

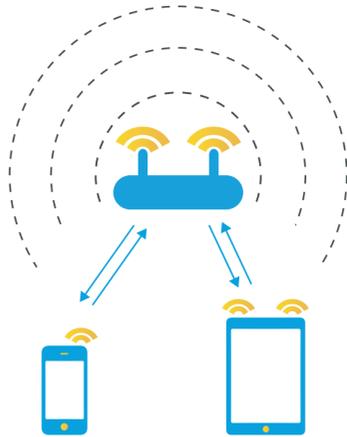
## Channel Availability

Before using a DFS channel, the AP first listens to any radar signal on that channel for 1 min.

*Note: The scanning time can be extended to 10 mins for channels 120 - 128 in some regions.*

If no radar signals are detected, the channel is available for the AP to use.

AP is servicing clients and monitoring **ch. 100**



## Event Detected

If a radar signal is transmitted on the channel, the AP will detect it.

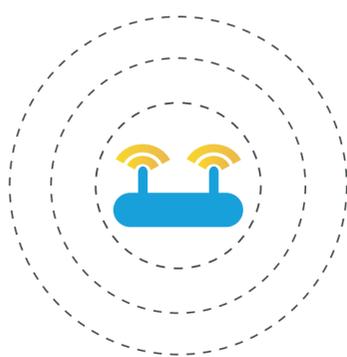
The AP then ceases all communications and start the process of moving to another channel.

Prior to shutting down its 5GHz radio, the AP may send a "Channel Switch Announcement" information to its client announcing to which channel the AP will be moving to.

This "Channel Switch Announcement" might be sent as an Information Element in a Beacon frame or as part of an Action frame.

Client devices can then decide to roam to this new channel. This depends on each client driver.

5GHz radio moves to **Ch. 36**



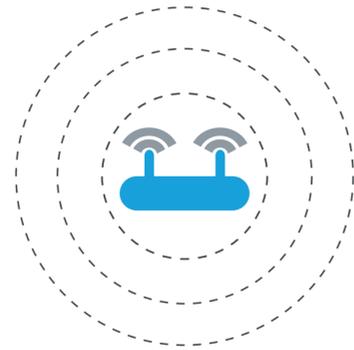
## Non-Occupancy Period

The Non-Occupancy Period starts as soon as the radar is detected and lasts 30 minutes.

During this time, no transmissions will be made by the AP on the affected channel.

At the end of the Non-Occupancy Period and depending on how the AP 5GHz radio is configured, some APs will attempt to return to their original channel, subject to a channel availability check performed for 1 minute.

Then the AP has 10 seconds to moves to the channel. In practice, it might be faster.



Scanning **ch. 100** for **60 sec**

No radar detected

5GHz radio enabled on **ch. 100**

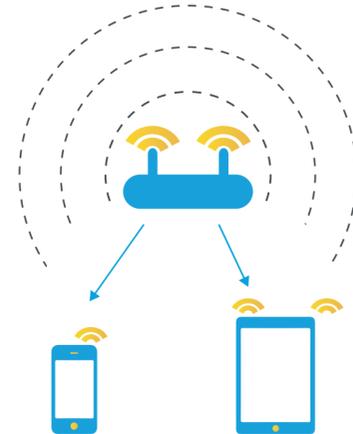


## In-Service Monitoring

The AP continuously scans the channel to check that a radar has not started operating within range.

The AP does this monitoring while operating, in-between Wi-Fi transmissions.

Radar transmitting on **ch. 100**



AP Detects Radar

AP sends a **Channel Switch Announcement** to its 5GHz clients

5GHz radio **stops transmitting**

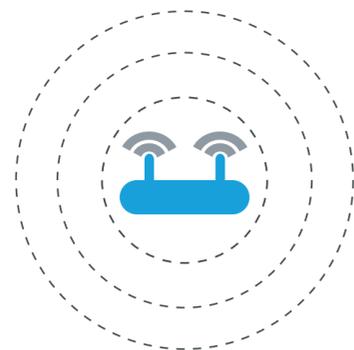


## Channel Move

The AP will then decide to move to a new channel. Implementation of this move varies upon WLAN vendors.

Some APs move to a non-DFS channel, others move to any other 5GHz channel available, others always move to the same 5GHz channel.

This process is not defined in the 802.11 standards.



No transmission on **ch. 100** for **30 mins.**

Scanning **ch. 100** for **60 sec**

No radar detected

5GHz radio moves back to **ch. 100** after **10sec**

