced
- Fluidity Pole Proximity

General

Mode



Mesh Point



Radio off



Radio off mode



Fixed



Local IP Address



10.122.136.10



Local Netmask



255.255.255.0

無線電B配置

Edit Device Configuration

- General**
- Wireless Radio
- Advanced Radio Settings
- Key Control
- FluidMAX
- Multicast
- SNMP
- Radius
- NTP
- L2TP
- Vlan
- Fluidity
- Fluidity Advanced
- Fluidity Pole Proximity

General

Mode

Mesh Point

Radio off

Radio off mode

Select Value

Local IP Address

192.168.0.11

Local Netmask

255.255.255.0

無線電C配置

3. 在「Wireless Radio」部分下，所有三個無線電必須配置相同的密碼。對於此設定，我們僅啟用每個IW裝置一個無線電。啟用您選取的無線電（無線電1或無線電2），並確定所有無線電的頻率和通道寬度都相同。連線天線時，必須使用基於所選無線電的正確外部埠。

Edit Device Configuration

Search

- General
- Wireless Radio**
- Advanced Radio Settings
- Key Control
- FluidMax
- Multicast
- SNMP
- RADIUS
- NTP
- L2TP
- VLAN
- Fluidity
- Fluidity Advanced
- Fluidity PoE Proximity

Wireless Radio

Passphrase
CiscoFWB123

Radio 1 enabled <input checked="" type="checkbox"/>	Radio 2 enabled <input type="checkbox"/>
Radio 1 role Fluid	Radio 2 role Select Value
Radio 1 Frequency (MHz) 5180 MHz	Radio 2 Frequency (MHz) Select Value
Radio 1 Channel width 80	Radio 3 Channel width Select Value

在PTMP設定的「無線電」段落中，網狀端無線電A的無線電角色設定為Fluidmax Primary，而網狀點無線電B和C設定為Fluidmax Secondary。

Edit Device Configuration

Search

- General
- Wireless Radio**
- Advanced Radio Settings
- Key Control
- FluidMAX
- Multicast
- SNMP
- Radius
- NTP
- L2TP
- Vlan
- Fluidity
- Fluidity Advanced
- Fluidity Role Proximity

Wireless Radio

Passphrase

CiscoFW0

Radio 1 enabled



Radio 2 enabled



Radio 1 role

Fluidmax primary



Radio 2 role

Select Value



Radio 1 Frequency (MHz)

5180 MHz



Radio 2 Frequency (MHz)

Select Value



Radio 1 Channel width

80



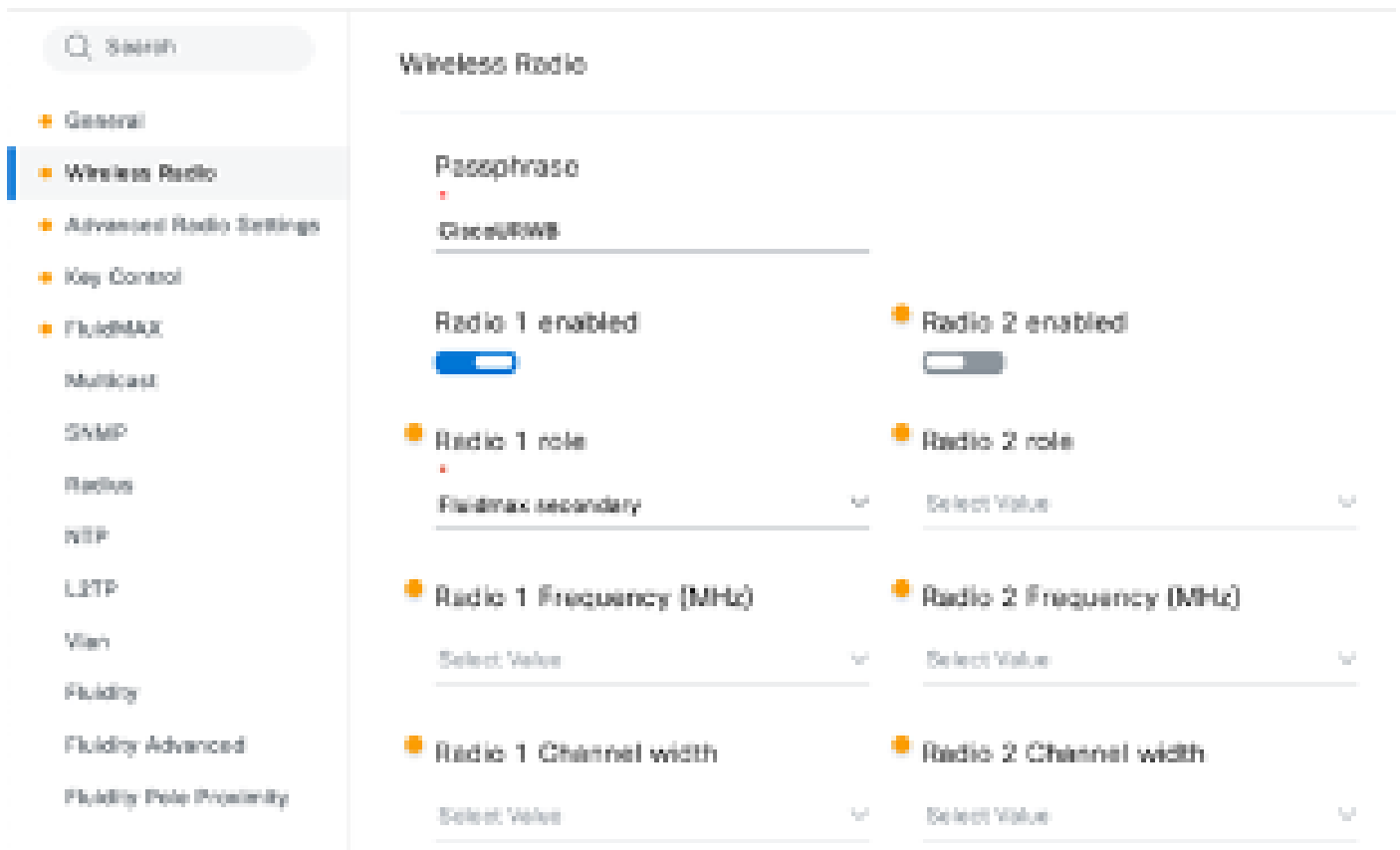
Radio 2 Channel width

Select Value



無線電A配置

Edit Device Configuration



Search

- General
- Wireless Radio**
- Advanced Radio Settings
- Key Control
- FluidMAX
- Multicast
- SNMP
- Radius
- NTP
- L2TP
- Vlan
- Fluidity
- Fluidity Advanced
- Fluidity Pole Proximity

Wireless Radio

Passphrase
CiscoURWB

Radio 1 enabled Radio 2 enabled

Radio 1 role: Fluidmax secondary Radio 2 role: Select Value

Radio 1 Frequency (MHz): Select Value Radio 2 Frequency (MHz): Select Value

Radio 1 Channel width: Select Value Radio 2 Channel width: Select Value

無線電波B和C配置

- 當級聯拓撲中存在多個PTMP部分時，可使用Fluidmax主/次模式來標識單個集群。Fluidmax主無線電的每個集群及其對應的Fluidmax輔助無線電都被分配了一個集群ID。此引數在「Fluidmax」部分配置。在此設定中，集群ID在所有三個無線電上都設定為預設「CiscoURWB」。

Edit Device Configuration

Search

- General
- Wireless Radio
- Advanced Radio Settings
- Key Control
- FluidMAX**
- Multicast
- SNMP
- Radius
- NTP
- L2TP
- Vlan
- Fluidity
- Fluidity Advanced
- Fluidity Pole Proximity

FluidMAX

Radio 1 FluidMAX™ mode	Radio 2 FluidMAX™ mode
Primary	Select Value
Radio 1 FluidMAX™ Autoscan	Radio 2 FluidMAX™ Autoscan
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Radio 1 FluidMAX Cluster ID	Radio 2 FluidMAX Cluster ID
CiscoURWB	CiscoURWB
Radio 1 Enable FluidMAX Tower ID	Radio 2 Enable FluidMAX Tower ID
<input type="checkbox"/>	<input type="checkbox"/>
Radio 1 FluidMAX Tower ID	Radio 2 FluidMAX Tower ID
CiscoURWB	CiscoURWB
Radio 1 Critical RSSI threshold	Radio 2 Critical RSSI threshold

編輯配置後，按一下底部的「儲存」。

- 現在，可使用「Push IoT OD Configuration」（按IoT OD配置）按鈕將更新的配置從IoT OD直接推送到無線電。出現提示後，按一下「確認」。裝置將重新啟動，並可從推送的配置從IP訪問。

Home > Cisco Configuration

Cisco

Summary Configuration

Device Configuration [Edit](#) [Push IoT OD Configuration](#)



Push Configuration

You're about to push the latest IoT CG device configuration (Conf. ID: 2) to the device Cisco (Serial Number EWC2702000K). This operation will take up to 5 minutes. Your device will reboot automatically.

[Cancel](#)

[Confirm](#)



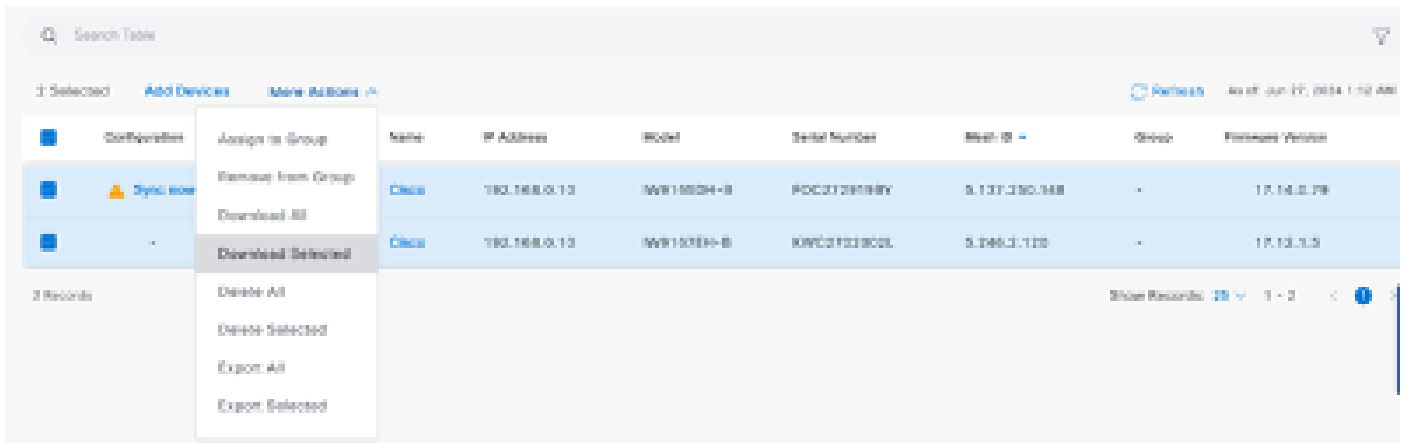
Push Configuration

You're about to push the latest IoT CG device configuration (Conf. ID: 2) to the device Cisco (Serial Number EWC2702000K). This operation will take up to 5 minutes. Your device will reboot automatically.

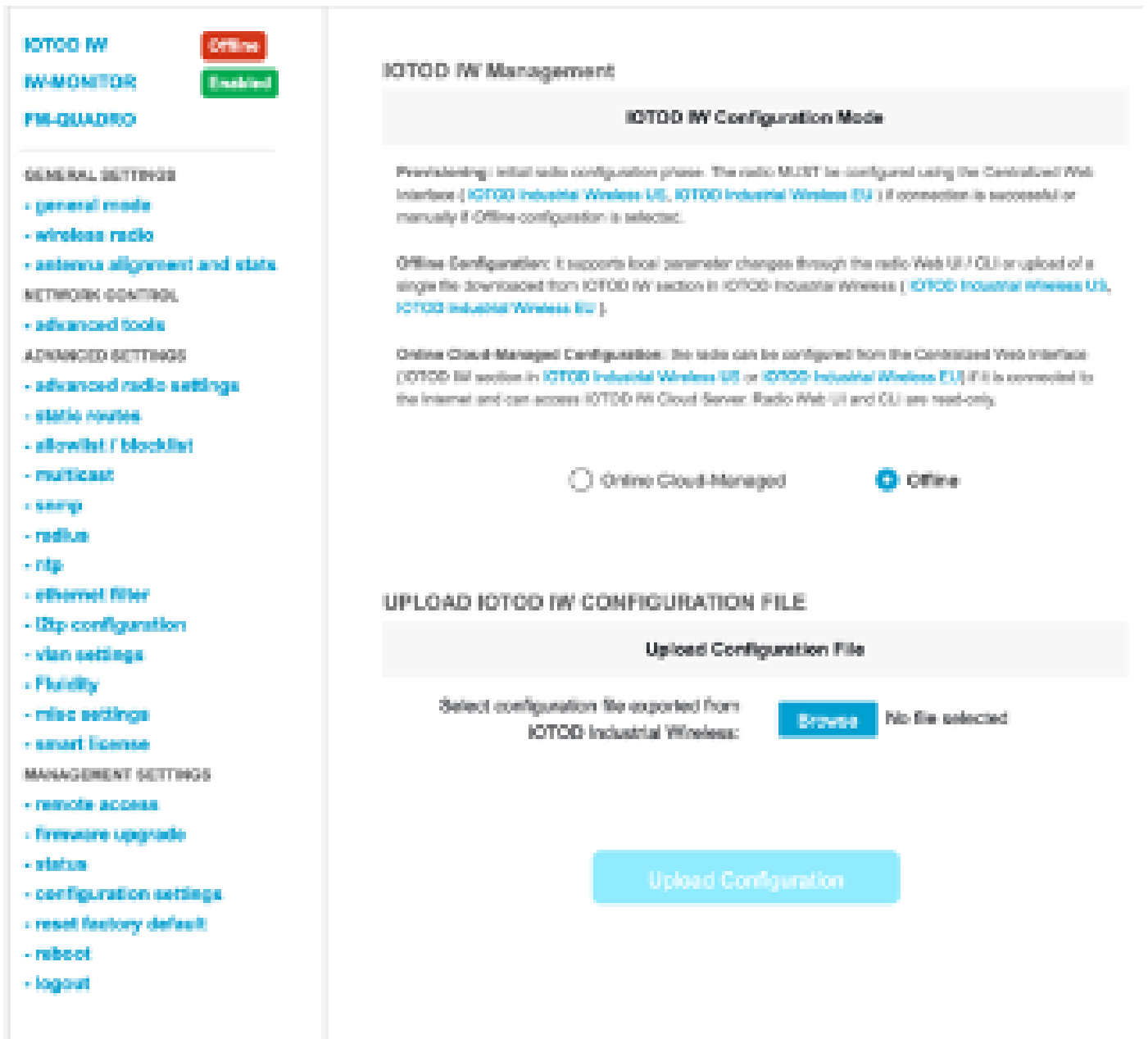
[Cancel](#)

[Confirm](#)

6. 如果無線電處於「離線」狀態，則推送配置的另一個選項是下載配置檔案。從「資產」頁籤中選擇一個或多個裝置，然後從「更多操作」下拉選單中選擇「下載選定內容」按鈕。



下載副檔名為.iwconf的檔案。相同的檔案可以從IoT-OD頁籤上傳到裝置的GUI。



您可以在「狀態」頁面上檢查組態。

The screenshot displays the Cisco URWB IW9167EH Configurator interface. At the top left is the Cisco logo with the tagline 'ULTRA RELIABLE WIRELESS BACKHAUL'. The top right shows the device name 'Cisco URWB IW9167EH Configurator' and the IP address '5.246.226.200 - MESH END MODE'.

The interface is divided into two main sections. The left section contains a navigation menu with the following items:

- IOTOD IW (Offline)
- IW-MONITOR (Disabled)
- FM-QUADRO
- GENERAL SETTINGS
 - general mode
 - wireless radio
 - antenna alignment and stats
- NETWORK CONTROL
 - advanced tools
- ADVANCED SETTINGS
 - advanced radio settings
 - static routes
 - allowlist / blocklist
 - multicast
 - snmp
 - radius
 - ntp
 - ethernet filter
 - l2tp configuration
 - vlan settings
 - Fluidity
 - misc settings
 - smart license
- MANAGEMENT SETTINGS
 - remote access
 - firmware upgrade
 - status
 - configuration settings
 - reset factory default
 - reboot
 - logout

The right section displays the device status and configuration details:

STATUS

Device: Cisco Catalyst IW9167E Heavy Duty Access Point
Name: ME_Primary
ID: 5.246.226.200
Serial: K9KC280208AS
Operating Mode: Mesh End
Uptime: 3 min
Firmware version: 17.14.0.79

DEVICE SETTINGS

IP: 10.122.136.50
Netmask: 255.255.255.192
MAC address: 40:36:5a:76:e2:c8
Configured MTU: 1530

WIRED0

Status: up
Speed: 6000 Mb/s
Duplex: full
MTU: 1530

WIRED1

Status: down

WIRELESS SETTINGS

Operating region: B

Radio 1

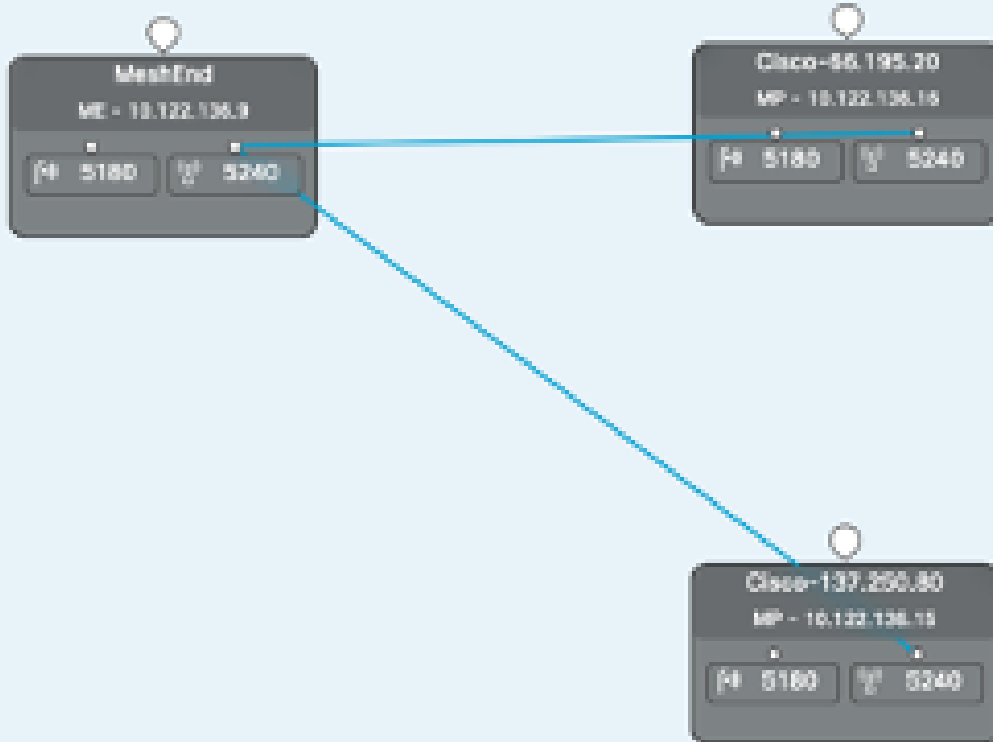
Interface: enabled
Mode: fluidmax primary
Frequency: 5180 MHz
Channel: 36
Channel Width: 80 MHz
Current tx power: 22 dBm
Current tx power level: 1
Antenna gain: not selected
Antenna number: 2
Radio Mode: primary
Maximum link length: 3 km

Radio 2

Interface: disabled
Mode: fixed infrastructure
Frequency: 5180 MHz
Channel: 36
Channel Width: 80 MHz
Current tx power: 19 dBm

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7. 可以訪問Mesh End無線電上的FM-Quadro頁面來檢查PTP設定的佈局。



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）。