



Cisco Universal Small Cell 8x18 Dual-Mode Module

- [Information About Cisco Universal Small Cell 8x18 Dual-Mode Module, page 1](#)
- [Configuring Cisco Universal Small Cell 8x18 Dual-Mode Module, page 2](#)
- [Configuring USC8x18 Dual-Mode Module in Different Scenarios, page 3](#)

Information About Cisco Universal Small Cell 8x18 Dual-Mode Module

Cisco Universal Small Cell 8x18 Dual-Mode Module is an external module (4G/LTE) that can be plugged into the Cisco Aironet 3600I APs or Cisco Aironet 3700I APs. The following features are available:

- You can configure VLAN tagging for the external module's traffic for the following modes:

Mode	Native VLAN	Non-Native VLAN
FlexConnect Local Switching	Supported	Supported
Local Mode Central Switching	Supported	Supported

- The module can be powered up by the PoE+ power supply
- Co-existence detection and warning when Wi-Fi in 2.4 GHz and 3G/4G module are enabled
- The module's inventory details are available on the Cisco WLC GUI at **Wireless > Access Points > Access Point name > Inventory**.
- Supported on the following Cisco Wireless Controller models:
 - Cisco 2504 WLC
 - Cisco 5508 WLC
 - Cisco 5520 WLC

- Cisco Flex 7510 WLC
 - Cisco 8510 WLC
 - Cisco 8540 WLC
 - Cisco Virtual Controller
 - Cisco WiSM2
- Supported on the following Cisco Access Point models:
 - Cisco Aironet 3600I AP
 - Cisco Aironet 3700I AP

Restrictions

Cisco Universal Small Cell 8x18 Dual-Mode Modules are not supported on the following Cisco Access Point models:

- Cisco Aironet 3600E AP
- Cisco Aironet 3700E AP

For more information about Cisco Universal Small Cell 8x18 Dual-Mode modules, see <http://www.cisco.com/c/en/us/support/wireless/universal-small-cell-8000-series/tsd-products-support-series-home.html>.

Configuring Cisco Universal Small Cell 8x18 Dual-Mode Module

Configuring Cisco Universal Small Cell 8x18 Dual-Mode Module (GUI)

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- Step 1** Choose **Wireless > Access Points > All APs**.
- Step 2** Click the AP name.
The **All APs > Details** page is displayed.
- Step 3** In the **Advanced** tab, check or uncheck the **External Module Status** check box.
You might be prompted with a co-existence warning when Wi-Fi in 2.4-GHz and 3G/4G module are enabled.
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Configuring Cisco Universal Small Cell 8x18 Dual-Mode Module (CLI)

- Enable or disable the Cisco USC 8x18 Dual-Mode Module by entering this command:
config ap module3G {enable | disable} ap-name
You might be prompted with a co-existence warning when Wi-Fi in 2.4-GHz and 3G/4G module are enabled.

Configuring USC8x18 Dual-Mode Module in Different Scenarios

Configuring VLAN Tagging for USC8x18 Dual-Mode Module in FlexConnect Local Switching (GUI)

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- Step 1** Choose **Wireless > Access Points > All APs**.
- Step 2** Click the AP name.
The **All APs > Details** page is displayed.
- Step 3** In the **FlexConnect** tab, check the **VLAN Support** check box and enter the number of the native VLAN on the remote network (such as 100) in the **Native VLAN ID** box.
- Step 4** To enable FlexConnect Local Switching with VLAN ID that is other than 0:
- Enable **FlexConnect Local Switching** under **External Module**.
 - Enter a value between 2 and 4096 in the **VLAN ID** box.
 - Click **Apply**.
- Step 5** To enable FlexConnect local switching with VLAN ID equal to 0:
- Enable **FlexConnect Local Switching** under **External Module**.
 - Click **Apply**.
- Step 6** To remove the FlexConnect local switching per AP configuration, click **Remove AP Specific Config**.
- Step 7** Save the configuration.
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Configuring VLAN Tagging for USC8x18 Dual-Mode Module in FlexConnect Local Switching (CLI)

- **config ap flexconnect module-vlan enable *ap-name*** —Enables FlexConnect local switching for external module with native VLAN
- **config ap flexconnect module-vlan remove *ap-name***—Removes the AP specific external module VLAN configuration
- **config ap flexconnect module-vlan enable *ap-name* vlan *vlan-id***—Enables FlexConnect local switching with non-native VLAN for the external module
- **show ap module summary {*ap-name* | all}**—Displays detailed information about the external module.
- **show ap inventory {*ap-name* | all}**—Displays information about the AP's inventory and the external module, if the module is present
- **show ap flexconnect module-vlan *ap-name***—Displays status of FlexConnect local switching and VLAN ID value

- **show ap config general *ap-name***—Displays information about the external module info, if the module is present.

Configuring VLAN Tagging for USC8x18 Dual-Mode Module in FlexConnect Group Local Switching (GUI)

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- Step 1** Choose **Wireless > FlexConnect Groups**.
- Step 2** Click **New**, enter the FlexConnect group name, and click **Apply**.
- Step 3** On the **FlexConnect Groups > Edit** page, in the **FlexConnect APs** area, click **Add AP**.
- Step 4** You can either select an AP from a list of APs associated with the Cisco WLC or directly specify the Ethernet MAC address of the AP that is associated with the Cisco WLC.
- Step 5** Click **Add**.
- Step 6** To enable FlexConnect Local Switching with VLAN ID:
- Enable **FlexConnect Local Switching** under **External Module Configuration**.
 - Enter a value between 2 and 4096 in the **VLAN ID** box.
 - Click **Apply**.
- Step 7** Save the configuration.
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Configuring VLAN Tagging for USC8x18 Dual-Mode Module in FlexConnect Group Local Switching (CLI)

- **config flexconnect group *group-name* module-vlan enable vlan *vlan-id***—Enables FlexConnect local switching for the FlexConnect group
- **config flexconnect group *group-name* module-vlan disable**—Disables the FlexConnect local switching for the FlexConnect group
- **show flexconnect group detail *group-name* module-vlan**—Displays status of the FlexConnect local switching and VLAN ID in the group

Configuring USC8x18 Dual-Mode Module in Local Mode Central Switching (GUI)

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- Step 1** Create a Remote LAN.
For instructions to create a remote LAN, see the *Configuring Remote LANs* chapter under *WLANS*.
- Step 2** On the **WLANS > Edit** page, click the **Security** tab.
- Step 3** In the **Layer 2** sub-tab, uncheck the **MAC Filtering** check box.

Note Remote LAN should be configured only with open security. 802.1X security is not supported.

Step 4 To see the current state of the 3G/4G client, choose **Monitor > Clients** to open the **Clients** page.

Step 5 Save the configuration.

Configuring USC8x18 Dual-Mode Module in Local Mode Central Switching (CLI)

- Create a Remote LAN.
For instructions to create a remote LAN, see the *Configuring Remote LANs* chapter under *WLANS*.
- **config interface 3g-vlan** *interface-name* {**enable** | **disable**}—Enables or disables the 3G/4G-VLAN interface
- **show interface detailed** *interface-name*—Displays status of the 3G/4G-VLAN flag
- **show client summary ip**—Displays status of the 3G/4G clients

