Cisco Embedded Wireless Controller (EWC) on Catalyst 9100 Access Points
Converting EWC-AP to Catalyst 9100 Series CAPWAP

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Converting an EWC AP to a CAPWAP AP

There are typically two reasons why a user would want to convert an access point running the Cisco® Embedded Wireless Controller (EWC) image to the Control and Provisioning of Wireless Access Points (CAPWAP) protocol:

1. You want to keep the access point in an EWC deployment but do not want the access point to participate in the master election process upon a failover of the master access point.

2. You want to migrate one or more access points with the EWC to an appliance or virtual Wireless LAN Controller (vWLC)-based deployment.
EWC-AP to CAPWAP AP using the EWC CLI

A user can convert an EWC AP to function only as CAPWAP by executing a command in the EWC AP (master AP) CLI.

Note: The access point will reboot and the AP type will change to NOT EWC CAPABLE. Also, after the AP is converted to CAPWAP, it will no longer participate in the master election process.

EWC-AP#wireless ewc-ap ap-type<AP name>capwap

Master AP 16.12.2s

1

CAPWAP AP 16.12.2s
EWC to CAPWAP AP using EWC WebUI

- From the EWC web-ui ‘Expert View’ navigate to Configuration > Wireless > Access Points
  - Fields called Image Type and EWC Capable have been added
  - Select the appropriate access point(s) and click Convert to CAPWAP or EWC
EWC-AP to CAPWAP AP using the AP CLI

A user can also convert an EWC-capable access point to function only as CAPWAP by executing a command in the AP CLI.

Note: The access point will reboot and the AP type will change to not EWC capable. Also, after the AP is converted to CAPWAP, it will no longer participate in the master election process.

EWC Capable AP 16.12.2s

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AP#ap-type capwap

CAPWAP AP 16.12.2s
Convert the EWC access point to CAPWAP using DHCP Option 43

**Use cases**

- The customer wants to order CAPWAP APs but mistakenly orders EWC APs. This forces the customer to do conversion from the EWC AP to CAPWAP before APs can join the WLC, resulting in significant overhead for the customer.

**Feature**

- Configure Option 43 on DHCP scope with sub type to convert AP type EWC-AP to CAPWAP.
- Different sub types include:
  - 0xF1 - Normal DHCP Option 43 configuration
  - 0xF2 - Used for converting EWC APs
- After receiving DHCP Option 43 and sub type 0xF2, the AP will convert the AP type from EWC-AP Capable to not EWC-AP Capable and follows the regular WLC join process.

**Option 43 syntax**

- The user can configure DHCP Option 43 along with the sub option '0xF2' followed by the length (05), WLC IP address(s), and conversion value (01).
- Example: Option 43 hex F205AC14E51201
  - 05 – For one WLC
  - 09 – For two WLCs
  - 13 – For three WLCs