

**LAPORAN PRAKTIKUM  
WIRELESS COMMUNICATION**

**PRAKTIKUM IV  
PERCOBAAN SETTING WIRELESS ROUTER**



**Disusun oleh :**

Muhammad Abidin(V3922032)  
Muhammad Rafi N.P(V3922034)  
Riqfi Rivaldi (V3922040)  
Syahla Chandra Ramadhania (V3922042)  
Winasis Widya Wisesa (V3922048)

**Dosen**

Yusuf Fadlila Rachman, S. Kom., M. Kom

**PS D-III TEKNIK INFORMATIKA  
SEKOLAH VOKASI  
UNIVERSITAS SEBELAS MARET  
2023**

# **BAB I**

## **PENDAHULUAN**

### **1.1. Latar Belakang**

TP LINK WR840N Mode Router adalah sebuah perangkat jaringan yang dirancang untuk memberikan akses internet nirkabel bagi pengguna rumahan atau kantor kecil. Dalam lingkungan jaringan, TP LINK WR840N Mode Router berperan sebagai pusat pengatur lalu lintas data antara perangkat yang terhubung di dalam jaringan dan koneksi internet.

### **1.2. Tujuan**

Tujuan dari TP LINK WR840N Mode Router adalah untuk memberikan akses internet yang cepat, stabil, dan aman bagi pengguna di dalam jaringan. Dengan adanya TP LINK WR840N Mode Router, pengguna dapat terhubung ke internet secara nirkabel atau dengan kabel LAN, berbagi file dan sumber daya, dan menjalankan aplikasi jaringan lainnya.

### **1.3. Manfaat**

Penggunaan TP LINK WR840N Mode Router memberikan berbagai manfaat antara lain:

1. Akses Internet yang cepat dan stabil
- 2 .Keamanan jaringan
3. Kemudahan pengguna
4. Meningkatkan kemampuan jaringan dengan menghubungkan beberapa perangkat ke dalam jaringan dan memungkinkan berbagi file dan sumber daya di antara perangkat tersebut.

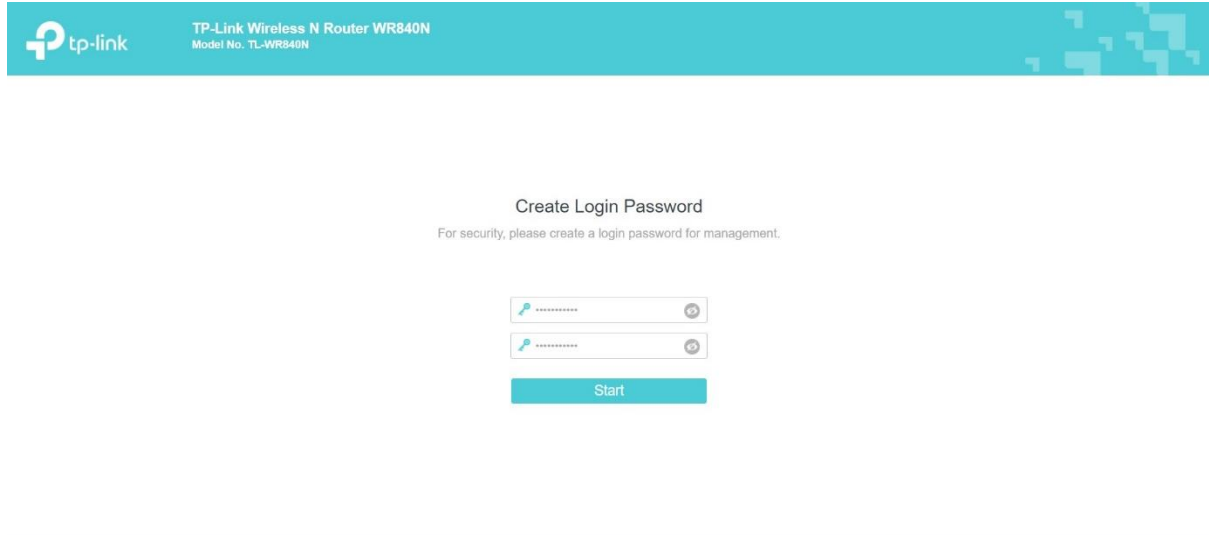
### **1.4. Alat dan Bahan**

- Router

- Network
- Laptop

## BAB II

### HASIL DAN PEMBAHASAN



TP-Link Wireless N Router WR840N  
Model No. TL-WR840N

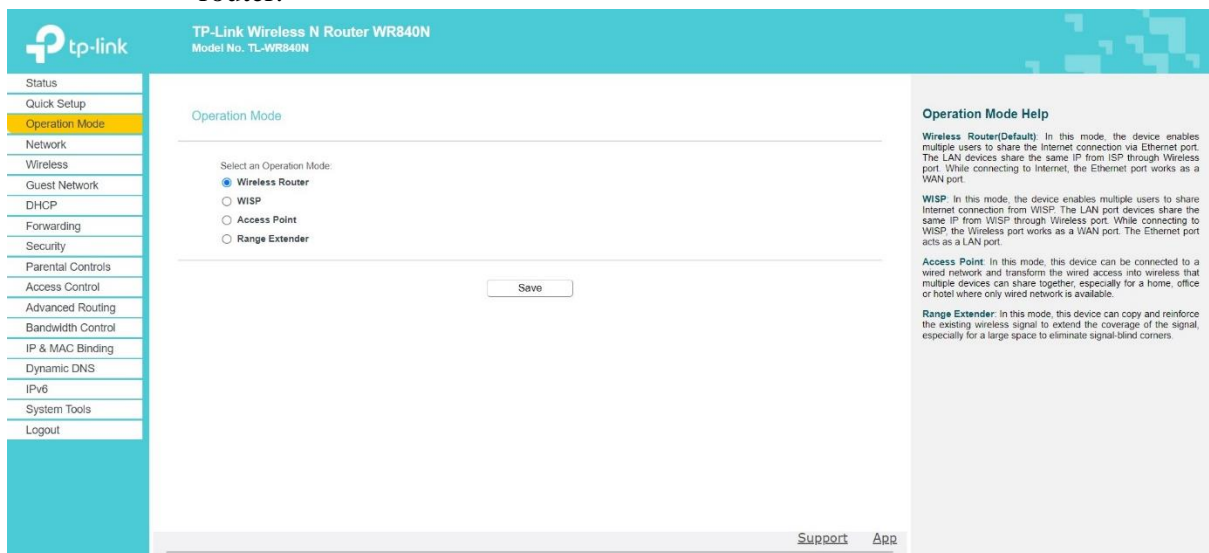
Create Login Password

For security, please create a login password for management.

Two password input fields with eye icons for toggling visibility.

Start

1. Cari nama router di Laptop lalu sambungkan. Nama dan password router terdapat di balik router tersebut.
2. Jika telah tersambung, buka Chrome atau apapun lalu login pada website <http://tplinkwifi.net/>, kemudian masukkan password yang ada pada belakang router.



TP-Link Wireless N Router WR840N  
Model No. TL-WR840N

Operation Mode

Select an Operation Mode:

- ☒ Wireless Router
- ☐ WISP
- ☐ Access Point
- ☐ Range Extender

Save

Operation Mode Help

**Wireless Router(Default)** In this mode, the device enables multiple users to share the Internet connection via Ethernet port. The LAN devices share the same IP from ISP through Wireless port. While connecting to Internet, the Ethernet port works as a WAN port.

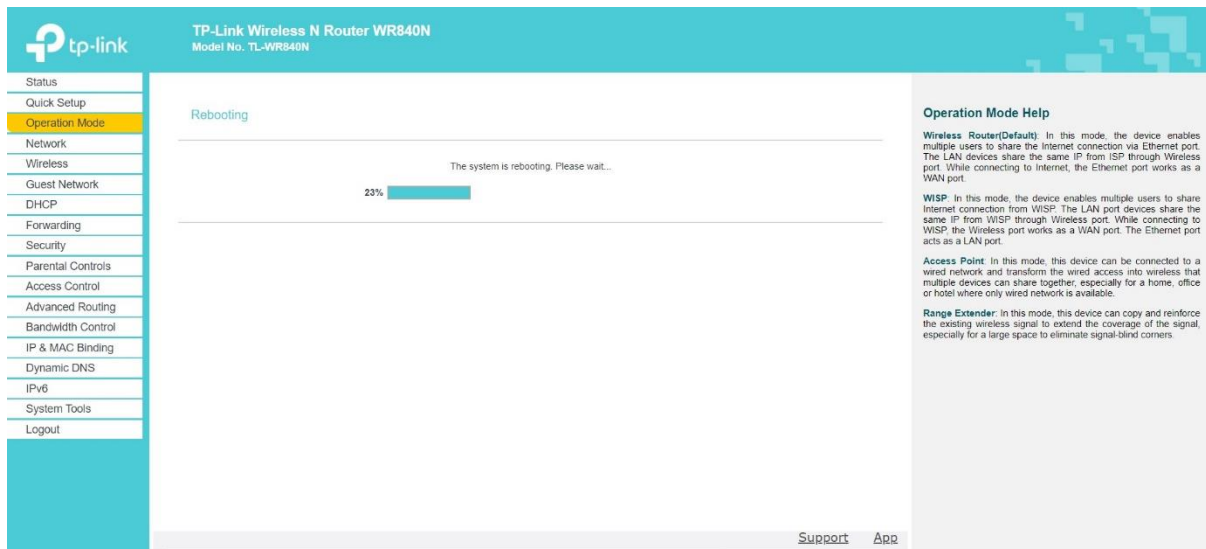
**WISP** In this mode, the device enables multiple users to share Internet connection from WISP. The LAN port devices share the same IP from WISP through Wireless port. While connecting to WISP, the Wireless port works as a WAN port. The Ethernet port acts as a LAN port.

**Access Point** In this mode, this device can be connected to a wired network and transform the wired access into wireless that multiple devices can share together, especially for a home, office or hotel where only wired network is available.

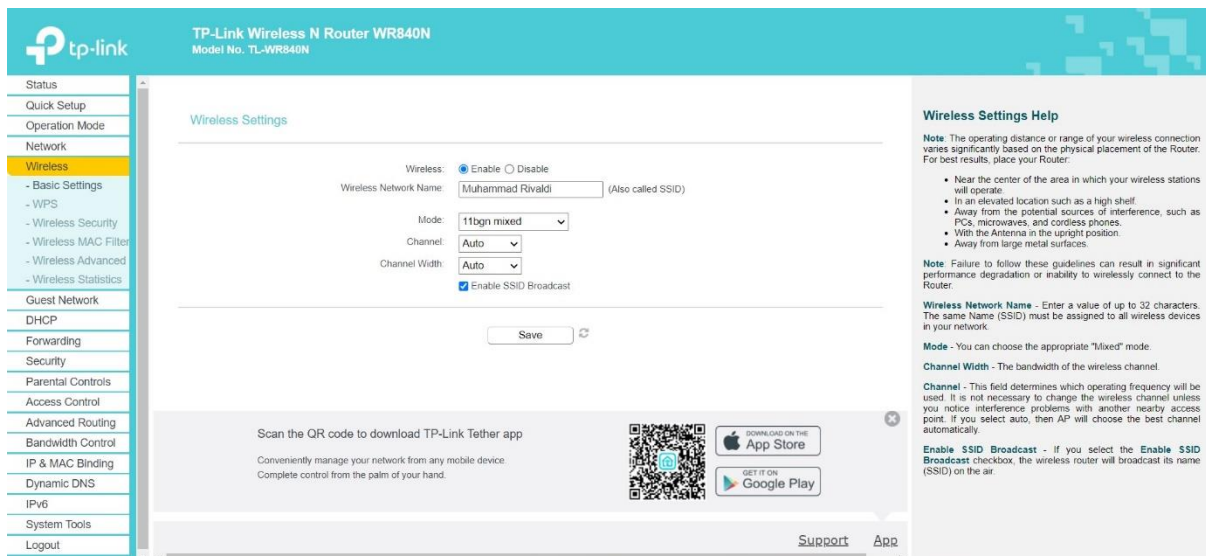
**Range Extender** In this mode, this device can copy and reinforce the existing wireless signal to extend the coverage of the signal, especially for a large space to eliminate signal-blind corners.

Support App

3. Kemudian pada menu Operation Mode terdapat 4 pilihan mode, ganti mode ke Access Point lalu klik Save.



4. Tunggu hingga selesai proses rebooting.
5. Apabila sudah selesai maka Router akan berubah menjadi Access Point, dan otomatis sinyal akan terputus dan masuk kembali seperti langkah awal. Untuk mengganti ke mode awal cukup pilih Wireless Route.



6. Masuk ke Wireless kemudian ke Basic Settings dan dapat merubah nama Wi-Fi(SSID) sesuai keinginan. Pilih save maka nama wifi akan berubah.

TP-Link Wireless N Router WR840N  
Model No. TL-WR840N

Wireless Security

☒ WPA/WPA2 - Personal (Recommended)

Version: WPA2-PSK  
Encryption: AES  
Wireless Password: rafisolol23  
Group Key Update Period: 0

☐ WPA/WPA2 - Enterprise

Version: Auto  
Encryption: Auto  
RADIUS Server IP:   
RADIUS Server Port: 1812 (1-65535, 0 stands for default port 1812)  
RADIUS Server Password:   
Group Key Update Period: 0

☐ WEP

Authentication Type: Open System  
WEP Key Format: Hexadecimal  
Selected Key: WEP Key  
Key 1:   
Key 2:   
Key 3:   
Key 4:   
Key Type: Disabled  
Disabled  
Disabled

Wireless Security Help

You can select one of the following security options:

- **Disable Wireless Security** - The wireless security function can be enabled or disabled. If disabled, the wireless stations will be able to connect the device without encryption. It is recommended strongly that you choose one of following options to enable security.
- **WPA/WPA2 - Personal** - Select WPA based on pre-shared passphrase.
- **WPA/WPA2 - Enterprise** - Select WPA based on Radius Server.
- **WEP** - Select 802.11 WEP security.

Each security option has its own settings as described follows.

**WPA/WPA2 - Personal Version** - You can select one of following versions.

**Version** - You can select one of following versions.

- **Auto** - Select WPA-PSK or WPA2-PSK automatically based on the wireless station's capability and request.
- **WPA-PSK** - Pre-shared key of WPA.
- **WPA2-PSK** - Pre-shared key of WPA2.

**Encryption** - You can select either Auto, or TKIP or AES.

**Wireless Password** - You can enter ASCII or Hexadecimal characters. For Hexadecimal, the length should be between 8 and 64 characters; for ASCII, the length should be between 8 and 63 characters.

**Group Key Update Period** - Specify the group key update interval in seconds. The value can be either 0 or at least 30. Enter 0 to disable the update.

**WPA/WPA2 - Enterprise Version** - You can select one of following versions.

**Version** - You can select one of following versions.

7. Setelah itu masuk ke dalam Wireless Security untuk setting password untuk keamanan Wi-Fi sesuai keinginan.

TP-Link Wireless N Router WR840N  
Model No. TL-WR840N

Wireless Statistics

Wireless Stations Currently Connected: 3 [Refresh](#)

| ID | MAC Address       | Current Status | Received Packets | Sent Packets | SSID             |
|----|-------------------|----------------|------------------|--------------|------------------|
| 1  | 54:6C:EB:CE:E7:44 | Associated     | 933              | 1,744        | Muhammad Rivaldi |
| 2  | 8C:AA:CE:47:59:9D | Associated     | 418              | 194          | Muhammad Rivaldi |
| 3  | C6:57:73:79:07:41 | Associated     | 90               | 53           | Muhammad Rivaldi |

Wireless Statistics Help

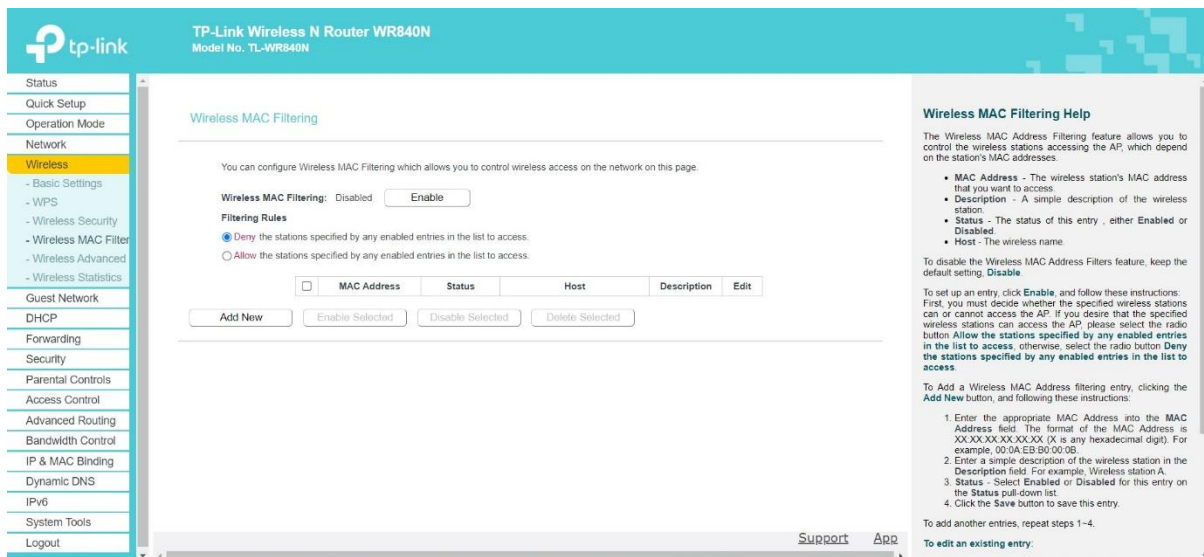
This page shows MAC Address, Current Status, Received Packets, Sent Packets and SSID for each connected wireless station.

- **MAC Address** - the connected wireless station's MAC address
- **Current Status** - the connected wireless station's running status
- **Received Packets** - packets received by the station
- **Sent Packets** - packets sent by the station
- **SSID** - SSID that the station associates with

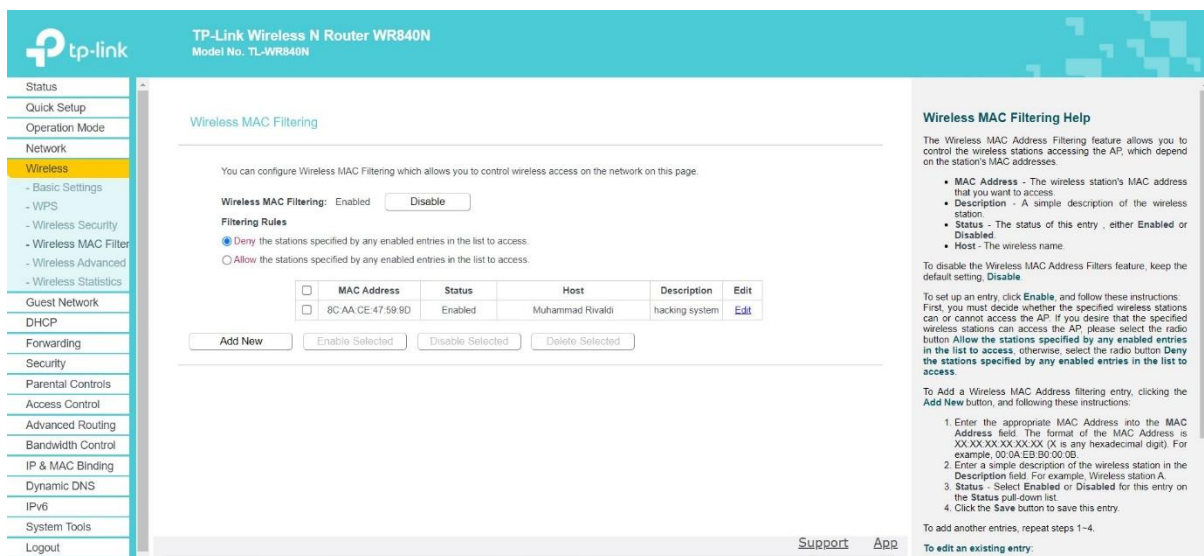
You cannot change any of the values on this page. To update this page and to show the current connected wireless stations, click on the **Refresh** button.

**Note:** This page will be refreshed automatically every 5 seconds.

8. Setelah nama dan password yang di atur tadi, masuk ke Wireless Statistics untuk melihat perangkat siapa saja perangkat yang tersambung.



9. Untuk membatasi pengguna yang terhubung dengan perangkat dapat dilakukan dengan cara membuka Wireless MAC Filtering pilih enable, lalu inputkan MAC address perangkat yang terhubung, beri deskripsi blokir kemudian save.



10. Kita dapat mengatur deny dan allow. Jika deny perangkat yang bisa terhubung kecuali yang di block, lalu jika allow semua perangkat tidak bisa terhubung kecuali yang kita block.

tp-link

TP-Link Wireless N Router WR840N

Model No. TL-WR840N

Status

Quick Setup

Operation Mode

Network

- WAN

- LAN

- IPTV

- MAC Clone

Wireless

Guest Network

DHCP

Forwarding

Security

Parental Controls

Access Control

Advanced Routing

Bandwidth Control

IP & MAC Binding

Dynamic DNS

IPv6

System Tools

Logout

LAN Settings

MAC Address: 54 AF 97 A4 EA F4

IP Address: 192.168.0.1

Subnet Mask: 255.255.255.0

Save

LAN Help

You can configure the IP parameters of LAN on this page.

- MAC Address - The physical address of the LAN ports, as seen from the LAN. The value cannot be changed.
- IP Address - Enter the IP address of your Device in dotted-decimal notation (factory default - 192.168.0.1)
- Subnet Mask - An address code that determines the size of the network. Usually it is 255.255.255.0.

Note:

- If you change the IP address, you must use the new IP address to login to the Device.
- If the new LAN IP address you set is not in the same subnet with the previous one, the IP Address pool in the DHCP server will be configured automatically, but the Virtual Server and DMZ Host will not take effect until they are re-configured.

Click the **Save** button to save your settings.

Support

App

11. Kita juga dapat melihat IP Address dan Subnet Mask Router dengan cara memilih Network lalu pilih LAN.