

User Manual

New OpenWrt Web interface

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1. Introduction

1.1. Objectives and methods

This document presents how to use each function of the new OpenWrt web interface.

The router user can switch to a browser and connect to the OpenWrt system on a real router or Docker environment to manipulate tests.

2. Basic concepts

It is preferable to read the Installation manual to prepare the environment of testing.

3. Reading guide

The new interface is divided into four modules: Quick Setup, Dashboard, Static IP, and Port redirects. One module may include several functions. This User Manual will not present by functions but by modules.

4. Modules

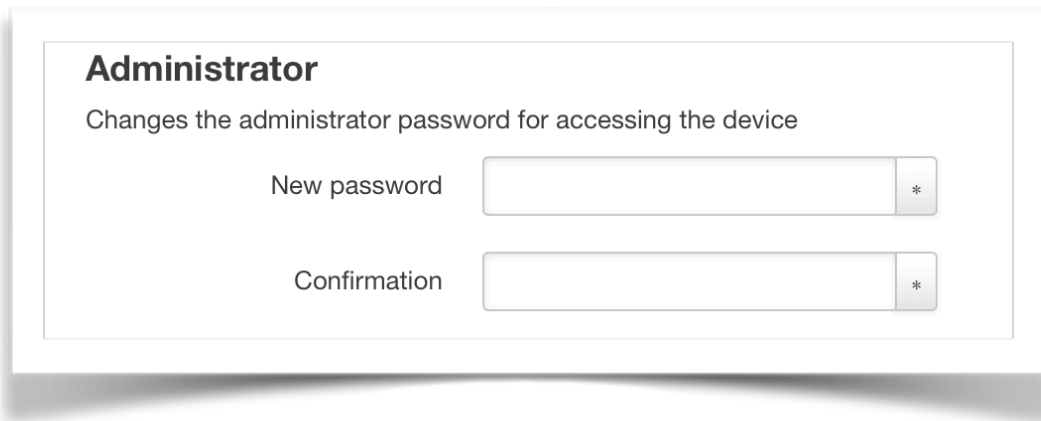
4.1. Quick Setup

This page is a combination of basics configurations for administrator, WAN, and Wifi.

Many configurations are not possible with Quick Setup, they must be done with the usual LuCI interface, but this is normal, Quick Setup only covers simple needs.

4.1.1. Administrator

This part allows for changing the administrator password for accessing the device.



The image shows a web interface for changing the administrator password. It has a title 'Administrator' and a subtitle 'Changes the administrator password for accessing the device'. There are two input fields: 'New password' and 'Confirmation', both with asterisks indicating password fields. The form is enclosed in a light gray box with a shadow.

Administrator
Changes the administrator password for accessing the device

New password

Confirmation

Error message:

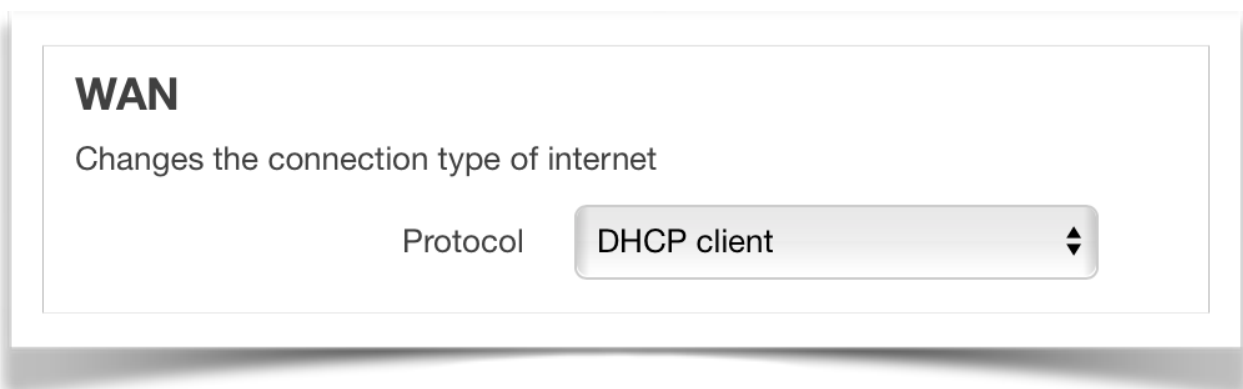
— Given password confirmation did not match, password not changed!

4.1.2. WAN

This part allows for changing the connection type of the internet. There are 3 types to choose: DHCP, Static address, and PPPoE.

1. DHCP: allows a device (in this case, your router) to obtain an IP address and associated information automatically.

In this case, you don't need to give any other pieces of information.



The image shows a web interface for changing the WAN connection type. It has a title 'WAN' and a subtitle 'Changes the connection type of internet'. There is a dropdown menu labeled 'Protocol' with 'DHCP client' selected. The form is enclosed in a light gray box with a shadow.

WAN
Changes the connection type of internet

Protocol DHCP client

2. Static address: an IP address specially reserved for your connection which does not change automatically.

In this case, you should choose the version of the internet protocol(ipv4 or ipv6), and then complete associated information with the version you have chosen.

WAN
Changes the connection type of internet

Protocol	Static address
IPv4 address	203.0.113.42
IPv4 netmask	255.255.255.0
IPv4 gateway	203.0.113.1
IPv6 address	2001:db8:0:1234:0:567:8:1
IPv6 gateway	

Error message: (when the input is not valid)

- Expecting: valid IPv4 address or prefix
- Expecting: valid IPv6 address or prefix

WAN
Changes the connection type of internet

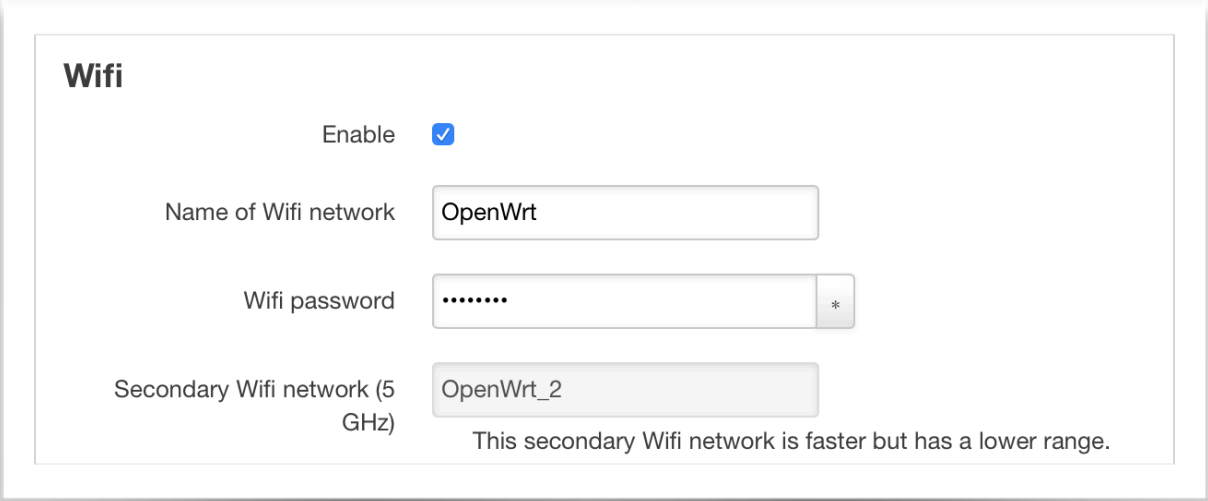
Protocol	PPPoE
PAP/CHAP username	
PAP/CHAP password	

3. PPPoE: the point-to-point protocol over Ethernet. This type of connection requires that you have a user name and password (given by your Internet service provider (ISP)) to access the Internet.

4.1.3. Wifi

This part allows for changing the ID and password of your wifi. You can also enable/disable this wifi by selecting/unselecting the checkbox "Enable". There are two wifis at the same time, one with a frequency of 2.4GHz, and another with 5GHz. They share the same password.

The ID of the Wifi with 5GHz is showed below the password. When you modify the ID of your wifi with 2.4GHz, the ID of the wifi with 5GHz is modified automatically with a suffix "_2".



The screenshot shows the 'Wifi' configuration page in OpenWrt. It features an 'Enable' checkbox which is checked. Below it, the 'Name of Wifi network' is set to 'OpenWrt'. The 'Wifi password' is masked with dots. The 'Secondary Wifi network (5 GHz)' is set to 'OpenWrt_2'. A note at the bottom states: 'This secondary Wifi network is faster but has a lower range.'

Wifi	
Enable	<input checked="" type="checkbox"/>
Name of Wifi network	<input type="text" value="OpenWrt"/>
Wifi password	<input type="password" value="....."/>
Secondary Wifi network (5 GHz)	<input type="text" value="OpenWrt_2"/>
This secondary Wifi network is faster but has a lower range.	

4.2. Static IP

This page is a lite version of Static leases comparing with that in the usual LuCI interface (Network → DHCP and DNS → Static Leases).

Static leases are used to assign fixed IP addresses and symbolic hostnames to DHCP clients. They are also required for non-dynamic interface configurations where only hosts with a corresponding lease are served.

This version keeps the essential configurations: Hostname, MAC-Address, and IPv4-Address.

When you select a MAC-Address within the list, the IPv4-Address associated with the MAC-Address is shown behind. If you have added this static lease before, it is the hostname shown behind the MAC-Address/IPv4-Address.

Furthermore, the users don't have to enter a new window to create or modify a static lease, that means, they can manipulate on the showing page, which simplifies the use of the interface.

Hostname	MAC-Address	IPv4-Address
xiaohui	40:6C:8F:5A:69:BD (xiaohui)	192.168.1.227 (xiaohui)
	unspecified	
	50:D4:F7:27:3C:FF (aaa)	
	40:6C:8F:5A:69:BD (xiaohui)	
	A4:5E:60:C1:3C:07 (192.168.1.140)	
	1E:80:37:2E:A4:5E	
	88:AE:07:27:09:2B (192.168.1.160)	
	A4:45:19:68:A8:54 (192.168.1.134)	
	-- custom --	

Powered by LuCI Master (git-20.140.4356)

3264-bf5d800578

Save & Apply Save Reset

4.3. Port Forwards

This page is a lite version of Port Forwards comparing with that in the usual LuCI interface (Network → Firewall → Port Forwards).

Port forwarding allows remote computers on the Internet to connect to a specific computer or service within the private LAN.

This version deletes Source Zone and Destination Zone, on the other hand, a default value was set to them (Source Zone : wan; Destination Zone : lan).

Furthermore, the users don't have to enter a new window to create or modify a server, that means, they can manipulate on the showing page, which simplifies the use of the interface.

Name	Protocol	External port	Internal IP address	Internal port
Name chosen for this server.		Match incoming traffic directed at the given destination port or port range on this host	Redirect matched incoming traffic to the specified internal host	Redirect matched incoming traffic to the given port on the internal host
test	TCP UDP	80	192.168.1.227 (xiaohui)	3389

Add Delete

Error message:(when external port is empty)
— Expecting: non-empty value

5. Glossary

OpenWrt (OPEN Wireless Router): an open-source project for operating system embedded Linux based, mainly used on embedded devices with a web interface (LuCI). All components have been optimized to be small enough to fit in the limited storage and memory available in home routers.

SSID: The name of wifi.

DHCP: a network management protocol which allows a device to obtain an IP address and associated information automatically.

MAC address: a unique identifier assigned to a network interface controller (NIC) for use as a network address in communications within a network segment.

IPv4 address: the fourth version of the Internet Protocol (IP).