R800

INDUSTRIAL LTE ROUTER

QUICK START GUIDE

ZTE

Website: www.ztewelink.com

E-mail: ztewelink@zte.com.cn

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APPLICATION RANGE

Industrial Wireless Router
R800

REVISION HISTORY

VERSION	DATE	DESCRIPTION
V1.0	2016-08-10	First release

ABOUT THIS DOCUMENT

Reading Note

The symbols below are the reading notes you should pay attention on:

: Warning or Attention

: Note or Remark

NOTE: Consult our website for up-to-date product descriptions, documentation, application notes, firmware upgrades, troubleshooting tips, and press releases

CONTACT INFORMATION

Post	9/F, Tower A, Hans Innovation Mansion, North Ring Rd., No.9018, Hi-Tech Industrial Park, Nanshan District, Shenzhen.
Web	www.ztewelink.com
Phone	+86-755-26902600
E-Mail	ztewelink@zte.com.cn

Note: Consult our website for up-to-date product descriptions, documentation, application notes, firmware upgrades, troubleshooting tips, and press releases

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1. Product Introduction

R800 3G/4G LTE IoT industrial wireless communication router takes the advantage of public 4G network to provide data transmission through long distance.

The product uses high-performance 32-bit industrial grade communications processor and industrial grade wireless module, Software platform is an embedded real-time operating system,While providing an RS232 interface,2 Ethernet LAN (one of which can be configured as WAN),At the same time,connect a serial port and Ethernet equipment,implement the data transparent transmission and routing functions.

The product has been widely used in the networking industry chain in the M2M industry,Such as smart grid,smart transportation,smart home,finance,mobile POS terminals,supply chain automation,industrial automation,intelligent building,fire, public safety,environmental protection,meteorology,digital medical,telemetry,space exploration,agriculture,forestry,water,coal, petrochemical and other fields.

2. Packing List

Please kindly check the packing list, if there are omissions, please contact the dealer.

Name of Accessory	Quantity	Remark
R800 LTE Router Main Machine	1	Packed as per customer order configurations
WLAN Antenna(The cable length is 1m)	1 piece	Packed as per customer order configurations
3G/4G Antenna	2 pieces	Packed as per customer order configurations
RJ45 Cable	1 piece	Packed as per customer order configurations
Installation Hardware	1 pair	Packed as per customer order configurations
Quick Start Guide	1	Packed as per customer order configurations
12VDC Power Adapter	1	Packed as per customer order configurations

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3. Before Installation

3.1. R800 Product Exterior View

Figure 3-1

3.2. Indicator Light Description

Table 3-2

Indicator Light	Status	Description
PWR	ON	Power ON
	OFF	Power OFF
	Flash	Temperature anomalies
SYS	ON	System operating normally
	OFF	Abnormal system operation
	Flash	Temperature anomalies
PPP	ON	Network connection
	OFF	No dial
	Fast Flash	Dialing
	Slow Flash	Allocated on a non-4G network
VPN	ON	Any VPN turned on

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	OFF	Disconnect
	Flash	Connecting
SIG	ON	21～31
	Slow Flash	11～20
	Fast Flash	1～10
	OFF	No service
BAK	ON	WAN as the primary link, and lte work
	Flash	Exception, none of access
	OFF	WAN works, LTE not working

3.3. PC CONNECTION

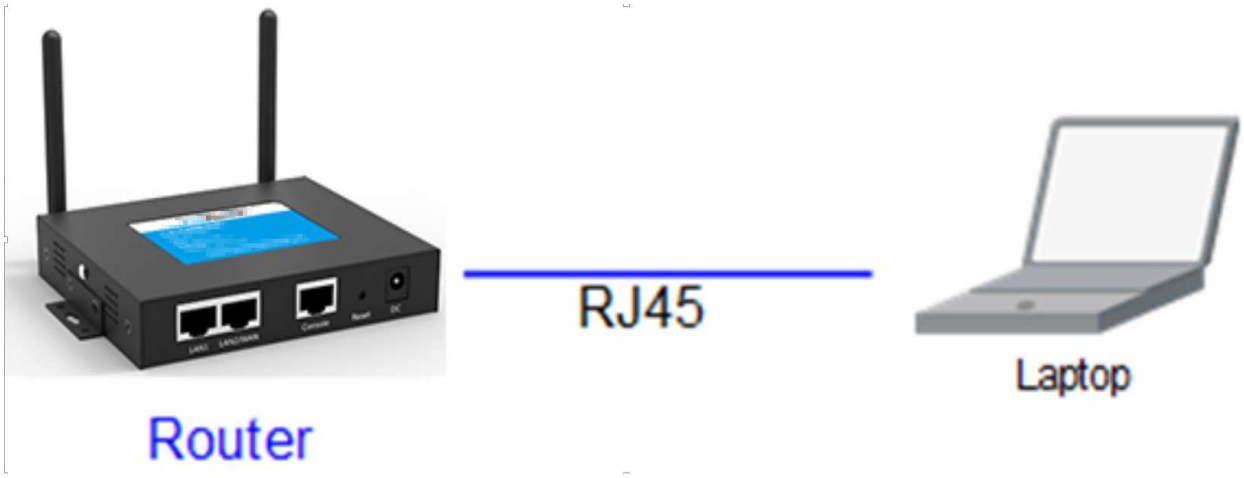

Figure 3-2 PC Connection

NOTE (Back of the device):

☑ Router antenna interface is SMA female socket. The matching antenna SMA male antenna screwed to the router interface and ensure tightened so as not to affect the signal quality.

☑ Insert the SIM card holder the right of small yellow dots with spikes, SIM card sets to pop up. When installing the SIM card, the first SIM card into the card holder and ensure that the SIM card metal contacts facing down, and then insert the SIM card holder in the drawer and make sure it clicks into place.

4. COMPUTER CONFIG (WINDOWS OS)

Press “WINDOWS + X” to open the menu, select “Control panel”.

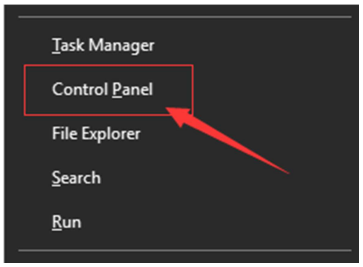

Figure 4-1

Open “View network status and tasks”.

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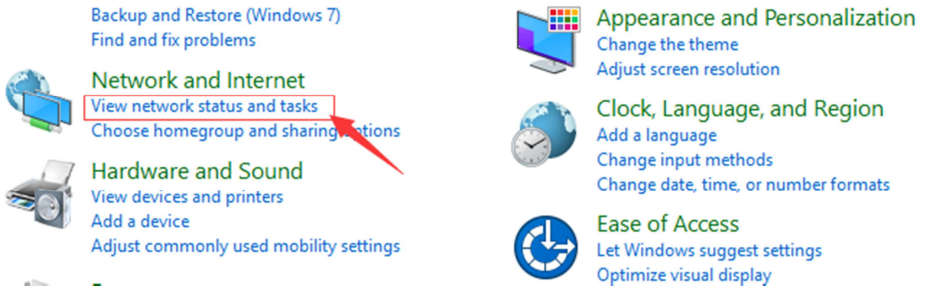

Figure 4-2

Open “Change adapter settings”,

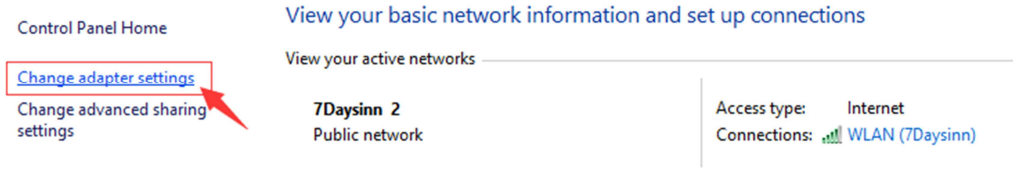

Figure 4-3

Open Ethernet Properties.

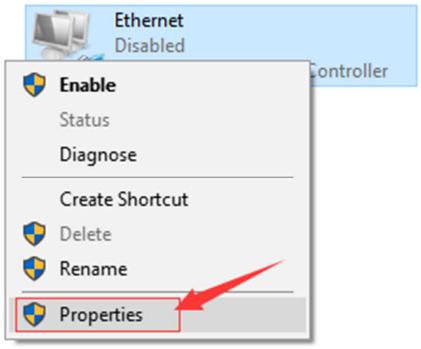

Figure 4-4

Select the internet protocol version 4 (TCP / IPv4) and click Properties.

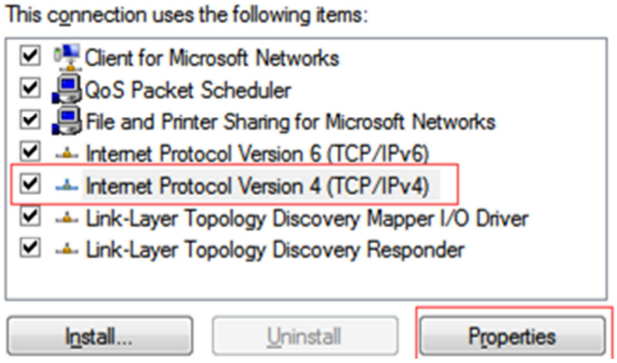

Figure 4-5

Select the Obtain an IP address automatically and Obtain DNS server address automatically.

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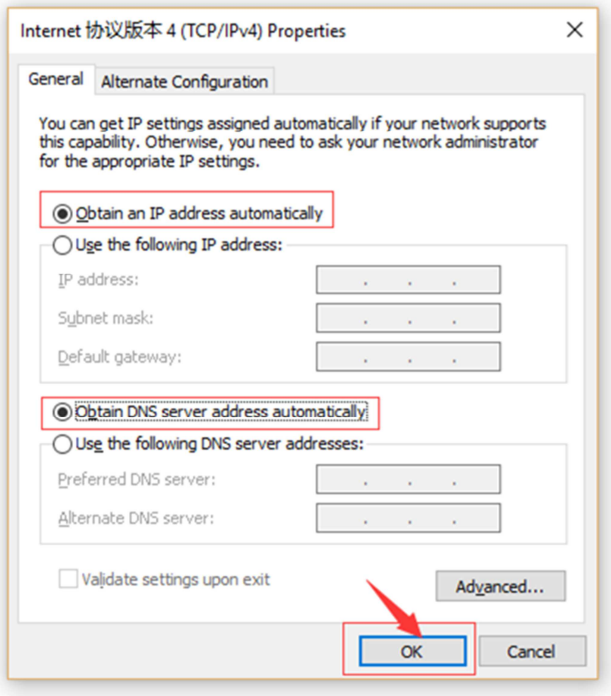

Figure 4-6

5. Router Parameter Config

5.1. Brief Introduction

Open the Chrome browser, enter 192.168.1.1 in the address bar to open the configuration screen and enter your password.

User name: admin

Password: admin

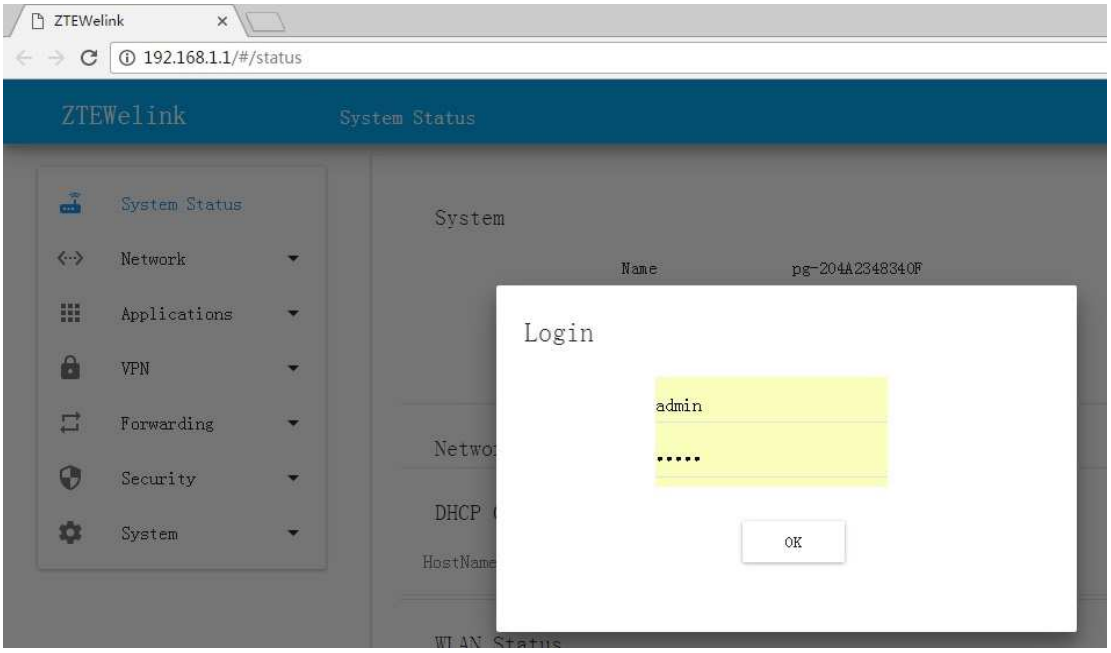

Figure 5-1

Click on "English" to select English language .

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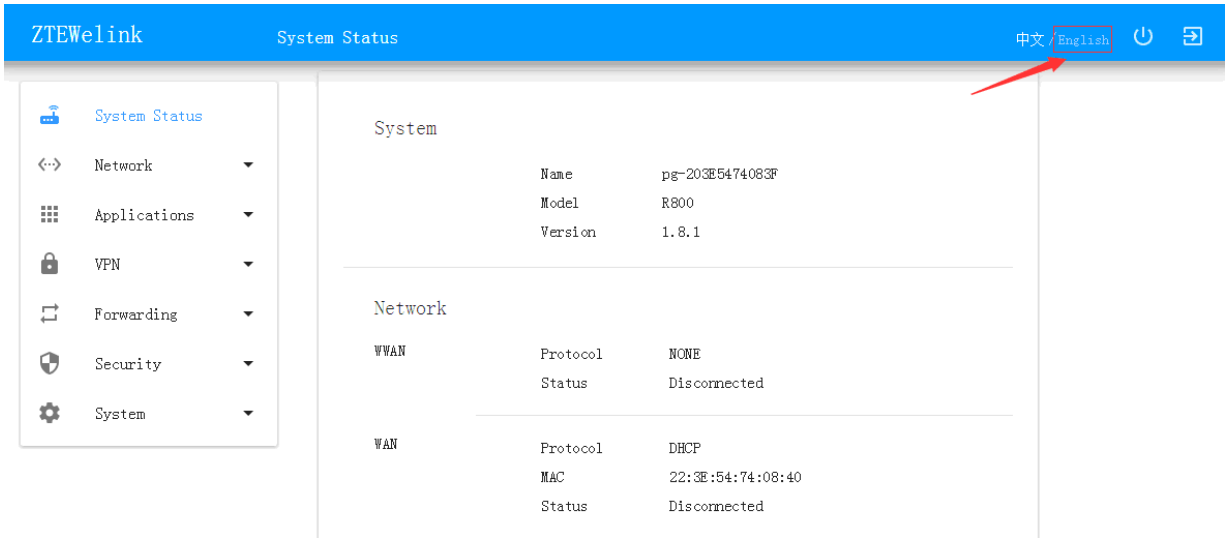

Figure 5-2

Connected to the Internet, there are two ways, one is a mobile network, and the other is connected through the Ethernet WAN.

Mobile Network:

Open the Network configuration WWAN, Fill SIM card operator APN.

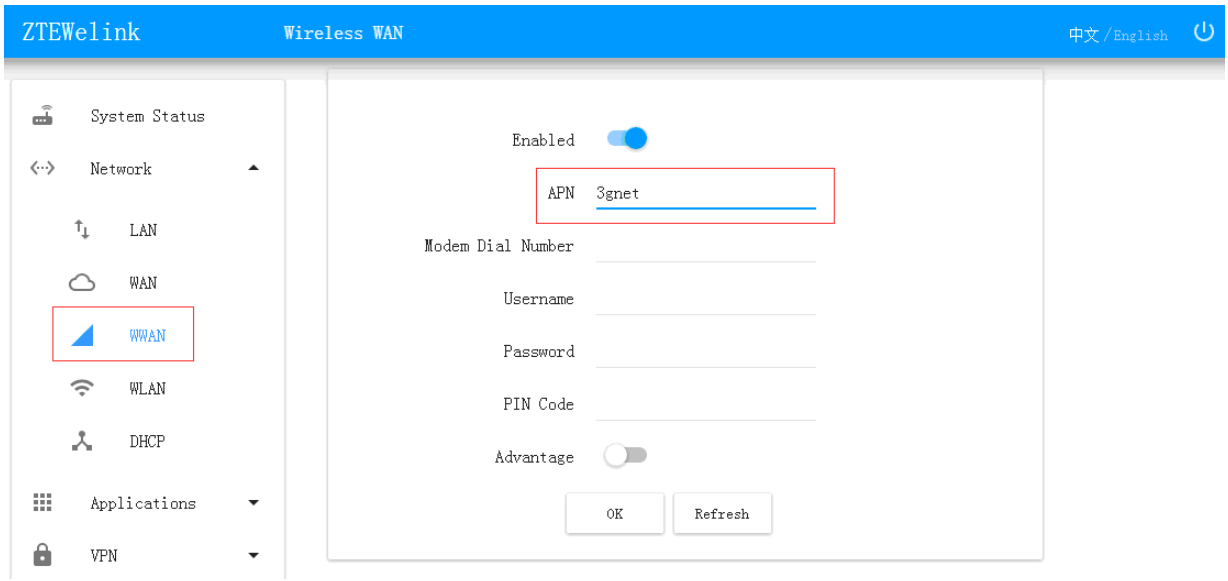

Figure 5-3

Ethernet WAN:

Open the "WAN" in the network configuration menu, in the "Connect Via" You can select the network mode.

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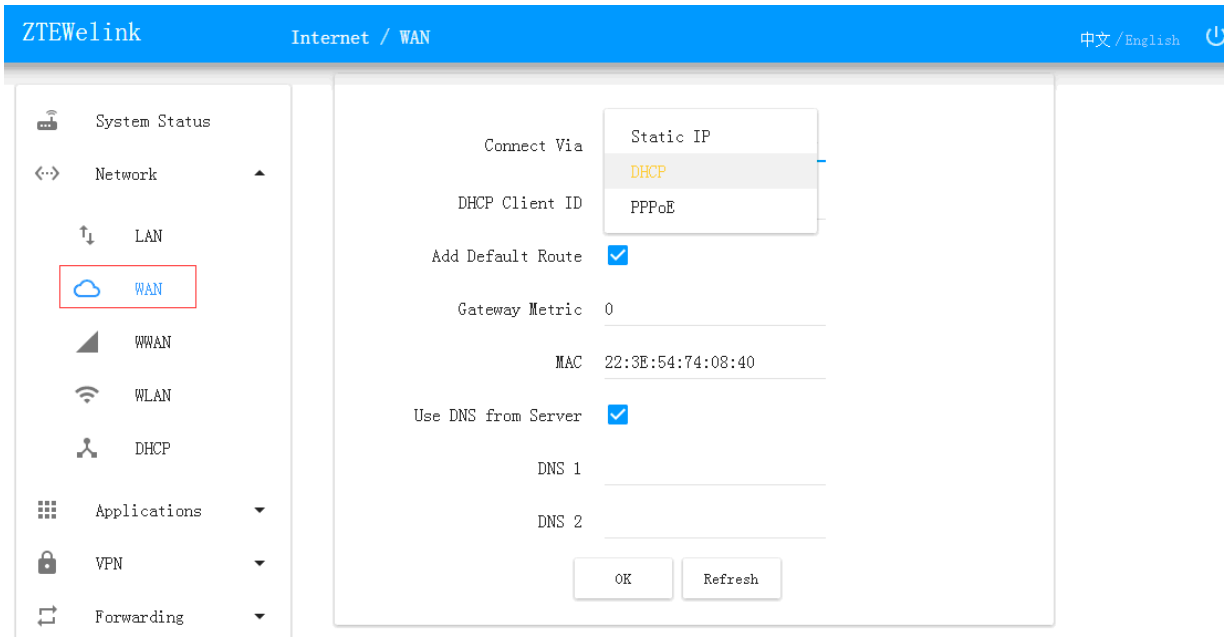

Figure 5-4

WLAN Configuration:

Select "WLAN" option in the network configuration, turn on the wireless status, set SSID number and password.

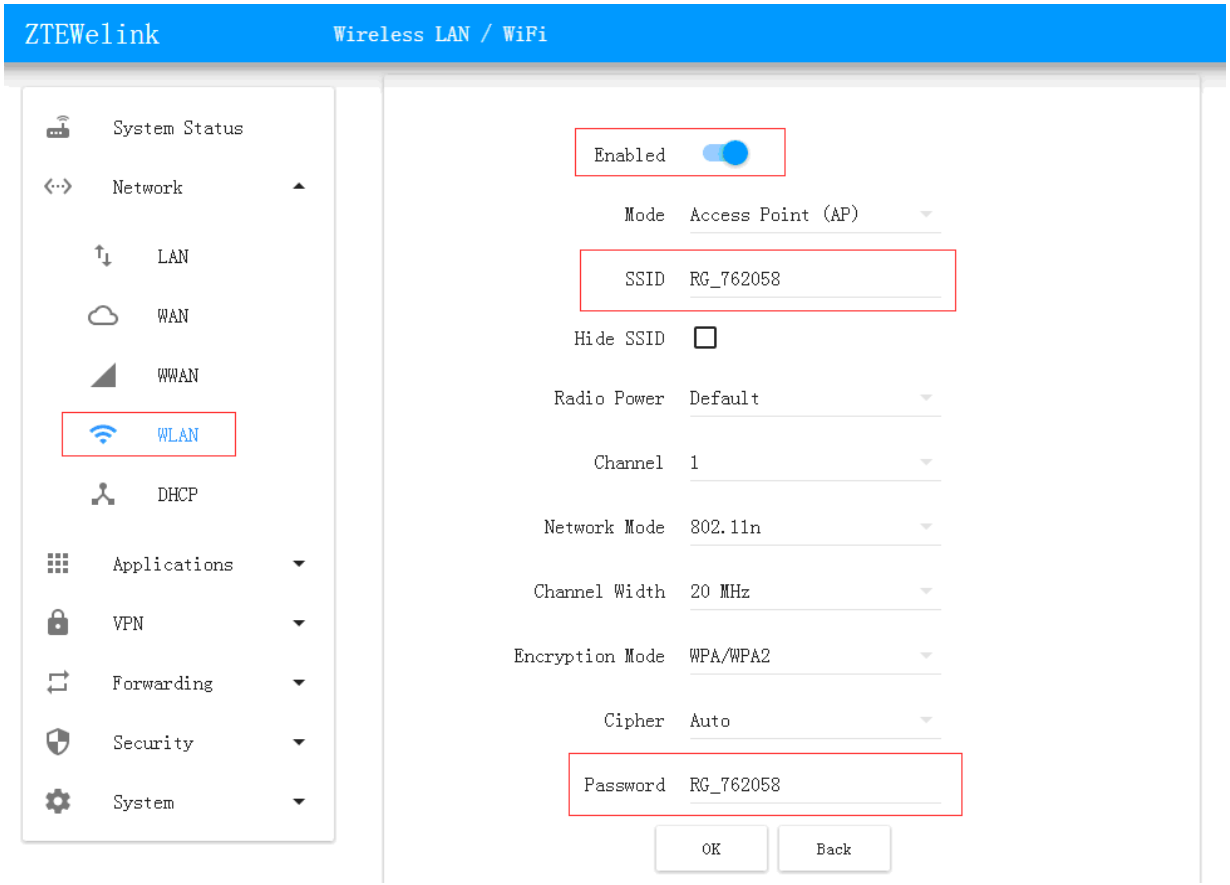

Figure 5-5

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6. ROUTER SYSLOG ILLUSTRATION

System debugging: Select the "Debug" option in the "System" menu, after checking the syslogd click Refresh.

Check the "syslogd" is all log information, check the "Show kernel log" is the only check kernel information, This part describes the router dial log and Ethernet interface activation log.

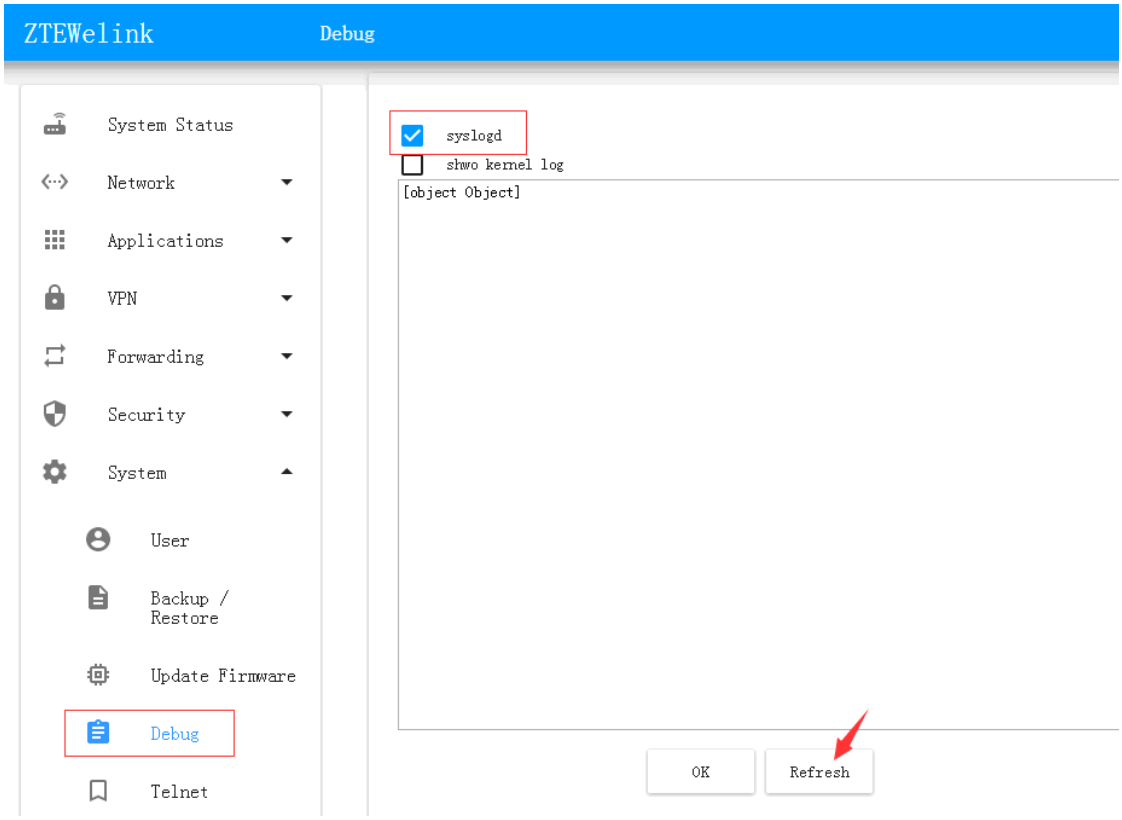

Figure 6-1

Log WAN interface：

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Figure 6-2

Mobile Network Dial log：

Wireless dial-up log is shown in Fig., The red box after successfully dialing line information.

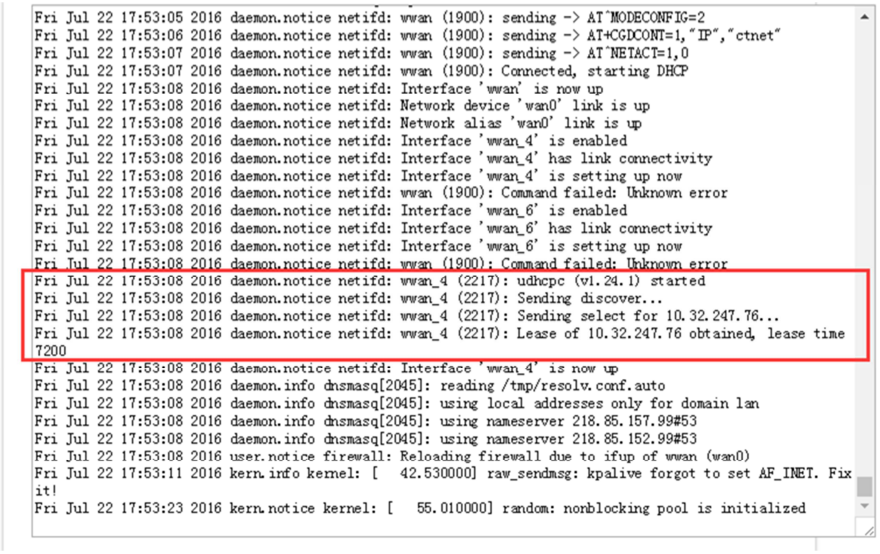

Figure 6-3

When the network is dropped, there will be detected www.baidu.com and ping www.yahoo.com timeout, this time re-dial.

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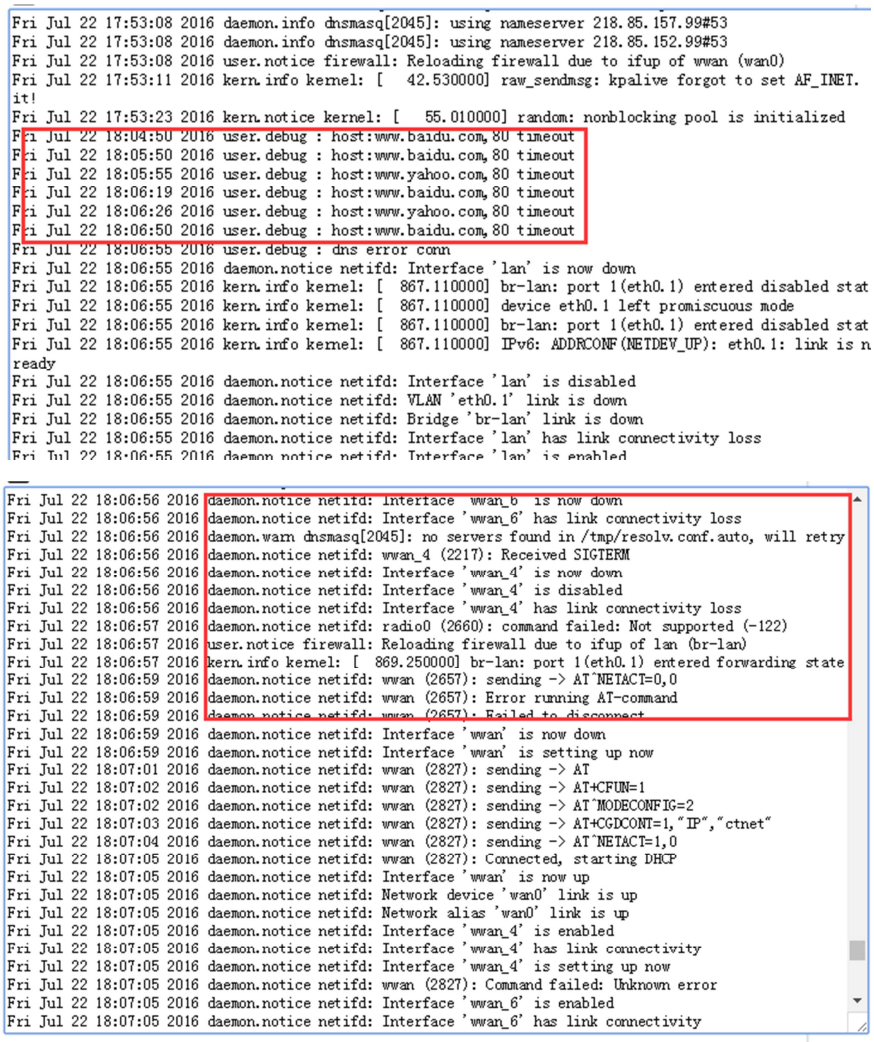

Figure 6-4

7. FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

This device complies with Part 15 of the FCC Rules. 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:

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- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

FCC ID: SRQ-R800

8. INDUSTRY CANADA STATEMENT

❶ This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1) this device may not cause interference, and
2) this device must accept any interference, including interference that may cause undesired operation of the device.

❶ Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1) l'appareil ne doit pas produire de brouillage, et
2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

❷ This Class B digital apparatus complies with Canadian ICES-003.

❷ Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

❸ This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference.

❸ Cet appareil est conforme à la norme RSS-310 d'Industrie Canada. L'opération est soumise à la condition que cet appareil ne provoque aucune interférence nuisible.

❹ This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.

❹ Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

❺ The County Code Selection feature is disabled for products marketed in the US/ Canada.

❺ La fonction de sélection de l'indicatif du pays est désactivée pour les produits commercialisés aux États-Unis et au Canada.

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

IC: 5200A-R800

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