Meshtastic Setup

Meshtastic Setup Guide
Panduan Konfigurasi Meshtastic

V1.1
02/JUN/2025

Introduction / Mukadimah

This is a quick guide to setting up your LoRa device(s) setting via the Meshtastic phone app for your RAK / B&Q / LilyGo / Seeed / Heltec / Elecrow / DIY Devices.

Ini adalah panduan ringkas untuk menetapkan konfigurasi peranti LoRa anda melalui aplikasi telefon Meshtastic untuk peranti RAK / B&Q / LilyGo / Seeed / Heltec / Elecrow / Peranti DIY.

Inspired by Abang Anonymous' guide :) // Inspirasi dari Abang Annoymous punya guide :)

iOS - Apple Store link
Android - Google Play link

This guide will be split into 4 guides, list below:
Panduan ini akan dibahagikan kepada 4 bahagian seperti berikut:

1. Understanding Meshtastic Role Settings and which should you choose.
1. Memahami Konfigurasi Peranan Meshtastic and yang mana patut anda pilih. 2
2. Utilising MQTT via Bluetooth of your smartphone.
2. Menggunakan MQTT melalui Bluetooth telefon pintar anda. 3
3. Utilising MQTT via WiFi, house WiFi or phone hotspot.
3. Menggunakan MQTT melalui WiFi, sama ada WiFi rumah atau hotspot telefon. 6
4. Utilising LoRa only, no MQTT via Bluetooth of your smartphone.
4. Menggunakan LoRa sahaja, tanpa MQTT melalui Bluetooth telefon pintar anda. 9

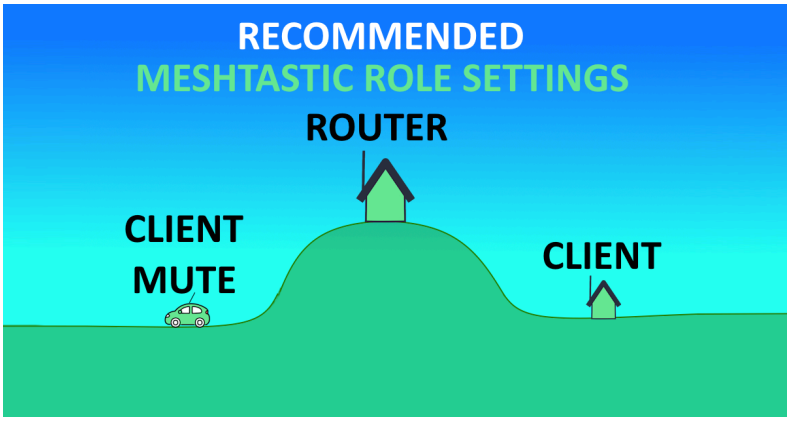
Changelog:
V1.1

- Added Meshtastic Role Settings guide, thanks Guzman KH16 for the link guide.
- Panduan Tetapan Peranan Meshtastic telah ditambah, terima kasih kepada Guzman KH16 atas pautan panduan tersebut.

V.1

- Added iOS guide and revamp guide from Abang Annoymous, thanks for the initial guide.
- Tambah panduan iOS dan panduan daripada Abang Anonymous ditambah baikan, terima kasih atas panduan asal.

1. Understanding common Meshtastic Role Settings and which should you choose.
1. Memahami Konfigurasi Peranan umum Meshtastic and yang mana patut anda pilih.



Types of common Meshtastic Roles **Jenis-Jenis Peranan umum Meshtastic**		
Type of Roles	Explanation	Use Case
CLIENT (default)	For most people this is the default This enables you to communicate with your node via bluetooth and your app and will re-route traffic your node picks up to others. Untuk kebanyakan orang, ini adalah konfigurasi asal. Ia membolehkan anda berkomunikasi dengan nod anda melalui Bluetooth dan aplikasi anda, serta akan mengalihkan trafik yang diterima oleh nod anda kepada nod yang lain.	Non-portable LoRa devices, Base / Home node and plus points if you have good aerial at good height. Peranti LoRa yang tidak mudah alih, nod Asas / Rumah, dan lebih baik lagi jika anda mempunyai antena yang baik pada ketinggian yang sesuai.
CLIENT_MUTE	Recommended for portable nodes walking, cars, planes and other vehicles. it will pick up nearby nodes but it will not re-route. This is important as mobile nodes in varying locations will poorly re-route mesh traffic and causes issue for others. Disyorkan untuk nod mudah alih seperti semasa	Portable LoRa devices such as handheld, car node, etc. Peranti LoRa mudah alih seperti peranti genggam, nod dalam

	berjalan, di dalam kereta, kapal terbang dan kenderaan lain. Ia akan mengesan nod berdekatan tetapi tidak akan mengalihkan trafik. Ini penting kerana nod mudah alih yang berada di lokasi yang berubah-ubah boleh mengalihkan trafik mesh dengan tidak berkesan dan menyebabkan masalah kepada pengguna lain.	kereta, dan sebagainya.
ROUTER	Only use this if you are located at a vantage point high on a hill or apartment block with clear line of sight viewshed to far away places and should also have an optimal set-up. **Misuse of this mode will cause Meshtastic to NOT route messages properly!** Hanya gunakan tetapan ini jika anda berada di lokasi strategik seperti di atas bukit atau bangunan apartmen tinggi dengan pandangan jelas ke kawasan yang jauh, dan juga mempunyai tetapan yang optimum. **Penyalahgunaan mod ini menyebabkan Meshtastic tidak dapat mengalihkan mesej dengan betul!**	Non-portable LoRa devices, Base / Home node and plus points if you have **REALLY** good aerial at good height. Peranti LoRa yang tidak mudah alih, nod Asas / Rumah, dan lebih baik lagi jika anda **BETUL-BETUL** mempunyai antena yang baik pada ketinggian yang sesuai.
For advanced users, or if you are curious about the other options, feel free to read this, linked here. Untuk pengguna berpengalaman, atau jika anda ingin tahu tentang pilihan lain, sila baca maklumat ini yang dilampirkan di sini.		

DEVICE CONFIGURATION : Device			
iOS		**Android**	
Options		Device Config	
Device Role	**Client** **Client Mute** **Router**	Role	**CLIENT** **CLIENT_MUTE** **ROUTER**
Rebroadcast	**All**	Rebroadcast mode	**ALL**
Node Info Broadcast Interval	**One Hour**	NodeInfo broadcast interval (seconds)	**10800**
Debug		POSIX Timezone	**<+08>-8 - +08** **MYT-8 - MYT**
Time Zone	**<+08>-8 - +08** **MYT-8 - MYT**	2 type of display, either “+08” or “MYT” for T Deck POSIX Timezone db - Click here / Tekan sini	

2. Utilising MQTT via Bluetooth of your smartphone.
2. Menggunakan MQTT melalui Bluetooth telefon pintar anda.

Launch the Meshtastic app, connect to your LoRa device and select **Settings**.
Lancarkan aplikasi Meshtastic, sambungkan kepada peranti LoRa anda dan pilih **Settings**.

RADIO CONFIGURATION : LoRa			
iOS		**Android**	
OPTIONS		Use modem preset	**True**
Region	**Malaysia 919MHz**	Modem preset	**LONG_FAST**
Use Preset	**True**	Frequency offset (MHz)	**0.0**
Presets	**Long Range - Fast**	Region (frequency plan)	**Malaysia 919MHz**
ADVANCED		Hop limit	**3***
Ignore MQTT	**False**	TX enabled	**True**
Ok to MQTT	**True**	TX power (dBm)	**27**
Transmit Enabled	**True**	Frequency slot	**16**
Number of hops	**3***	Override Duty Cycle	**False**
Frequency Slot	**16**	SX126X RX boosted gain	**True**
RX Boosted Gain	**True**	Override frequency (MHz)	**922.875**
Frequency Override	**922.875**	Ignore MQTT	**False**
Transmit Power	**27dBm**	OK to MQTT	**True**

MODULE CONFIGURATION : Channels - Primary Channel			
iOS		**Android**	
CHANNEL DETAILS		Channel Name	**LongFast**
Name	**Leave empty**	PSK	**AQ==**
Key Size	**Default**	Uplink enabled	**True**
Key	**AQ==**	Downlink enabled	**True**
Channel Role	**Primary**	Position enabled	**True**
POSITION		Precise location	**True**
Positions Enabled	**True**		
MQTT			
Uplink Enabled	**True**		
Downlink Enabled	**True**		

MODULE CONFIGURATION : MQTT			
iOS		**Android**	
OPTIONS		MQTT Config	
Enabled	**True**	MQTT Enabled	**True**
MQTT Client Proxy	**True**	Address	**mqtt.lucifernet.com**
Connect to MQTT via Proxy	**True**	Username	**meshdev**
Encryption Enabled	**True**	Password	**large4cats**
MAP REPORT		Encryption enabled	**True**
Enabled* **Set TRUE only if you would like to share location on the Meshtastic Map! Pilih TRUE hanya jika anda ingin berkongsi lokasi pada Peta Meshtastic!**	**True**	JSON output enabled	**False**

Consent to Share	**True**	TLS enabled	**False**
Map Publish Interval	**One Hour**	Root topic	**msh/MY_919**
ROOT TOPIC		Proxy to client enabled	**True**
Root Topic	**msh/MY_919**	Map reporting* **Set TRUE only if you would like to share location on the Meshtastic Map!** **Pilih TRUE hanya jika anda ingin berkongsi lokasi pada Peta Meshtastic!**	**True**
SERVER		Precise location	**True**
Address	**mqtt.lucifernet.com**		
Username	**meshdev**		
Password	**large4cats**		

3. Utilising MQTT via WiFi, house WiFi or phone hotspot.
3. Menggunakan MQTT melalui WiFi, sama ada WiFi rumah atau hotspot telefon.

Launch the Meshtastic app, connect to your LoRa device and select **Settings**.
Lancarkan aplikasi Meshtastic, sambungkan kepada peranti LoRa anda dan pilih **Settings**.

RADIO CONFIGURATION : LoRa			
iOS		**Android**	
OPTIONS		Use modem preset	**True**
Region	**Malaysia 919MHz**	Modem preset	**LONG_FAST**
Use Preset	**True**	Frequency offset (MHz)	**0.0**
Presets	**Long Range - Fast**	Region (frequency plan)	**Malaysia 919MHz**
ADVANCED		Hop limit	**3 or 7*** **3 for portable LoRa** **7 for Home/Base LoRa**
Ignore MQTT	**False**	TX enabled	**True**
Ok to MQTT	**True**	TX power (dBm)	**27**
Transmit Enabled	**True**	Frequency slot	**16**
Number of hops	**3 or 7*** **3 for portable LoRa** **7 for Home/Base LoRa**	Override Duty Cycle	**False**
Frequency Slot	**16**	SX126X RX boosted gain	**True**
RX Boosted Gain	**True**	Override frequency (MHz)	**922.875**
Frequency Override	**922.875**	Ignore MQTT	**False**
Transmit Power	**27dBm**	OK to MQTT	**True**

MODULE CONFIGURATION : Channels - Primary Channel			
iOS		**Android**	
CHANNEL DETAILS		Channel Name	**LongFast**
Name	**Leave empty**	PSK	**AQ==**
Key Size	**Default**	Uplink enabled	**True**
Key	**AQ==**	Downlink enabled	**True**
Channel Role	**Primary**	Position enabled	**True**
POSITION		Precise location	**True**
Positions Enabled	**True**		
MQTT			
Uplink Enabled	**True**		
Downlink Enabled	**True**		

MODULE CONFIGURATION : MQTT			
iOS		**Android**	
OPTIONS		MQTT Config	
Enabled	**True**	MQTT Enabled	**True**
MQTT Client Proxy	**True**	Address	**mqtt.lucifernet.com**
Connect to MQTT via Proxy	**True**	Username	**meshdev**
Encryption Enabled	**True**	Password	**large4cats**
MAP REPORT		Encryption enabled	**True**
Enabled* **Set TRUE only if you would like to share location on the Meshtastic Map! Pilih TRUE hanya jika anda ingin berkongsi lokasi pada Peta Meshtastic!**	**True**	JSON output enabled	**False**

Consent to Share	**True**	TLS enabled	**False**
Map Publish Interval	**One Hour**	Root topic	**msh/MY_919**
ROOT TOPIC		Proxy to client enabled	**True**
Root Topic	**msh/MY_919**	Map reporting* **Set TRUE only if you would like to share location on the Meshtastic Map!** **Pilih TRUE hanya jika anda ingin berkongsi lokasi pada Peta Meshtastic!**	**True**
SERVER		Precise location	**True**
Address	**mqtt.lucifernet.com**		
Username	**meshdev**		
Password	**large4cats**		

4. Utilising LoRa only, no MQTT via Bluetooth of your smartphone.
4. Menggunakan LoRa sahaja, tanpa MQTT melalui Bluetooth telefon pintar anda.

Launch the Meshtastic app, connect to your LoRa device and select **Settings**.
Lancarkan aplikasi Meshtastic, sambungkan kepada peranti LoRa anda dan pilih **Settings**.

RADIO CONFIGURATION : LoRa			
iOS		**Android**	
OPTIONS		Use modem preset	**True**
Region	**Malaysia 919MHz**	Modem preset	**LONG_FAST**
Use Preset	**True**	Frequency offset (MHz)	**0.0**
Presets	**Long Range - Fast**	Region (frequency plan)	**Malaysia 919MHz**
ADVANCED		Hop limit	**7*** 7 for furthest reach possible
Ignore MQTT	**True**	TX enabled	**True**
Ok to MQTT	**False**	TX power (dBm)	**27**
Transmit Enabled	**True**	Frequency slot	**16**
Number of hops	**7*** 7 for furthest reach possible	Override Duty Cycle	**False**
Frequency Slot	**16**	SX126X RX boosted gain	**True**
RX Boosted Gain	**True**	Override frequency (MHz)	**922.875**
Frequency Override	**922.875**	Ignore MQTT	**True**
Transmit Power	**27dBm**	OK to MQTT	**False**

MODULE CONFIGURATION : Channels - Primary Channel

iOS		Android	
CHANNEL DETAILS		Channel Name	**LongFast**
Name	**Leave empty**	PSK	**AQ==**
Key Size	**Default**	Uplink enabled	**False**
Key	**AQ==**	Downlink enabled	**False**
Channel Role	**Primary**	Position enabled	**True**
POSITION		Precise location	**True**
Positions Enabled	**True**		
MQTT			
Uplink Enabled	**False**		
Downlink Enabled	**False**		

MODULE CONFIGURATION : MQTT

iOS		Android	
OPTIONS		MQTT Config	
Enabled	**False**	MQTT Enabled	**False**
MQTT Client Proxy	**False**	Address	
Connect to MQTT via Proxy	**False**	Username	
Encryption Enabled	**True**	Password	
MAP REPORT		Encryption enabled	**True**
Enabled	**False**	JSON output enabled	**False**
Consent to Share	**False**	TLS enabled	**False**
Map Publish Interval	**One Hour**	Root topic	**msh/MY_919**
ROOT TOPIC		Proxy to client enabled	**False**
Root Topic	**msh/MY_919**	Map reporting	**False**

SERVER		Precise location	**True**
Address			
Username			
Password			