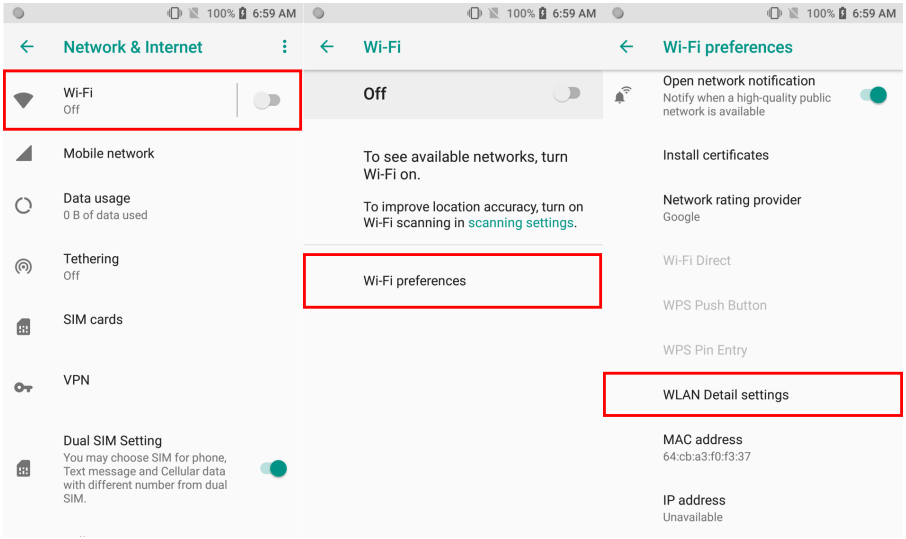
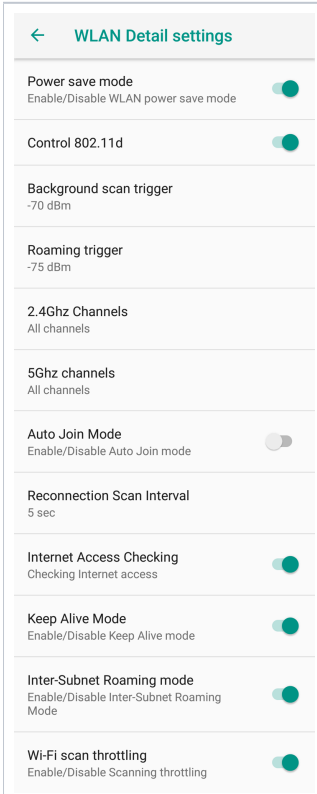
Instruction of WLAN Detail Settings

WLAN Detail Settings

- Setting Location : Settings > Network & Internet > Wi-Fi > Wi-Fi preferences > Advanced > WLAN Detail settings
  (The path and screenshot is captured from PM85 Android 8.)



Instruction



Power save mode

- You can batch the data transmission that occurred in a similar time frame by enabling this mode
- If disable, Wi-Fi performance will be better but battery consumption will increase
- Default: Enable

Control 802.11d

- Decide whether the device get & use the country code of each AP
- Default: Enable
- Only in Android 7, 8

Background scan trigger

- Set the signal strength value that causes scanning the AP action
- If the signal strength of currently connected AP is lower than the set value, the device starts scanning nearby AP to roam.
- Only in Android 7, 8

Roaming trigger

- Set the signal strength value that causes actual roaming
- Default: -75dBm

> ⚠ **Background Scan & Roaming Trigger**
>
> - **Difference between roaming trigger value and background scan trigger value should -5dBm.** Otherwise, the roaming action may be abnormal.
> - The device starts to scan the new AP when the signal strength equals to Background scan trigger. And roaming occurs when the signal strength equals to Roaming trigger value.

2.4Ghz Channels

- Set the channels of 2.4Ghz band
- Default: All channel is enabled
- Set this value if you want to search specific channels when the device is trying to roaming
- If AP set the channel automatically, instead of fixing it, roaming feature may have problem

5Ghz Channels

- Set the channels of 5Ghz band
- Default: All channel is enabled
- Set this value if you want to search specific channels when the device is trying to roaming
- If AP set the channel automatically, instead of fixing it, roaming feature may have problem

Auto Join Mode

- This feature allows automatic connection with the opened Wi-Fi network
- Default: Disable

Reconnection Scan Interval

- If the device moves to where the Wi-Fi signal doesn't be detected, it is trying to reconnect every second you set
- Default: 5 seconds (Minimum: 5 seconds)

Internet Access Checking

- With enabling this setting, the Wi-Fi network icon indicates normal connection even in the closed network which cannot access an external network
- If you are using a closed network, enable this setting to avoid user misunderstanding that the network is not working.

Keep Alive Mode

- Accessible on Android 7 and 8. (In case of Android 9, this feature is enabled as a default by Google OS design.)
- Read below article to find more detail.

What is Keep Alive Mode in WLAN Detail Settings?

Inter-Subnet Roaming mode

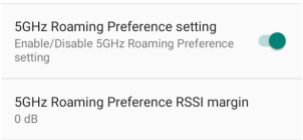
- Enable this mode to reassign the IP address automatically when device roams to different server that has same SSID

Wi-Fi scan throttling

- Restrict the frequency of Wi-Fi scanning for improving the performance and security of the network, and prolonging the battery lifetime.
- Read the article below to find more detail. It may require OS update.

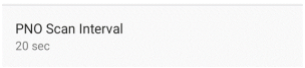
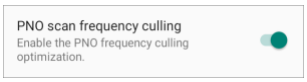
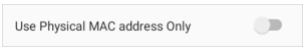
Wi-Fi Scan Throttling Setting

- Only in Android 9 & 11



5GHz Roaming Preference Setting

- Enabling this setting to prefer to connect the 5GHz band when an SSID supports two bands, 2.4GHz and 5GHz.
- Default: Enable

	5GHz Roaming Preference RSSI margin • Set the signal strength (RSSI; Received Signal Strength Indication) margin between the 2.4GHz and 5GHz (2.4GHz - 5GHz) • 5GHz is preferred when 5GHz's RSSI is lower than the 2.4GHz's, but the difference is less than the margin you set. If you want to connect 5GHz no matter how strong the 2.4GHz signal is, set the margin high. • Default: 0 dB
• Android 8 and above 	**PNO Scan Interval** • Set time interval for Wi-Fi scanning that occurred when a device is disconnected from Wi-Fi and the screen is off (PNO; Wi-Fi preferred network offload). • Default: 20 seconds
• Android 10 and above 	**PNO scan frequency culling** • Turn on to scan only previously scanned frequencies when performing PNO scanning. If turning on this setting, the device may not reconnect to the AP (Access Point) which is in auto channel selection mode. • Default: Enable (Turn on)
• Only in PM86 / PM560 	**WLAN multicast mode** • Turn on the switch to use multicast mode that receives all packets through the interface without filtering. • The battery consumption may increase when turning on this setting. • Default: Enable (Turn on)
	Band Selection • Select Wi-Fi band frequency between 2.5GHz, 5GHz, or both (ALL). • Default: ALL
• Only in PM86/ PM560 (56.03~) / PM95 	**Use Physical MAC address Only** • Turn on the switch to use physical MAC address (Device MAC) only instead of randomized MAC. It will be applied all Wi-Fi network. • If this setting is turned off, the system will use MAC address type specified in the Wi-Fi (SSID) setting. • Default: Disable (Turn off)

RELATED ARTICLES

- Enhanced Security, WPA3 Support
- Wi-Fi Privacy (Randomized MAC) Setting in Android 10 or higher
- Backup and Restore Wireless Network Profiles using Direct Clone
- Check Link Speed
- Wi-Fi Scan Throttling Setting