Zero Wait Dynamic Frequency Selection

Information About Zero Wait Dynamic Frequency Selection

Access points (APs) monitor and perform Channel Availability Check (CAC) on a potential channel for 60 seconds when AP moves to Dynamic Frequency Selection (DFS) channels. Further, the AP ensures that there is no radar operating in the same frequency range before advertising beacons and serving clients. When the AP moves to a DFS, there is a service outage for a minute. This outage can be higher and extend up to 10 minutes. The Zero Wait Dynamic Frequency Selection feature helps to avoid the service outage in regulatory domains. As of now, U.S. and Europe are the only supported domains.

Configuring Zero Wait Dynamic Frequency Selection Globally (CLI)

Procedure

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 2	**ap dot11 5ghz rrm channel zero-wait-dfs** **Example:** `Device(config)# ap dot11 5ghz rrm channel zero-wait-dfs`	Enables the Zero Wait Dynamic Frequency Selection feature. By default, the feature is disabled. Use the **no** form of this command to disable the feature.

	Command or Action	Purpose
		Note Tthe Zero Wait Dynamic Frequency Selection feature is only available on a 5-GHz radio.

Configuring Zero Wait Dynamic Frequency Selection Globally (GUI)

Procedure

Step 1 Choose **Configuration > Radio Configurations > RRM**.

Step 2 In the **RRM** page, click the **5 GHz Band** tab.

Step 3 Click the **DCA** tab.

Step 4 Select the **Zero Wait DFS** check box to allow the AP to change to DFS without a service outage.

Step 5 Click **Apply**.

Enabling Zero Wait Dynamic Frequency Selection on a RF Profile (CLI)

Procedure

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 2	**ap dot11 5ghz rf-profile** *profile-name* **Example:** `Device(config)# ap dot11 5ghz rf-profile test-dfs`	Configures a radio frequency (RF) profile and enters RF profile configuration mode.
Step 3	**channel zero-wait-dfs** **Example:** `Device(config-rf-profile)# channel zero-wait-dfs`	Enables the Zero Wait Dynamic Frequency Selection feature for the RF profile. Use the **no** form of this command to disable the feature.

Enabling Zero Wait Dynamic Frequency Selection on a RF Profile (GUI)

Procedure

Step 1 Choose **Configuration > Tags & Profiles > RF/Radio**.

Step 2 In the **RF** tab, click **Add**.

The **Add RF Profile** page is displayed.

Step 3 Enter the name for the RF profile.

Step 4 From the **Radio Band** drop-down, choose the **5 GHz** band.

Step 5 Click the **RRM** tab.

Step 6 Click the **DCA** tab.

Step 7 Select the **Zero Wait DFS** check box to allow the AP to change to DFS without a service outage.

Step 8 Click **Apply to Device**.

Verifying Zero Wait Dynamic Frequency Selection Configuration

Use the following commands to verify the DFS configuration.

To display the Zero Wait DFS configuration on an AP, use the following command:

```
Device# show ap name ap1 config slot 1 | inc Zero

  Zero Wait DFS Parameters
    Zero Wait DFS Capable                       : Yes
    CAC Domain                                  : None
```

To display the global configuration related to the Zero Wait Dynamic Frequency Selection feature, use the following command:

```
Device# show ap dot11 5ghz channel | inc Zero

  Zero Wait DFS Parameters
    Zero Wait DFS Capable                       : Yes
    CAC Domain                                  : None
```

To display the RF profile configuration related to the Zero Wait Dynamic Frequency Selection feature, use the following command:

```
Device# show ap rf-profile name test detail | sec Zero

Description                       :
RF Profile Name                   : test
Band                              : 5 GHz
Transmit Power Threshold v1       : -70 dBm
Min Transmit Power                : -10 dBm
Max Transmit Power                : 30 dBm
.
```

```
.
.
Guard Interval                  : default
Zero Wait DFS                   : Enabled
```