Cisco WLC 9800 #central mode #17.9.4a

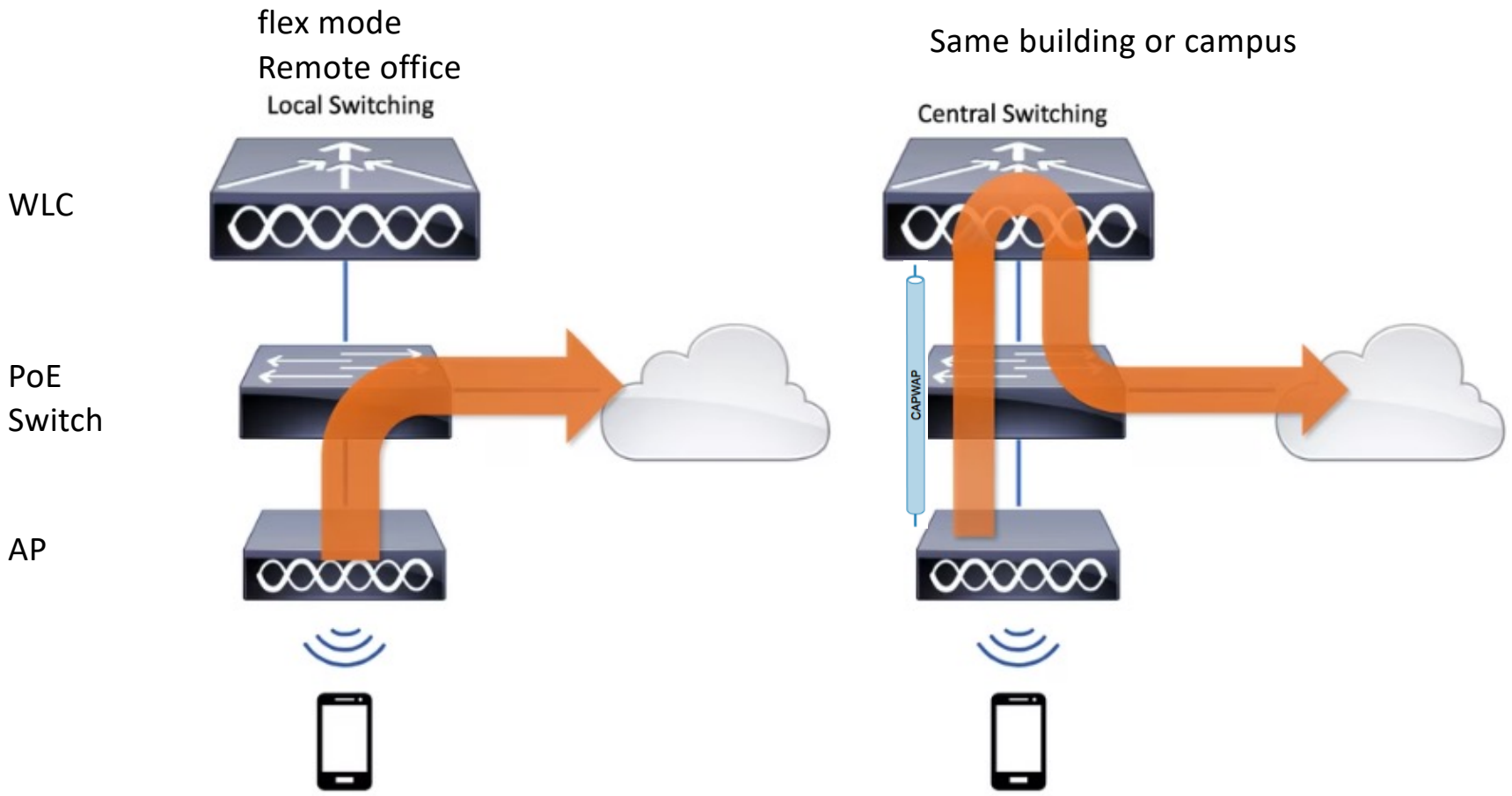
2024年 2月

Reference

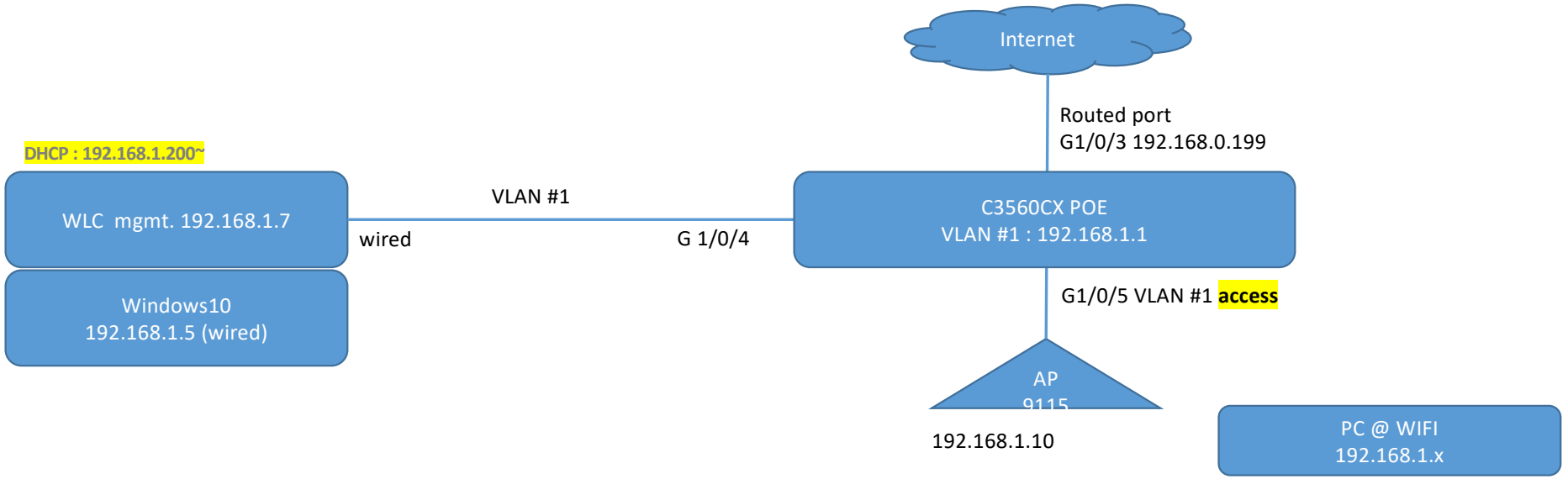
- English
  - https://www.cisco.com/c/en/us/support/docs/wireless/catalyst-9800-series-wireless-controllers/213945-understand-flexconnect-on-9800-wireless.html

- Korean
  - https://www.cisco.com/c/ko_kr/support/docs/wireless/catalyst-9800-series-wireless-controllers/213945-understand-flexconnect-on-9800-wireless.html

Flex mode or Central Mode



Topology #central mode



Only VLAN #1 is used because my Realtek NIC doesn't support trunk.
VLAN #1 : WLC, AP and client

Catalyst Switch Config

```
!
interface GigabitEthernet1/0/4
switchport mode access
spanning-tree portfast edge
!
interface GigabitEthernet1/0/5
switchport mode access
spanning-tree portfast edge
!
interface Vlan1
ip address 192.168.1.1 255.255.255.0
!
```

WLC Install

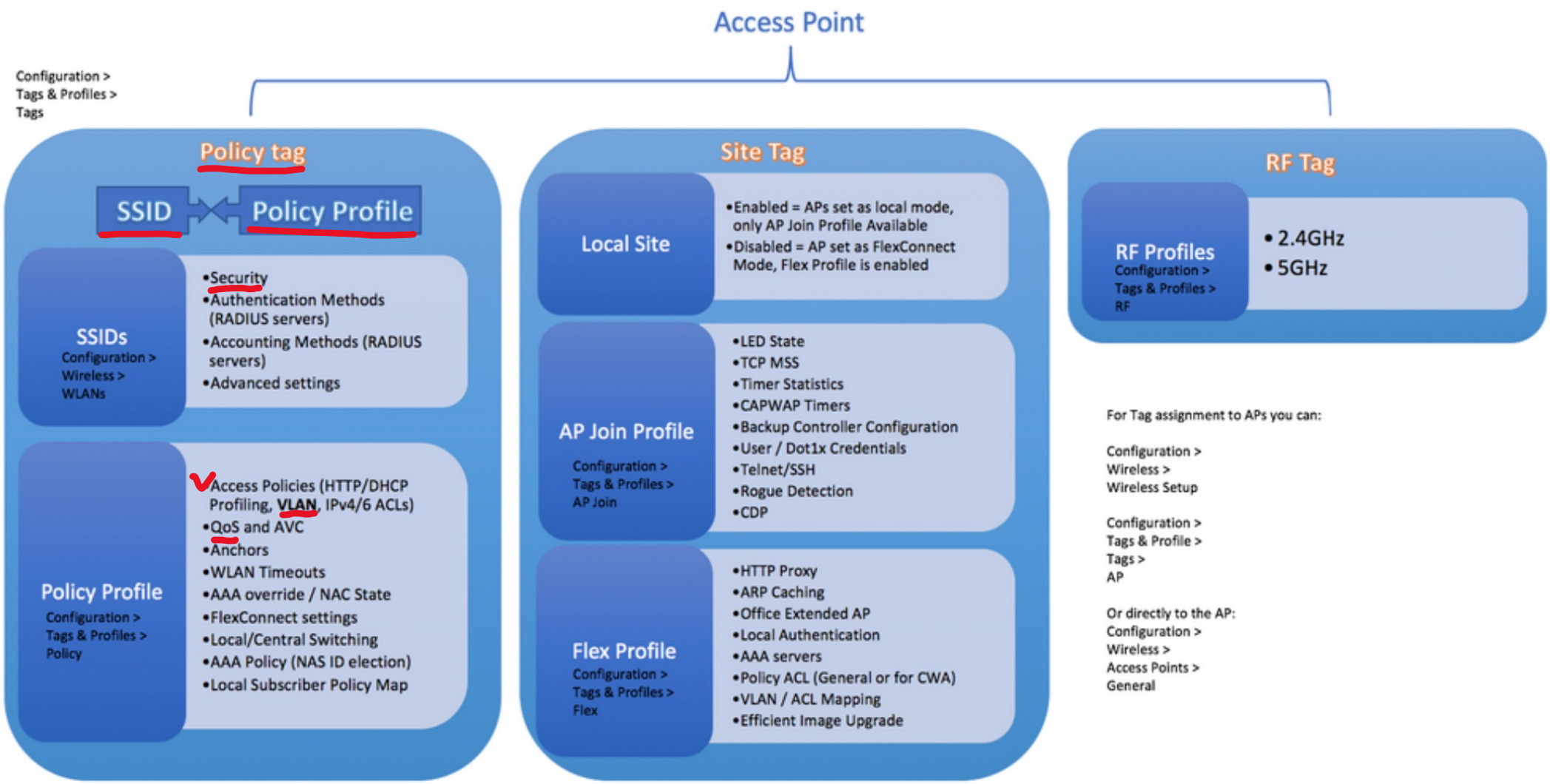
C9800 trustpoint issue #**reboot**

<config after set up the mgmt. IP address of WLC>

```
wireless config vwlc-ssc key-size 2048 signature-algo sha256 password 0 <pwd>
C9800#show wireless management trustpoint
Trustpoint Name  : ewlc-default-tp
Certificate Info : Available
Certificate Type : SSC
Certificate Hash : c4e57f728e523f64ade21597ab8ee472e7a7a8b7
Private key Info : Available
FIPS suitability : Not Applicable
```

```
--------
[*10/21/2019 17:30:17.7700] CAPWAP State: Discovery
[*10/21/2019 17:30:17.7730] Discovery Request sent to 192.168.30.200, discovery type STATIC_CONFIG(1)
[*10/21/2019 17:30:17.7770] Discovery Request sent to 192.168.30.200, discovery type STATIC_CONFIG(1)
[*10/21/2019 17:30:17.7790] Discovery Request sent to 255.255.255.255, discovery type UNKNOWN(0)
[*10/21/2019 17:30:17.7790] Discovery Response from 192.168.30.200
[*10/21/2019 17:30:17.7800] Discovery Response from 192.168.30.200
•  [*10/21/2019 17:30:17.7810] Discovery Response from 192.168.30.200
•  [*10/21/2019 17:30:26.0000]
•  [*10/21/2019 17:30:26.0000] CAPWAP State: DTLS Setup
•  [*10/21/2019 17:31:23.0150]
•  [*10/21/2019 17:31:23.0150] CAPWAP State: DTLS Teardown
•  [*10/21/2019 17:31:23.0260] Aborting image download(0x0): Dtls cleanup,
•  [*10/21/2019 17:31:23.0850] do ABORT, part1 is active part
```

WLC Config



For Tag assignment to APs you can:

Configuration >
Wireless >
Wireless Setup

Configuration >
Tags & Profile >
Tags >
AP

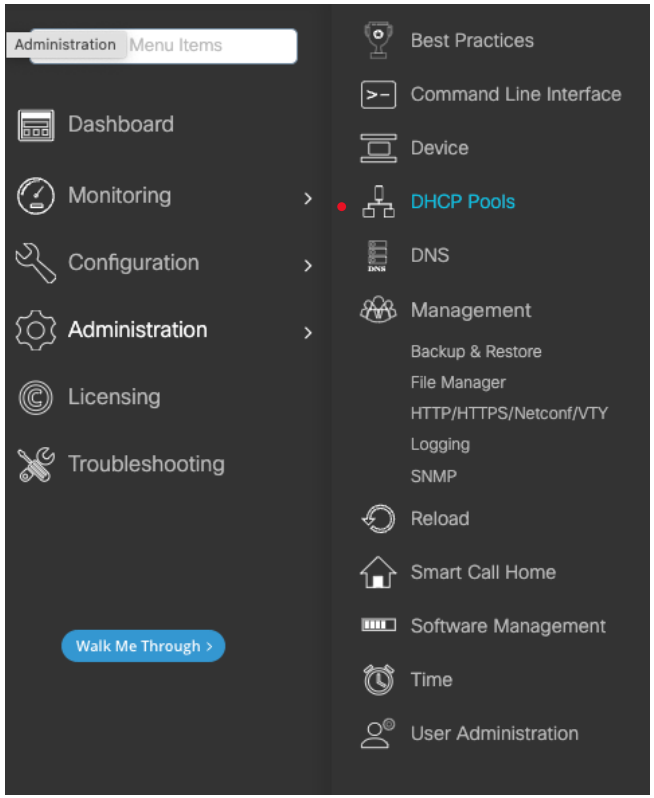
Or directly to the AP:
Configuration >
Wireless >
Access Points >
General

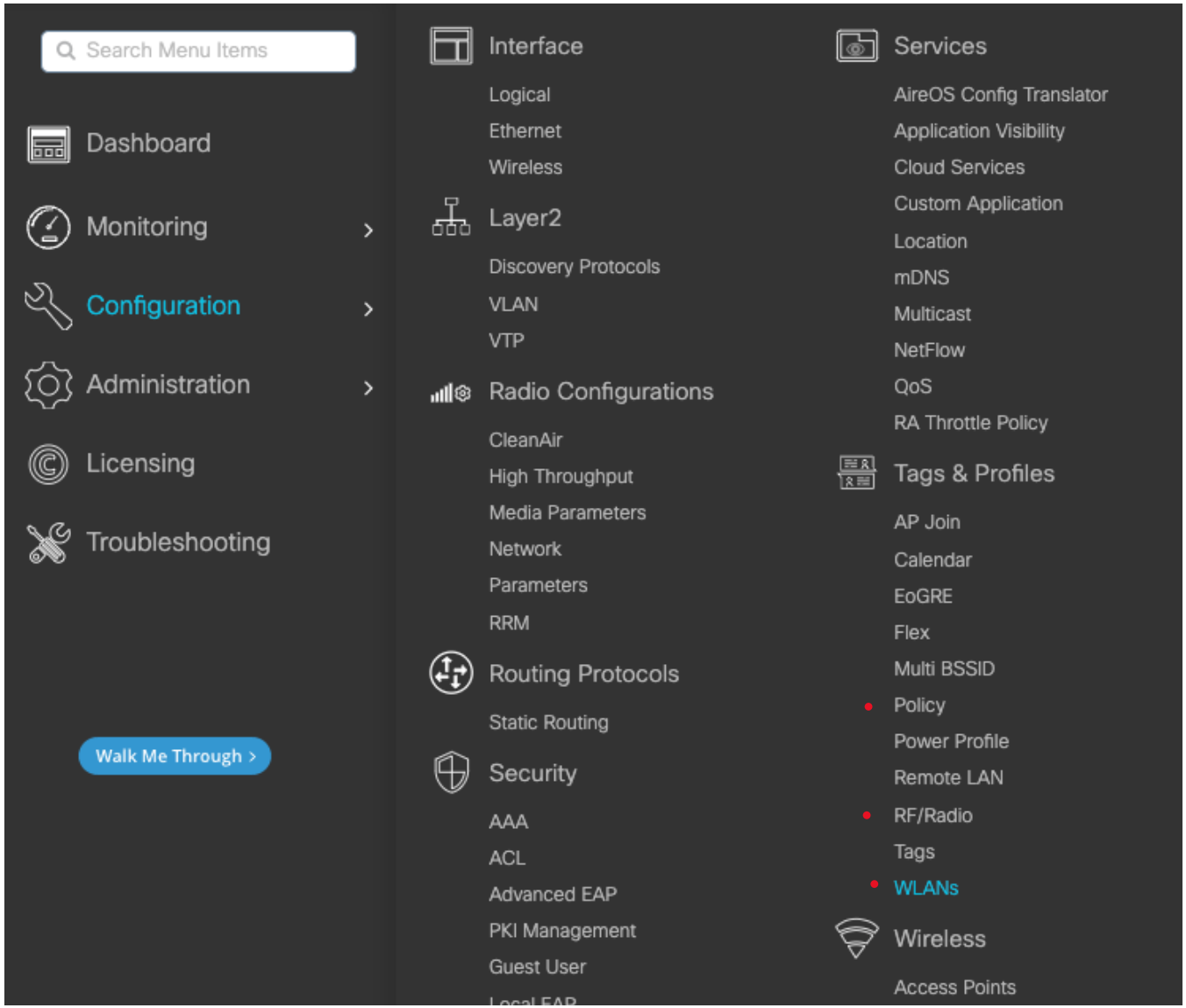
Step

- DHCP@WLC

- **Central** mode
  - WLAN (SSID)
  - Policy
  - Tag (policy) = WLAN + policy

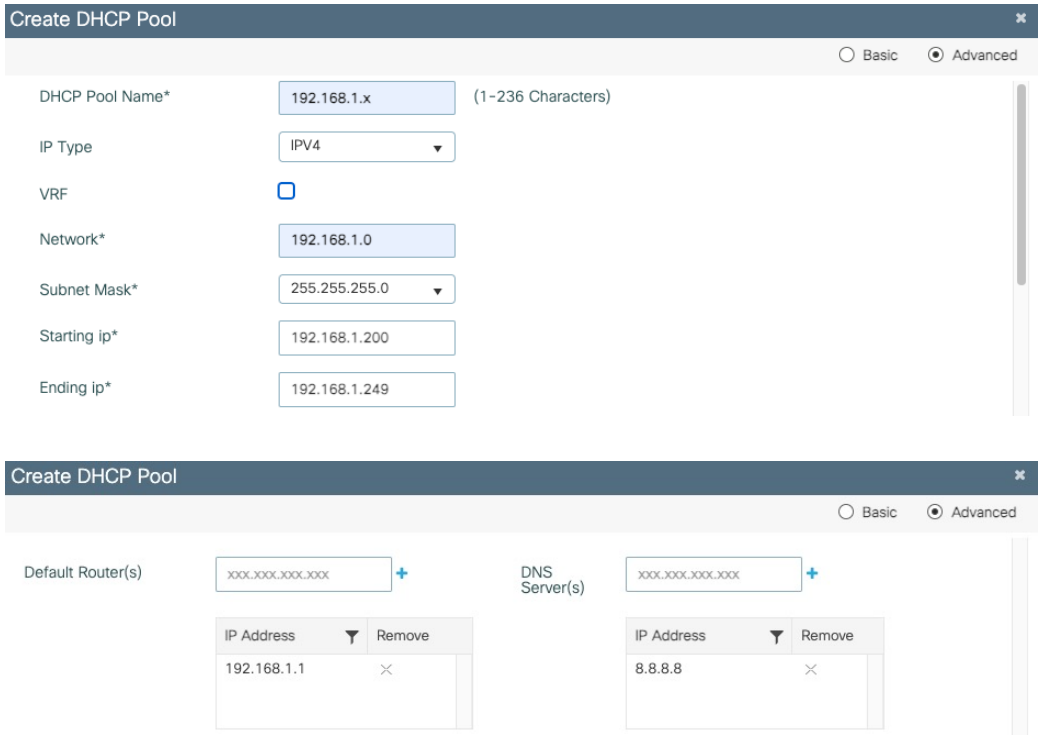
- Tag AP apply


Administration
Menu Items
Dashboard
Monitoring
Configuration
Administration
Licensing
Troubleshooting
Walk Me Through >
Best Practices
Command Line Interface
Device
DHCP Pools
DNS
Management
Backup & Restore
File Manager
HTTP/HTTPS/Netconf/VTY
Logging
SNMP
Reload
Smart Call Home
Software Management
Time
User Administration


Search Menu Items
Dashboard
Monitoring
Configuration
Administration
Licensing
Troubleshooting
Walk Me Through >
Interface
Logical
Ethernet
Wireless
Layer2
Discovery Protocols
VLAN
VTP
Radio Configurations
CleanAir
High Throughput
Media Parameters
Network
Parameters
RRM
Routing Protocols
Static Routing
Security
AAA
ACL
Advanced EAP
PKI Management
Guest User
Services
AireOS Config Translator
Application Visibility
Cloud Services
Custom Application
Location
mDNS
Multicast
NetFlow
QoS
RA Throttle Policy
Tags & Profiles
AP Join
Calendar
EoGRE
Flex
Multi BSSID
Policy
Power Profile
Remote LAN
RF/Radio
Tags
WLANs
Wireless
Access Points

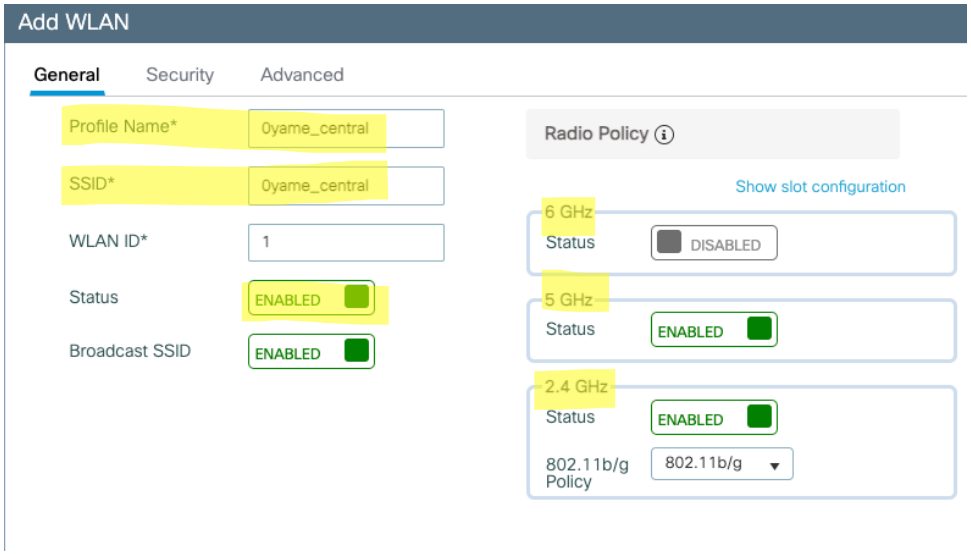
DHCP

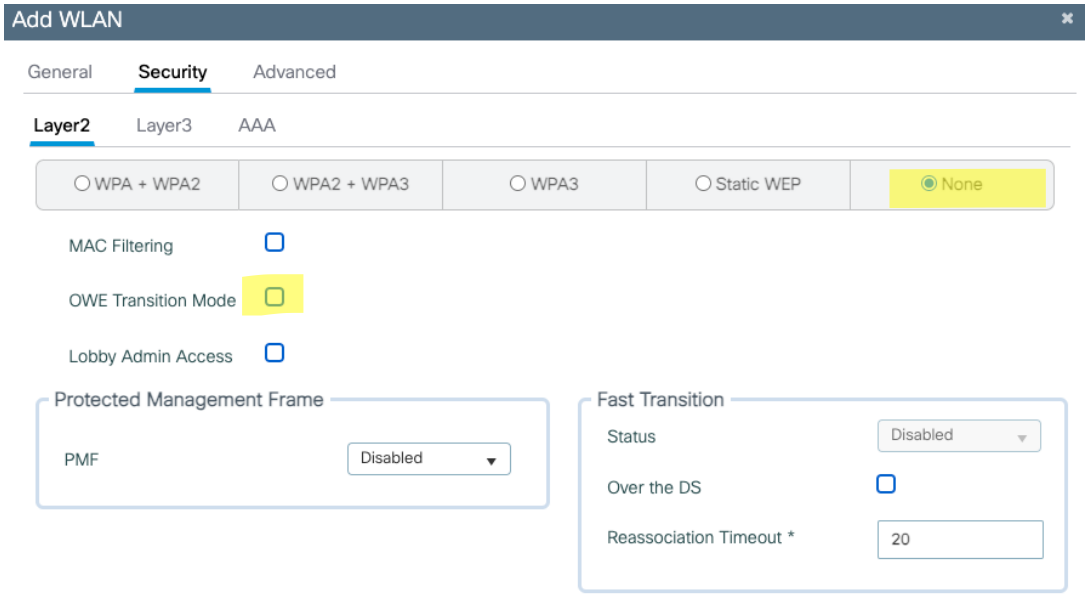
Administration > DHCP Pools



WLAN (SSID)

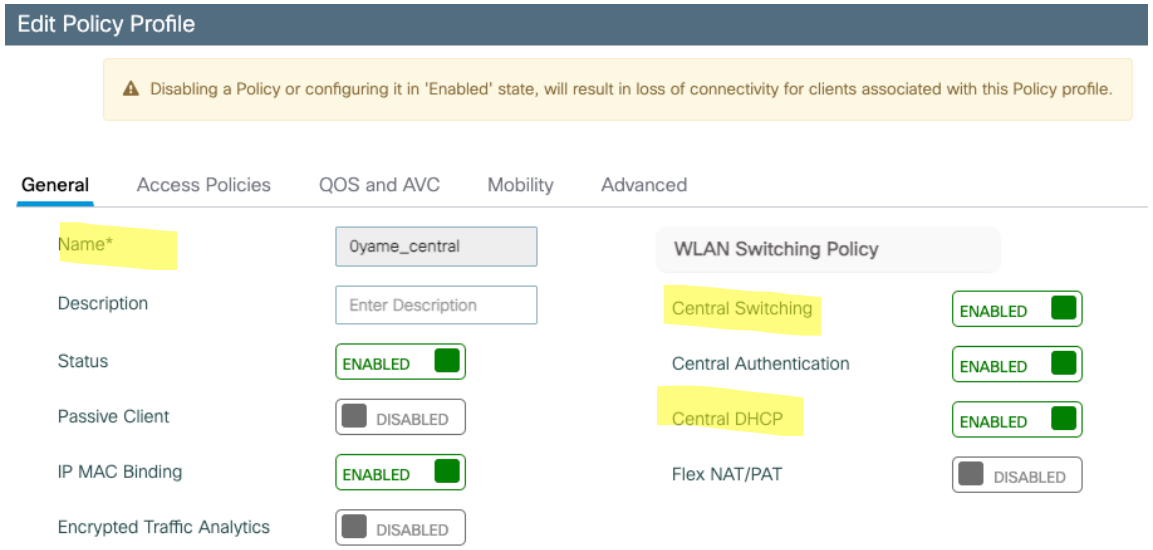
Configuration > Tags & Profiles > WLANs

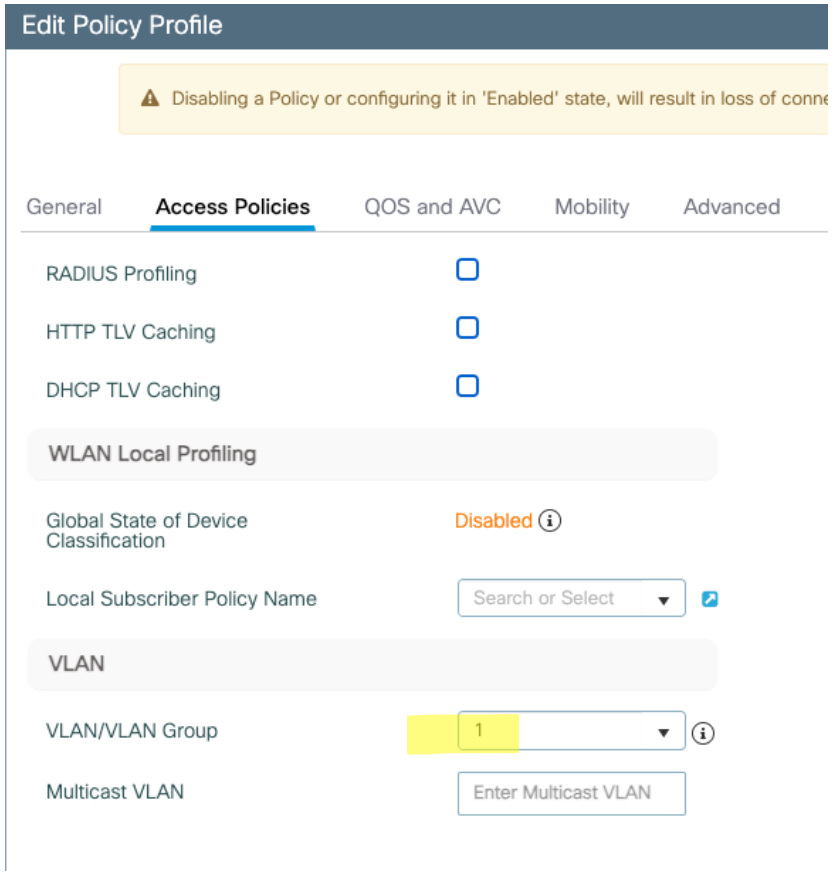




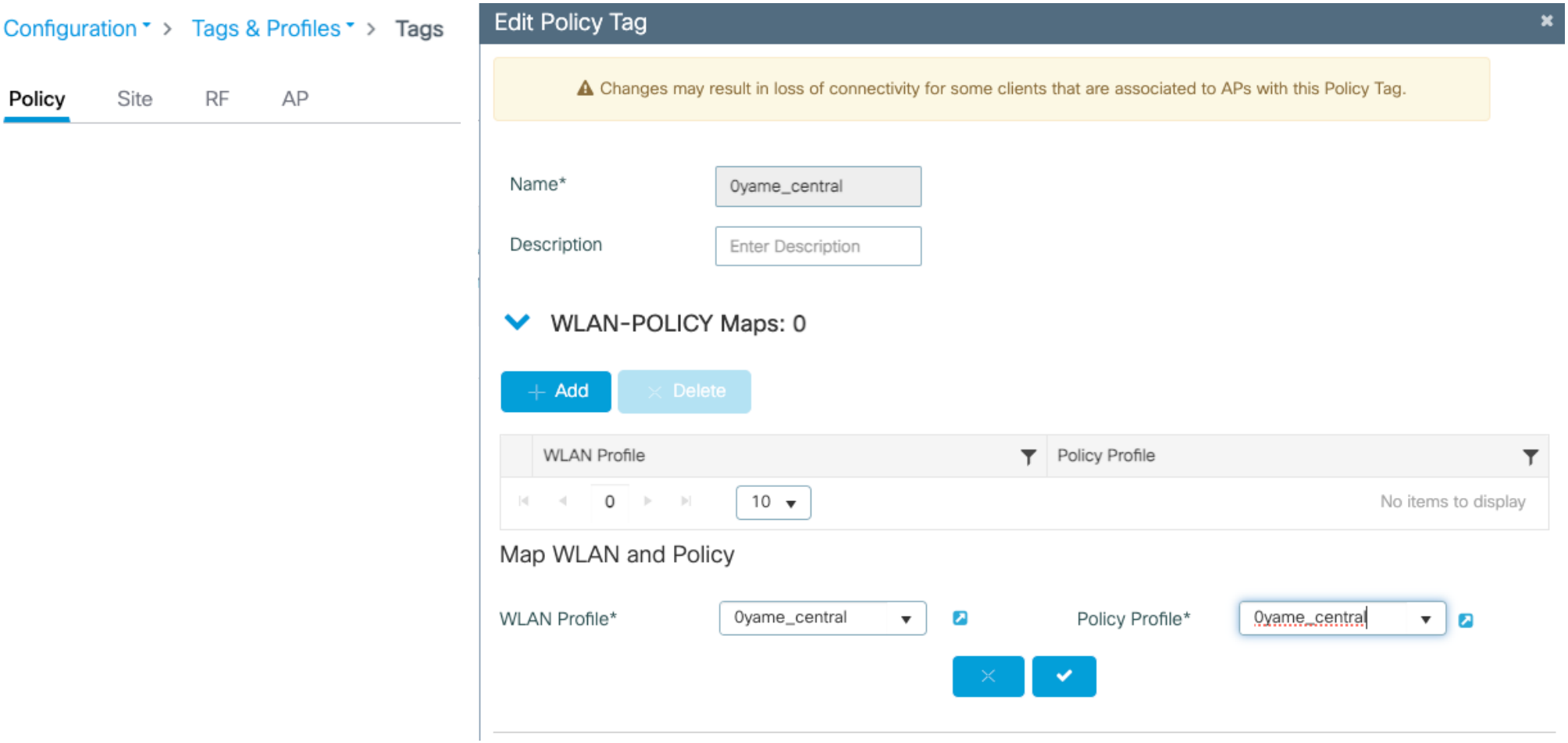
Policy

Configuration > Tags & Profiles > Policy





Policy Tag – WLAN profile mapping



AP config

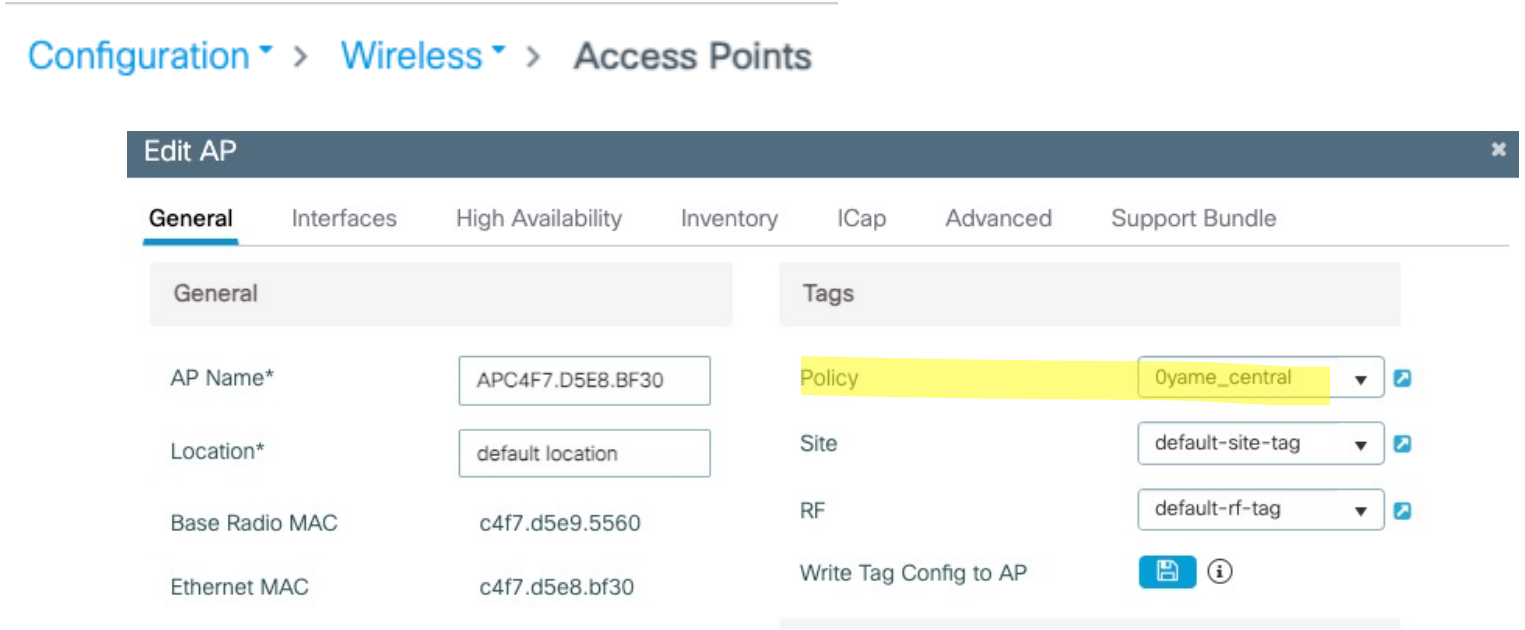
AP config

- Use the factory default AP
  - Or push reset the button for 30 sec when booting

- ID / password : Cisco

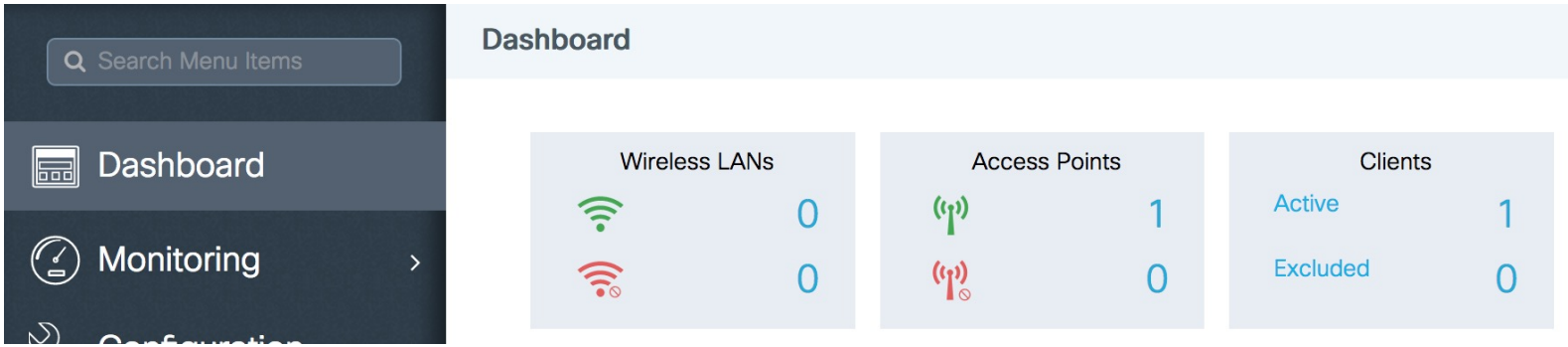
- Use this command
  - `capwap ap primary-base wlc 192.168.1.7`
  - `capwap ap ip 192.168.1.10 255.255.255.0 192.168.1.1`

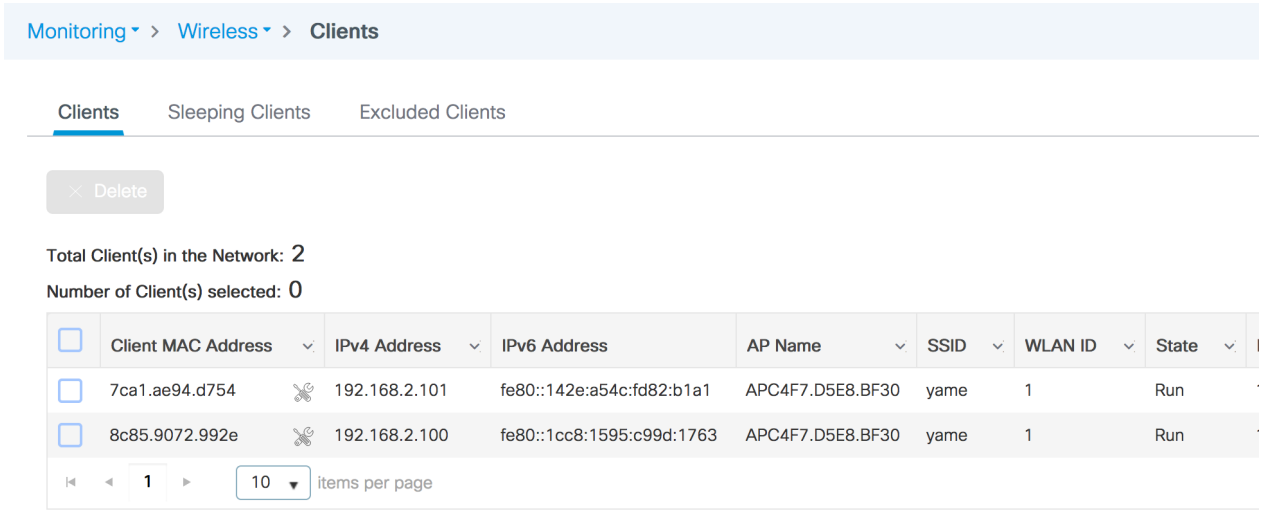
AP tag change #AP rebooting



Monitoring

Monitoring


Search Menu Items
Dashboard
Monitoring
Dashboard
Wireless LANs
0
0
Access Points
1
0
Clients
Active
1
Excluded
0


Monitoring > Wireless > Clients
Clients
Sleeping Clients
Excluded Clients
Delete
Total Client(s) in the Network: 2
Number of Client(s) selected: 0
Client MAC Address
IPv4 Address
IPv6 Address
AP Name
SSID
WLAN ID
State
7ca1.ae94.d754
192.168.2.101
fe80::142e:a54c:fd82:b1a1
APC4F7.D5E8.BF30
yame
1
Run
8c85.9072.992e
192.168.2.100
fe80::1cc8:1595:c99d:1763
APC4F7.D5E8.BF30
yame
1
Run
1
10
items per page