

Configure the Basic Radio Settings on the WAP581

Objective

The radio is the physical part of the Wireless Access Point (WAP) that creates a wireless network. The radio settings on the WAP control the behavior of the radio and determine what kind of wireless signals the WAP sends out.

Why do we need to configure the basic radio settings on the WAP?

The performance of the WAP can be compromised and interrupted if it is in close range to other wireless sources. Configuring the basic radio settings on the WAP is useful in order to avoid problems due to wireless interference from other wireless sources within the range. This way, you can be sure that the WAP is providing optimum wireless capability without worrying about interruptions due to interference.

The objective of this document is to show how to configure the basic radio settings on the WAP581.

Applicable Devices

- WAP581

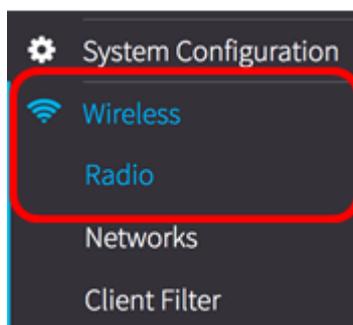
Software Version

- 1.0.0.4

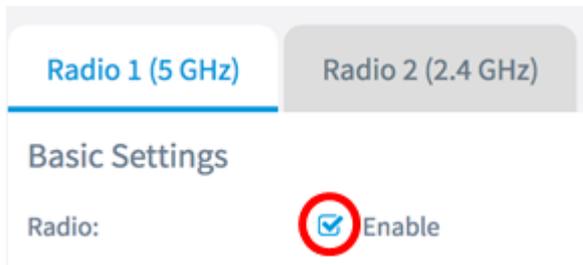
Configure the Basic Radio Settings

Configure Radio 1 (5 GHz)

Step 1. Log in to the access point web-based utility and choose **Wireless > Radio**. You will be automatically brought to the Radio 1 (5 GHz) tab.



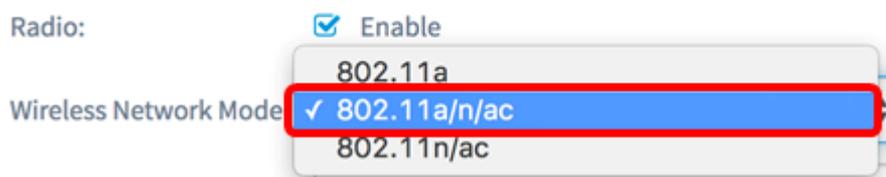
Step 2. Under Basic Settings, check the **Enable** check box in the Radio area to enable the Radio for the 5 GHz band.



Step 3. Choose a Wireless Network Mode from the drop-down menu. The options are:

- 802.11a — This option allows only wireless clients with 802.11a standard to connect to the WAP.
- 802.11a/n/ac — This option allows wireless clients with 802.11a, 802.11n, and 802.11ac standards to connect to the WAP.
- 802.11n/ac — This option allows wireless clients with 802.11n and 802.11ac standards to connect to the WAP.

Basic Settings

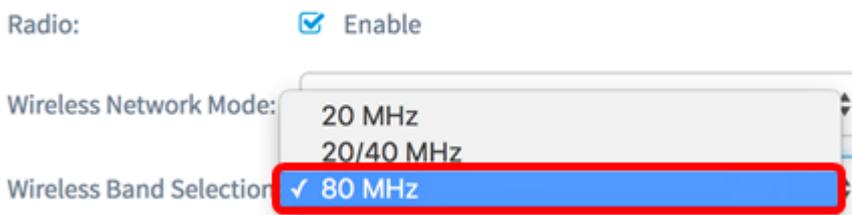


Note: In this example, 802.11a/n/ac is chosen.

Step 4. Choose the Wireless Band from the drop-down menu. The options are:

- 20 MHz
- 20/40 MHz
- 80 MHz

Basic Settings



Note: In this example, 80 MHz is used. The 802.11ac specification allows an 80 MHz-wide channel in addition to the 20 MHz and 40 MHz channels. Set the field to 20 MHz to restrict the use of the channel bandwidth to a 20 MHz channel. For the 802.11ac mode, set the field to 40 MHz to prevent the radio from using the 80 MHz channel bandwidth.

Step 5. Choose the portion of the radio spectrum that the radio uses to transmit and receive from the Channel drop-down list.

Channel:

Scheduler:

Note: In this example, Auto is chosen. This will enable the WAP to scan for available channels and choose a channel where the least traffic is detected. You will also not be able to select a primary channel if auto is chosen.

Step 6. Click the button.

You should now have successfully configured the basic radio settings on the 5 GHz band of the WAP581.

Configure Radio 2 (2.4 GHz)

Step 1. Click the **Radio 2 (2.4 GHz)** tab.

Radio

Step 2. Under Basic Settings, check the **Enable** check box in the Radio area to enable the Radio for the 2.4 GHz band.

Basic Settings

Radio: Enable

Step 3. Choose a Wireless Network Mode from the drop-down menu. The options are:

- 802.11b/g — This option allows wireless clients with 802.11b and 802.11g standards to connect to the WAP.
- 802.11b/g/n — This option allows wireless clients with 802.11b, 802.11g, and 802.11n standards to connect to the WAP.
- 2.4 GHz 802.11n — This option allows only wireless clients with 802.11n standard operating on the 2.4 GHz frequency to connect to the WAP.

Radio: Enable

Wireless Network Mode:

802.11b/g

2.4 GHz 802.11n

Note: In this example, 802.11b/g/n is chosen.

Step 4. Choose the Wireless Band from the drop-down list. The options are:

- 20 MHz
- 20/40 MHz

Wireless Network Mode: 802.11b/g/n

Wireless Band Selection: 20 MHz
 20/40 MHz

Note: In this example, 20 MHz is chosen.

Step 5. Choose the Primary Channel from the drop-down list. The options are:

- Lower — Sets the primary channel as the lower 20-MHz channel in the 40-MHz band. This is the default setting.
- Upper — Sets the primary channel as the upper 20-MHz channel in the 40-MHz band.

Wireless Band Selection: 20 MHz

Primary Channel: Lower
 Upper

Note: In this example, Lower is chosen.

Step 6. Choose the Channel from 1 to 11 from the drop-down list. This is the portion of the radio spectrum that the radio uses for transmitting and receiving.

Channel: Auto
1
2
3
4
5
6
7
8
9
10
11

Scheduler:

Advanced Settings

Note: The range of available channels is determined by the mode of the radio interface and the country code setting. In this example, Auto is chosen. This allows the WAP device to scan for available channels and select a channel where the least amount of traffic is detected.

Step 7. Click the button.

You should now have successfully configured the basic radio settings on the 2.4 GHz band of the WAP581.