# Manual

Mode : ZBT-WE1326

# n Remark:

ZBTlink reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes. Any update please browse <u>http://www.cswlink.com</u>

All copyrights reserved. No reproduction by any means is allowed without acknowledgement

# **Table of Contents**

## 1. Product Overview

1.1 Simply Description
1.2 Main Feature

1.3 Specification.....

# 2. Hardware Description

2.1 Product Appearance
2.1.1 Front Panel 2.1.2 Back Panel
2.2 Reboot
2.3 System Requirements
2.4 Install Condition

# 3. TCP/IP Setting

# 4. Configuration Guide

4.1 Start and Login
4.2 Status
4.2.1 Overview
4.2.3 Routing List
4.2.5 Kernel Log
4.2.7 Realtime Graphs
4.3 System
4.3.1 System 4.3.2 Administration

4.3.3 Software
4.3.4 Startup
4.3.5 Schedule Tasks
4.3.6 Mount Points, LED Configuration
4.3.7 Backup/Flash Firmware
4.3.8 Reboot
4.4 Service
4.4.1 Dynamic DNS
4.5 Network
4.5.1 Interfaces
4.5.2 Wireless
4.5.3 DHCP/DNS、Hostnames, Static Routes
4 5 4 Firewall
4.5.5 QOS
4.6 Log Out
4.7 Flash Firmware
5.FAQ

# **1. Product Overview**

# n 1.1 Simply Description

CSW-WR246 provide an easy way to expend your wired Ethernet to wireless. It works well on gateway, and you could configure it via Web. It could meet both enterprise and the home's requirements economically, its user could browser the internet and time and anywhere. It has multi-function ,highly-perfomance and easy install. Will be your best choice to build your own WLAN. About the wireless security, CSW-WR246 provides multi-protection, support unable SSID broadcast , also provide 64/128/152 bit WEP encryption , support for WPA / WPA-PSK, WPA2/WPA2-PSK security mechanism , in order to protect your data .Comply with 802.11a/ 802.11n/ 802.11g/ 802.11b/ 802.113/802.11au/802.11AC standard has 300Mbps , Our smart antenna management, makes the CSW-WR246 performs much better than other similar product in WiFi transmission distance, perfectly compitable with other network device.

# n 1.2 Features and Specification

## u 1.2.1 Main Features

- Ø Provide 5 10M/100M Ethernet ports
- Ø DHCP server
- Ø Support RTS/CTS protocol , ensure the communication quality
- Ø Roaming technology, efficient wireless connect
- Ø DHCP serve static IP address
- Ø Web manage

# u 1.2.2 Specification

- Ø Comply with 802.11a/802.11n/802.11g/802.11b/802.113/802.113u/802.11ac standard
- Ø Support TCP/IP、DHCP、ICMP protocol
- Ø Auto MDI/MDIX port
- Ø Indictor LED, power adapter(12V 1A)
- Ø Work temperature  $0^{\circ}$ C  $40^{\circ}$ C
- Ø Operating Humidity: 10%~90% non-condensing

# 2. Hardware Description

# n 2.1 Panel Layout

u 2.1.1 Front Panel



Pic 2-1 Front Panel

# Indictor LED (Will adjust with the specific mode)

Indictor LED	Description	Function
POWER	Power LED	Keep ON - Power in Keep Off - No Power
PCIE	PCIE	Flashing - PCIE module work Keep Off - PCIE module not work
LAN	LAN LED	On - The relevant port connect Off - No connect to the relevant port Flashing- Data transmission on the relevant port
WLAN	Wifi LED	Off - Wireless function unable On - Wireless function enable

# u 2.1.2 Back Panel



Pic 2-2 Back Panel Port(Will adjust with the specific mode)

Port	Description	Function
DC	Power Port	Connect the supplied power adapter.
LAN	LAN Port (RJ45)	Connect to the devices in the LAN, such as HUB, switches or PC
WAN	WAN Port (RJ45)	Connect to the WAN device, data exchange with the internet

Button(Will adjust with the specific mode)

Button	Description	Function
RESET/WPS	RESET/WPS Multi-function button	Rest: Press for 8 seconds WPS: Press one times.
Antenna	4* 5Dbi omni external antenna	Wireless data transfer and receive

# n 2.2 Rest

If you want to rest to the factory default settings, please refer the below steps

- 1) To plug the power adapter.
- 2) When the router works normally, press the REST/WPS button for 8 seconds.
- 3) All the router's LEDs will off and then on again, wait until it work normally.
- 4) When above 3 steps done, the router will rest to the factory default setting.

Warming:

Before steps finishing, don't cut the power off, or it will break your router.

#### n 2.3 System Requirements.

- Ø Network card and Ethernet cable
- Ø TCP/TP net software (Windows 95 or higher version has pre-install)
- Ø IE 5.0 or higher version

#### n 2.4 Install Condition

When you install the router, please refer the below

- Ø Put the device horizontally
- Ø Keep away from any heat device
- Ø Do not put it in some place which is too dirty or too humidity.

#### Remark:

The environment will effect the transfer distance , recommend using environment: Temperature:  $0^{\circ}C \sim 40^{\circ}C$  ,Humidity:  $10\% \sim 95\%$  RH

# 3. TCP/IP Configuration

Before using the device, you need to configure the network correctly, this manual is based on the Windows 2000/XP, the IP of the device is 192.168.1.1, subnet mask is 255.255.255.0.

Firstly, connect your PC to the LAN port, and then you can configure the IP of your PC in 2 ways.

#### <sup>2</sup> Set the IP

Set your PC's IP as 192.168.1.xxx(xxx could be any number in 2~254), subnet mask to be 255.255.255.0, default gateway 192.168.1.1, DNS server 192.168.1.1

#### <sup>2</sup> Auto set the IP by the DHCP server.

Set the TCP/IP to "automatically get IP address", after setting , you could use the Ping command to check if the device has connected to the PC. For an example, in Windows 2000, run the cmd.exe , and the enter ping 192.168.1.1 If the screen shows as the below, means OK, the device connected to the PC.

```
Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time<10ms TTL=64
Ping statistics for 192.168.1.1:
Packets: Sent = 4, Received = 4, Lost = 0 <0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

If it shows as below, it means fail

```
Pinging 192.168.1.1 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Approximate round trip times in milli-seconds:
    Minimum = Øms, Maximum = Øms, Average = Øms
```

When it fails to connect, you could check as below.

1): If the hardware connect in right way?

#### >>The relevant LED to the PC must be on

2): If your PC's TCP/IP sets right?

>>If the IP of the device is 192.168.1.1 , your PC's IP must be 192.168.1.xxx(xxx should be 2~253)

# 4. Configuration Guide

#### n 4.1 Start and Login

The router provide the UI based on the IE, this solution could work in any MS Windows, Macintosh or UNIX system . Run the browser, unable the VPN (if the VPN is working) , and then input the 192.168.1.1 in browser. After doing that, you will see the login page, you should enter it as the administer, which means you should enter the username: root /Password: admin , and then click the "log in"

The system of the ZBT-CSW-WR246 is OpenWrt

ase enter your username and password.			
Username	🚨 root		
Password			
			🙆 Reset 🔲 Lo

4-1 Log in webpage

When everything goes well, the browser will show as the 4-2. There are several tag, click some tag, you could configure relevant function settings.

Memory         19956 K8 / 61944 K8           Free         39566 K8 / 61944 K8           Cached         7648 K8 / 70944 K8           Suffered         2240 K8 / 70944 K8           Wirered         2240 K8 / 70944 K8           Network         (3%)           IPv4 WAN Status         ? Not connected           Active Connections         270 / 16384 (1%)           DHCP Leases         IPv4-Address         MAC-Address           Wireless         Concerts 020 Uhon Wireless Controller (rs0)         Concerts 020 Uhon Wireless Controller (rs0)	e remaining
Memory Wemory Total Available Free 39566 KB / 51944 KB Free 39566 KB / 51944 KB Cached Cached 7648 KB / 57944 KB Cached 2240 KB / 57944 KB Cached Cached 2240 KB / 57944 KB Cached Cached 2240 KB / 57944 KB Cached	e remaining
Memory         Total Available         49456 kB / 61944 kB           Free         39566 kB / 61944 kB         5046 kB           Cached         7648 kB / 61944 kB         5046 kB           Suffered         2240 kB / 61944 kB         5044 kB           Vetwork         2240 kB / 61944 kB         5044 kB           Vetwork         270 / 16384 (1%)         5044 kB           DHCP Leases         270 / 16384 (1%)         5044 kB	
Ademory         Ademory           Total Available         49456 kB / 61944 kB           Free         39566 kB / 61944 kB           Cached         7649 kB / 61944 kB           suffered         2240 kB / 61944 kB           letwork         240 kB / 61944 kB           IPV4 WAN Status         ?           Abt connected         270 / 16384 (1%)	
Area nor y         Total Available         49456 kB / 61944 kB           Total Available         49456 kB / 61944 kB         5000000000000000000000000000000000000	
Internet         149456 kB / 61944 kB           ree         39568 kB / 61944 kB           Cached         7648 kB / 20144 kB           Juffered         2240 kB / 61944 kB           tetwork         (3%)	
Itemory         Itemory           Otal Available         49456 kg / 61944 kB           ree         39566 kg / 61944 kB           iached         7648 kB / 2044 kB           utfered         2240 kB / 20144 kB	
iemory	
lemory 'otal Available 49456 k6 / 6/944 kB ree 9956 k6 / 6/944 kB	
Temory Temo	
and a second secon	
UDU AND DU AND DU AND	
Jptime 0h 4m 0s and Average 0h 00 0.05	
Local Time Tue Apr 2 19:20:50 2013	
constant operative adjustment (1.1.1.5.1.) fact many (0.1.1.5.1.5.1.)	
Router Model 28T WR8305FT	
Router Name ZBT-WR8305RT	
System	
115	
erview Firewall Routes System Log Kernel Log Processes Realtime Graphs	
tus System Services Network Logout	
305RT   OnenWith Attitude Adjustment 12.09.1   Load: 0.14 0.10 0.05   Auto Refresh: on	(

4-2

I will explain each menu.

#### n 4.2 us

#### u 4.2.1 Overview

Click the "Overview" You could check the running information, included system information, Memory, network, DHCP leases, wireless and associate stations, as 4.2.1

🚺 🕄 ZE	T-WB8305RT - Overvie* ×					
← -	C 192.168.1.1/cgi-bin/luci					ର ନ୍ଥ ୧
ZBT-W	R8305RT   OpenWit Attitude Adjustment 12.09.1     oad: 0.14.0 :	10.0.05 LAuto Refresh: on				Cha
201-11	Status System Services Network Legent					cha
	Quernieu Frewall Poutas System Los Kernel Los Pros	ossos - Roaltimo Granhs				
	Overview Pirewall Routes System Log Remei Log Proc	esses Realume Graphs				
S	tatus					
L I I	System					
	Router Name	ZBT-WR8305RT				
	Router Model	ZBT WR8305RT				
	Firmware Version	OpenWrt Attitude Ac	djustment 12.09.1 / LuCI Trunk (0.11-	+svn396)		
	Kernel Version	3.3.8				
	Local Time	Tue Apr 2 19:20:50 :	2013			
	Uptime	Oh 4m Os				
	Load Average	0.08, 0.09, 0.05				
	Memory					
	Total Available	40456 kp / 61044	lin lin			
	Free	19430 KB / 01944	KD I			
	Cashed	39568 KB / 01944	KB .			
	Luffored	7648 KB / 61944 K				
	buileieu	(3%)	<u>B</u>			
r e	Network					
	IPv4 WAN Status	Ø				
		? Not connected				
	Active Connections	270 / 16384 (1%				
	DHCP Leases					
	Hostname I	Pv4-Address	MAC-Address		Leasetime rem	aining
			There are no active leases.			
	Wireless					
	Generic 802.11bgn Wireless Controller (ra0)	SSID: ZBT-CI Mode: Maste Channel: 11 100% Birrate: 300 BSSID: 00:0 Encryption: -	h <u>ina 912CDB</u> (0.000 GHz) Mbit/s 1:42:91:2C:DB			
-	Associated Stations					
	MAC-Address	Network	Signal	Noise	RX Rate	TX Rate
			No information available			
Dowe	red by LuCI Trupk (0.11+syn396)					
POWE	Carby East Hank (0.117590390)					

4.2.1 Status

- Ø System: Router name, Router model, Firmware version, Kernel version, Local Time, Uptime, Load average.
- Ø Memory: Total available , Free, Caches, Buffered
- Ø Network: The connection status of the WAN port.
- Ø DHCP Leases: Show the IP address ,MAC, and the Lease time
- Ø Wireless: It is about the wireless status, will included SSID, Mode, Work Channel, Bitrates, the MAC of the wireless interface, the Encryption of the transmission.
- Ø Associate: Shows the status of all the device connect to the router via Wireless

#### u 4.2.2 Firewall

Click the firewall tag, you could check the firewall status of the device

-		1/ogi bill/luci/,s	con-concurses25cdes10128150	.0010031317a	umm/sta	us/iptabi	05/				42
305RT   O	penWrt Atti	tude Adjustment 12.0	9.1   Load: 0.04 0.08 0.05								Ch
atus Syst	tem Servi	ces Network L	ogout								
erview F	irewall F	toutes System Log	Kernel Log Processes Realtin	ne Graphs							
wall Statu	•										
nut otutu											
ctions Recet C	ounters										
Restart	Firewall										
11 PL											
able: Filter											
hain INPL	/T (Policy:	ACCEPT, Packets: 0,	Traffic: 0.00 B)		-					the second second	
Rule #	Pkts.	Traffic 172 70 KB	Target	Prot.	Flags	In *	Out *	Source	Destination	Options	
1	2457	1/3./8 KB	delegate input	ali				0.0.0/0	0.0.0/0	-	
hain FOR	WARD (Pol	icy: DROP, Packets:	0, Traffic: 0.00 B)								
Rule #	Pkts.	Traffic	Target	Prot.	Flags	In	Out	Source	Destination	Options	
1	0	0.00 B	delegate forward	all		*	*	0.0.0.0/0	0.0.0/0		
hain 0//7	PUT (Police	CACCEPT. Packets:	0. Traffic: 0.00 B)								
Rule #	Pkts	Traffic	Tarnet	Prot	Flags	In	Out	Source	Destination	Ontions	
1	2623	252.32 KB	delegate output	all		*	*	0.0.0.0/0	0.0.0.0/0	-	
		1/5 (									
hain deleg	gate_forwa	(References: 1)		D	<b>F</b> 1			0	B - Marchine	0.00	
Rule #	Pkts.	I raffic	larget	Prot.	Flags	In	Out *	Source	Destination	Options	
2	U	0.00 8	Torwarding_rule	all			*	0.0.0.0/0	0.0.0/0	/* user chain for forwarding */	
3	ő	0.00 B	zone lan forward	all		hr-lan	*	0.0.0/0	0.0.0/0	-	
4	Ō	0.00 B	zone wan forward	all		eth2.2	*	0.0.0.0/0	0.0.0/0		
5	Ō	0.00 B	reject	all		*	*	0.0.0.0/0	0.0.0/0	-	
hain dolo	nato innut	(References: 1)									
Rule #	Dktc	Traffic	Target	Prot	Flans	In	Out	Source	Destination	Ontions	
1	1968	130.69 KB	ACCEPT	all	nago	lo	*	0.0.0.0/0	0.0.0.0/0	options	
2	489	43.09 KB	input rule	all		*		0.0.0.0/0	0.0.0.0/0	/* user chain for input */	
3	384	32.75 KB	ACCEPT	all		*	*	0.0.0.0/0	0.0.0/0	ctstate RELATED.ESTABLISHED	
4	29	1.47 KB	syn flood	tcp		*	*	0.0.0.0/0	0.0.0/0	tcp flags:0x17/0x02	
5	105	10.35 KB	zone lan input	all		br-lan	*	0.0.0.0/0	0.0.0/0	-	
6	0	0.00 B	zone wan input	all		eth2.2	*	0.0.0.0/0	0.0.0/0	-	
hain deleg	gate_outpu	t (References: 1)									
Rule #	Pkts.	Traffic	Target	Prot.	Flags	In	Out	Source	Destination	Options	
1	1968	130.69 KB	ACCEPT	all		*	lo	0.0.0.0/0	0.0.0/0		
2	655	121.64 KB	output_rule	all	5124	*	*	0.0.0.0/0	0.0.0/0	/* user chain for output */	
3	655	121.64 KB	ACCEPT	all		•	*	0.0.0.0/0	0.0.0/0	ctstate RELATED,ESTABLISHED	
4	0	0.00 B	zone lan output	all	1.77	*	br-lan	0.0.0.0/0	0.0.0/0		
5	0	0.00 B	zone wan output	all		*	eth2.2	0.0.0/0	U.O.O.0/O	-	
hain rejec	t (Referen	ces: 3)									
Rule #	Pkts.	Traffic	Target	Prot.	Flags	In	Out	Source	Destination	Options	
1	0	0.00 B	REJECT	tcp		*	*	0.0.0.0/0	0.0.0/0	reject-with tcp-reset	
		0.00.8	REIECT	-10		*	*	0.0.0.0/0	0.0.0.0/0	reject with isone part upreachable	

## u 4.2.3 Routing List

Click the status-routes, you could check the routing list of the device, the currently active on the device.

atus System Services Network Logout			
rerview Firewall Routes System Log Kernel Log	Processes Realtime Graphs		
ites			
following rules are currently active on this system.			
IRP			
<u>IPv4</u> -Address 192.168.1.3		MAC-Address be:5f:f4:f8:72:05	Interface br-lan
Active IPv4-Routes			
Network Ian	Target 192.168.1.0/24	IPv4-Gateway 0.0.0.0	Metric O

4.2.3

## u 4.2.4 System Log

Click the System Log, you could check the running status and the operate history



4.2.4

# u 4.2.5 Kernel Log

Click the Kernel Log, you could check some information about the device's system

287-19830581 - Kerael   x	
← → C 🗋 192.168.1.1/cgi-bin/luci/;stok=e8bcdf8e525cae8f0f28f5c0c7c89191/admin/status/dmesg/	요 삶 🔮 🛢
287-WR8305RT   OpenWrt Attitude Adjustment 12.09.1   Load: 0.01 0.06 0.05	Changes: 0
Status System Services Network Logout	
Overview Firewall Routes System Log Kernel Log Processes Realtime Graphs	
Kamalian	
nemeruog	
[ 0.00000] Lanux version 3.8 C.0042EF5Cerver) [gcc version 4.6.3 20120201 [grerelesse] Clinuro 602 4.6-2012 (02) ) #1 Won Jun 16 17:32:41 CST 2014 [ 0.00000] Bedi Tel MTSCR CFF 500004, Bus;159Mt Burt: 40002 [ 0.000000] Bedi Tel MTSCR CFF 50004, Bus;159Mt Burt: 40002	
C 0.000000] Detecting menory64 MBI	
[ 0.00000] PIES: bypass FUTe BLL. [ 0.00000] PIES: Lypass [Autic buffer control.: Addr:0x98 -> 0x84	
[ 0.000000] disable all pover about FCIe	
U 0.00000 (Pt version is: context for WTACMB 0 0.00000) (Pt version is: context for WTACMB (VERSION) (Pt version is: context for the Pt version is: context	
[ 0.000000] Determined physical RAM map:	
L 0.00000] nenery: 04000000 @ 0000000 (uzale) [ 0.00000] Zone PW ranzes:	
[ 0.000000] Normal 0x0000000 -> 0x00004000	
[ 0.00000] Movable zone start FIN for each node [ 0.000000] Event FIN senses	
[ 0.00000] On node 0 totalpages: 1534	
1 0.000000 Irre_tree_init_nose. nose 0, prat outacto, nose_nem_map 0.000000 [0.00000] Kyrnal zone: 125 pages used for nemap	
[ 0.000000] Normal zone: 0 pages reserved	
[ 0.00000] Normal zone: 18256 pages, LIPO batch: 3 [ 0.00000] norm-20156: 0.0.4 30758 %2788 %2008 %10.0.1102/1788	
[ 0.00000] ppp alloc: [0] 0	
[ 0.000000] Built 1 ronelists in Zone order, mobility grouping on. Total pages: 18258	
[ 0.00000] PTD hernel command line: control="typ1, ll:200mb beard="HTMSUbbit root:type="squath: [ 0.00000] PTD hernel table action: "28 (order: -2.102 brian)	
[ 0.000000] Dentry cache hash table entries: 8192 (order: 3, 32788 bytes)	
[ 0.00000] Inde-cache hash table entries: 4098 (order: 2, 1638 bytes)	
1 0.000000 Primary instruction cache evado, viri, evado, interie a optes. 1 0.000000 Primary data cache 2284 evado PIT no aliaese. lineire az bytes	
[ 0.000000] Writing ErrCtl register=00079283	
[ 0.00000] Beadback ErrCl register=00078233 [ 0.00000] Beadback ErrCl register=00078233	
<ol> <li>0.000000 JLBE Genilabres, Maligneso, Audora Maria Code, Ficker Vel, Sockers (Koders)</li> <li>0.000000 JLBE Genilabres, Maligneso, Succession (Section Code), Roders</li> </ol>	
L 0.000000 min/raine/system inek.com/er init ed:0029e200 mi214/40, s:32 D. DODDDD concels fit/s01 methiad	
[ 0.004000] Calibrating delay loop 367.58 BogoMIPS (Lpj=775168)	
[ 0.040000] Pid_max: default: 32769 minimum: 301	
C 0.044000 MET. Registered protocol family 16	
[ 0.052000] Ralink/WTK BootROW maped.	
L U.DSUUUJ MITS' mechane uz ZET MESUBAT	
[ 0.064000] IZC:0710	
[ 0.064000] SFI_EFCLK: <ptd< td=""><td></td></ptd<>	
2.1.6.1.1/g_i=bin/lusi/jsteeBedf8e525cas8672865c0c7c89191/adsin/status/	

#### u 4.2.6 Processes

Click the progresses, you could check an overview over currently running system processes and their status. Such as CPU usage, Memory usage. You could hang up ,terminate or even kill the program, depends on your requirements.

SHENZHEN ZHIBOTONG ELECTRONICS CO.,LTD

WR8305	RT   OpenWrt A	ttitude Adjustment 12.09.1   Load: 0.01 0.06 0.05			Chang
Status	System Ser	wices Network Logout			
Overvie	ew Firewall	Routes System Loa Kernel Loa Processes Realtime Graphs			
Drocorre	or				
This list	aives en overvi	aw over durantly numing system processes and their status			
THIS HSC	gives an overvi	ew over carrendy raining system processes and their status.			
PID	Owner	Command	CPU usage (%)	Memory usage (%)	Hang Up Terminate Kill
1	root	init	0%	2%	# Hang Up 🛋 Terminate 💩 Kill
2	root	[kthreadd]	0%	0%	# Hang Up 💌 Terminate 🥹 Kill
3	root	[ksoftirqd/0]	0%	0%	# Hang Up Terminate & Kill
4	root	[kworker/0:0]	0%	0%	# Hang Up 🛛 Terminate 💩 Kill
5	root	[kworker/u:0]	0%	0%	# Hang Up 🛋 Terminate 🚳 Kill
6	root	[khelper]	0%	0%	# Hang Up 🛪 Terminate 🥹 Kill
7	root	[kworker/u:1]	0%	0%	# Hang Up I Terminate Kill
56	root	[sync supers]	0%	0%	# Hang Up 💌 Terminate 🚳 Kill
58	root	[bdi-default]	0%	0%	# Hang Up 💌 Terminate 🧶 Kill
60	root	[kblockd]	0%	0%	# Hang Up Terminate Kill
91	root	[kswapd0]	0%	0%	# Hang Up 🛋 Terminate 🙆 Kill
143	root	[fsnotify_mark]	0%	0%	🖉 Hang Up 💌 Terminate 🧶 Kill
180	root	[mtdblock0]	0%	0%	🥔 Hang Up 🖻 Terminate 🧶 Kill
185	root	[mtdblock1]	0%	0%	# Hang Up 💌 Terminate 🥘 Kill
190	root	[mtdblock2]	0%	0%	🖉 Hang Up 💌 Terminate 🧶 Kill
195	root	[mtdblock3]	0%	0%	# Hang Up 🔊 Terminate 🥹 Kill
200	root	[mtdblock4]	0%	0%	😂 Hang Up 💌 Terminate 🧧 Kill
205	root	[mtdblock5]	0%	0%	# Hang Up 🗷 Terminate 🧶 Kill
210	root	[mtdblock6]	0%	0%	# Hang Up 💌 Terminate 🧶 Kill
215	root	[mtdblock7]	0%	0%	🖉 Hang Up 💌 Terminate 🧔 Kill
225	root	[kworker/0:1]	0%	0%	# Hang Up 💌 Terminate 🙂 Kill
444	root	[jffs2_gcd_mtd7]	0%	0%	🖉 Hang Up 💌 Terminate 🧔 Kill
446	root	[flush-mtd-unmap]	0%	0%	# Hang Up Terminate & Kill
468	root	[khubd]	0%	0%	# Hang Up 🛋 Terminate 🧧 Kill
496	root	init	0%	2%	# Hang Up 💌 Terminate 🧶 Kill
497	root	init	0%	2%	# Hang Up 🛪 Terminate 🙆 Kill
617	root	/sbin/syslagd -C16	0%	2%	# Hang Up 🛋 Terminate 🚳 Kill
619	root	/sbin/klogd	0%	2%	# Hang Up 🛋 Terminate 🧶 Kill
621	root	/sbin/hotplug2overridepersistentset-rules-file /etc/hotplug2.rulesset-coldplug-cmd /sbin/udevtriggermax-children 1	0%	1%	# Hang Up Terminate 🕹 Kill
629	root	/sbin/ubusd	0%	1%	# Hang Up 🔊 Terminate 🙆 Kill
651	root	/sbin/netifd	0%	2%	# Hang Up Terminate 💩 Kill
710	root	udhcpc -p /var/run/udhcpc-eth2.2.pid -s /lib/netifd/dhcp.script -f -t 0 -i eth2.2 -C	0%	2%	# Hang Up 🛋 Terminate 🧶 Kill
1125	root	[RtmpCmdQTask]	0%	0%	# Hang Up 💌 Terminate 🧧 Kill
1126	root	[RtmpWscTask]	0%	0%	# Hang Up 🗷 Terminate 🧧 Kill
1128	root	/sbin/watchdog -t 5 /dev/watchdog	0%	2%	# Hang Up 🛋 Terminate 🙆 Kill

4.2.6

## u 4.2.7 Realtime Graphs

Click the Realtime Graphs ,you could check the load, traffic, wireless and connection of the device.

ZBT-	WR8305RT   OpenWrt Attitude Adjus	tment 12.09.1   Load: 0.25 0.10 0.07   Auto Refre	sh: on			Changes: 0
	Status System Services Netw	vork Logout				
	Overview Firewall Routes Sys	stem Log Kernel Log Processes Realtime G	raphs			
	Load Traffic Wireless Connec	tions				
	Realtime Load					
	6n	Sm	4n:	3n	2m	lm
	0.22					
	0.15					
	0.07					
						(6 minute window, 3 second interval)
	1 Minute L	oad: 0.25	Average: 0.25			Peak: 0.27
	15 Minute Li	oad: 0.10	Average: 0.10 Average: 0.07			Peak: 0.07

图 4.2.7

## u 4.3.1 System

Click the System tag, you could check and edit some basic information of the device, including Local time, Hostname, time zone.

R8305RT   OpenWrt Attitude Adjustment 12.09.1   Load: 0.05 0.05 0.05   A	Auto Refresh: on	Cha
tatus System Services Network Logout		
ystem Administration Software Startup Scheduled Tasks Mount	Points LED Configuration Backup / Flash Firmware Reboot	
rstem		
ere you can configure the basic aspects of your device like its hostname or	r the timezone.	
System Properties		
General Settings Logging Language and Style		
Local Time	Tue Apr 2 19:25:01 2013 📴 Sync with browser	
Hostname	ZBT-WR8305RT	
Timezone	UTC T	
Time Synchronization		
Enable NTP client	8	
Provide NTP server	0	
NTP server candidates	0.openwrt.pool.ntp.org 🔊	
	1. openwrt.pool.ntp.org 💉	
	3.openwrt.pool.ntp.org	
		⊚Reset © Save © Save & Ap
		@Reset @Save @Save &A

4.3.1

#### u 4.3.2 Administration

You can edit the administrator password for accessing the device

Administration Scieware Scartup Scheduled Task	s mount contra the configuration backup ( has no minimum configuration ( RBD000	
uter Password		
nanges the administrator password for accessing the device		
Password	ja 1997. 1977. 197	
Confirmation	<i>»</i>	
iH Access		
opbear offers <u>SSH</u> network shell access and an integrated <u>SCP</u> s	erver	
Dropbear Instance		wDolo
Interface	0 lan: ** 0	2.Dele
	wan: 🐲	
	unspecified	
	Listen only on the given interface or, if unspecified, on all	
Port	22	
	Specifies the listening port of this Dropbear instance	
Password authentication	O Allow SSH password authentication	
Allow root logins with password	Allow the root user to login with password	
Gateway purcs	Allow remote mosts to connect to local sam for warded ports	
Mdd		
SSH-Keys		
Here you can paste public SSH-Keys (one per line) for SSH public	-key authentication.	

#### u 4.3.3 Software

Click the software page, you could download and install the package , do not operate it without a professional engineer.

#### u 4.3.4 Startup

Click to the Startup page, You can enable or disable installed init scripts here. Changes will applied after a device reboot, do not operate it without a professional engineer.

#### u 4.3.5 Schedule Tasks

This is the system crontab in which scheduled tasks can be defined., do not operate it

without a professional engineer.

## u 4.3.6 Mount Points, LED Configuration

Do some edition about the system , do not operate it without a professional engineer.

## u 4.3.7 Backup/Flash Firmware

You could upgrade the firmware or backup it in this page, as below.

tem Administration Software Startup Scheduled	Tasks Mount Points LED Configuration Backup / Flash Firmware Reboot	
h operations		
ons Configuration		
Backup / Restore Click "Generate archive" to download a tar archive of th	e current configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible with so	quashfs images).
Download backup:	Generate archive	
Reset to defaults:	Perform reset	
To restore configuration files, you can upload a previou:	ly generated backup archive here.	
Restore backup:	选择文件 未选择任何文件 III Upload archive	
Flash new firmware image		
Upload a sysupgrade-compatible image here to replace	the running firmware. Check "Keep settings" to retain the current configuration (requires an OpenWrt compatil	ble firmware image).
Keep settings:	8	
Image:	选择文件 未选择任何文件 IFlash image	

4.3.7

## u 4.3.8 Reboot

Select menu system to restart, you can restart your device. When you click the Reboot tag, the device will reboot.



## n 4.4. Service

#### u 4.4.1 Dynamic DNS

Dynamic DNS allows that your router can be reached with a fixed hostname while having a dynamically changing IP address

## n 4.5 Network

#### u 4.5.1 Interfaces

Click the Interface tag, you could check the wired port's status and edit it.



4.5.1

#### u 4.5.2 Wireless

Click the Interface tag, you could check the wireless port's status and edit it.

-WR8305RT   OpenWrt Attitude A	djustment 12.09.1   Load: 0.00 0.02 0.05   Aut	o Refresh: on				Chang
Status System Services	Network Logout					
Interfaces Wifi DHCP and	DNS Hostnames Static Routes Firewall	Diagnostics				
ra0: Master "ZBT-China_912CD	DB"					
Wireless Overview						
Ralink/MTK RT2860v Channel: 11 (? GH2)   SSID: ZBT-Chin 100% BSSID: 00:01:4	2 802.1160n (re0) Bitrate: 300 Mbit/S a 912CD8   Mode: Master 42191:2C:D6   Encryption: -					i Scan ≛ Add i Disable i Edit i Remove
Associated Stations						
SSID	MAC-Address	IPv4-Address	Signal	Noise	RX Rate	TX Rate
		No information a	vailable			
L						

4.5.2

#### u 4.5.3 DHCP/DNS、Hostnames, Static Routes,

You could edit these setting in relevant page. do not operate it without a professional engineer.

#### u 4.5.4 Firewall

The firewall creates zones over your network interfaces to control network traffic flow

as system services intervolk Logour						
erfaces Wifi DHCP and DNS Hostnames Static R	outes Firewall Diagnost	tics				
neral Settings Port Forwards Traffic Rules Custon	n Rules					
ewall - Zone Settings						
e firewall creates zones over your network interfaces to	control network traffic flow <mark>.</mark>					
General Settings						
Enable SYN-flood protection		×				
Drop invalid packets		8				
Input		accept	•			
Output		accept	•			
Forward		reject	¥			
Zones						
Zone ⇒ Forwardings	Input	Output	Forward	Masquerading	MSS clamping	
lan: lan: ഈ 👳 ⇒ 🗰 wan	accept	<ul> <li>accept</li> </ul>	▼ reject ▼	8	0	ZEdit ZDelete
wan: wan: 📰 👄 REJECT	reject	▼ accept	▼ reject ▼		2	Edit Delete
10Add						

Pic 4.5.4

#### u 4.5.5 QOS

With QoS you can prioritize network traffic selected by addresses, ports or services.

r   o	penWrt A	titude A	djustment 12.	.09.1   Load: 1	.05 0.63	8 0.26									Chan
S	itatus S	stem	Services Ne	twork La	gout										
I	nterfaces	Wifi	DHCP and DN	S Hostname:	s Stat	ic Routes 🛛 Diagnosti	s Firewal	QoS							
Q	uality of S	rvice													
W	ith QoS y	ou can p	rioritize netwo	irk traffic selec	ted by a	addresses, ports or se	ervices.								
1	Interface	s													
	WAN														× Delete
	Enable														
	Classific	ation gr	up					default			-				
	Calculat	e overhe	ad					0							
	Half-dup	lex						8							
	Downloa	d speed	(kbit/s)					1024							And and a state of the state of
	Upload s	peed (k	oit/s)					128			7				
								-			-				
				Add											
	Classific	ation Ru	les												
	Tar	get	Sour	ce host	I	Destination host		Service	Protocol		Ports		Number of bytes	Sort	
	priority	0	all	Ŧ	all	•	all	۲	all	۲	22,53	•		• •	Delete
	normal		all	۲	all	۲	all	۲	TCP	۲	20,21,25,80,110,443,993,995	•		• •	💌 Delete
	express		all	۲	all	•	all	•	all	۲	5190	•		• •	Delete
	Add														
· · · · ·															
														windeset 🐸 Sav	/e 📟 save & Appl'

Pic 4.5.5

#### n 4.6 Log out

Click the Log Out tag, you will log out the website.

#### More details about the system. Please refer the https://openwrt.org/

#### n 4.7 Flash Firmware

Operate this keep the router connecting computer status.

First, use sharp item Pressing the RESET button as "Picture 1" below, then power on the router.



Second, set the computer TCP/IP in to static IP 192.168.1.X (X means any number between 2 to 255) and Subnet mask into 255.255.255.0

Connect using:   Provide a real network protocol /Internet Protocol. The default wide area network protocol /Internet Protocol. The default wide area network protocol /Internet Protocol. The default wide area network protocol hat provides communication across diverse interconnected networks. Show icon in notification area when connected Notify me when this connection has limited or no connectivity You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. You can get IP settings assigned automatically You can get IP settings assigned automatically if your network administrator for the appropriate IP settings. You can get IP settings assigned automatically You can get IP settings assigned automatically Otherwise, you need to ask your network administrator for the appropriate IP settings. You can get IP settings assigned automatically Outpervise, you need to ask your network administrator for the appropriate IP settings. Use the following IP address: <th>eneral Authentication Advanced</th> <th>General</th> <th></th>	eneral Authentication Advanced	General	
I his connection uses the following items:               Client for Microsoft Networks                    Client for Microsoft Networks                          Client for Microsoft Networks <td>Connect using:  Realtek PCIe FE Family Controller  Configure</td> <td>You can get IP settings assigned automatically if your network this capability. Otherwise, you need to ask your network act the appropriate IP settings.</td> <td>vork supports dministrator for</td>	Connect using:  Realtek PCIe FE Family Controller  Configure	You can get IP settings assigned automatically if your network this capability. Otherwise, you need to ask your network act the appropriate IP settings.	vork supports dministrator for
Install       Uninstall       Properties         Description       Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.       Obtain DNS server address automatically         Show icon in notification area when connected       Preferred DNS server:       .         Notify me when this connection has limited or no connectivity       Alternate DNS server:       .	I his connection uses the following items:           Image: Client for Microsoft Networks           Image: Cl	O Dbtain an IP address automatically     O Use the following IP address:     IP address:     I92 . 168 . 1     Subnet mask:     255 . 255 . 255	. 22
Description         Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.         Show icon in notification area when connected         Notify me when this connection has limited or no connectivity	Install Uninstall Properties	Default gateway:	
<ul> <li>✓ Show icon in notification area when connected</li> <li>✓ Notify me when this connection has limited or no connectivity</li> </ul>	Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	Obtain DNS server address automatically     Obtain DNS server addresses:     Preferred DNS server:	
	Show icon in notification area when connected Notify me when this connection has limited or no connectivity	Alternate DNS server:	

Third,key in 192.168.1.1 into browser, come into "Firmware recovery page" as below pic. (this system developed based on Chinese ,so the page shows Chinese word)

Click "Brower " button find the firmware "root\_ulmage.ulmage" from your computer, double click "root\_ulmage.ulmage" to hang on it. Then click "刷新固件"to start uploading

(During uploading time,don't move or power off the router!! Otherwise will cause the router dead !!)

s 🗿 http://192.168.1.1/

固件恢复模式

				请选择固件:			Brows	<u></u>	1
					刷棄	新固件	/		
	Choose file			1		/	?	1	
<del>〕错误</del>	Look jn: My Recent Documents Desktop My Documents	Removable	Disk (G:)		י 2	1 🕂 🎟			
	My Computer My Computer My Network Places	File <u>n</u> ame: Files of <u>ty</u> pe:	root_ulmage All Files (*.*)	ulmage		•	<u>D</u> pen Cancel		
; 🙋 http:	//192.168.1.1/								💌 🔁 (
				拯救	莫式				
			Æ	在升级固件,请 系统将在更新完成	等待96 秒, 活自动重启。	•			
)更新	过程中请不要断	电或者重启。						1 100000	

#### File Uploading, don't restar or power off the router during this time!!

About 100seconds, the file upload success will show "升级完毕" as below picture show. And the router will automatic restart







请不要断电或者重启。

# Upload success, router will restart.



Fourth, Set the computer TCP/IP into automatic obtain IP

SHENZHEN ZHIBOTONG ELECTRONICS CO.,LTD

Bashali DOla EE Famili Camballar	
	Internet Protocol (TCP/IP) Properties
his connection uses the following items:	General Alternate Configuration
<ul> <li>Client for Microsoft Networks</li> <li>File and Printer Sharing for Microsoft Networks</li> <li>QoS Packet Scheduler</li> <li>Thternet Protocol (TCP/IP)</li> </ul>	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
	Obtain an IP address automatically
Install	Use the following IP address:
Description	IP address:
Transmission Control Protocol/Internet Protoc	cc Subnet mask:
across diverse interconnected networks.	Default gateway:
Show icon in notification area when connect	te
Notify me when this connection has limited o	O     Use the following DNS server addresses:
	Preferred DNS server:
ОК	Alternate DNS server



#### 1、LAN LED off

It is about the hardware connection issue, you could check follow below steps

- Ø To check if the Ethernet cable plug into the port firmly.
- Ø To check if the network device is power on
- Ø Make sure the Ethernet cable are working well

#### 2. The device work normally after setting . But the link will become unsteady after working

#### some time, such as delay and package dropping.

It means there are some interference in the work environment, you could follow the below steps to solve such problem.

- Ø To check if each part of the connection are steady.
- Ø If the signal strength are too weak, you can try to change the work channel, in order to

reduce the reference.

Ø Reboot the device.

Reset to the factory default setting.

After all the above steps, if it still have the same questions, please contact to the reseller or our FAE.

#### **FCCCaution**

This devicecomplies with part 15 of the FCCRules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

AnyChangesormodificationsnotexpresslyapprovedbythepartyresponsible for compliance couldvoid the user's authority to operate the equipment.

Note: This equipmenthasbeentestedandfoundtocomplywiththe limitsforaClass Bdigitaldevice,pursuanttopart15oftheFCCRules.Theselimitsaredesignedto providereasonableprotectionagainstharmfulinterferenceinaresidentialinstallation. This equipmentgeneratesusesandcanradiateradiofrequencyenergyand, ifnot installedandusedinaccordance withthe instructions,maycauseharmfulinterference toradiocommunications. However,thereisnoguaranteethatinterferencewillnot occurinaparticularinstallation. Ifthisequipmentdoescauseharmfulinterferenceto radioortelevisionreception,whichcanbedeterminedbyturningtheequipmentoff andon, theuserisencouragedtotrytocorrecttheinterferencebyone ormoreofthe followingmeasures:

- Reorientorrelocatethereceivingantenna.

- Increase the separation between the equipmentand receiver.

- Connecttheequipmentintoanoutletona circuitdifferentfromthattowhichthe receiverisconnected.

- Consultthedealeroranexperiencedradio/TVtechnicianforhelp.

This equipmentcomplies with FCC radiation exposure limits setforth for an uncontrolled environment. This equipments hould be installed and operated with minimum distance 20 cm between the radiator & your body.

Note: Modifications to this product will void the user's authority to operate this equipment.