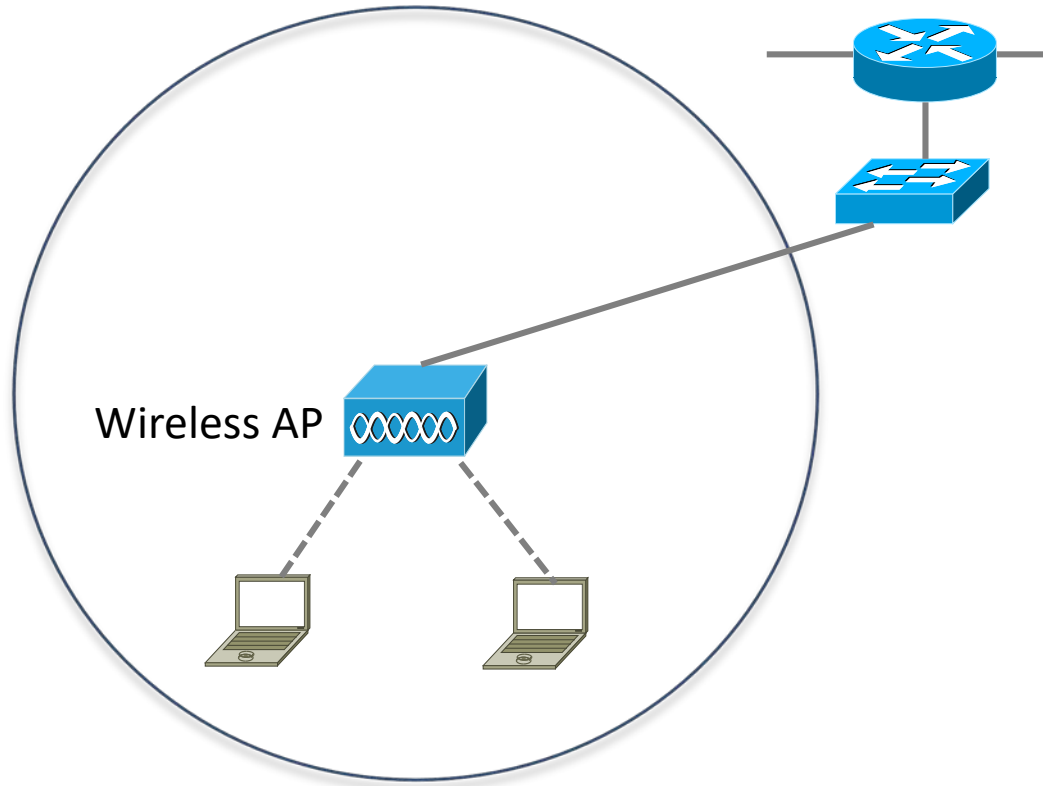# Wireless Access Points

- Wireless Access Points provide connectivity between wireless stations, and between the wireless and wired networks

- Wireless is half-duplex
- Only one device can communicate at a time
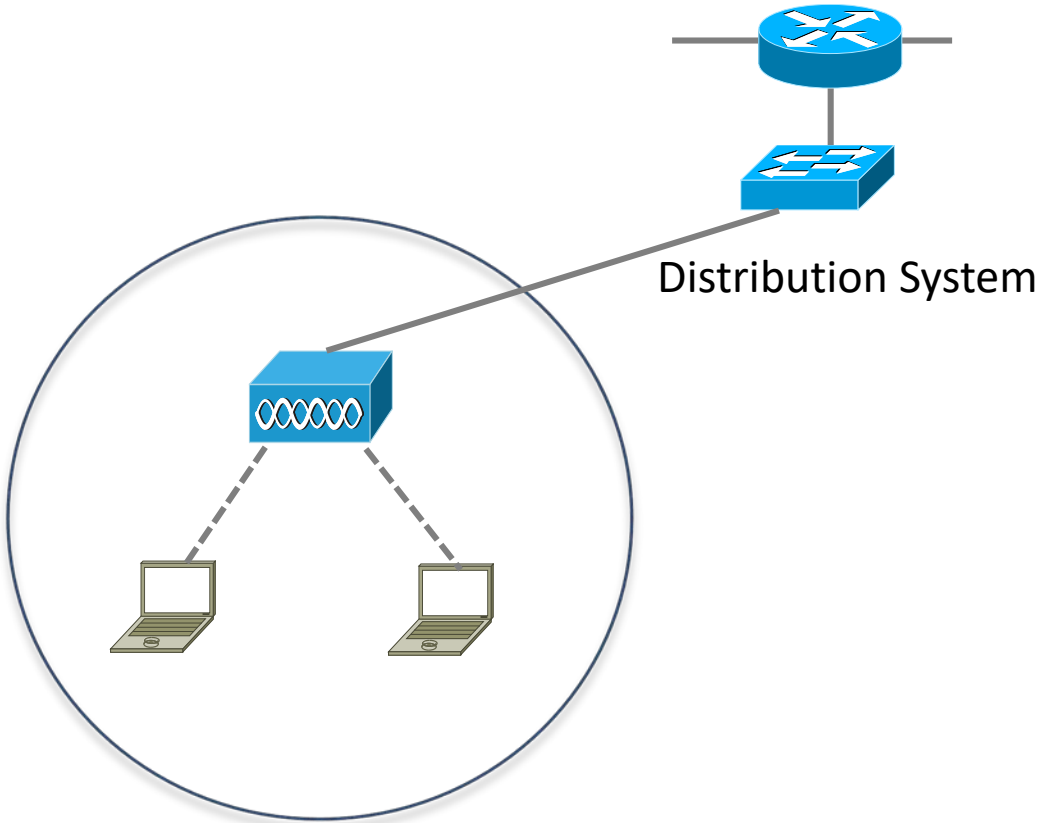
Cisco Aironet Wireless Access Point
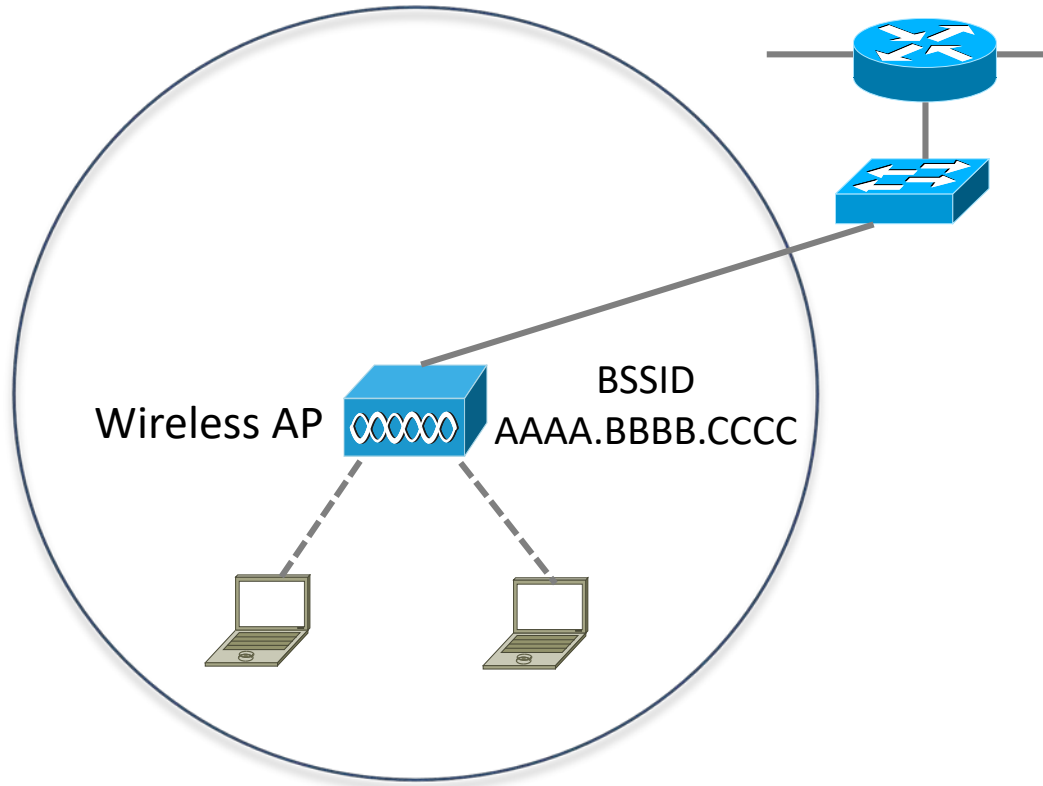
BSS Basic Service Set

Wireless AP

- An Access Point centralizes access and control over a group of wireless devices.
- The devices and their wireless settings make up a BSS

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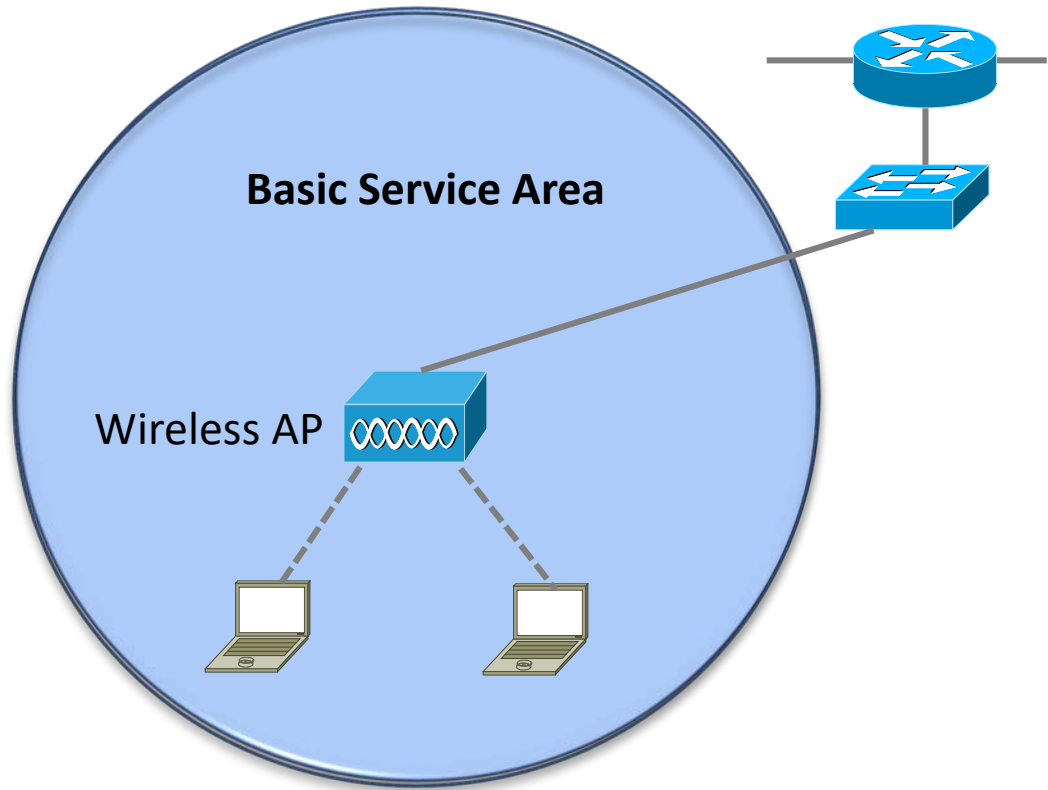
DS Distribution System

Distribution System

A distribution system connects Wireless Access Points to the wired network

BSSID Basic Service Set Identifier

Wireless AP
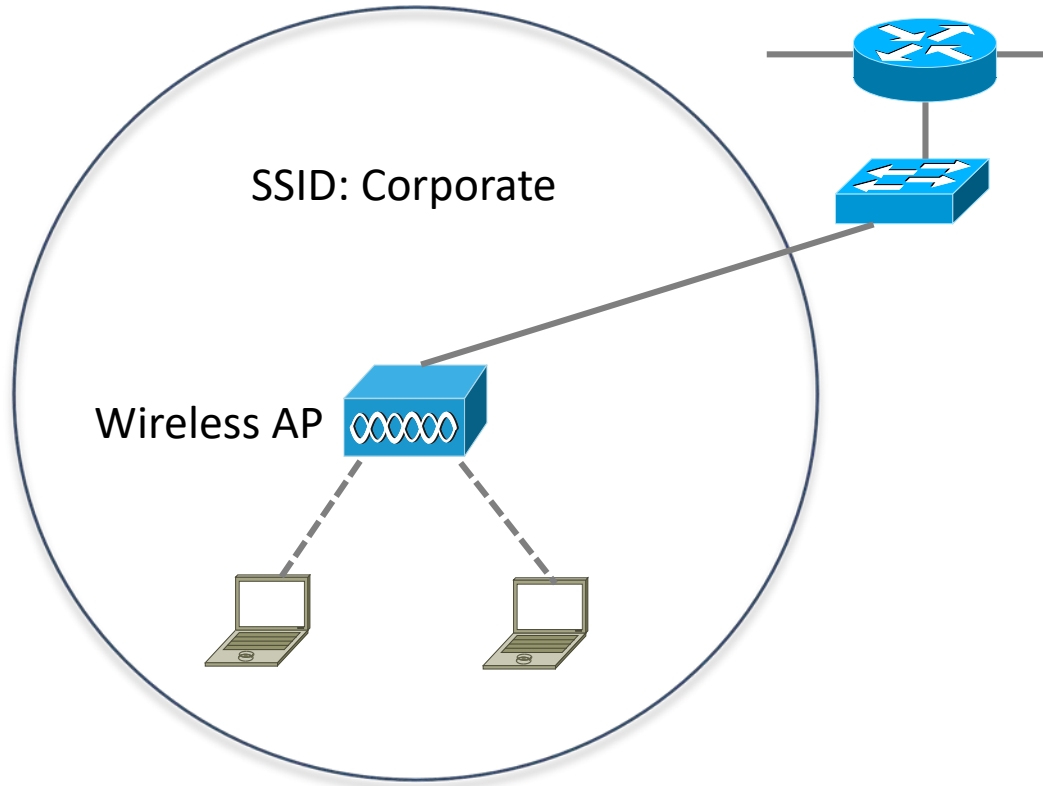
BSSID
AAAA.BBBB.CCCC

- Devices within Basic Service Sets are identified by their BSSID, which is based on their MAC address

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BSA Basic Service Area

Basic Service Area

Wireless AP

- The BSA is the wireless coverage area of an Access Point
- Also known as a wireless cell

SSID Service Set Identifier

SSID: Corporate

Wireless AP

The SSID is a unique identifier that names the wireless network (WLAN), for example 'Corporate'

Multiple SSID Service Set Identifiers

SSID: Corporate
BSSID: AAAA.BBBB.CCC1
SSID: Guest
BSSID: AAAA.BBBB.CCC2
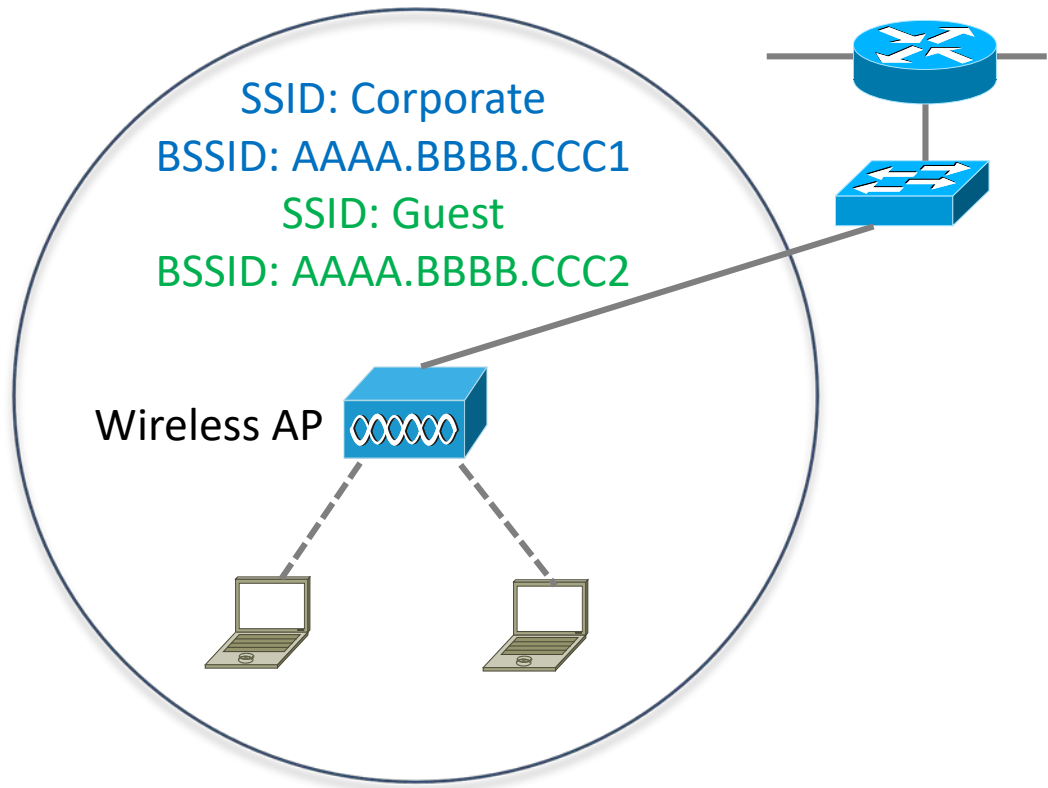
Wireless AP

- A single Access Point can support multiple SSIDs
- For example 'Corporate' and 'Guest'
- Different SSIDs can have different security settings and be mapped to different VLANs

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Beacons

SSID: Corporate
SSID: Guest
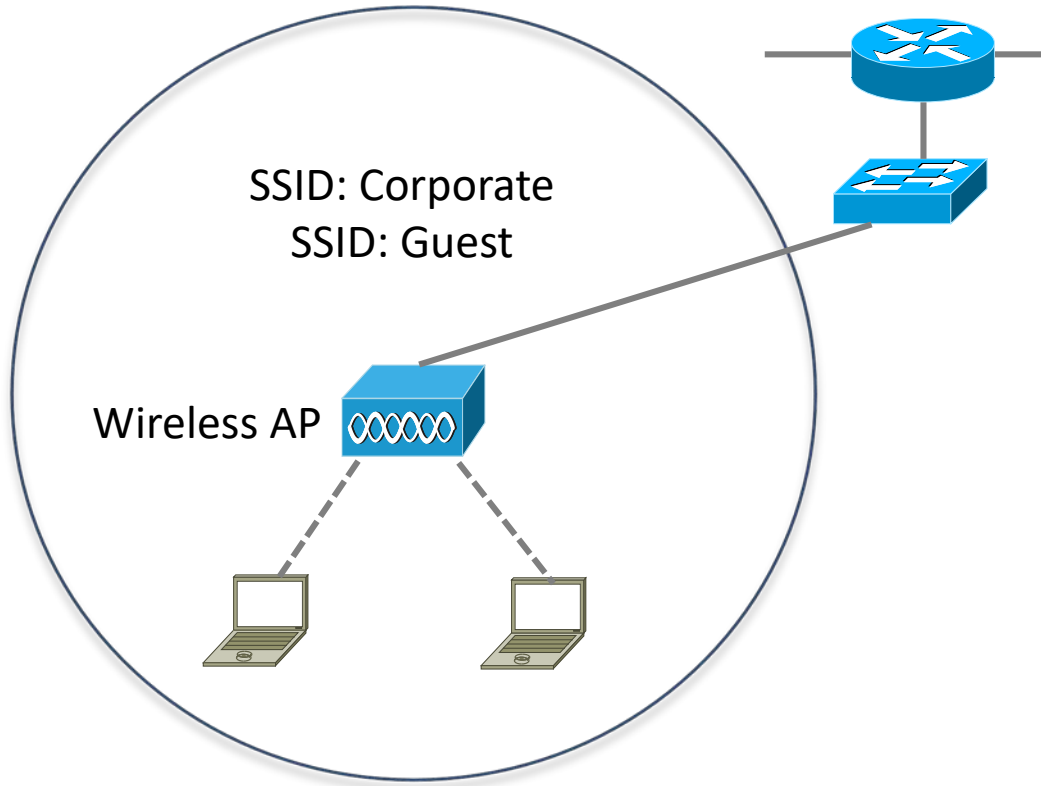
Wireless AP

- Wireless Access Points broadcast information about their WLANs (including the SSID and authentication requirements) with beacon frames
- This can be disabled

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ESS Extended Service Set

SSID: Corporate
Channel: 1

Wireless AP

SSID: Corporate
Channel: 6
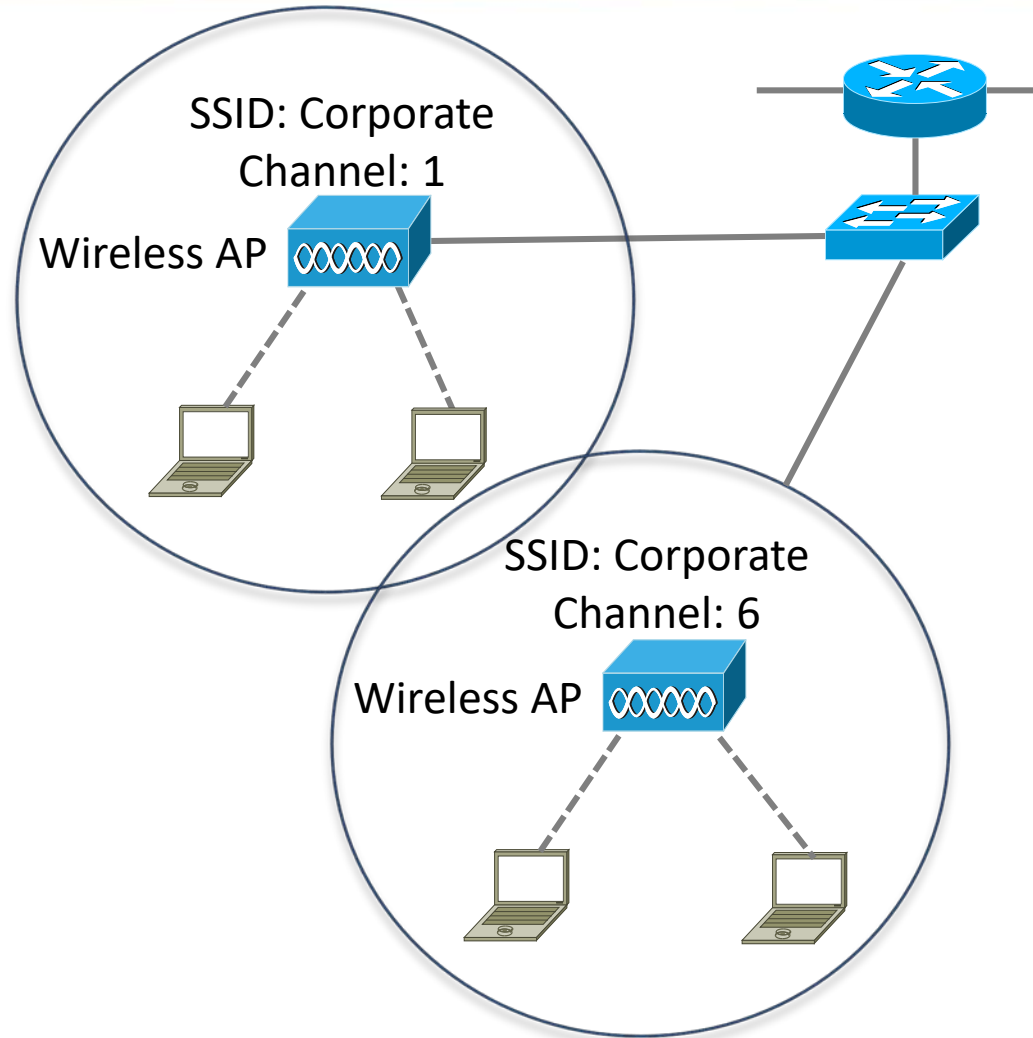
Wireless AP

The same SSID can be supported across multiple Access Points to give a larger coverage area

Roaming

SSID: Corporate
Channel: 1

SSID: Corporate
Channel: 6
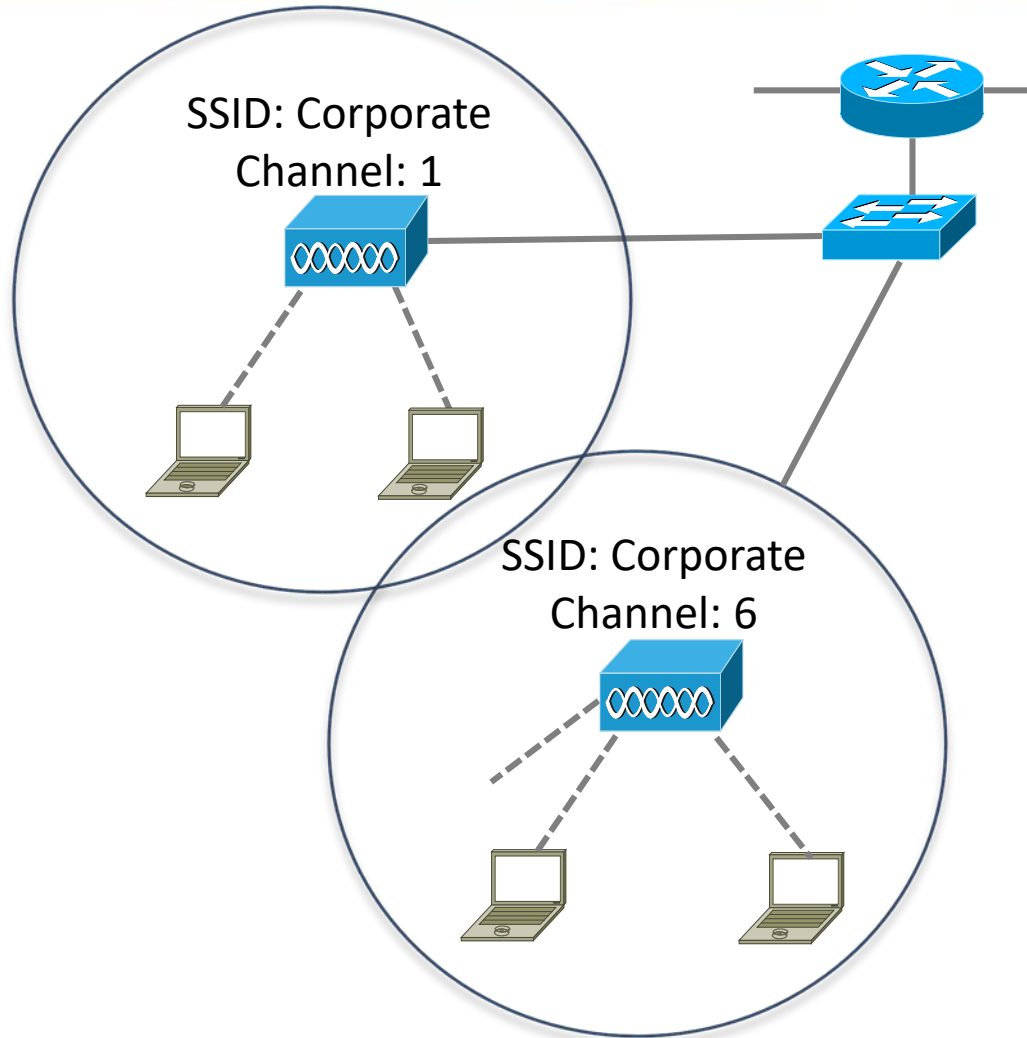
- Wireless client stations can roam across Wireless APs supporting the same WLANs