SGL4010

User Manual

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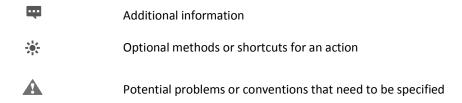
1 Getting Started

1.1Welcome to the CPE

In this document, the LTE (Long Term Evolution) CPE (customer premises equipment) will be replaced by the CPE. The CPE support B2/4/5/8/12/13/14/25/26/66/38/41/42/43/48/53.

And its tx power is 23 ± 2 .

Carefully read the following safety symbols to help you use your CPE safely and correctly:



Note: 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 or more 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.

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.

The customer does not have permission to modify the parameters of the device.

The device usage scenario is 20cm away from the human body.





No professional installation of equipment is required.

1.2Computer Configuration Requirements

Item	Requirement		
CPU	Pentium 500 MHz or higher		
Memory	128 MB RAM or higher		
Hard disk	50 MB available space		
Operating system	Microsoft: Windows XP, Windows Vista, or Windows 7		
	• Mac: Mac OS X 10.5 or higher		
Display resolution	1024 x 768 pixels or higher		
Browser • Internet Explorer 7.0 or later			
	• Firefox 3.6 or later		
	Opera 10 or later		
	• Safari 5 or later		
	Chrome 9 or later		

For optimum performance, make sure your computer meets the following requirements.

1.3Logging In to the Web Management Page

Use a browser to log in to the web management page to configure and manage the CPE.

The following procedure describes how to use a computer running Windows XP and Internet Explorer 7.0 to log in to the web management page of the CPE.

- 1. Connect the CPE properly.
- 2. Launch Internet Explorer, enter <u>http://192.168.1.1</u> in the address bar, and press Enter. As shown in Figure 1-1.

http://192.168.1.1

Figure 1-1

- 3. Enter the user name and password, and click Log In.
- 4. You can log in to the web management page after the password is verified. As shown in Figure 1-2.

4	GLTE
÷	superadmin
0	
	Login

Figure 1-2

The default user name and password are both admin. If you want to view or configure the CPE more, you should use the super account to log in to the web management page. The default super user name is superadmin, and the password is admin.

To protect your CPE from unauthorized access, change the password after your first login.

The CPE supports diagnostic function. If you encounter problems, please contact customer service for the specific using method.

To ensure your data safety, it is recommended that you turn on the firewall, and conserve your login and FTP password carefully.

2 Overview

2.1Viewing Current Connection

To view the current connection, perform the following steps:

Choose Overview;

In the **Current Connection** area, view the connection status, such as DL/UL Data Rate and Online time. As shown in Figure 2-1.

Current	Connection	
current	connection	

DL Data Rate	Current: 63 KB/s Max.: 63 KB/s Min.: 0 Bytes/s
UL Data Rate	Current: 51 KB/s Max.: 91 KB/s Min.: 0 Bytes/s
Online Time	00d 00h 33min

Figure 2-1

2.2Viewing LTE Status

To view the LTE network status, perform the following steps:

- 1. Choose Overview;
- 2. In the **LTE Status** area, view the information about Connect status, Mode, Cell ID, Signal quality and so on. As shown in Figure 2-3.

LTE Status		
Status	Connected	
Mode	TDD	
Cell ID	203	
RSRPO	-70 dBm	
RSRP1	-81 dBm	
RSRQ	-6 dB	
SINR	30 dB	
	E: 0.0	



2.3Viewing WAN Status

To view the WAN status, perform the following steps:

- 1. Choose Overview;
- 2. In the **WAN Status** area, view the information about Connect Mode, IP, Subnet Mask, DNS Server and so on. As shown in Figure 2-4.

WAN Status	
Connect Mode	NAT
IP Address	<u>100.0.10.60</u>
Subnet Mask	255.0.0.0
DNS Server	172.16.34.120
	114.114.114.114

Figure 2-4

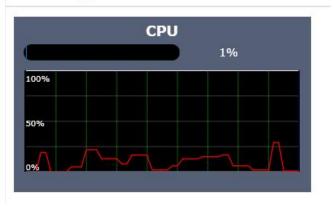
3 Statistics

3.1Viewing CPU Usage

To view the CPU usage, perform the following steps:

- 1. Choose Statistics;
- 2. In the **CPU Usage** area, view the CPU usage information, such as Current CPU usage, Max CPU usage, Min CPU usage. As shown in Figure 3-1.

CPU Usage

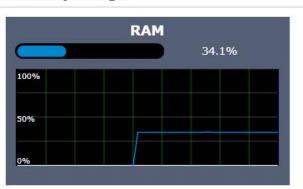




3.2Viewing Memory Usage

To view the memory usage, perform the following steps:

- 1. Choose Statistics;
- 2. In the **Memory Usage** area, view the memory usage information, such as Total memory, Current memory usage, Max memory usage and Min memory usage. As shown in Figure 3-2.







3.3Viewing APN List

To view the APN list, perform the following steps:

- 1. Choose Statistics;
- 2. In the **APN List**, view the information about APN information. As shown in Figure 3-3.

APN List			
APN Name	Status	IP Address	Subnet Mask
apn1	Enable	100.16.14.121	255.0.0.0
apn2	Disable	-	
apn3	Disable		-
apn4	Disable		-

Figure 3-3

3.4Viewing Throughput Statistics

To view the Throughput Statistics, perform the following steps:

- 1. Choose Statistics;
- 2. In the **Throughput Statistics** area, view the throughput statistics, such as APN throughput and LAN throughput.
- 3. In this area, also you can choose and click the button **Reset** to empty the throughput statistics. As shown in Figure 3-4.

Port	Received					Sent	nt	
	Total Traffic	Packets	Errors	Dropped	Total Traffic	Packets	Errors	Dropped
LAN	2.97 MB	18066	0	0	17.44 MB	24735	0	0
apn1	12.96 MB	16883	0	0	1.65 MB	12366	0	0
apn2	0 Bytes	0	0	0	0 Bytes	0	0	0
apn3	0 Bytes	0	0	0	0 Bytes	0	0	0
apn4	0 Bytes	0	0	0	0 Bytes	0	0	0

Figure 3-4

3.5Viewing Device List

To view the device list, perform the following steps:

Choose Statistics;

In the **Device List** area, view the device information which connect to the CPE, such as Device name, Mac address, IP address and Lease time. As shown in Figure 3-5.

Device List							
Index	Device Name	MAC Address	IP Address	Lease Time	Туре		
1	jingjin-PC	c0:f8:da:ab:38:64	192.168.1.173	0days 11:59:51	WIFI		



4 Update

4.1 Version Manager

This function enables you to upgrade the software version of the CPE to the latest version. It is recommended that you upgrade the software because the new version, certain bugs have been fixed and the system stability is usually improved.

Viewing Version Info

To view the version info, perform the following steps:

- 1. Choose Update>Version Manager.
- 2. In the **Version Info** area, you can view the product name and software version. As shown in Figure 4-1.

Overview Statistics	Update	Settings			
🕀 Version Manager	1				
Auto Upgrade	Version Manager				
		Version Information			
	1	Product Model	ZS321		
	3	Running software version	M-IDU-20160324_V1.1		
	3	Backup software version	M-IDU-20160324_V1.1		
	1	Module Version	CAT6_BYPASS_0.3.2.9_V0.8		
		Local Upgrade			
		Version File 选择文件	未选择任何文件		
		Upgrade			

Figure 4-1

Version Upgrade

To perform an upgrade successfully, connect the CPE to your computer through a network cable, save the upgrade file on the computer, and make sure the CPE is not connected to anything other than a power adapter and the computer.

To perform an upgrade, perform the following steps:

- 1. Choose Update>Version Manager.
- 2. In the Version Upgrade area, click Browse. In the displayed dialog box, select the target

software version file.

- 3. Click **Open**. The dialog box choses. The save path and name of the target software version file are displayed in the Update file field.
- 4. Click Submit.
- 5. The software upgrade starts. After the upgrade, the CPE automatically restarts and runs the new software version. As shown in Figure 4-2.
 - During an upgrade, do not power off the CPE or disconnect it from the computer.

grade			
Version File	选择文件	未选择任何文件	
Submit			

Figure 4-2

4.2Auto upgrade

To perform a ftp auto upgrade successfully, make sure the CPE is connected to the Internet.

To perform a ftp auto upgrade, perform the following steps:

Choose Update>Auto upgrade.

Enable auto upgrade.

If you want to check new firmware after connect to Internet, you need to enable the item of **Check new firmware after connect to Internet**.

Set a ftp address to the Upgrade folder box.

Set Version file.

Set User name and Password.

Set the Interval of checking new firmware.

Set Start time.

Set Random time.

Click **Submit**. As shown in Figure 4-3.



The CPE will automatically upgrade according to the setting. During an upgrade, do not disconnect the power supply or operate the CPE.

Overview Statistics	Update	Settings		
🕸 Version Manager				
P Auto Upgrade	Au	to Upgrade		
		Settings		
		Auto Upgrade	 Enable 	
		Check New FW after connec	ted 🔲 Enable	
		Upgrade Folder	ftp 🔻 ://	*
		Version File	version.txt *	
		Username	admin *	
		Password	*	
		Check New FW Every	24	
		Start Time(24hrs)	0	
		Random Time	3 🔻	

Figure 4-3

5 Settings

5.1 Viewing the Device Information

To view the System Information, perform the following steps:

Choose Settings;

In the **System Information** area, view the system status, such as Running time. As shown in Figure 5-1.

System Information

Running Time

00d 02h 23min

Figure 5-1

Viewing the Version Information

To view the Version Information, perform the following steps:

- 1. Choose Settings;
- In the Device Information area, view the device information, such as Product name, Product Model, Hardware Version, Software version, UBoot version and CPE SN. As shown in Figure 5-2.

Version Information	
Product Model	ZS321
Hardware Version	V2.0
Software Version	M-IDU-20160324_V1.1
UBOOT Version	V1.0.1
Serial Number	022387A180500004
IMEI	863491030070095
IMSI	460680004600024



Viewing LAN Status

To view the LAN status, perform the following steps:

Choose Settings;

In the **LAN Status** area, view the LAN status, such as Mac address, IP address and Subnet mask. As shown in Figure 5-4.

LAN Status

MAC Address	A8:93:52:0A:12:90
IP Address	192.168.0.1
Subnet Mask	255.255.255.0

Figure 5-4

5.2Viewing Network

Network Mode

To set the network mode, perform the following steps:

Choose Network >WAN Settings;

In the Network Mode area, select a mode between NAT and ROUTER;

Click **Submit**. As shown in Figure 5-5.

Settings				
Network Mode	NAT	v		
	NAT ROUTER			



LTE Settings

Settings

To set the LTE network, perform the following steps:

- 1. Choose Network >LTE Settings;
- 2. In the Settings area, you can set the configuration of LTE network;
- 3. In the **Status** area, you can view the LTE network connect status, such as Frequency, RSSI, RSRP, RSRQ, CINR, SINR, Cell ID and so on. As shown in Figure 5-7.

Device Information	Settings		
Network			
WAN Settings	Status	Connected	
LTE Settings	Connect Method	Auto 🔻	
Scan Mode			
APN Management			Submit Cancel
PIN Management	Status		
LAN Settings	DL MCS	0	
DMZ Settings	UL MCS	0	
Static Route			
Ş M⊦LL	DL Frequency	36600 KHz	
🖓 Firewall	UL Frequency	36600 KHz	
<\$ VPN	Bandwidth	20 MHz	
∰IPv6	RSSI	-50 dBm	
- System	RSRP0	-76 dBm	
	RSRP1	-82 dBm	
	RSRQ	-6 dB	
	SINR	30 dB	
	TX Power	-7 dBm	
	PCI	52	
	CINR0	30.3 dB	
	CINR1	31.0 dB	
	Cell ID	203	
	MCC	460	
	MNC	68	

```
Figure 5-7
```

Connect Method Setting

To set the connect method, perform the following steps:

- 1. Choose Network > LTE Settings;
- 2. In the **Setting** area, Select a connect method between **Auto** and **Manual**. As shown in Figure 5-8.

Status	Connected		
Connect Method	Auto	•	
	Manual		
	Auto		



Auto Connect LTE Network

To set the CPE automatically connect to the internet, perform the following steps:

- 1. Choose Network > LTE Settings;
- 2. In the **Setting** area, set the connect method as **Auto**, when the LTE network is ready, the CPE will be connected automaticity. As shown in Figure 5-9.

Status	Connected	
Connect Method	Auto	Y
Status		
DL MCS	28	
UL MCS	22	
DL Frequency	36600 KHz	
UL Frequency	36600 KHz	
Bandwidth	20 MHz	
RSSI	-52 dBm	
RSRP0	-78 dBm	
RSRP1	-85 dBm	
RSRQ	-6 dB	
	30 dB	

Manual Connect Mobile Network

To set the mobile network manual connect to the internet, perform the following steps:

- 1. Choose Network > LTE Settings;
- 2. In the **Setting** area, set the connect method as **Manual**, when the LTE network is ready, you can set the CPE connect to the LTE network or disconnect from the LTE network. As shown in Figure 5-10.

Settings		
Status	Connected	
Connect Method	Manual 🔻	
	Disconnect	
		Submit Cancel
Status		
DL MCS	28	
UL MCS	22	
DL Frequency	36600 KHz	
UL Frequency	36600 KHz	
Bandwidth	20 MHz	
RSSI	-52 dBm	
RSRP0	-77 dBm	
RSRP1	-80 dBm	
RSRQ	-6 dB	
SINR	30 dB	
TX Power	-6 dBm	
PCI	52	
CINR0	29.3 dB	
CINR1	31.2 dB	

Figure 5-10

Scan Mode

To set the lte network scan mode, perform the following steps:

choose Network>Scan mode;

You can choose full mode, a band the CPE supported

Click Submit.

Setting Frequency (Earfcn)

To set the frequency, perform the following steps:

- 1 Choose Network>Scan Mode.
- 2 In the **Scan Mode** area, choose **Frequency Lock**.
- 3 In the Frequency Lock area, you can choose a band, then click Add list to

choose a Earfcn Number.

4 Click **Submit**. As shown in Figure 5-11.

Device Information						
	Scan Mode					
WAN Settings						
LTE Settings						
Scan Mode	To put the new configuration	To put the new configuration into effect, must click Submit button after Add List				
APN Management						
PIN Management	Cattinge					
LAN Settings	Settings					
DMZ Settings	Scan Mode	Frequency Lock v				
Static Route						
∕\$Wi-Fi	Frequency Lock					
Firewall	EARFCN	44500 v Ad	d			
K VPN						
®IPv6	Frequency Lock L	ist (Max Limit :5)				
System	Index	Frequency	Operation			
	1	44500	Delete			
			Submit Cancel			

Figure 5-11

APN Management

To set and manage APN, perform the following steps:

Choose Network>APN Management.

In the APN Management area, you can set the APN.

Choose a **APN number** which you want to set.

In the **APN Setting** area you can set the APN parameters, such as enable or disable the apn, apn name, username, password and so on.

If you want set a APN as **default gateway**, you should check that is enabled.

Click **Submit.** As shown in Figure 5-12.

UDevice Information			
A Network	APN Management		
WAN Settings			
LTE Settings	APN Selection		
Scan Mode	APN Number	# 1 ▼	
APN Management	AFININGHOL	π 1 Ψ	
PIN Management	APN Settings		
LAN Settings	Enable	Capital Capital	
DMZ Settings	Enable	Enable	
Static Route	Profile Name	apn1 *	
© ₩i-Fi	APN Name	APN1	
😡 Firewall	To H Home		
🗳 VPN	Authentication Type	NONE	
∰IPv6	PDN Type	IPv4 v	
🖨 System	Default Gateway	🖉 Enable	
	Apply To	TR069	
			Submit Cancel

Figure 5-12

PIN Management

To manage the PIN, you can perform the following operations on the PIN Management page:

- > Enable or disable the PIN verification.
- Verify the PIN.
- Change the PIN.
- Set automatic verification of the PIN. As shown in Figure 5-13

Device Information			
	PIN Management		
WAN Settings			
LTE Settings			
Scan Mode	The PIN lock of the USIM card the PIN.	I protects the router against unauthorized accesses to the	Internet. You can activate, modify, or deactivate
APN Management	ule i liv.		
PIN Management	Note:The router cannot provid	le Internet services when the USIM card is not inserted or t	the PIN verification failed.
LAN Settings			
DMZ Settings			
Static Route	PIN Management		
रू Wi-Fi	USIM Card Status	USIM Normal	
V Firewall	PIN Verification	Enable Disable	
SVPN			
₿IPv6	PIN	*	
System	Remaining Attempts	3	
			Submit Cancel

Figure 5-13

Viewing the Status of the USIM Card

To view the status of the USIM card, perform the following steps:

- 1 Choose Network >PIN Management.
- 2 View the status of the USIM card in the USIM card status field.

Enabling PIN Verification

To enable PIN verification, perform the following steps:

- 1 Choose Network >PIN Management.
- 2 Set PIN verification to Enable.
- 3 Enter the PIN (4 to 8 digits) in the Enter PIN box.
- 4 Click Submit.

Disabling PIN Verification

To disable PIN verification, perform the following steps:

- 1 Choose Network >PIN Management.
- 2 Set PIN verification to Disable.
- 3 Enter the PIN (4 to 8 digits) in the Enter PIN box.
- 4 Click Submit.

Verifying the PIN

If PIN verification is enabled but the PIN is not verified, the verification is required. To verify the PIN, perform the following steps:

- 1 Choose Network >PIN Management.
- 2 Enter the PIN (4 to 8 digits) in the **PIN** box.
- 3 Click Submit.

Changing the PIN

The PIN can be changed only when PIN verification is enabled and the PIN is verified.

To change the PIN, perform the following steps:

- 1 Choose Network>PIN Management.
- 2 Set PIN verification to **Enable**.
- 3 Set Change PIN to Enable.
- 4 Enter the current PIN (4 to 8 digits) in the **PIN** box.
- 5 Enter a new PIN (4 to 8 digits) in the **New PIN** box.
- 6 Repeat the new PIN in the **Confirm PIN** box.
- 7 Click Submit.

Setting Automatic Verification of the PIN

You can enable or disable automatic verification of the PIN. If automatic verification is enabled, the CPE automatically verifies the PIN after restarting. This function can be enabled only when PIN verification is enabled and the PIN is verified.

To enable automatic verification of the PIN, perform the following steps:

- 1. Choose Network > PIN Management.
- 2. Set **Pin verification** to **Enable**.
- 3. Set **Remember my PIN** to **Enable**.
- 4. Click **Submit**.

Verifying the PUK

If PIN verification is enabled and the PIN fails to be verified for three consecutive times, the PIN will be locked. In this case, you need to verify the PUK and change the PIN to unlock it.

To verify the PUK, perform the following steps:

Choose Network> PIN Management.

Enter the PUK in the **PUK** box.

Enter a new PIN in the **New PIN** box.

Repeat the new PIN in the **Confirm PIN** box.

Click Submit.

SIM Lock

If you want to connect a specify network, and the CPE can't connect other network, you can set a SIM lock.

To set the SIM lock, perform the following steps:

- 1. Choose Network>SIM Lock.
- 2. Enter the PLMN in the **PLMN** box.
- 3. Click **Submit**. As shown in Figure 3-9.

(i) Device Information			
🚠 Network	SIM Lock		
WAN Settings			
LTE Settings			
Scan Mode	To put the new configura	tion into effect, must click Submit butto	on after Add List
APN Management			
PIN Management	Cottingo		
SIM Lock	Settings		
LAN Settings	PLMN		* Add
DMZ Settings		-	
Static Route	PLMN List (Ma	x Limit :5)	
र्रुWi-Fi	Index	PLMN	Operation
Parental Controls	index	I LIVIN	Operation
💭 Firewall			Submit Concel
< VPN			Submit Cancel
₩IPv6			



LAN Setting

Setting LAN Host Parameters

By default, the IP address is 192.168.0.1 with a subnet mask of 255.255.255.0. You can change the host IP address to another individual IP address that is easy to remember. Make sure that IP address is unique on your network. If you change the IP address of the CPE, you need to access the web management page with the new IP address.

To change the IP address of the CPE, perform the following steps:

- 1. Choose Network>LAN Settings.
- 2. In the LAN Host Settings area, set IP address and subnet mask.
- 3. In the DHCP Setting area, set the DHCP server to Enable.
- 4. Click **Submit**. As shown in Figure 5-14.

Device Information			
- Network	LAN Settings		
WAN Settings			
LTE Settings	LAN Host Settings	3	
Scan Mode	IP Address	192.168.0.1	*
APN Management	IF Address	192.108.0.1	
PIN Management	Subnet Mask	255.255.255.0	*
LAN Settings			
DMZ Settings	DHCP Settings		
Static Route	DHCP Server	Enable	

Figure 5-14

Configuration the DHCP Server

DHCP enables individual clients to automatically obtain TCP/IP configuration when the server powers on. You can configure the CPE as a DHCP server or disable it. When configured as a DHCP server, the CPE automatically provides the TCP/IP configuration for the LAN clients that support DHCP client capabilities. If DHCP server services are disabled, you must have another DHCP server on your LAN, or each client must be manually configured.

To configure DHCP settings, perform the following steps:

- 1. Choose Network Setting > LAN Settings.
- 2. Set the DHCP server to **Enable**.
- 3. Set Start IP address.

This IP address must be different from the IP address set on the LAN Host Settings area, but they must be on the same network segment.

4. Set End IP address.

This IP address must be different from the IP address set on the LAN Host Settings area, but they must be on the same network segment.

5. Set Lease time.

Lease time can be set to 1 to 10,080 minutes. It is recommended to retain the default value.

6. Click **Submit**. As shown in Figure 5-15.

Device Information				
A Network	LAN Settings			
WAN Settings				
LTE Settings	LAN Host Settings			
Scan Mode	IP Address	192,168,0,1	*	
APN Management	II Address	132.100.0.1		
PIN Management	Subnet Mask	255.255.255.0	*	
LAN Settings	DUCD Cottings			
DMZ Settings	DHCP Settings			
Static Route	DHCP Server	Enable		
₹Wi-Fi	Start IP Address	192.168.0.10	*	
Firewall	Start IF Address	152.100.0.10		
\$ VPN	End IP Address	192.168.0.100	*	
∰IPv6	Lease Time	720	*	
System				
				Submit Cancel



DMZ Settings

If the demilitarized zone (DMZ) is enabled, the packets sent from the WAN are directly sent to a specified IP address on the LAN before being discarded by the firewall.

To set DMZ, perform the following steps:

- 1. Choose Network > DMZ Settings.
- 2. Set DMZ to Enable.
- 3. (Optional) Set ICMP Redirect to Enable.
- 4. Set Host address.
 - This IP address must be different from the IP address set on the LAN Host
 Settings page, but they must be on the same network segment.
- 5. Click **Submit**. As shown in Figure 5-18.

(i) Device Information				
🚠 Network	DMZ Settings			
WAN Settings				
LTE Settings	DMZ			
Scan Mode	DMZ	Enable		
APN Management	DIVIZ			
PIN Management	ICMP Redirect	Enable		
LAN Settings	Host Address	192.168.0.10	*	
DMZ Settings	Thous had bee	102.100.0.10		
Static Route				Submit Cancel
रूWi-Fi				Submit
Firewall				
🗳 VPN				
₿IPv6				
🔅 System				

Figure 5-18

Static Route

Add Static Route

To add a static route, perform the following steps:

Choose Network Setting>Static Route.

Click Add list.

Set the Dest IP address and Subnet mask.

Select an Interface from the drop-down list.

If you select $\ensuremath{\textbf{LAN}}$ as the interface, you need set a Gateway.

Click Submit. As shown in Figure 5-19.

(i) Device Information							
A Network	Static Route						
WAN Settings							
LTE Settings	Static Ro	ute List (Max	x Limit :10)				
Scan Mode							Add List
APN Management							
PIN Management	Index	Dest IP Address	Subnet Mask	Interface	Gateway	Status	Operation
LAN Settings							
DMZ Settings	Static Po	ute Settings					
Static Route	Static Ro	die Settings					
€ Wi-Fi	Dest IP Add	ress	202.100.14.202	*			
Firewall	Subnet Mas	k	255.255.255.255	*			
VPN							
	Interface		LAN	•			
System	Gateway		192.168.10.1	*			



Modify Static Route

To modify an access restriction rule, perform the following steps:

- 1. Choose Firewall>Static Route.
- 2. Choose the item to be modified, and click **Edit**.
- 3. Repeat steps 3 through 5 in the previous procedure.
- 4. Click **Submit**. As shown in Figure 5-20.

Device Information							
Network	Static Route						
WAN Settings	_						
LTE Settings	Static Rou	te List (Max	Limit :10)				
Scan Mode							Add List
APN Management							7.000 2.01
PIN Management	Index	Dest IP Address	Subnet Mask	Interface	Gateway	Status	Operation
LAN Settings	1	202.100.14.202	255.255.255.255	LAN	192.168.0.1	Effective	Delete Edit
DMZ Settings							
Static Route	Ctatia Dav	to Cottingo					
≷Wi-Fi	Static Rou	te Settings					
Firewall	Dest IP Addre	ess	202.100.14.202	*			
VPN	Subnet Mask		255.255.255.255	*			
∮IPv6	Interface		LAN				
System	menace		LAN	•			
	Gateway		192.168.0.1	*			
						Subm	nit Cancel

Figure 5-20

Delete Static Route

To delete a static route, perform the following steps:

Choose Firewall>Static Route.

Choose the item to be deleted, and click **Delete**.

5.3 Parental Controls

This page describes how to set the Parental Controls. If you enable or disable the Parental Controls, you can modify the configuration.

Parental Controls Manager

Choose Parental Controls Manager, Choose Enable ,and then click Submit Enabled the Choose Parental function. As shown in Figure 5-4-1.

arental Controls					
ls Manager					
Enable					
	Is Manager				

Figure 5-4-1.

Submit

Parental Controls List

This page is set the Parental Controls List. If this function is enabled, you can add some users. If someone in this List , he was forbidden from the Internet. If you want to allow him to access the

Internet, you can remove it from this Parental Controls List. As shown in Figure 5-4-2 \times 5-4-3

Name	tony	*			
Device	192.168.	1.2 *			
Weekdays	Mon	Tue Wed Thu F	ri Sat Sun		
Time	0	• : 1 • - 23	▼ : 59 ▼		
					Submit Can
					Submit
		Fig	gure 5-4-2		
arental Contro	ls List (Max Lim	it · 32)			
					Add Lis
Index	Name	Device	Weekdays	Time	Operation
	Name tony	Device 192.168.1.2	Weekdays Mon,Tue,Wed,Thu,Fri	Time 00:01 - 23:59	Operation Delete Edit
1					
Index 1 2	tony	192.168.1.2	Mon,Tue,Wed,Thu,Fri	00:01 - 23:59	Delete Edit
1	tony	192.168.1.2	Mon,Tue,Wed,Thu,Fri	00:01 - 23:59	Delete Edit
2 ettings	tony	192.168.1.2	Mon,Tue,Wed,Thu,Fri	00:01 - 23:59	Delete Edit
1 2 ettings ame	tony mary	192.168.1.2 192.168.1.5	Mon,Tue,Wed,Thu,Fri	00:01 - 23:59	Delete Edit
1 2 settings ame evice	tony mary mary 192.168.1.1	192.168.1.2 192.168.1.5 * 5 *	Mon,Tue,Wed,Thu,Fri Tue,Wed,Thu	00:01 - 23:59	Delete Edit
1 2 ettings ame	tony mary mary 192.168.1.1	192.168.1.2 192.168.1.5	Mon,Tue,Wed,Thu,Fri Tue,Wed,Thu	00:01 - 23:59	Delete Edit



5.4 Firewall

Setting Firewall

This page describes how to set the firewall. If you enable or disable the firewall, you can modify the configuration.

To set the firewall, perform the following steps:

Choose Firewall>Firewall Setting. Choose Enable or Disable to modify the configuration. Click Submit. As shown in Figure 5-30.

Device Information			
T. Network	Firewall Setting		
© Wi-Fi			
🖓 Firewall	Settings		
Firewall Setting	Firewall	Enable	
MAC Filtering			
IP Filtering			Submit Cancel
URL Filtering			
Port Forwarding			
Access Restriction			
UPnP			
DoS			

Figure 5-30

If you choose enable the firewall, you can modify the configuration about firewall, such as Mac filter, IP filter, URL filter and so on. If you choose disable, you can't modify any configurations about the firewall.

MAC Filtering

This page enables you to configure the MAC address filtering rules.

Enabling MAC Filter

To enable MAC address filter, perform the following steps:

- 1. Choose Firewall>MAC Filtering
- 2. Set MAC filtering to **Enable**.
- 3. Click **Submit**. As shown in Figure 5-31.

MAC Filtering

MAC Filtering Manager					
MAC Filtering	Enable				
Within The Rule To Allow/Deny	 Allow 				
	○ _{Deny}				

Figure 5-31

Disabling MAC Filter

To disable MAC address filter, perform the following steps:

- 1. Choose Firewall>MAC Filtering
- 2. Set MAC filtering to **Disable**.
- 3. Click **Submit**. As shown in Figure 5-32.

MAC Filtering Manager

MAC Filtering	Enable
Within The Rule To Allow/Deny	Allow
	Deny



Setting Allow access network within the rules

To set allow access network within the rules, perform the following steps:

- 1. Choose Firewall>MAC Filtering.
- 2. Set **Allow access network** within the rules.
- 3. Click **Submit**. As shown in Figure 5-33.

MAC Filtering

MAC Filtering Manager				
MAC Filtering	Enable			
Within The Rule To Allow/Deny	• Allow			
	O _{Deny}			



Setting Deny access network within the rules

To set deny access network within the rules, perform the following steps:

- 1. Choose Firewall>MAC Filtering.
- 2. Set **Deny access network** within the rules.
- 3. Click **Submit**. As shown in Figure 5-34.

MAC Filtering Manager

MAC Filtering	Enable
Within The Rule To Allow/Deny	O _{Allow}
	Deny



Adding MAC Filtering rule

To add a MAC filtering rule, perform the following steps:

Choose Firewall>MAC Filtering. Click Add list.

Set MAC address.

Click Submit. As shown in Figure 5-35.

MAC Filtering List	(Max Limit :32)		
			Add List
Index	MAC Address	Operation	
Settings			
MAC Address	00:12:61:AE:C0:89 *		
		Submit	Cancel



Modifying MAC Filtering rule

To modify a MAC address rule, perform the following steps:

- 1. Choose Firewall>MAC Filtering.
- 2. Choose the rule to be modified, and click **Edit**.
- 3. Set MAC address.
- 4. Click **Submit**. As shown in Figure 5-36.

MAC Filtering List (Max Limit :32)

		Add List
Index	MAC Address	Operation
1	00:12:61:AE:C0:89	Delete Edit
Settings		
MAC Address	00:12:61:AE:C0:89 *	
		Submit Cancel



Deleting MAC Filtering rule

To delete a MAC address filter rule, perform the following steps:

Choose Firewall>MAC Filtering.

Choose the rule to be deleted, and click **Delete**. As shown in Figure 5-37.

MAC Filtering List	(Max Limit :32)
--------------------	-----------------

		Add I	List
Index	MAC Address	Operation	
1	00:12:61:AE:C0:89	Delete Edit	

Figure 5-37

IP Filtering

Data is filtered by IP address. This page enables you to configure the IP address filtering rules.

Enabling IP Filtering

To enable IP Filtering, perform the following steps:

- 1. Choose Firewall>IP Filtering.
- 2. Set IP Filtering Enable.
- 3. Click **Submit**. As shown in Figure 5-38.

IP Filtering Manager

IP Filtering	Enable
Except The Rules To Allow/Deny	• Allow
Allowberry	O _{Deny}



Disabling IP Filtering

To disable IP Filtering, perform the following steps:

- 1. Choose Firewall>IP Filtering.
- 2. Set IP Filtering **Disable**.
- 3. Click **Submit**. As shown in Figure 5-39.

IP Filtering Manager

IP Filtering	Enable
Except The Rules To Allow/Deny	Allow
Allow/Deny	Deny

Figure 5-39

Setting Allow access network outside the rules

To set allow access network, perform the following steps:

- 1. Choose Firewall>IP Filtering.
- 2. Set Allow access network outside the rules.
- 3. Click **Submit**. As shown in Figure 5-40.

IP Filtering Manager

IP Filtering	☑ Enable
Except The Rules To Allow/Deny	 Allow
,	O Deny



Setting Deny access network outside the rules

To set allow access network, perform the following steps:

- 1. Choose Firewall>IP Filtering.
- 2. Set Deny access network outside the rules.
- 3. Click **Submit**. As shown in Figure 5-41.

IP Filtering Manager





Adding IP Filtering rule

Add an IP address filtering rule, perform the following steps:

- 1. Choose Firewall>IP Filtering.
- 2. Click Add list.
- 3. Set Service.
- 4. Set Protocol.
- 5. In the **Source IP Address Range** box, enter the source IP address or IP address segment to be filtered.
- 6. In the **Source port range** box, enter the source port or port segment to be filtered.
- 7. In the Destination IP Address Range box, enter the destination IP address or IP address

segment to be filtered.

- 8. In the **Destination port Range** box, enter the destination port or port segment to be filtered.
- 9. In the **Status** box, choose a status the rule will be executed.
- 10. Click **Submit**. As shown in Figure 5-42.

IP Filtering List (Max Limit :32)

Index	Protocol	Source IP Address Range	Source Port Range	Destination IP Address Range	Destination Port Range	Status	Add List Operation
Settings							
Service	Custo	om 🗸					
Protocol	ALL	\sim					
Source IP Addr	ess Range 192.1	168.1.120					
Source Port Ra	nge						
Destination IP /	Address Range 100.1	10.64.123					
Destination Por	t Range						
Status	Allow	· ~					
							Submit Cancel

Figure 5-42

Modifying IP Filtering rule

To modify an IP filtering rule, perform the following steps:

- 1. Choose Firewall > IP Filtering.
- 2. Choose the rule to be modified, and click **Edit**.
- 3. Repeat steps 3 through 9 in the previous procedure.
- 4. Click **Submit**. As shown in Figure 5-43.

IP Filtering List (Max Limit :32)

							Add Lis
Index	Protocol	Source IP Address Range	Source Port Range	Destination IP Address Range	Destination Port Range	Status	Operation
1	ALL	192.168.1.120	N/A	100.10.64.123	N/A	Allow	Delete Edit
Settings							
Service		Custom 🗸					
Protocol	A	ALL 🗸					
Source IP Addi	ess Range	192.168.1.120					
Source Port Ra	inge						
Destination IP	Address Range 1	100.10.64.123					
Destination Po	t Range						
Status	4	Allow 🗸					

Submit Cancel

Deleting IP Filtering rule

To delete an IP address filtering rule, perform the following steps:

- 1. Choose Firewall > IP Filtering.
- 2. Choose the rule to be deleted, and click **Delete**. As shown in Figure 5-44.

P Filtering	List (Max Limit :	32)					
							Add Li
Index	Protocol	Source IP Address Range	Source Port Range	Destination IP Address Range	Destination Port Range	Status	Operation
1	ALL	192,168,1,120	N/A	100.10.64.123	N/A	Allow	Delete Edit



URL Filtering

Data is filtered by uniform resource locator (URL). This page enables you to configure URL filtering rules.

Enabling URL Filtering

To enable URL Filtering, perform the following steps:

- 3. Choose Firewall>URL Filtering.
- 4. Set **URL Filtering** to **Enable**.
- 5. Click **Submit**. As shown in Figure 5-45.

URL Filtering Manager

URL Filtering

Enable

Figure 5-45

Disabling URL Filtering

To disable URL Filtering, perform the following steps:

- 1. Choose Firewall>URL Filtering.
- 2. Set URL Filtering to Disable.
- 3. Click **Submit**. As shown in Figure 5-46.

URL Filtering Manager

URL Filtering

Enable

Figure 5-46

Adding URL Filtering list

To add a URL filtering list, perform the following steps:

Choose Firewall>URL Filtering. Click Add list. Set URL. Click Submit. As shown in Figure 5-47.

URL Filtering List (Max Limit :32)

		Add	List
Index	URL	Operation	
Settings			
URL	www.google.com *		
		Submit Can	cel



Modify URL Filtering list

To modify a URL filtering rule, perform the following steps:

- 1. Choose Firewall>URL Filtering.
- 2. Choose the rule to be modified, and click **Edit**.
- 3. Set URL address.
- 4. Click **Submit**. As shown in Figure 5-48.

URL Filtering List (Max Limit :32)

			Add List
Index	URL	Operation	
1	www.google.com	Delete Edit	
Sattinga			
Settings			
URL	www.google.com *		
			Submit Cancel

Figure 5-48

Deleting URL Filtering list

To delete a URL list, perform the following steps:

- 1. Choose Firewall>URL Filtering.
- 2. Choose the item to be deleted, and click **Delete**. As shown in Figure 5-49.

URL Filtering List (Max Limit :32)

			Add List
Index	URL	Operation	
1	www.google.com	Delete Edit	



Port Forwarding

When network address translation (NAT) is enabled on the CPE, only the IP address on the WAN side is open to the Internet. If a computer on the LAN is enabled to provide services for the Internet (for example, work as an FTP server), port forwarding is required so that all accesses to the external server port from the Internet are redirected to the server on the LAN.

Adding Port Forwarding rule

To add a port forwarding rule, perform the following steps:

	Choose Firewall > Port Forwarding.
	Click Add list.
	Set Service .
	Set Protocol .
	Set Remote port range.
	The port number ranges from 1 to 65535. Set Local host.
	This IP address must be different from the IP address that is set on the LAN Host Settings page, but they must be on the same network segment.
	Set Local port.
	The port number ranges from 1 to 65535.
	Click Submit . As shown in Figure 5-50.
Port Forwarding List (M	ax Limit :32)

					Add List
Index	Protocol	Remote Port Range	Local Host	Local Port	Operation
Settings					
Service	Custom	~			
Protocol	TCP	\sim			
Remote Port Range	2000	*			
Local Host	192.168.1.120	*			
Local Port	3000	*			
					Submit Cancel

Figure 5-50

Modifying Port Forwarding rule

To modify a port forwarding rule, perform the following steps:

- 1. Choose Firewall > Port Forwarding.
- 2. Choose the item to be modified, and click **Edit**.
- 3. Repeat steps 3 through7 in the previous procedure.
- 4. Click **Submit**. As shown in Figure 5-51.

Port Forwarding List (Max Limit :32)

Protocol	Remote Port Range	Local Host		
	itemeter of thange	Local Host	Local Port	Operation
TCP	2000	192.168.1.120	3000	Delete Edit
Custom	\sim			
TCP	\sim			
2000	*			
192.168.1.120	*			
3000	*			
	Custom TCP 2000 192.168.1.120	Custom ~ TCP ~ 2000 * 192.168.1.120 *	Custorn TCP 2000 * 192.168.1.120 *	Custom ✓ TCP ✓ 2000 * 192.168.1.120 *

Figure 5-51

Deleting Port Forwarding rule

To delete a port forwarding rule, perform the following steps:

Choose Firewall > Port Forwarding.

Choose the item to be deleted, and click **Delete**. As shown in Figure 5-52.

Port Forwarding List (Max Limit :32)					
					Add List
Index	Protocol	Remote Port Range	Local Host	Local Port	Operation
1	TCP	2000	192.168.1.120	3000	Delete Edit

Figure 5-52

Access Restriction

Access Restriction

Access Restri	iction List (Max L	imit :32)				
						Add List
Index	Enable	Name	Device	Weekdays	Time	Operation
Settings						
Enable	🖂 Enal	ble				
Name	ABC	*				
Device	00:12:61	* AE:C0:89				
Weekdays	Mon	Tue Wed Thu	Fri Sat Sun			
Time	0 ~	: 0 ~ _ 23	✓ : 59			
						Submit Cancel



Add Access Restriction

To add a access restriction rule, perform the following steps:

- 1. Choose Security>Access Restriction.
- 2. Click Add list.
- 3. Set Access Restriction to Enable.
- 4. Set Access Restriction Name.
- 5. Set Device MAC address or IP address.
- 6. Set Weekdays and time.
- 7. Click Submit.

Modify Access Restriction

To modify a access restriction rule, perform the following steps:

- 1. Choose Security>Access Restriction.
- 2. Choose the item to be modified, and click Edit.
- 3. Repeat steps 4 through 6 in the previous procedure.
- 4. Click Submit.

Delete Access Restriction

To delete a access restriction rule, perform the following steps:

- 1. Choose Security>Access Restriction.
- 2. Choose the item to be deleted, and click **Delete**.

UPnP

On this page, you can enable or disable the Universal Plug and Play (UPnP) function.

To enable UPnP, perform the following steps:

- 1. Choose Firewall > UPnP.
- 2. Set UPnP to Enable.
- 3. Click **Submit**. As shown in Figure 5-54.

P					
Settings					
UPnP	☑ Enable				
					Submi
Current UPnP	Status				
Index	Description	Protocol	IP Address	External Port	Internal Port

Figure 5-54

DoS

On this page, you can enable or disable the Denial of service (DoS) function.

- 1 Choose Firewall > DoS.
- 2 Set UPnP to Enable.
- 3 Click **Submit**. As shown in Figure 5-55.

Network	DoS		
≫ Wi-Fi	1		
Firewall	DoS Setting		
Firewall Setting	DoS	Enable O Disable	
MAC Filtering			
IP Filtering	Sync flood	 Enable 	
URL Filtering	Ping flood	Enable	
Port Forwarding	TCP port scan	Enable	
Access Restriction	TOP poil scan	Enable	
UPnP	UDP port scan	Enable	
DoS			
VPN			Submit Cancel



5.6 VPN

This function enables you to connect the virtual private network (VPN).

To connect the VPN, perform the following steps:

Choose VPN. In the VPN Settings area, enable VPN. Select a protocol from Protocol drop-down list. Enter Username and Password. Click Submit. You can view the status in VPN Status area. As shown in Figure 5-55.

VPN Settings

VPN Settings			
VPN	Enable		
Protocol	L2TP	¥	
VPN Server	172.16.34.120	*	
Usemame	test	*	
Password	••••	*	
VPN Status			
Username	Local Address	Remote Address	Online Time
			Submit Cancel

Figure 5-55

5.7 IPv6

Internet Protocol version 6 (IPv6) is the most recent version of the Internet Protocol (IP). Every device on the Internet is assigned a unique IP address for identification and location definition.

Status

The status page shows IPv6 information. As shown in Figure 5-56.

Status

IPv6 Information

 IPv6 Status
 Active

 WAN Connection Type
 AutoConfiguration

 IPv6 MGMT Global Address -

LAN Address AutoConfiguration

IPv6 DATA Global Address ---

IPv6 Link-Local Address fe80::da55:a3ff:fe61:c4e0

AutoConfiguration Type SLAAC

Figure 5-56

IPv6 WAN Settings

In this page, user can enable or disable IPv6 function. Meanwhile, user can set WAN Connection Type and the type of DNS.As shown in Figure 5-27

WAN		
IPv6 Enable	💌 Enable	
WAN Settings		
	AutoConfiguration	Ŧ
WAN Settings WAN Connection Type IPv6 MGMT Global Addre		Ŧ



IPv6 LAN Settings

In this page, user can chose the AutoConfiguration Type. As shown in Figure 5-58.

IPv6 LAN Settings

LAN Settings

IPv6 Link-Local Address	fe80::da55:a	3ff:fe61:c4e0
AutoConfiguration Type	SLAAC	•
	SLAAC	1000
	DHCPv6	

Figure 5-58

5.8 System

5.8.1 Maintenance

Reboot

This function enables you to restart the CPE. Settings take effect only after the CPE restarts. To restart the CPE, perform the following steps:

- 1. Choose System>Maintenance.
- Click **Reboot**. As shown in Figure 5-59. The CPE then restarts.

Rebo	oot
С	lick Reboot to reboot device
F	Reboot

Figure 5-59

Reset

This function enables you to restore the CPE to its default settings. To restore the CPE, perform the following steps:

- 1. Choose System>Maintenance.
- Click Factory Reset. As shown in Figure 5-60. The CPE is then restored to its default settings.

Factory Reset

Click Factory Reset to restore device to its factory settings

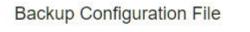
Factory Reset

Figure 5-60

Backup Configuration File

You can download the existing configuration file to back it up. To do so:

- 1. Choose System>Maintenance.
- 2. Click **Download** on the **Maintenance** page.
- 3. In the displayed dialog box, select the save path and name of the configuration file to be backed up.
- Click Save. As shown in Figure 5-61.
 The procedure for file downloading may vary with the browser you are using.



To backup the current configuration file, click Download.

Download

Figure 5-61

Upload Configuration File

You can upload a backed up configuration file to restore the CPE. To do so:

- 1. Choose System>Maintenance.
- 2. Click Browse on the Maintenance page.
- 3. In the displayed dialog box, select the backed up configuration file.
- 4. Click Open.
- 5. The dialog box choses. In the box to be right of Configuration file, the save path and name of the backed up configuration file are displayed.
- 6. Click **Upload**. As shown in Figure 5-62.

The CPE uploads the backed up configuration file. The CPE then automatically restarts.

Restore Configuration File

To restore the configuration file, specify the path of the local configuration file, import the file, and click Upload to restore the configuration file Configuration File 选择文件 未选择任何文件

Figure 5-62

5.8.2 TR069

TR-069 is a standard for communication between CPEs and the auto-configuration server (ACS). If your service provider uses the TR069 automatic service provision function, the ACS automatically provides the CPE parameters. If you set the ACS parameters on both the CPE and ACS, the network parameters on the CPE are automatically set using the TR-069 function, and you do not need to set other parameters on the CPE.

To configure the CPE to implement the TR-069 function, perform the following steps:

- 1. Choose System>TR069.
- 2. Set acs URL source. There are two methods, such as URL and DHCP.
- 3. In the ACS URL box, enter the ACS URL address.
- 4. Enter ACS **user name** and **password** for the CPE authentication.
 - To use the CPE to access the ACS, you must provide a user name and password for authentication. The user name and the password must be the same as those defined on the ACS.
- 5. If you set **Periodic inform** to **Enable**, set **Periodic inform interval**.
- 6. Set connection request user name and password.
- 7. Click **Submit**. As shown in Figure 7-5.

TR069

Settings			
Enable TR069	Enable		
ACS URL Source	URL v		
ACS URL	http://192.168.0.10/acs	*	
ACS Username	tr069	*	
ACS Password	···· ~	*	
Enable Periodic Inform	Enable		
Periodic Inform Interval	3600	*	
Connection Request Username	tr069		
Connection Request Password	····· ~		

Figure 5-63

5.8.3 Date & Time

You can set the system time manually or synchronize it with the network. If you select **Sync from network**, the CPE regularly synchronizes the time with the specified Network Time Protocol (NTP) server. If you enable daylight saving time (DST), the CPE also adjusts the system time for DST.

To set the date and time, perform the following steps:

- 1. Choose System > Date & Time.
- 2. Select Set manually.

Settings

- 3. Set Local time or click Sync to automatically fill in the current local system time.
- 4. Click **Submit**. As shown in Figure 5-64.

ootungo	
Current Time	2017-10-26 15:23:33
Set Manually	
Local Time	2017 / 10 / 26 / 15 / 23 / 33 (format:YYYY/MM/DD/HH/MM/SS,the value of year is between 2000 and 2030)

Sync from Network

Figure 5-64

To synchronize the time with the network, perform the following steps:

- 1. Choose **System > Date & Time**.
- 2. Select Sync from network.
- 3. From the **Primary NTP server** drop-down list, select a server as the primary server for time synchronization.
- 4. From the **Secondary NTP server** drop-down list, select a server as the IP address of the secondary server for time synchronization.
- 5. If you don't want to use other NTP server, you need to enable **Optional ntp server**, and set a server IP address.
- 6. Set Time zone.
- 7. Click **Submit**. As shown in Figure 5-65.

Settings	
Current Time	2017-10-26 15:23:33
Set Manually	
Sync from Network	
Primary NTP Server	pool.ntp.org
Secondary NTP Server	asia.pool.ntp.org
Optional NTP Server	192.168.0.10
Time Zone	(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi 🔹
DOT	

Figure 5-65

To set DST, perform the following steps:

- 1. Choose System>Date&Time.
- 2. Set **DST** enable.
- 3. Set Start Time and End Time.
- 4. Click **Submit**. As shown in Figure 5-66.

DST

DST	📃 Enab	le				
Start Time	Mar 🔻	Second V	Mon 🔻	(2017-03-13) at	2	o'clock
End Time	Nov 🔻	First V	Sun 🔻	(2017-11-05) at	2	o'clock
Status	Not Run	ning				

Figure 5-66

The CPE will automatically provide the DST time based on the time zone.

5.8.4 DDNS

Dynamic Domain Name Server (DDNS) service is used to map the user's dynamic IP address to a fixed DNS service.

To configure DDNS settings, perform the following steps:

- 1. Choose **System > DDNS**.
- 2. Set DDNS to Enable.
- 3. In Service provider, choose DynDNS.org or oray.com.
- 4. Enter **Domain name** and **Host name**. For example, if the domain name provided by your service provider is test.customtest.dyndns.org, enter customtest.dyndns.org as Domain name, and test as Host name.
- 5. Enter User name and Password.
- 6. Click **Submit**. As shown in Figure 5-67.

DDNS Settings

DDNS	Enable	
Service Provider	WWW.DYNDNS.ORG	v
Domain		*
Usemame		*
Password	~	*
Refresh	0	*
Enable Wildcard	Enable	
WAN IP and domain verification	Enable	



Submit

Cancel

5.8.5 Diagnosis

If the CPE is not functioning correctly, you can use the diagnosis tools on the **Diagnosis** page to preliminarily identify the problem so that actions can be taken to solve it.

Ping

If the CPE fails to access the Internet, run the ping command to preliminarily identify the problem. To do so:

Choose System>Diagnosis.

In the Method area, select Ping.

Enter the domain name in the **Target IP or domain** field, for example, <u>www.google.com</u>.

Set Packet size and Timeout.

Set Count.

Click Ping. As shown in Figure 5-68.

Wait until the ping command is executed. The execution results are displayed in the Results box.

Diagnostics

Method			
Method of Diagnostics	• Ping		
	O TraceRoute		
Ping			
Target IP/Domain	www.google.com *		
Packet Size	56 *	<	
Timeout	*		3
Count	4 *		
			Ping Cancel
Result			
Result	Pass		
Details	PING www.google.com/61.135.169.125): 56 data bytes 64 bytes from 61.135.169.125: seq=0 ttl=52 time=253.329 ms 64 bytes from 61.135.169.125: seq=7 ttl=52 time=203.0802 ms 64 bytes from 61.135.169.125: seq=2 ttl=52 time=252.282 ms 64 bytes from 61.135.169.125: seq=3 ttl=52 time=252.282 ms www.baidu.com ping statistics 4 packets transmitted. 4 packets received, 0% packet loss round-trip min/avg/max = 203.802/332.403/620.199 ms		

Figure 5-68

Traceroute

If the CPE fails to access the Internet, run the Traceroute command to preliminarily identify the problem. To do so:

- 1. Choose System>Diagnosis.
- 2. In the Method area, select **Traceroute**.
- 3. Enter the domain name in the Target IP or domain field. For example, <u>www.google.com</u>.
- 4. Set Maximum hops ad Timeout.
- 5. Click Traceroute. As shown in Figure 5-69

Wait until the traceroue command is executed. The execution results are displayed in the Results box.

gnostics	
Method	
Method of Diagnostics	O Ping
	TraceRoute
Traceroute	
Target IP/Domain	www.google.com *
Maximum Hops	30 *
Timeout	10 *
	Traceroute Canc
Result	
Result	Pass
Details	traceroute to www.google.com(61.135.169.125), 30 hops max, 38 byte packets 1 92.168.224 (192.168.22.42) 151.573 ms 2 192.168.223 (192.168.22.13) 119.710 ms 3 172.16.34.1 (172.16.34.1) 192.445 ms 4 112.64.146.109 (112.64.184.109) 166.459 ms 5 * 6 139.226.197.137 (139.226.197.137) 152.109 ms 7 219.158.16.89 (219.158.16.89) 191.071 ms 8 *

Figure 5-69

5.8.6 Port Mirror

Port mirroring is used on a network switch to send a copy of network packets seen on one switch port. To do so:

- 1. Choose System>Port Mirror.
- 2. Enable Port Mirror.
- 3. Select the **WAN Interface** which you want a copy.
- 4. Type the **Monitor IP**, where the copy will send to.
- 5. Click **Sbumit**. As shown in Figure 5-70.

Port Mirror

Enable			
apn1	\sim		
192.168.1.120	*		
			Cancel
	apn1	apn1 V	apn1 V

Figure 5-70

5.8.7 Syslog

The syslog record user operations and key running events.

Local

To set the syslog to local, perform the following steps:

- 1. Choose System>Syslog.
- 2. In the **Setting** area, set the method to **Local**.
- 3. In the Level drop-down list, select a log level.
- 4. Click **Submit**. As shown in Figure 5-71.

Syslog

Settings			
Method	Network		
Network	O Local		
Forward IP Address	192.168.1.120	*	
			Submit Cancel
	Figure 5-71		

Viewing local syslog

To view the local syslog, perform the following steps:

In the **Keyword** box, set a keyword.

Click **Pull**, the result box will display.

Network

To set the syslog to network, perform the following steps:

- 1. Choose System>Syslog.
- 2. In the **Setting** area, set the method to **Network**.

- 3. In the Level drop-down list, select a log level.
- 4. In the Forward IP address box, set a IP address.
- 5. Click **Submit**. As shown in Figure 5-72.

The syslog will transmit to some client to display through network.

Syslog

Settings		
Method	Network	
	Local	
Network		
Forward IP Address	192.168.1.120	*

Figure 5-72

5.8.8 WEB Setting

To configure the parameters of WEB, perform the following steps:

- 1. Choose System> WEB Setting.
- 2. Set **HTTP** enable. If you set HTTP disable, you will can't login the web management page with the HTTP protocol from WAN side.
- 3. Set **HTTP port**. If you want to change the login port, you can set a new port in the box, the default HTTP port is 80.
- 4. Set **HTTPS** enable. If you want to login the web management page with the HTTPS protocol from WAN side, you need to enable the HTTPS.
- 5. If you want to login the web management page form the **WAN**, you need to Enable **Allowing login from WAN**.
- 6. Set the **HTTPS port**.
- 7. Click **Submit**. As shown in Figure 5-73.

WEB Setting

Settings			
HTTP Enable	Enable		
HTTP Port	80	*	
HTTPs Enable	Enable		
Allow HTTPs Login from WAN	Enable		
Allow PING from WAN	Enable		
HTTPs Port	443	*	
Refresh Time	10	*	
Session Timeout	10	*	
Language	English •]	
			Submit Cancel

Figure 5-73

5.8.9 Account

This function enables you to change the login password of the user. After the password changes, enter the new password the next time you login.

To change the password, perform the following steps:

- 1. Choose System>Account.
- 2. Select the **user name**, if you want to change the password of normal user, you need to set **Enable User** enable.
- 3. Enter the current password, set a new password , and confirm the new password.
- 4. New password and Confirm password must contain 5 to 15 characters.
- 5. Click **Submit**. As shown in Figure 5-74.

Account

Change Password			
Usemame	admin	•	
Current Password		transfer *	
New Password		transfer *	
Confirm Password		~ *	
			Submit Cancel

Figure 5-74

5.8.10 Logout

To logout the web management page, perform the following steps:

Choose System and click Logout

It will back to the login page.

6 FAQs

The POWER indicator does not turn on.

- Make sure that the power cable is connected properly and the CPE is powered on.
- > Make sure that the power adapter is compatible with the CPE.

Fails to Log in to the web management page.

- Make sure that the CPE is started.
- Verify that the CPE is correctly connected to the computer through a network cable. If the problem persists, contact authorized local service suppliers.

The CPE fails to search for the wireless network.

- Check that the power adapter is connected properly.
- Check that the CPE is placed in an open area that is far away from obstructions, such as concrete or wooden walls.
- Check that the CPE is placed far away from household electrical appliances that generate strong electromagnetic field, such as microwave ovens, refrigerators, and satellite dishes.

If the problem persists, contact authorized local service suppliers.

The power adapter of the CPE is overheated.

The CPE will be overheated after being used for a long time. Therefore, power off the CPE when you are not using it.

Check that the CPE is properly ventilated and shielded from direct sunlight.

The parameters are restored to default values.

If the CPE powers off unexpectedly while being configured, the parameters may be restored to the default settings.

After configuring the parameters, download the configuration file to quickly restore the CPE to the desired settings.