

## Example

## **IPQ40xx UI setting**

- 1) input the IP: 192.168.1.1 and login;
- 2) Input the username: root; password: asdf1234, then press the button "Login",

WIE	OpenWrt   OpenWrt Chaos Calmer 15.05.1 unknown   Load: 0.22 0.11 0.04	. 📮
4	uthorization Required	
P	ease enter your username and password.	
	Username	la root
	Password	<b>2</b>
		@Reset BLogin

- 3) network setting
  - IP Setting: setting IP in the path "network->Interfaces->LAN->IPV4 address"
  - DHCP setting:DHCP and other protocol setting in the path network->Interfaces->LAN->protocol"

OpenWrt   OpenWrt Chaos Calmer 15.05.1 unknow		
atus System Services Network Logo	t Betz Yestz State to State State State State State State State	<u>eenatenenatenen</u> t
sterfaces Wifi Switch Static Routes Diagno	stics Firewall Multi-WAN	
AN WANG LAN		
erfaces - LAN		
this page you can configure the network interfaces. Y	ou can bridge several interfaces by ticking the "bridge interfaces" field and enter the nan	nes of several network interfaces separated by spaces. You can
use VLAN notation INTERFACE.VLANNR (e.g.: eth0.1).		
Common Configuration		
General Setup Advanced Settings Physical Sett	ngs Firewall Settings	
Status	Uptime: 0h 3m 1s MAC-Address: EA:0F:0E:DF:31:08 PX:161.56 KB (1832 Pdts.) br-lan TX: 467.16 KB (792 Pkts.) IPv4: 192.166 (192 Pkts.)	
Protocol	Static address	
IPv4 address	192.168.1.1	
IPv4 netmask	255.255.255.0 🗸	
IPv4 gateway		
IPv4 broadcast		
Use custom DNS servers	<b>*</b>	
IPv6 assignment length	60 Session a part of given length of every public IPv6-prefix to this i	interface
IPv6 assignment hint		

- 4) wireless setting
  - login the path network->Interfaces->WIFI, then choose one wifi,we select the red marked as example, click the button 'Edit'

F) Oper	nWrt   OpenWrt Chaos Calmer 15.05.1 unknown   Load: 0.0	00 0.04 0.05   Auto Refresh: <b>on</b>							Change
Status	System Services Network Logout	State:	RANA AN		1051		612061		
Interface	es Wifi Switch Static Routes Diagnostics Firew	all Multi-WAN							
wifi1: Ma	aster "OpenWrt" wifi2: Master "OpenWrt" wifi0: Master	'OpenWrt"							
Wireles	ss Overview								
	Generic Atheros 802.11bgn (wifi0)						Scan		Add
	SSID: OpenWrt   Mode: Master 0% Wireless is disabled or not associated				🐉 Ei	nable 🛛 🗾	Edit	×	Remove
9	Generic Atheros 802.11anac (wifi1)					٩	Scan		Add
	SSID: OpenWrt   Mode: Master 0% Wireless is disabled or not associated				🖉 Ei	nable 🛛 🗷	Edit	×	Remove
	Generic Atheros 802.11anac (wifi2)						Scan		Add
	SSID: OpenWrt   Mode: Master 0% Wireless is disabled or not associated				8 Ei	nable 🛛 🛃	Edit	×	Remove
Associa	ited Stations								
	SSID MAC-Address	IPv4-Address	Signal	Noise		RX Rate		TX Ra	te

 The detail information show in the picture as below: Channel:for channel select; Transmit Power:signal chain power setting; ESSID:for ID Mode:it support 4 mode AP,AP(WDS),client,client(WDS) Wireless Security:for Encryption setting

stus System Services Network Logout	כלול לול לול לול לול לול לול לול לול לול
erfaces Wifi Switch Static Routes Diagnostics Firewal	Multi-WAN
fil: Master "OpenWrt" wifi2: Master "OpenWrt" wifi0: Maste	∲ "OpenW4"
eless Network: Master "OpenWrt" (wifi1.networ	k1)
Device Configuration section covers physical settings of the radio h ation mode are grouped in the Interface Configuration.	ardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or
evice Configuration	
Seneral Setup Advanced Settings	
Status	SSID: OpenWrt   Mode: Master 0%, Wireless is disabled or not associated
Vireless network is disabled	Enable
Thannel	auto
ransmit Power	3 dBm (1 mW)
	Ø dbm
nterface Configuration	
General Setup   Wireless Security   Advanced Settings	
SSID	OpenWrt
fode	Access Point
letwork	☑ lan: 過意意意
	wan: 🖉
	uan6: @
	Choose the network(s) you want to attach to this wireless interface or fill out the greate field to define a new network.
ide ESSID	

IN Advance setting you can select which chain do you need, which BW do you need and so

	12021202120212021202120212021202		
arfaces Wifi Switch Static Routes Diagnostics Firewall I	Multi-WAN		
hl: Master "OpenWrt" witi2: Master "OpenWrt" witi0: Master "Op	enWrt"		
eless Network: Master "OpenWrt" (wifi1.network1)			
Device Configuration section covers physical settings of the radio hardw ation mode are grouped in the Interface Configuration.	vare such as channel, transmit power or antenna selection which	are shared among all defined wireless networks (if the radio l	ardware is multi-SSID capable). Per network settings like encryption o
evice Configuration			
eneral Setup Advanced Settings			
lode	802.11ac	~	
T mode	20MHz	~	
x Antenna bitmask	🗌 chain2 🗌 chain1	C chain2 C chain1	
x Antenna bitmask	🗌 chain2 🔲 chain1		
istance Optimization			
egulatory Domain			
ountry Code	00 - World Use ISO/IEC 3166 alpha2 c	v Jountry codes.	
terface Configuration			
ieneral Setup Wireless Security Advanced Settings			
ncryption	No Encryption	~	
ack to Overview 🖾 Reset			Save Save

In the end ,you need click the button "Save & Apply", and wait for 2 minutes, then you can enjoy it.

## 5) Backup archive

Login System->Backup/Flash Firmware;

Then click the button"Generate archive";

Then download the archive

tatus System Services Network Control Logout		
stem Administration Services SNMP LED Configurat	on Backup / Flash Firmware Reboot	
ash operations		
ctions Configuration		
ТСРДИМР		
Click TDPDUMP" to download tcp dumped file.		
Download TCPDUMP:	Generate tcpdump	
Backup / Restore Click "Generate archive" to download a tar archive of the curren	t configuration files. To reset the firmware to its initial state, click "Perfon	n reset" (only possible with squashfs images).
Download backup:	Generate archive	
Reset to defaults:	Perform reset	
To restore configuration files, you can upload a previously gene	rated backup archive here.	
Restore backup:	浏览 未选择文件。	Upload archive
Flash new firmware image		
Upload a sysupgrade-compatible image here to replace the runn	ing firmware. Check "Keep settings" to retain the current configuration (	requires an OpenWrt compatible firmware image).
Keep settings:		

6) 5M config, quarter rate

Ratus System Services Network Logout	161616161616169	र से र से र से र से र से र	<u>स्तित्र स्ट्रान्ट्</u> रान्	CICICICICIC
nterfaces Wifi Switch Static Routes Diagnostics Firewall Mult	i-wan			
wifi1: Master "athLink1" wifi0: Master "athLink0"				
ireless Network: Master "athLink1" (ath1)				
Device Configuration section covers physical settings of the radio hardware supped in the Interface Configuration.	uch as channel, transmit power or antenna selection which are shared	among all defined wireless networks (if th	e radio hardware is multi-SSID capable). I	er network settings like encryption or operation mod
Device Configuration				
General Setup Advanced Settings				
Status	Mode: Master   SSID BSSID: C4:48:101:00 Channel: 104 (5:520 100% Signal: -97 dBm   Me Bitrate: 14:4.0 Mbit/s	athLink1 3A:27   Encryption: None GH2)   Tx-Power: 24 dBm ise: -95 dBm   Country: US		
Wireless network is enabled	() Disable			
Country Code	US - United States Use ISO/IEC 3166 alpha2 of	v ountry codes.		
Mode	802.11ac	¥		
Channel Spectrum Width	20MHz	*		
Half/Quarter Rate	quarter rate	*		
Frequency	104 (5.520 GHz)	*		
Block Dfs Channel list	🗐 🕲 Block Dfs Channel list			
Background ACS scan	Automatically scan and standard scan and standard scan and standard scandard sc	witch to best channel after a period of tim	, default is 60 seconds	
Scan List:	Enable Scan List			
	🔲 36 (5.180 GHz)	40 (5.200 GHz)	44 (5.220 GHz)	🔲 48 (5.240 GHz)
	52 (5.260 GHz)	56 (5.280 GHz)	60 (5.300 GHz)	64 (5.320 GHz)
	100 (5.500 GHz)	🔲 104 (5.520 GHz)	108 (5.540 GHz)	🗐 112 (5.560 GHz)
	116 (5.580 GHz)	120 (5.600 GHz)	124 (5.620 GHz)	🗐 128 (5.640 GHz)
	132 (5.660 GHz)	136 (5.680 GHz)	🔲 140 (5.700 GHz)	🔲 149 (5.745 GHz)
	🔲 153 (5.765 GHz)	157 (5.785 GHz)	🔲 161 (5.805 GHz)	🔲 165 (5.825 GHz)
Transmit Power	28 dBm (316 mW)			

## 10M config, half rate

itus System Services Network Logout	ার চার চার চার চার চার চার চার চার			
erfaces Wifi Switch Static Routes Diagnostics Firewall Mult	i-wan			
h1: Master "athLink1" wih0: Master "athLink0"				
eless Network: Master "athLink1" (ath1)				
Device Configuration section covers physical settings of the radio hardware : ped in the Interface Configuration.	uch as channel, transmit power or antenna selection which are shared	among all defined wireless networks (if th	e radio hardware is multi-SSID capable). I	Per network settings like encryption or operation mo
evice Configuration				
eneral Setup Advanced Settings				
tatus	Mode: Master   SSID: 8SSID: C4:48:D1:00 100% Signat: -97 dbm   Mo Bitrate: 14-0 Mbl/s	athLink1 3A:27   Encryption: None GHz)   Tx-Power: 24 dBm ise: -95 dBm   Country: US		
vireless network is enabled	() Disable			
ountry Code	US - United States Use ISO/IEC 3166 alpha2 of	v puntry codes.		
lode	802.11ac	•		
hannel Spectrum Width	20MHz	•		
ialf/Quarter Rate	half rate	*		
requency	104 (5.520 GHz)	¥		
ock Dfs Channel list	🗐 🎱 Block Dfs Channel list			
ackground ACS scan	🗐 🕲 Automatically scan and s	witch to best channel after a period of time	e, default is 60 seconds	
can List:	🔲 Enable Scan List			
	🔲 36 (5.180 GHz)	🔲 40 (5.200 GHz)	🔲 44 (5.220 GHz)	🔲 48 (5.240 GHz)
	52 (5.260 GHz)	56 (5.280 GHz)	60 (5.300 GHz)	64 (5.320 GHz)
	100 (5.500 GHz)	104 (5.520 GHz)	108 (5.540 GHz)	🔲 112 (5.560 GHz)
	116 (5.580 GHz)	120 (5.600 GHz)	124 (5.620 GHz)	128 (5.640 GHz)
	132 (5.660 GHz)	136 (5.680 GHz)	140 (5.700 GHz)	149 (5.745 GHz)
	153 (5.765 GHz)	157 (5.785 GHz)	161 (5.805 GHz)	165 (5.825 GHz)
ransmit Power	28 dBm (316 mW)	•		

7) Advanced settings for long distance transmission

ess Network: Master "athLink1" (ath1) vice Configuration section covers physical settings of the radio hardware such as channel, transmit powe I in the Interface Configuration.	r or antenna selection which are sh		
vice Configuration section covers physical settings of the radio hardware such as channel, transmit powe in the Interface Configuration.	r or antenna selection which are sh		
		ared among all defined v	wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation r
ce Configuration			
eral Setup Advanced Settings			
ntenna bitmask	🗹 chain2 🗹 chain1	check	
ntenna bitmask	🗹 chain2 🗹 chain1		
ance Optimization	7000		If you will test 6km, enter number 7000/8000 here.
Jatory Domain			
rface Configuration			
eral Setup Wireless Security MAC-Filter Advanced Settings			
R	athLink1		
e	Access Point	~	
rd Interval	Long v		Chaose "long" here
Rate (Mbps)	Auto	~	
ESSID	0		
to Overview @Reset			@Save
使有法国法国法国法国法法国法国法国法国法国法	والجا بالجا بالجا بالجا با	法法法法法法	http://www.inter-thetterty-statestarty-st