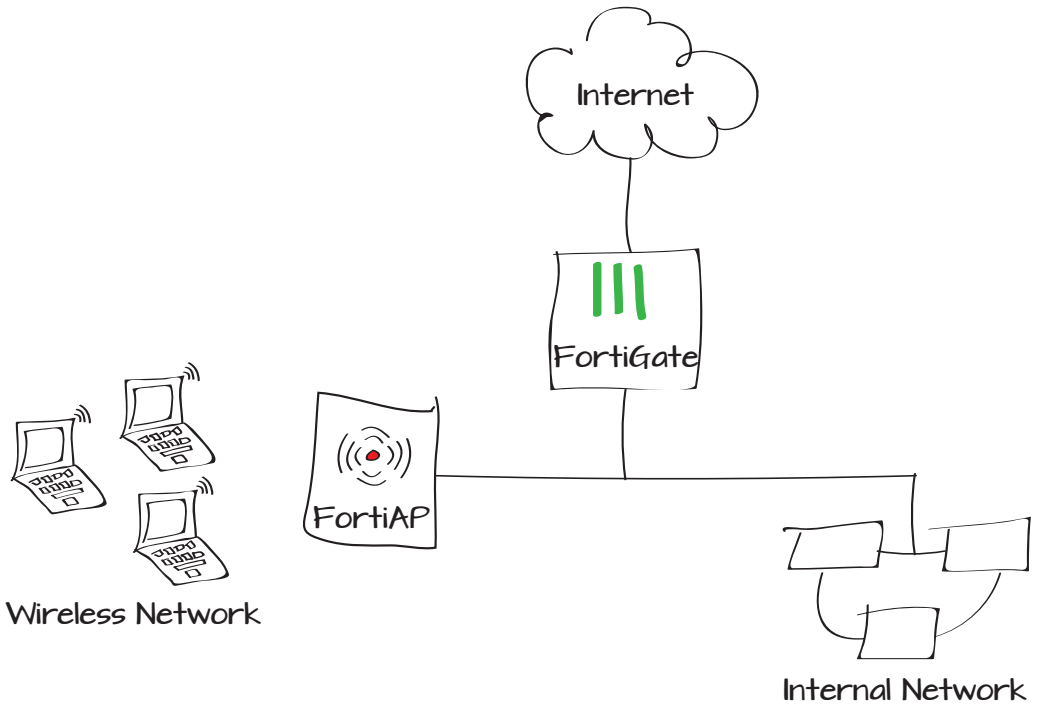
# Setting up a network using a FortiGate unit and a FortiAP unit

This example sets up a wired network and a wireless network that are in the same subnet. This will allow wireless and wired users to share network resources.

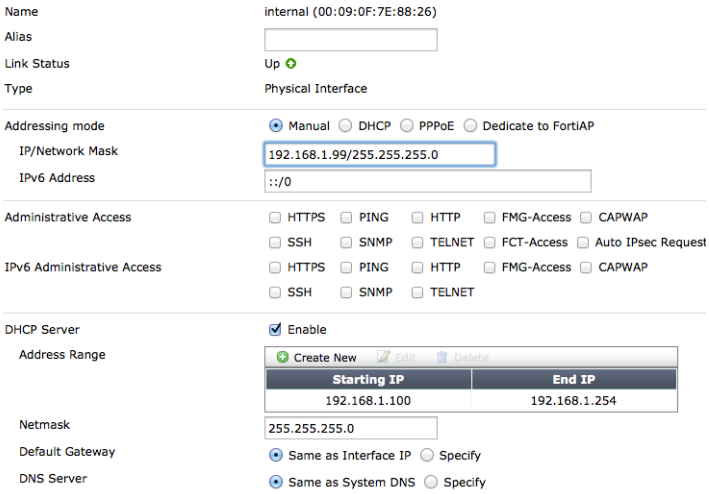
1. Configuring the internal wired network to use DHCP
2. Creating the internal wireless network
3. Results



# Configuring the internal wired network to use DHCP

Edit the internal interface.

Set **Addressing mode** to **Manual** and enable **DHCP server**. Take note of the IP range.

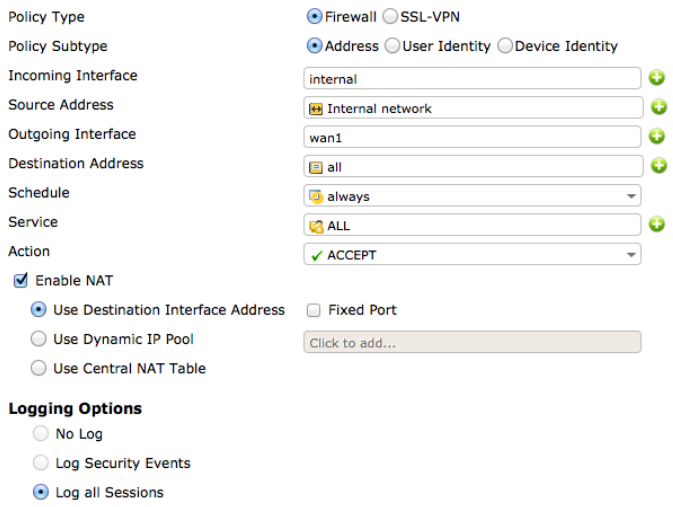



Go to **Firewall Objects > Address > Addresses.**

Set **Type** to **IP Range** and set **Subnet/IP Range** to use the IP range from the DHCP server.

Go to **Policy > Policy > Policy**.

Create a security policy allowing users on the wired network to access the Internet.




## Creating the internal wireless network

Connect the FortiAP to the internal interface. Go to **WiFi Controller > Managed Access Points > Managed FortiAPs** and right-click on the FortiAP unit. Select **Authorize**.


It may take a few minutes for the FortiAP unit to appear on the **Managed FortiAPs** list.

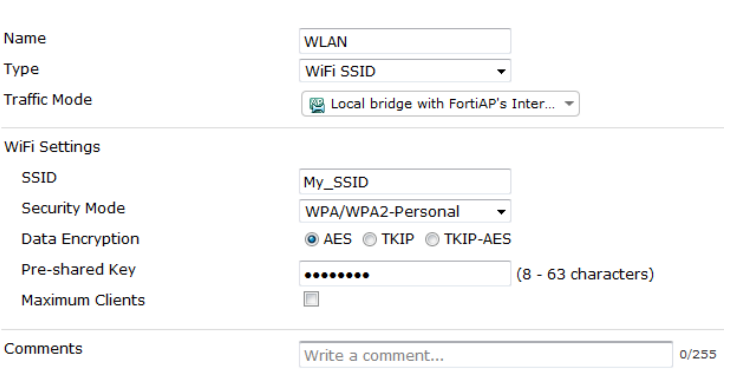
Go to **WiFi Controller > WiFi Network > SSID** and create a new SSID.

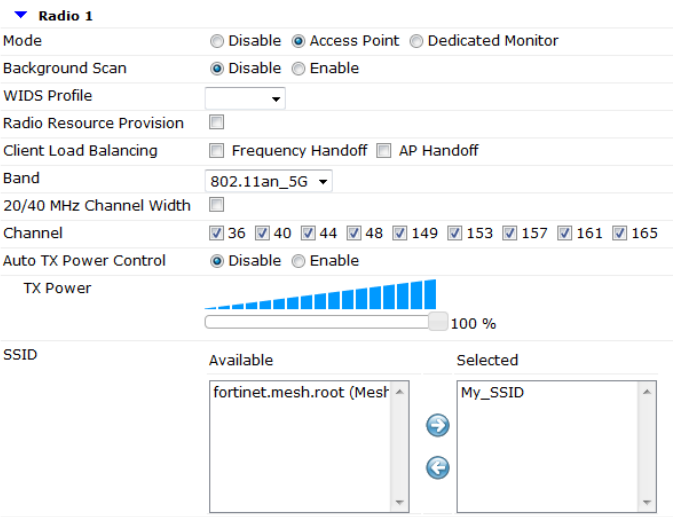
Ensure the **Traffic Mode** is set to **Local bridge with FortiAP's Interface**.

Bridge mode is more efficient than Tunnel mode, as it uses the CAPWAP tunnel for authentication only. Bridge mode is also required in order to have a wired and wireless network be on the same subnet.

Go to **WiFi Controller > WiFi Network > Custom AP Profiles**. Select **Create New**.

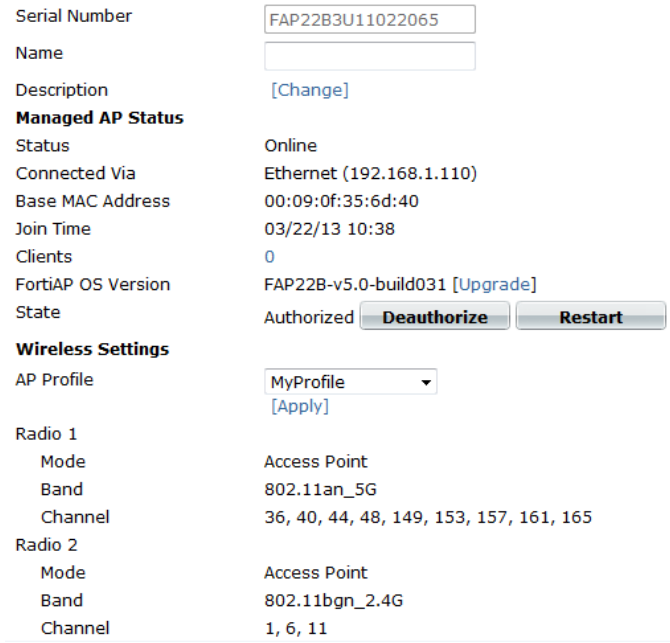
Set **SSID** for both **Radio 1** and **Radio 2** to the new SSID.



Go to **WiFi Controller > Managed Access Points > Managed FortiAPs**. Edit the FortiAP unit.

Under **Wireless Settings,** set **AP Profile** to use the new profile.




## Results

Users connected to the new SSID will be able to access the Internet. The wireless devices will be in the same subnet as the internal wired network.

Go to **WiFi Controller > Monitor > Client Monitor** to see WiFi users and their IP addresses.

Go to **Log & Report > Traffic Log > Forward Traffic** to verify that the same policy controls both wired and wireless traffic.