EDCA Parameters

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EDCA parameters

An Enhanced Distributed Channel Access (EDCA) parameter is a wireless channel access configuration that

- assigns preferential access to voice, video, and other quality of service (QoS) traffic
- differentiates wireless traffic priority through distinct parameter settings, and
- enables customization of wireless performance using controller GUI or CLI interfaces.

Configure EDCA parameters (GUI)

Set global EDCA parameters to optimize channel access for voice, video, and quality-of-service traffic on your wireless networks using GUI.

Procedure

Step 1 Choose **Configuration** > **Radio Configurations** > **Parameters**. On this window, you can configure global parameters for 802.11a/n/ac (5 GHz) and 802.11b/g/n (2.4 GHz) radios.

Note
You cannot configure or modify parameters, if the radio network is enabled. Disable the network status in the **Configuration** > **Radio Configurations** > **Network** window before proceeding. To apply the EDCA settings to the WLANs, disable and then re-enable the WLANs.

Step 2 In the **EDCA Parameters** section, select an EDCA profile from the **EDCA Profile** drop-down list. Enhanced Distributed Channel Access (EDCA) parameters provide preferential wireless channel access for voice, video, and other QoS traffic.

Step 3 For 802.11a/n/ac (5 GHZ) radios, in the (DFS 802.11h) section, enter the local power constraint. You cannot configure power constraint if the DTPC Support check box on the **Configure** > **Radio Configurations** > **Network** page is checked. The valid range is 0 dBm to 30 dBm.

Step 4 Check the **Channel Switch Announcement Mode** check box, if you want the AP to announce when it is switching to a new channel and the new channel number. The default value is disabled.

Step 5 Check the **Smart DFS** check box to enable Dynamic Frequency Selection (DFS) and avoid radar signal interference.

Step 6 Click **Apply**.

Configure EDCA parameters (CLI)

Set EDCA parameters on a wireless controller to optimize Quality of Service (QoS) for different traffic profiles and improve network performance using commands.

Procedure

Step 1 Enter the global configuration mode.

Example:

```
Device# configure terminal
```

Step 2 Disable the radio network.

Example:

```
Device(config)# ap dot11 {5ghz | 24ghz | 6ghz} shutdown
```

Step 3 Enable specific EDCA parameters for the 802.11a, 802.11b/g, or 802.11 6-GHz network.

Example:

```
Device(config)# ap dot11 {5ghz | 24ghz | 6ghz} edca-parameters {client-load-based |
custom-voice | fastlane | optimized-video-voice | optimized-voice | svp-voice | wmm-default}
```

Note
The **custom-voice** option is not supported for Cisco Catalyst 9800 Series Wireless Controller .

- **client-load-based**: Enables client load based EDCA configuration.
- **custom-voice**: Enables custom voice parameters for the 802.11a or 802.11b/g network.
- **fastlane**: Enables the fastlane parameters for the 802.11a or 802.11b/g network.
- **optimized-video-voice**: Enables EDCA voice-optimized and video-optimized parameters for the 802.11a or 802.11b/g network. Choose this option when both voice and video services are deployed on your network.
- **optimized-voice**: Enables non-SpectraLink voice-optimized profile parameters for the 802.11a or 802.11b/g network. Choose this option when voice services other than SpectraLink are deployed on your network.
- **svp-voice**: Enables SpectraLink voice-priority parameters for the 802.11a or 802.11b/g network. Choose this option if SpectraLink phones are deployed on your network to improve the quality of calls.

- **wmm-default**: Enables the Wi-Fi Multimedia (WMM) default parameters for the 802.11a or 802.11b/g network. This is the default option. Choose this option when voice or video services are not deployed on your network.

Step 4 Enable the radio network and return to the privileged EXEC mode.

Example:

```
Device(config)# no ap dot11 {5ghz | 24ghz | 6ghz} shutdown
Device(config)# end
```

Step 5 Display the current status of MAC optimization for voice.

Example:

```
Device# show ap dot11 {5ghz | 24ghz | 6ghz} network
```