



XT-1000AC



Wireless Access Point Controller & Multi-WAN Gateway

User Manual

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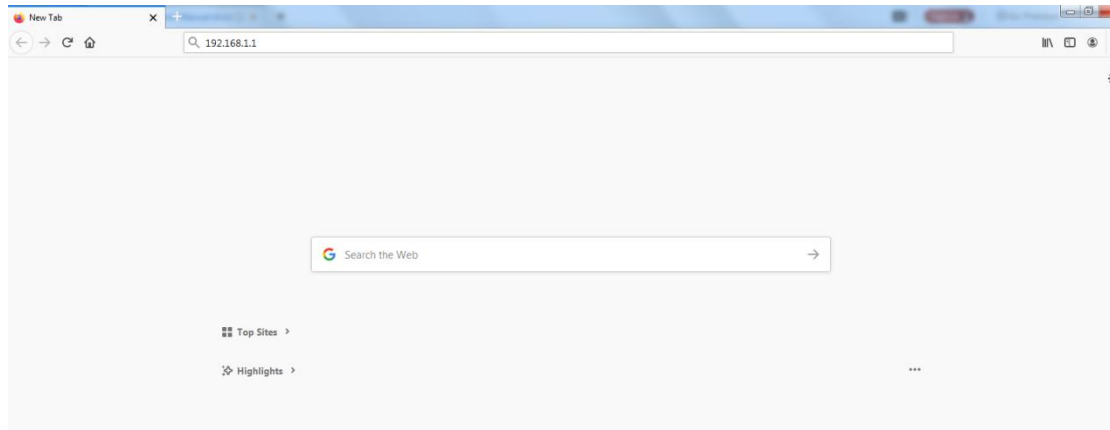
10.4 Password Setting

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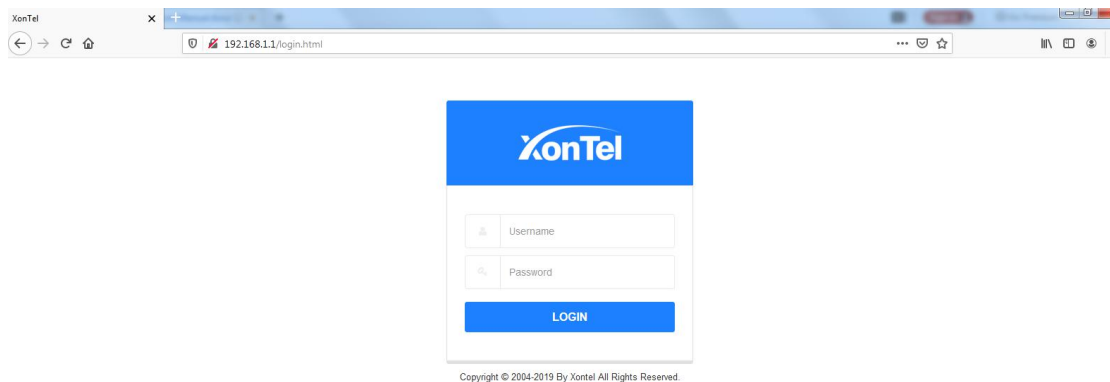
10.6 PING

1 Log In

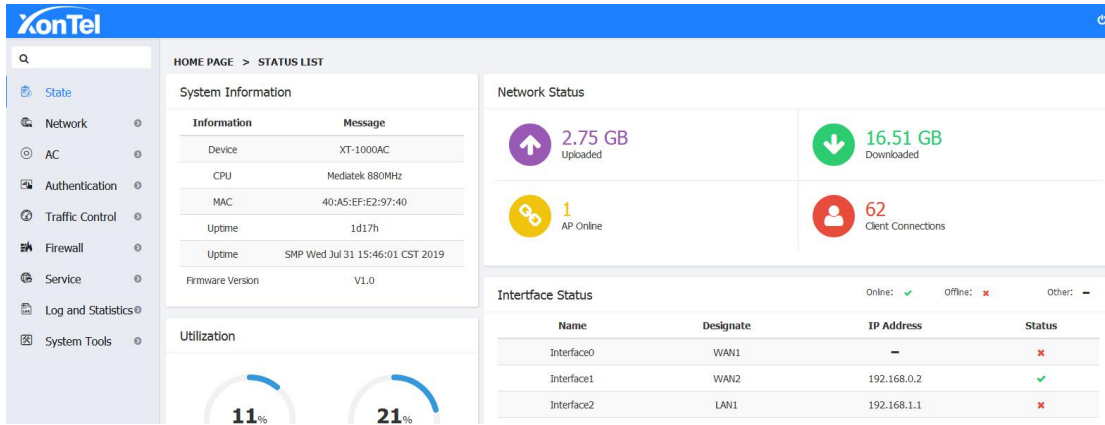
1. XT-1000AC is based on the browser's configuration interface. Open your browser, and input IP address as 192.168.1.1



2. After finished the IP address and click Enter. Then it will get into XT-1000AC' LOGIN interface as below:

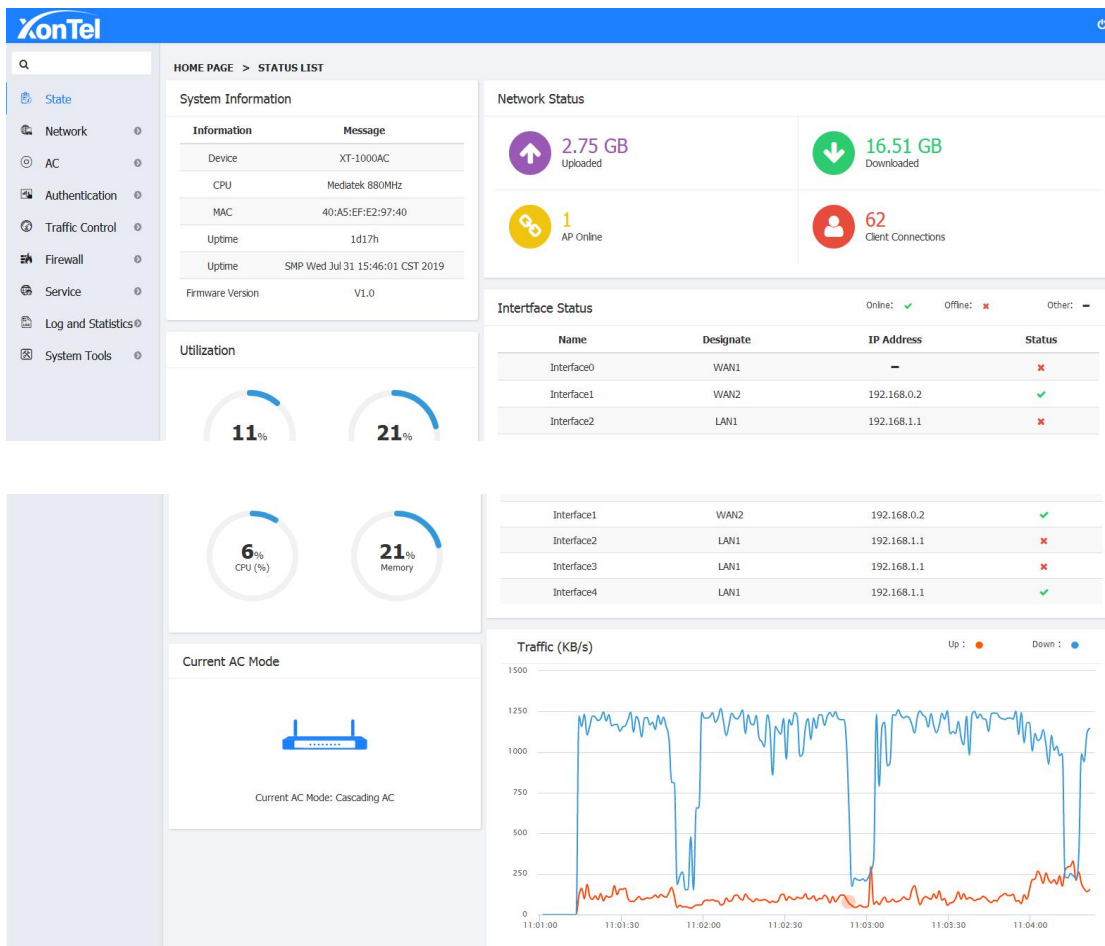


2. Input user name "admin", Password "xontel". Then click LOGIN to get into the home page as below:



2 State

After login, it will get into the state information page directly. It will show you basic hardware information, CPU and Memory utilization, Ethernet status and Traffic rate data

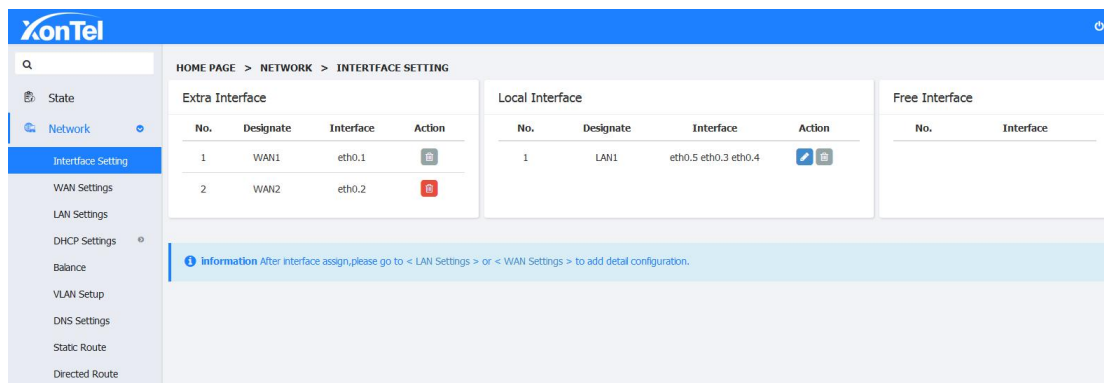


3 Network

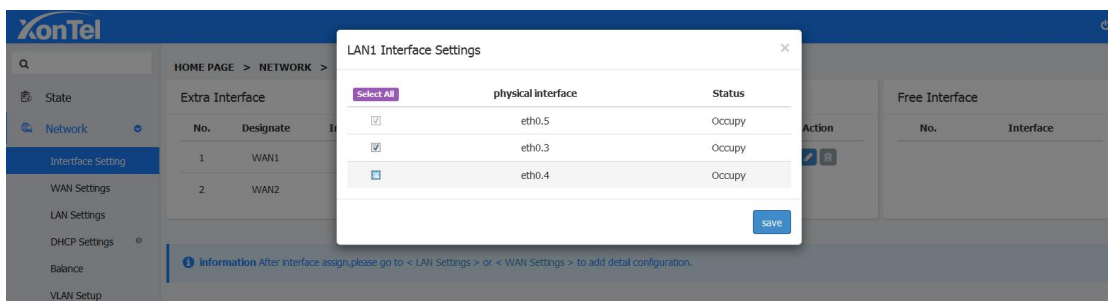
3.1 Interface Setting

The “eth0” is defaulted to be WAN port. “eth5” is defaulted to be LAN port and it cannot edit. The rest “eth1-eth4” is customized to be WAN port or LAN port. After designated the WAN port or LAN port, set up the internal network and outer network by “Local Network” and “WAN Settings”.

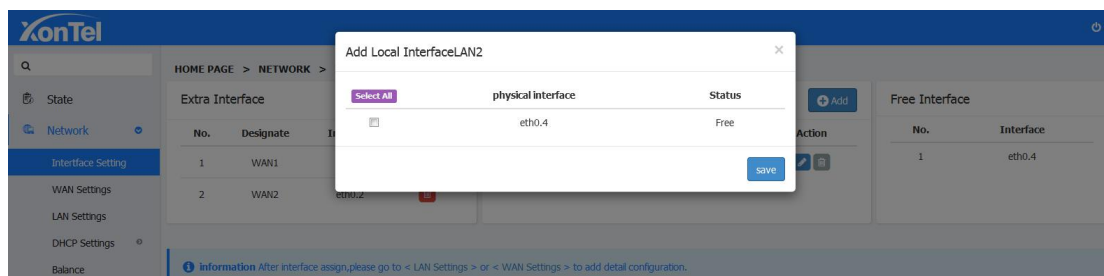
1. Click “Interface Setting” and get into the its setting page as below:



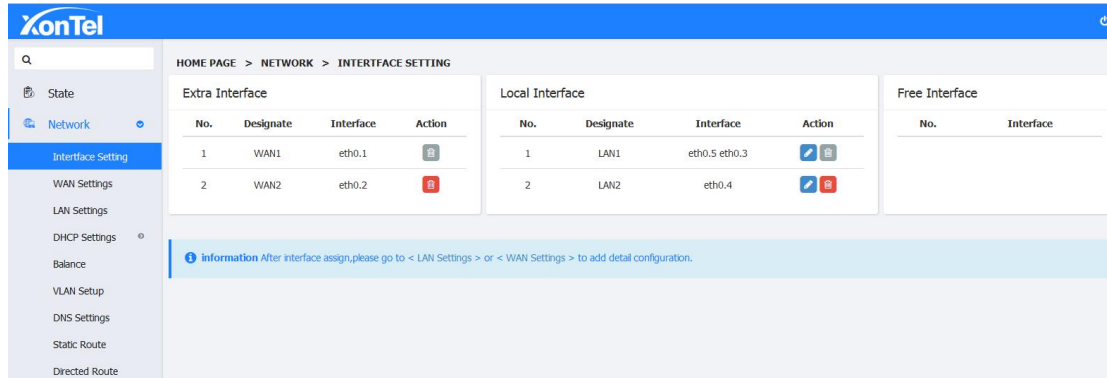
2. Click the “Edit” button to go into the “LAN1 Interface Settings” page, you can release free Ethernet ports. e.g eth0.4 is unchecked in below picture:



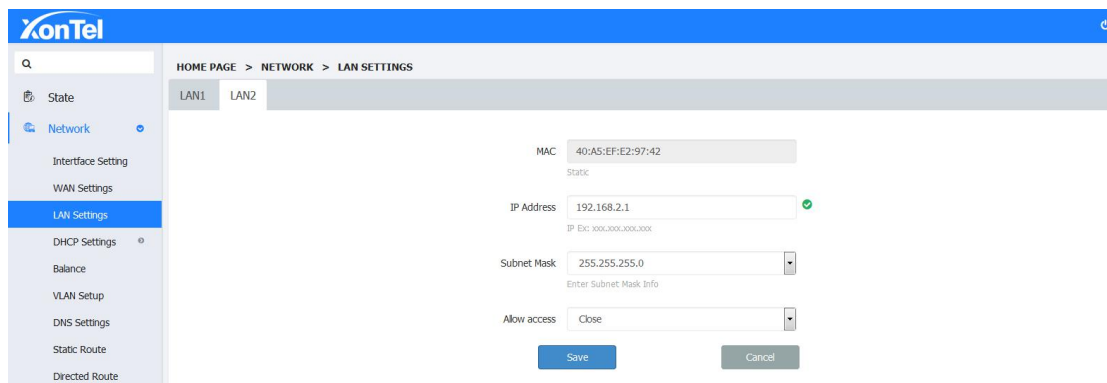
3. Click the “Add” button to get into the “Extra Interface”, Then go into the newly increased Local Interface page, tick to choose the INTERFACE which you want to add, as below:



4. Click “Save” and the INTERFACE list which you add will appear in the local Interface as new Interface.



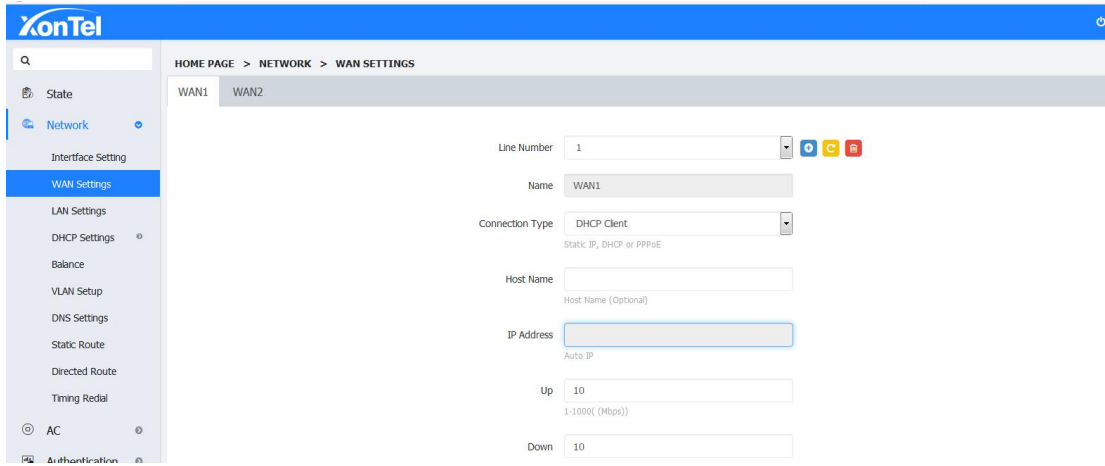
5. Click “LAN Settings” to set up the LAN2’s IP Address and Subnet Mask parameter .



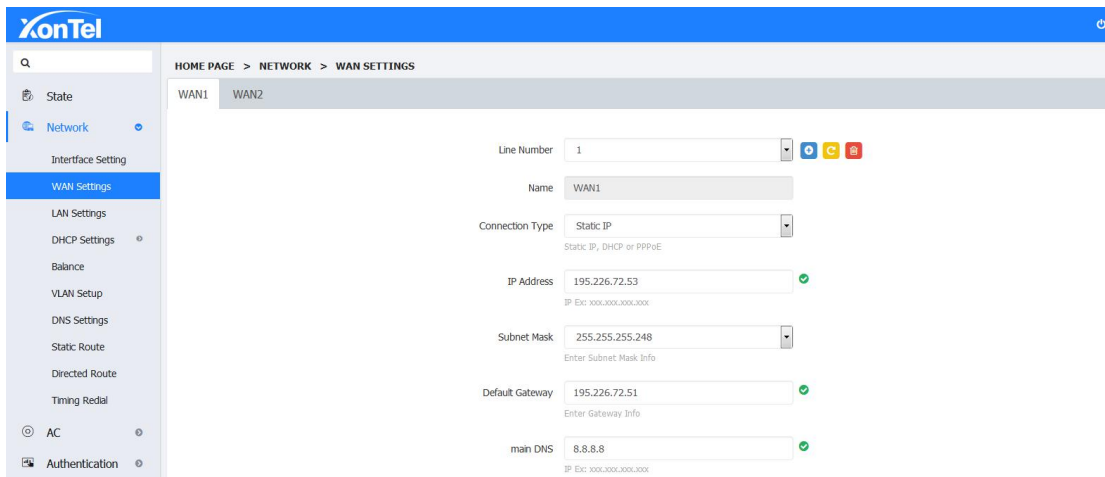
3.3 WAN Settings

In “WAN Settings” you can set up WAN Interface as DHCP Client, Static IP, PPPoE in connection types, it support Clone MAC address.

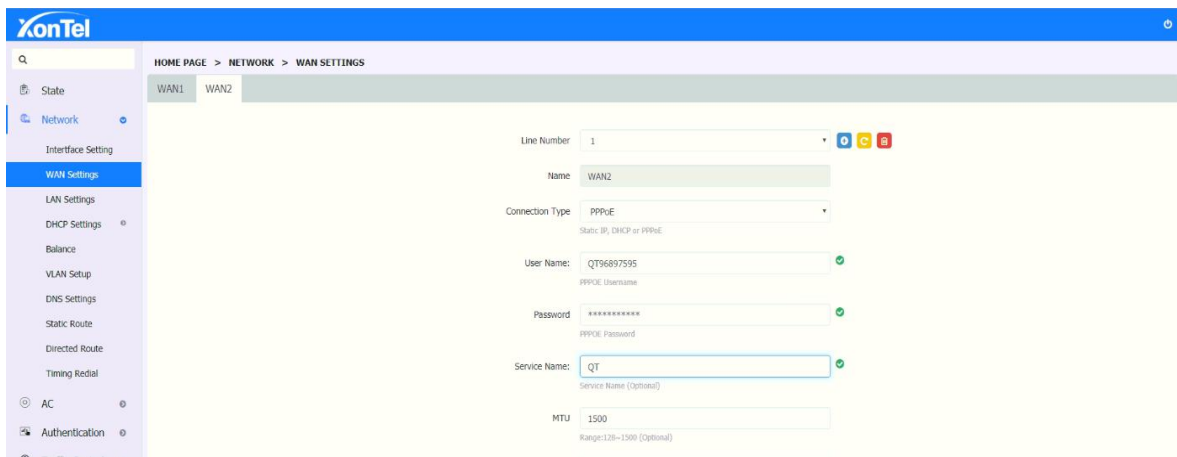
1. DHCP: If the WAN Port achieve the IP automatically by the DHCP, you can use this connection type.



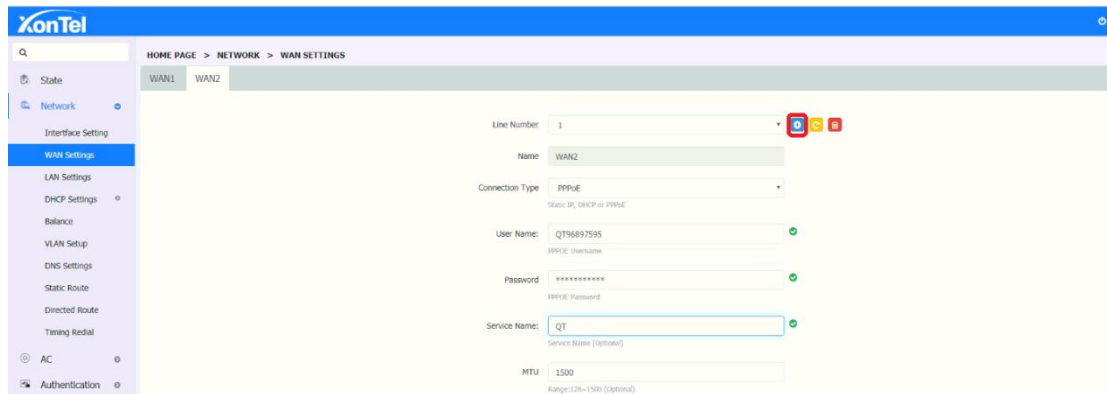
2. Static IP: Configure the Fixed IP, Subnet Mask, Default Gateway and DNS of the service.



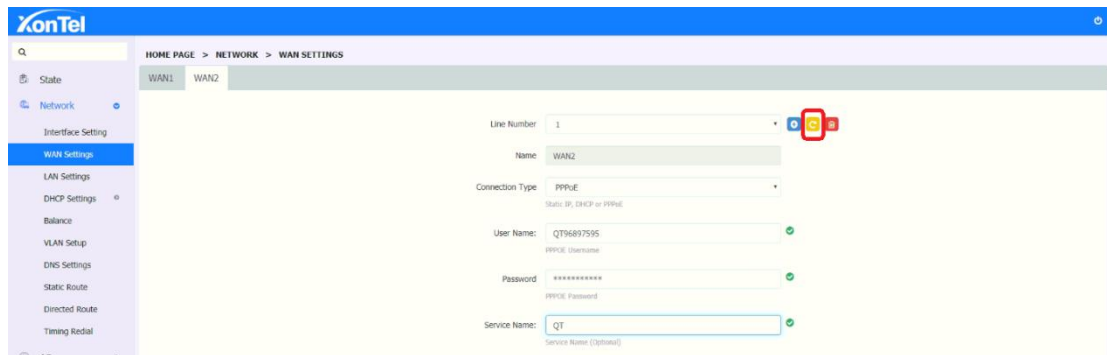
3. PPPoE: If choose this connection type,fill in the related User Name and Password of the service,the state will show connected after success authentication.



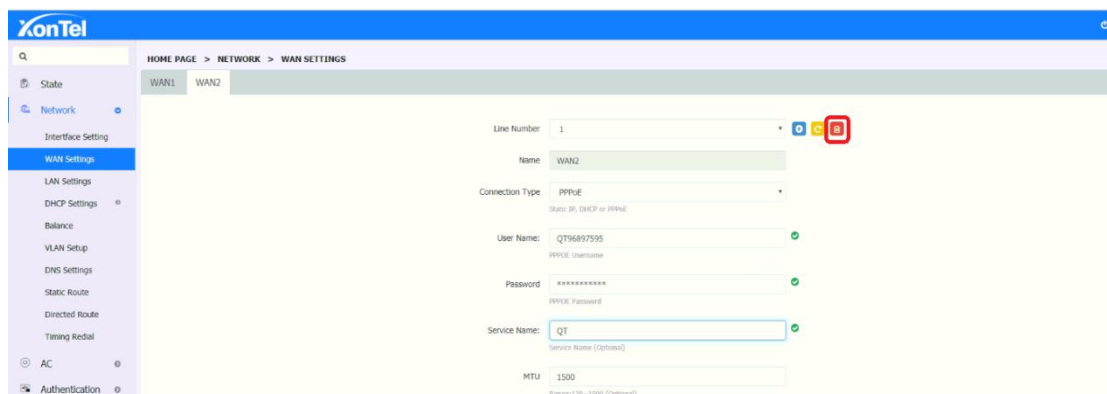
4. Click "+" to add multiple network connections on the same interface.



5. Click "Redial" button to redial the network line



6. Click the delete button to delete unnecessary Internet lines. The first one cannot be deleted



3.2 Local Network Settings

You can manually set each LAN Interface's IP Address and Subnet Mask, the default IP address is 192.168.1.1

The screenshot shows the XonTel web interface for LAN1 settings. The breadcrumb path is HOME PAGE > NETWORK > LAN SETTINGS. The left sidebar lists various network settings, with LAN Settings selected. The main content area displays the following configuration for LAN1:

- MAC: 40:A5:EF:E2:97:40 (Static)
- IP Address: 192.168.1.1 (with a note: IP Ex: xxx.xxx.xxx.xxx)
- Subnet Mask: 255.255.255.0 (with a note: Enter Subnet Mask Info)
- Allow access: Close

Buttons for 'Save' and 'Cancel' are located at the bottom of the form.

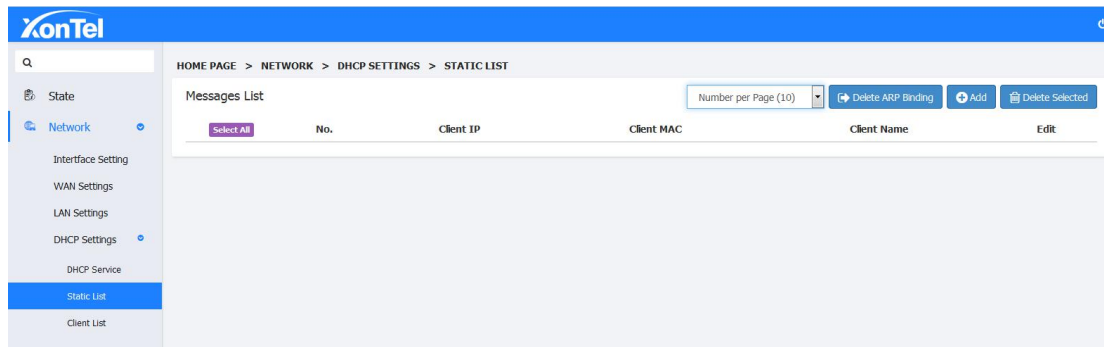
3.5 DHCP Settings

DHCP Settings: Here you can set up DHCP as Server, start IP, Address number, DHCP Lease Time, Domain Name, Main DNS and Backup DNS. You can also disabled DHCP function. (Attention: At the situation of disabled DHCP function, the device will not offer IP to client, and client need to manual setting the IP address)

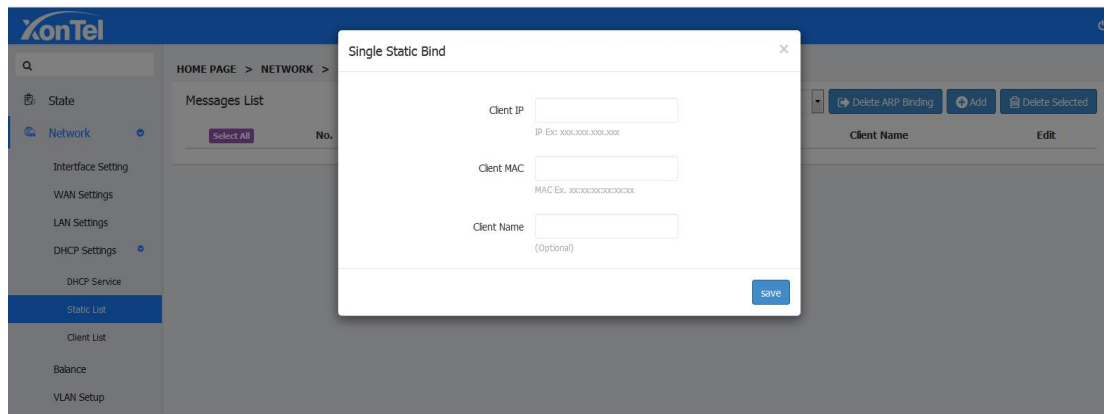
The screenshot shows the XonTel web interface for DHCP Settings under LAN1. The breadcrumb path is HOME PAGE > NETWORK > DHCP SETTINGS > DHCP SERVICE. The left sidebar lists various network settings, with DHCP Settings selected. The main content area displays the following configuration for DHCP Service:

- DHCP: Server
- DHCP Starting IP: 2 (with a note: Ex: 172.16.0.0(Fill the last bit))
- Max Clients: 100 (with a note: Max Number of IPs to Allocate (1-32768))
- DHCP Lease Time: 120 (with a note: 2 ~ 10080 Minutes)
- Domain Name: XonTel (with a note: DHCP Domain (Ex: XonTel))
- Main DNS: 192.168.1.1 (with a note: IP Ex: xxx.xxx.xxx.xxx)
- Spare DNS: 8.8.8.8

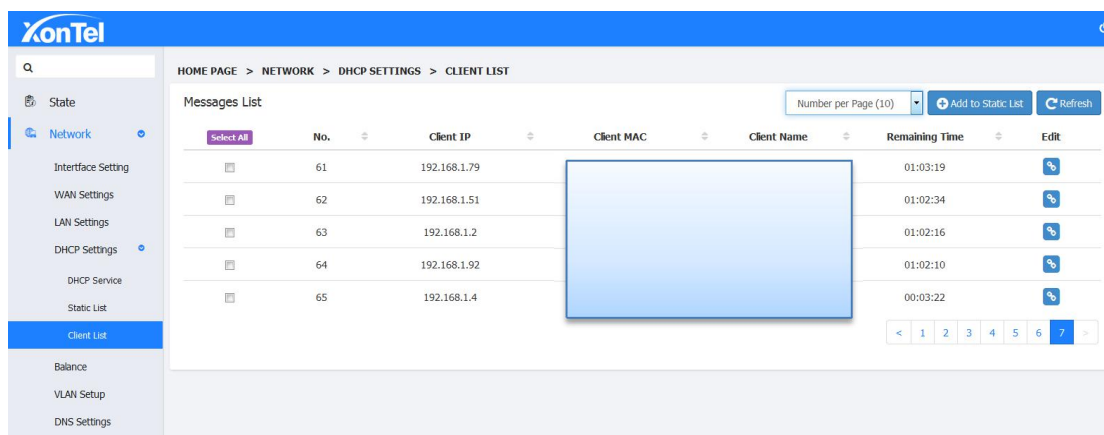
Static List: The DHCP service can always assign the same IP address to a specific computer on your LAN. To be more specific, the DHCP service assigns this static IP to a unique MAC address assigned to each NIC on your LAN. You can add it in this place. Here you can installed the compatible ARP binding information, and also can add the PC or mobile device IP address to static allocation, then those device will get the fixed IP.



To add single static bind, click “Add” button in the static list and set up the Client IP and MAC.



Client List: Here System will display the DHCP allocated CLIENT IP, CLIENT MAC, CLIENT NAME which are connected with the device. You can add any particular client IP to the static list by clicking “Add to Static List” button.



3.5 Balance

Balance: When the multiple ISP lines connected,choose balance strategy,choose corresponding rate as per their speed. The same or different ISP line will allocate the bandwidth by balance strategy.

HOME PAGE > NETWORK > BALANCE

Balance

Wan line	Balance	Weight:
WAN1	<input type="checkbox"/>	1
WAN2	<input type="checkbox"/>	1

Save Cancel

Multiline Route: Install purpose-play Netcom game through Netcom,play Telecom game through Telecom.

Multiline Route

Multiline route switch (Multiple different ISP lines,please enable multiline route,and load balance is disabled.)

Enabled

No.	Line	IP	ISP	Join multiline route	Default Gateway
1	WAN1	192.168.0.2	MADA	join	<input checked="" type="checkbox"/>
2	WAN2		choose isp	join	<input type="checkbox"/>

Save Cancel

Custom ISP:If the list haven't corresponding broadband ISP,you can add custom ISP.Collect the full ISP IP,add it according to the format,then configure mutiline route.

Custom ISP

ISP

ISP comment

Destination IP

(Destination ip format: isleagal ip address or ip address/netmask,each line filled in one.)

save

Custom ISP

Number per Page (10) + Add Delete Selected

Select All	No.	ISP	ISP comment
<input type="checkbox"/>	1	QQ	QQ

< 1 >

Port division

1. Traffic will go through the specific exit when the local network appointed IP wants to access some internet ports.

Choose the appointed wan line you need, and enter the appointed IP in SOURCE IP. Enter your DESTINATION PORT.

Attention: At the normal situation, you cannot enter the DESTINATION IP and SOURCE PORT. When your local internet IP is specific, you will need to enter the DESTINATION IP.

Example: Let 443 shuttling into WAN1.

Port division

Number per Page (10) + Add Delete Selected

Select All	No.	Proto	Wan line	Source IP	Destination IP	Source port	Destination port	Edit
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2. You can install local internet appointed IP in specific WAN line

Step: Protocol choose at random, Wan line choose appointed one you need, Source choose the appointed IP you need, Destination IP not need to write.

3.6 VLAN Settings

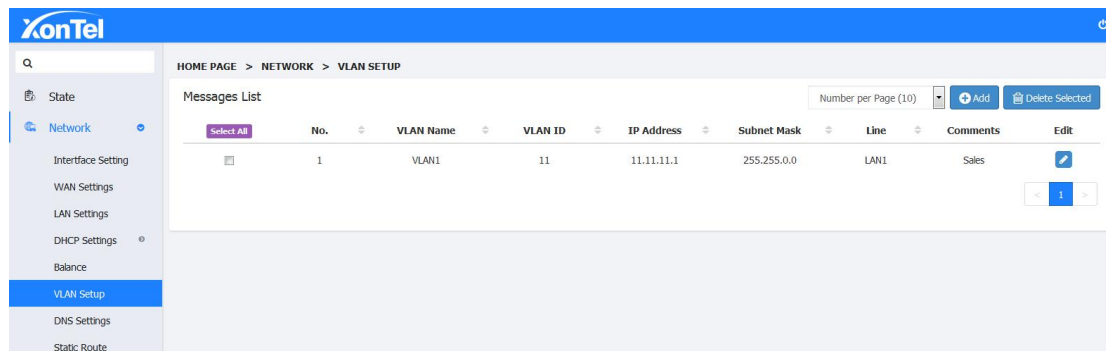
A VLAN is a group of devices on one or more LAN that are configured to communicate as if they were attached to the same wire, when in fact they are located on a number of different LAN segments. Because VLANs are based on logical instead of physical connections, they are extremely flexible.

VLAN SETUP;

Visit the VLAN SETUP page, click “add” on the upper right corner. Create a VLAN and set a virtual IP address.

VLAN ID: Virtual LAN ID number, used to distinguish between different VLANs

IP: This IP address is the address of this VLAN.



The screenshot shows the XonTel web interface for VLAN Setup. The breadcrumb navigation is HOME PAGE > NETWORK > VLAN SETUP. There is a search bar and a 'Messages List' section. The table has columns for No., VLAN Name, VLAN ID, IP Address, Subnet Mask, Line, Comments, and Edit. One entry is visible with No. 1, VLAN Name VLAN1, VLAN ID 11, IP Address 11.11.11.1, Subnet Mask 255.255.0.0, Line LAN1, and Comments Sales. There are 'Add' and 'Delete Selected' buttons at the top right of the table area.

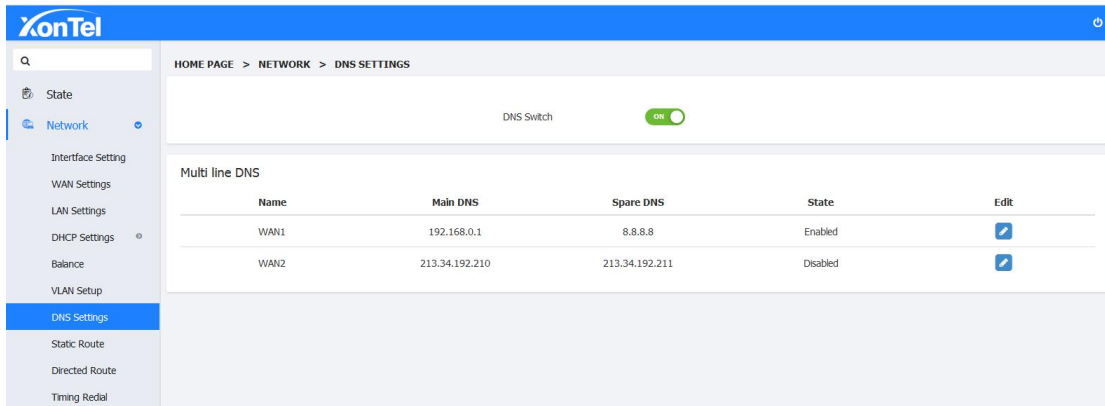
No.	VLAN Name	VLAN ID	IP Address	Subnet Mask	Line	Comments	Edit
1	VLAN1	11	11.11.11.1	255.255.0.0	LAN1	Sales	[Edit]

Note: The VLAN ID must correspond to the VLAN ID in the switch. The LAN port of the router directly connect to the trunk of VLAN switch.

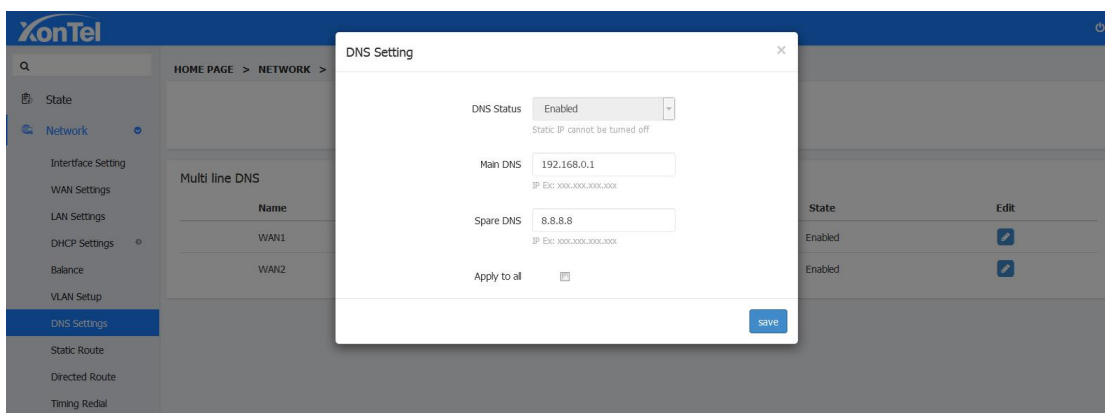
3.7 DNS Settings

DNS Settings: DNS, or Domain Name System, is the mechanism by which a network device resolves a name like `www.example.com` to an IP address such as `198.51.100.25`, or viceversa. Clients must have functional DNS if they are to reach other devices such as servers using their hostnames or fully qualified domain names. At the Static IP Mode, need to manual set up Main DNS and Secondary DNS. If you don't know your local DNS address, you can contact with your Internet Service Provider.

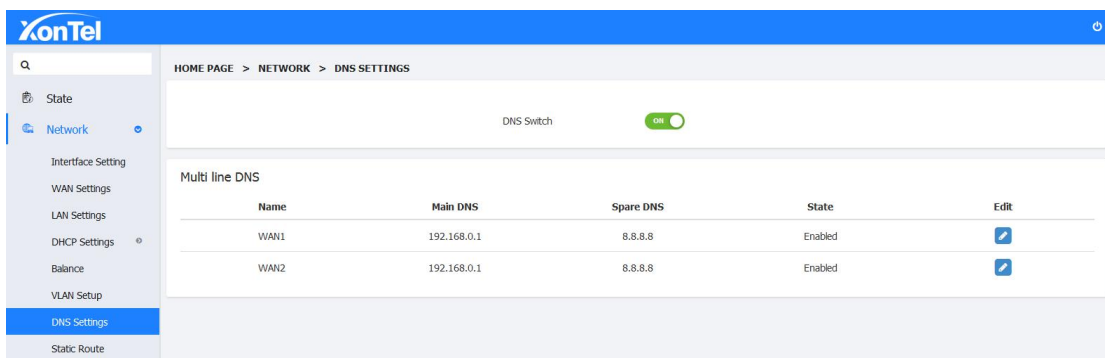
1. On Homepage Click "Network - DNS Settings" to enter the DNS setting interface, turn on the DNS switch



2. Select the need to set the DNS line, click the Edit button, you can select DNS Switch as On or Off, enter the main DNS or secondary DNS, click Save.

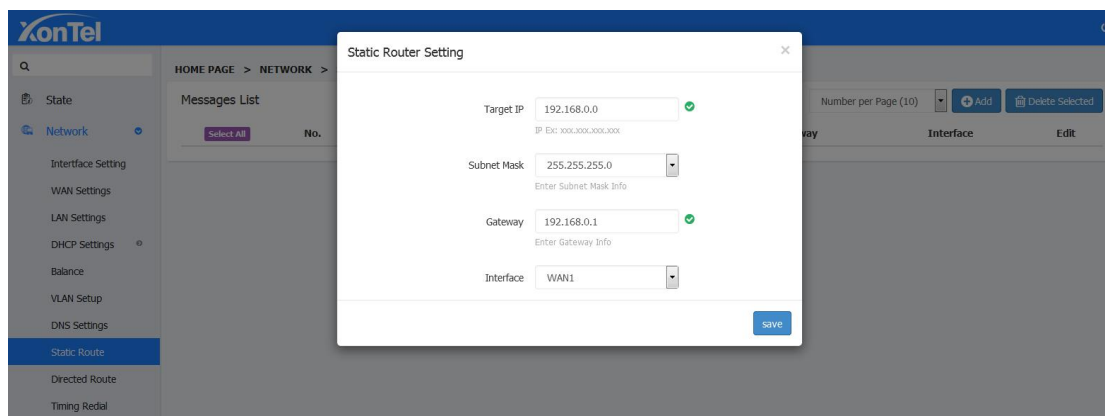
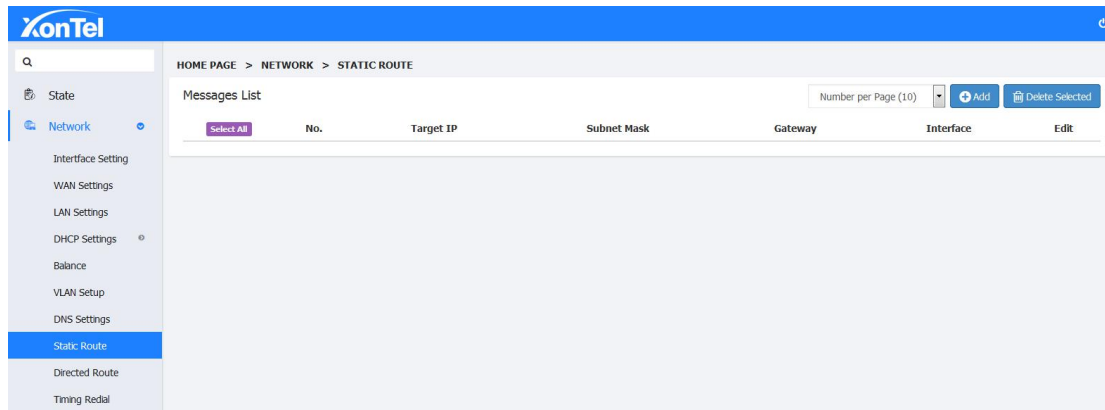


3. Click "Apply to all lines" in the action box and click save to apply the current settings to all lines.



3.8 Static Route

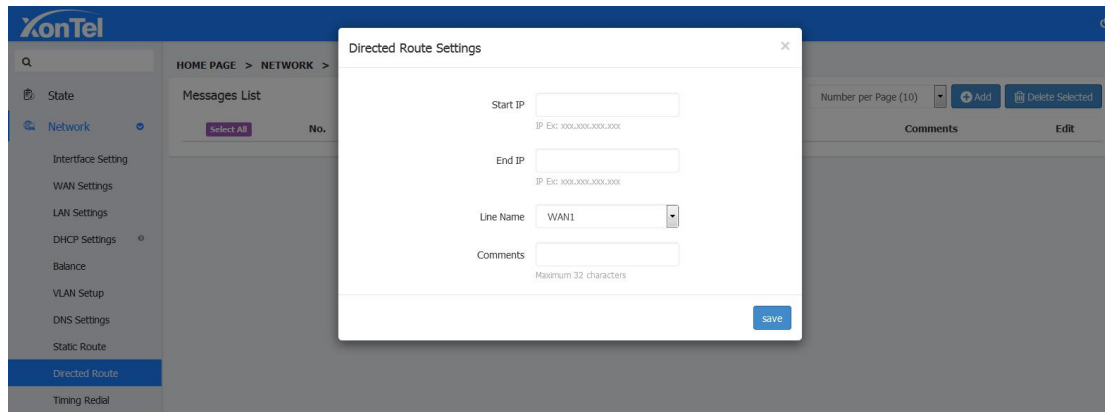
Static Route is a form of routing that occurs when a router uses a manually-configured routing entry, rather than information from a dynamic routing traffic. In many cases, static routes are manually configured by a network administrator by adding in entries into a routing table, though this may not always be the case.



3.9 Directed Route

Directed route means setting a fixed network flow direction and pointing data from one port to another fixed port instead of wide area.

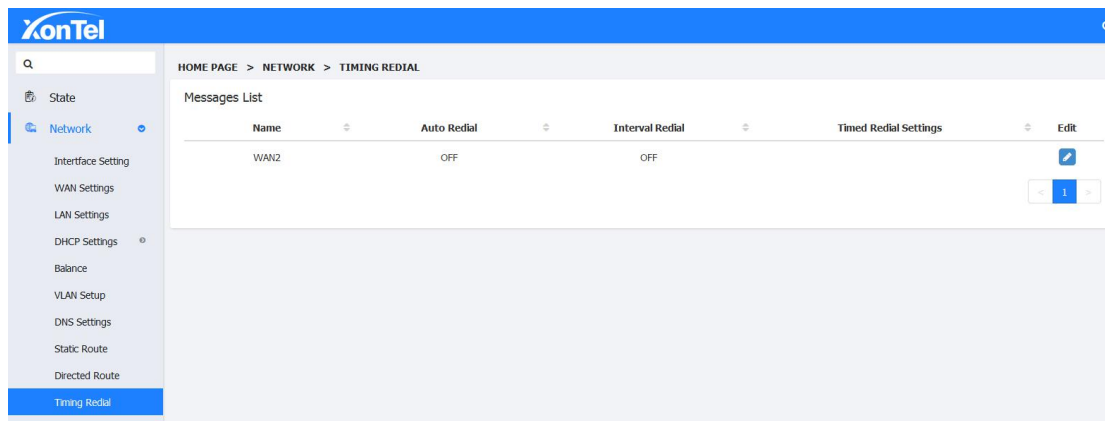
1. Click on "Network- Directed Route" to enter the Directional Routing Settings page, click the "+Add" button, enter the start IP, end IP and destination line name, click Save. Set the start IP to end IP data. The flow direction is specified to wan1 and does not pass through other wan ports.



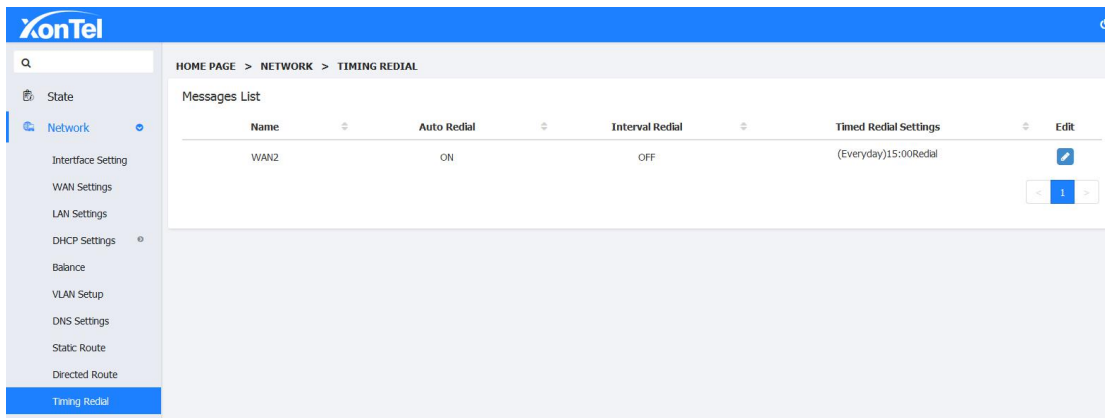
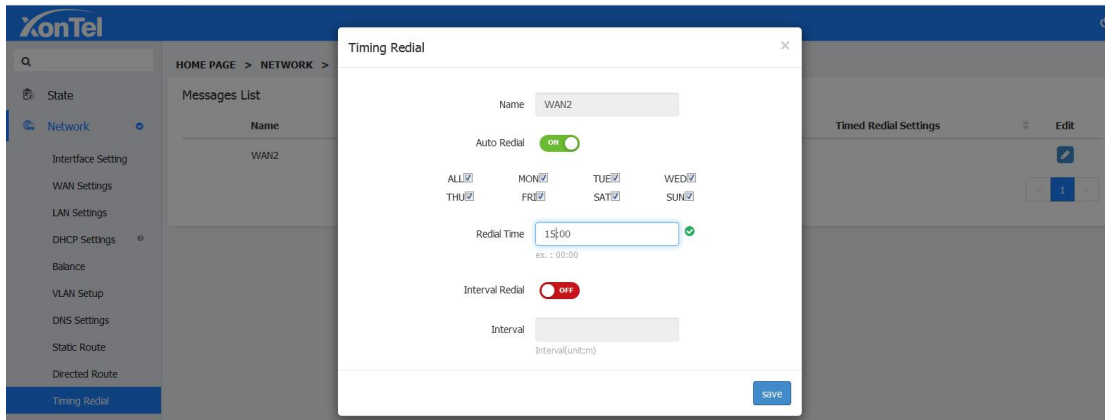
3.9 Timing Redial

Auto Redial: Set a specific time or a specific interval to allow automatic redialing of a WAN line which is DHCP Client or PPPoE.

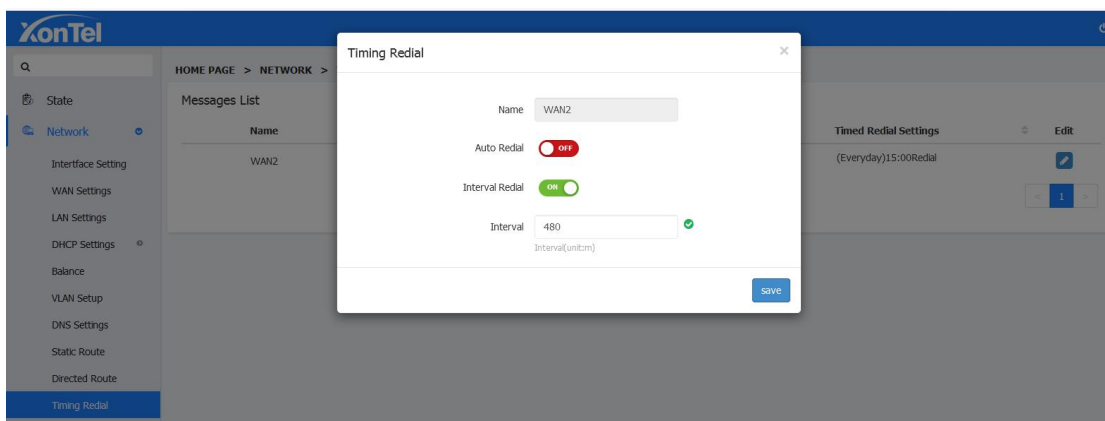
1. Click "Network - Timing Redial" to enter the Timing Redial page

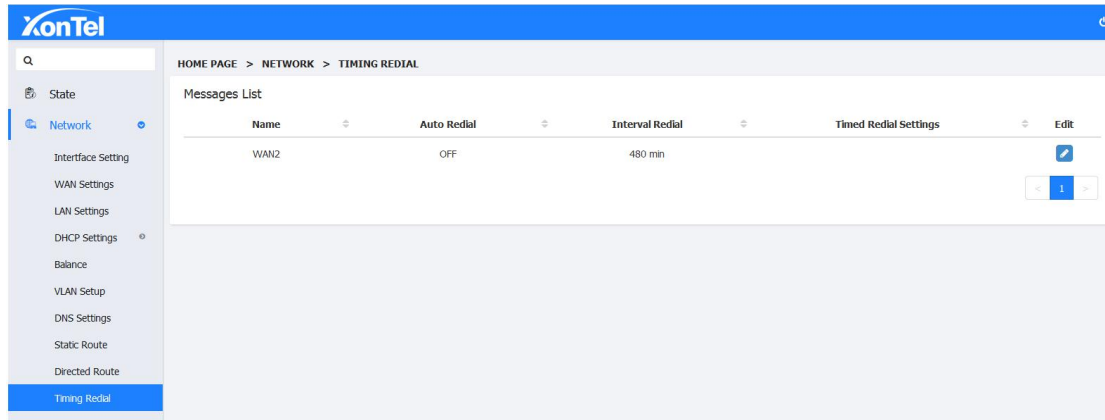


2. Click on the Edit button of one of the lines to pop up the operation box, enable the auto redial status, check the date, and click save after completing the time. As shown in the photo below, the WAN2 line automatically redials at 15:00hours every day.



3. To perform Interval Redial, Click on Edit button and Turn On Interval Redial, enter the interval restart time, click Save as shown below. After this setting WAN2 line will re-dial every 480 minutes (Every 8 Hours).

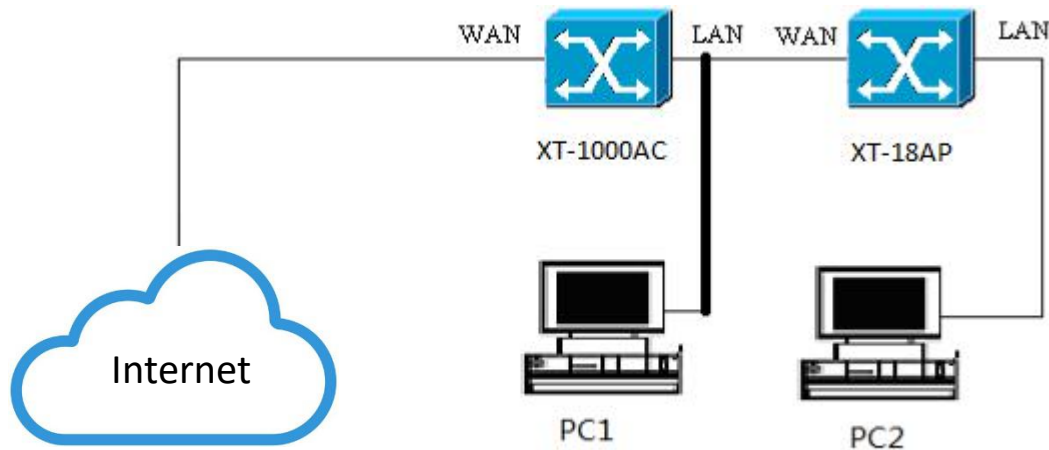




4 AC Control

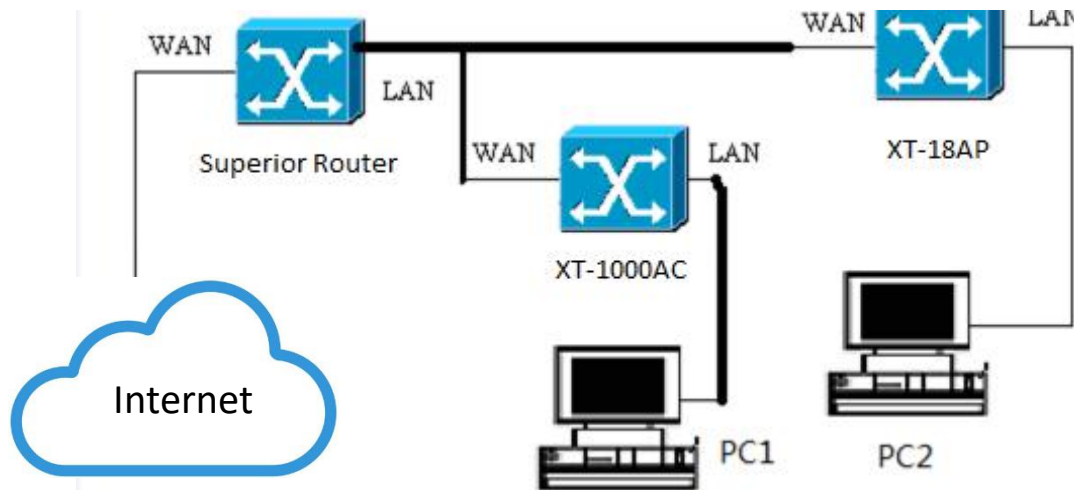
Cascading AC Mode

In Cascading AC mode, the Access Points (XT-18AP) connect with the XT-1000's internal network, and the connection way is XT-1000's LAN port connect with Access Point's WAN port as shown below:



By-Pass AC Mode

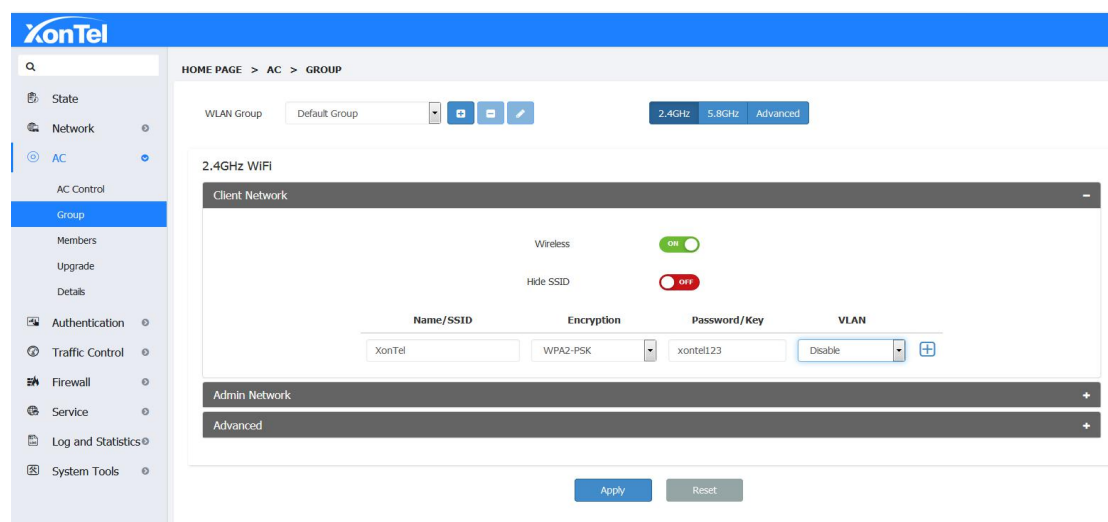
In By-Pass AC Mode Access Points(XT-18AP) and XT-1000AC connects with the same network. The connection way is the Superior Router's LAN port connects with the WAN port of XT-1000AC and XT-18AP. After the XT-1000AC and Xt-18AP consult successfully,you can visit XT-1000AC management page through XT-1000AC's WAN port IP.



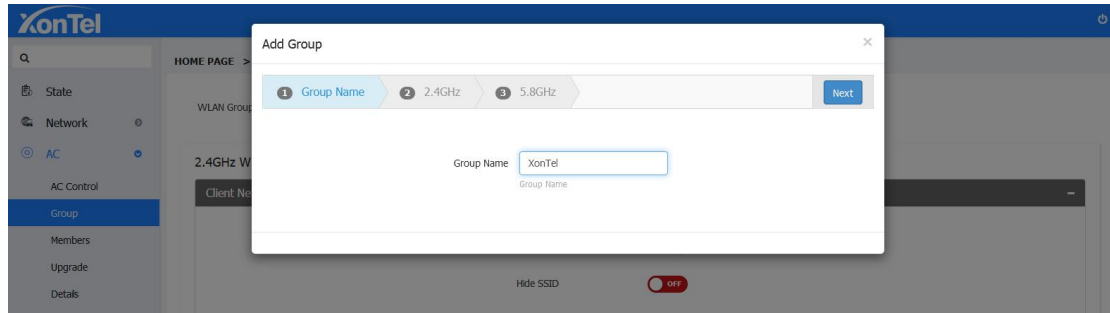
4.1 Group

Here you can use the default group (For Mass APs Config) or create a new group,can setup 2.4GHz and 5.8GHz SSID,wireless advanced parameters.

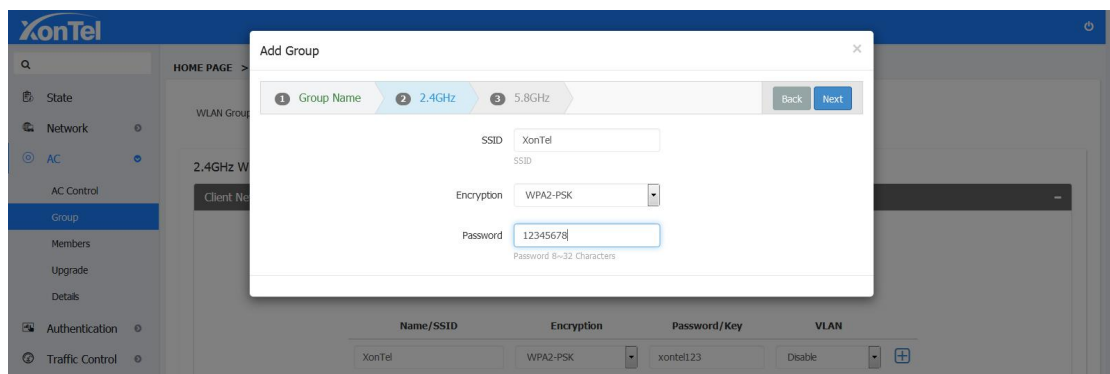
1. Open the XT-1000AC's home page,go into AC Control's "Group"page,as below:



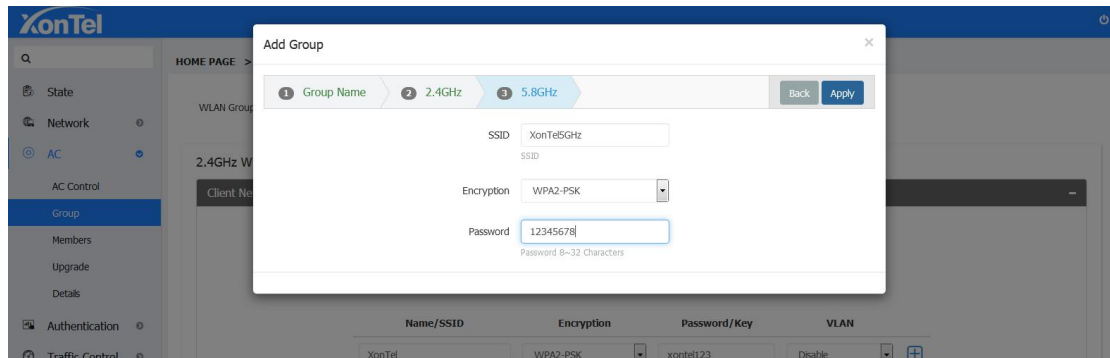
2. Click “+” button near WLAN Group and go into the add group wizard, Type Group Name as you like and click Next



3. Setup 2.4GHz relative parameter(SSID/Encryption Type/Password),click Next:

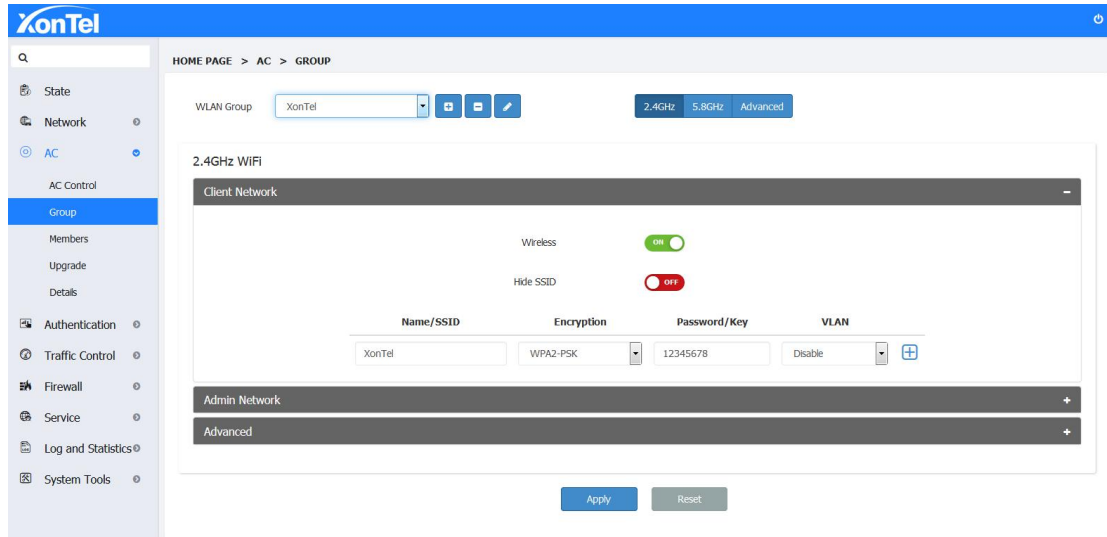


4. Setup 5.8GHz relative parameter(SSID/Encryption Type/Password)

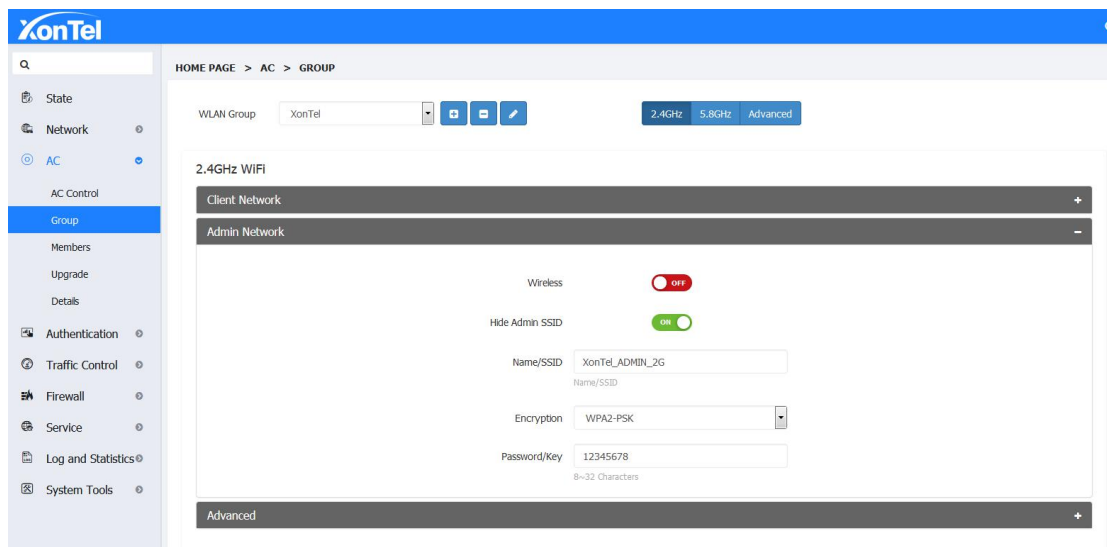


5. Click “Apply” and it will go to “GROUP” page. Choose the group name which you set in wizard and you can view detail setup of that group.

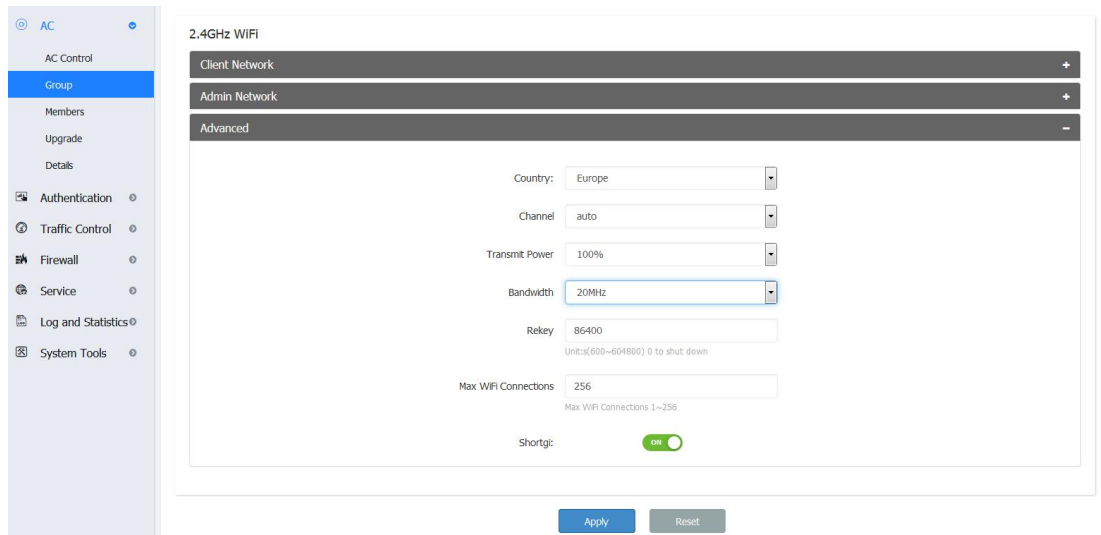
1: Client Network: You can setup the NAME/SSID and PASSWORD/KEY for End Users.



2: Admin Network: You can setup the NAME/SSID and PASSWORD/KEY for Admin Network.

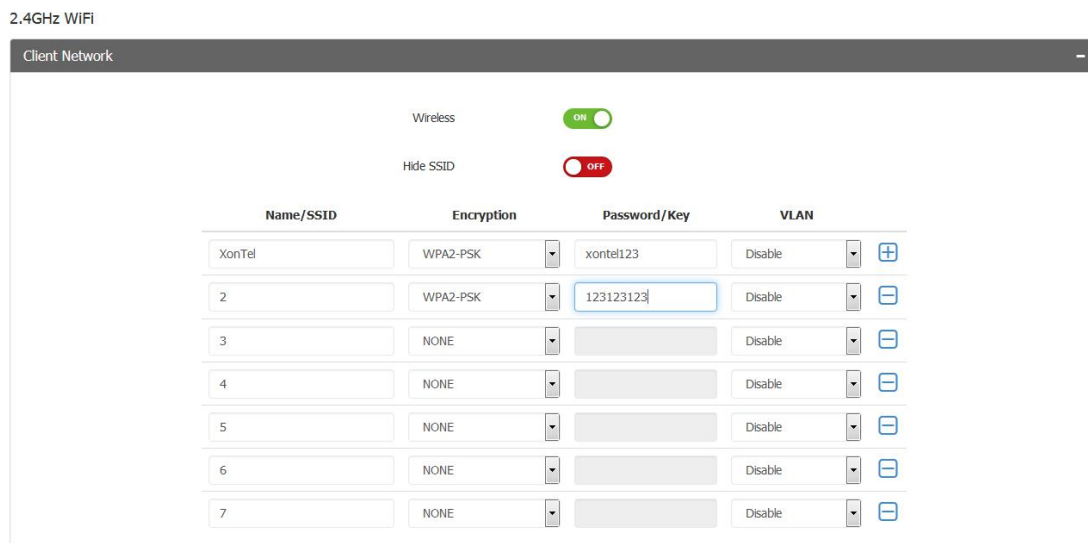


3: Advanced-Here you can setup Country,Channel,Transmit Power etc.relative parameters.

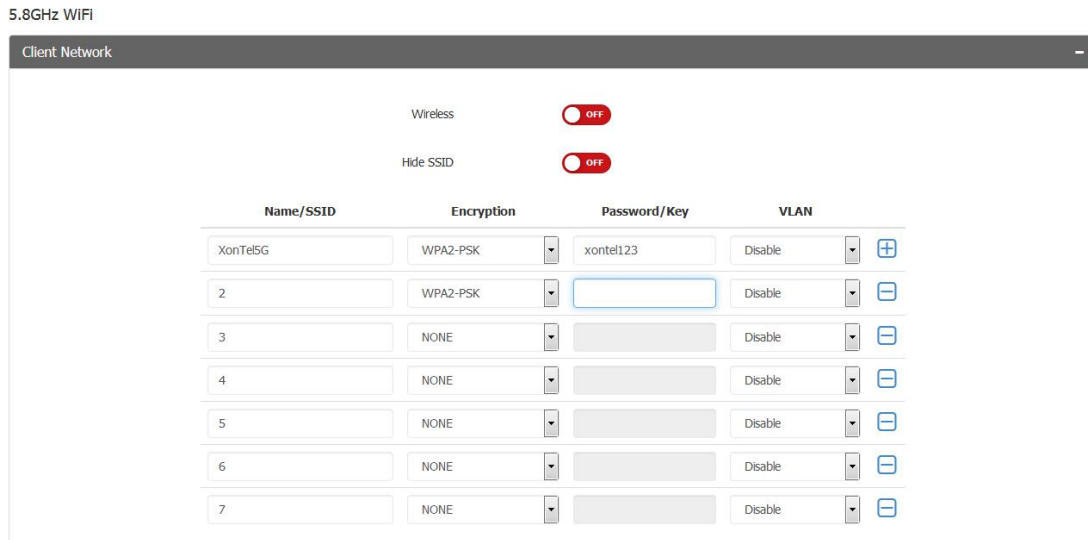


6. Inside Client Network click “+” sign to add multiple SSID. You can add extra 7 SSID both in 2.4GHz and 5.8GHz.

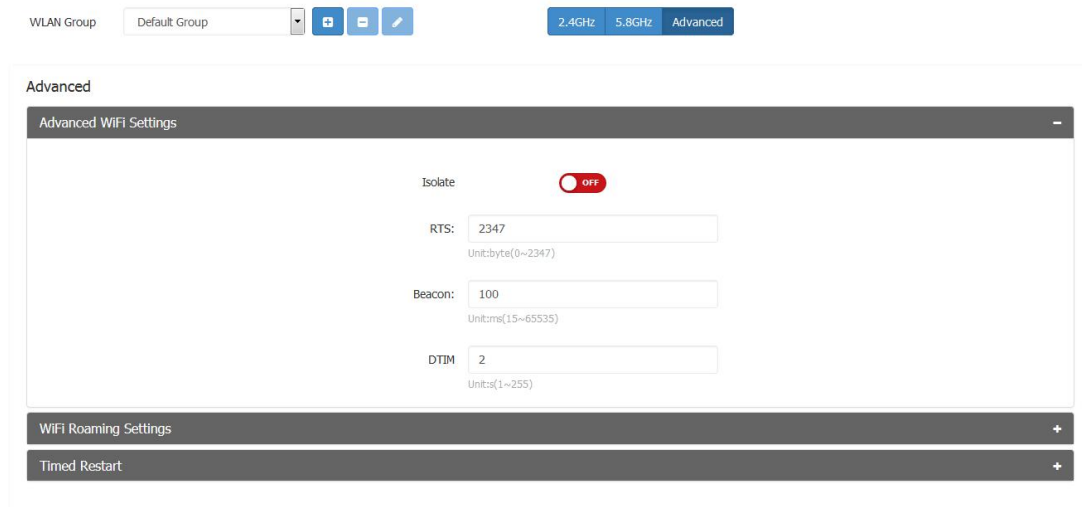
2.4G Multiple -SSID:



5.8GHz Multiple -SSID:



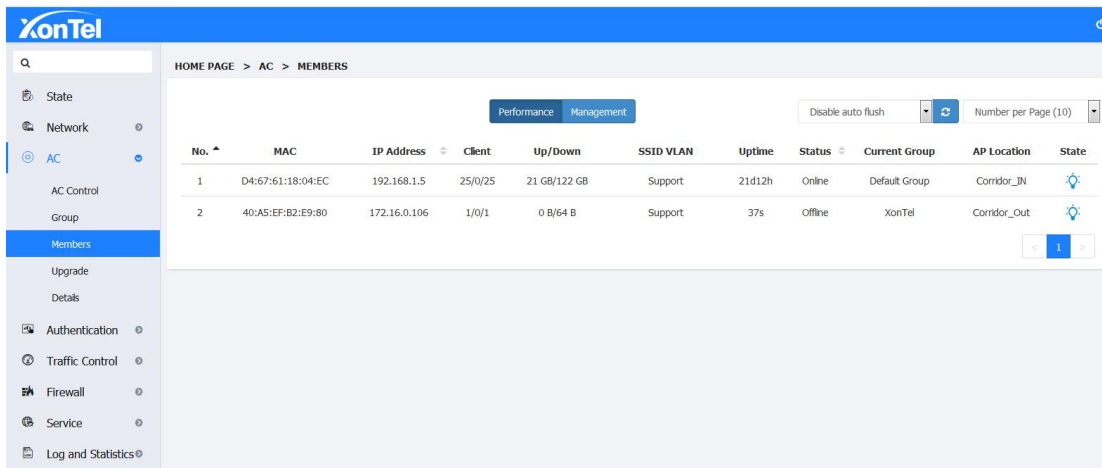
7. Click **Advanced** on top of the page, **Advance WIFI Settings** will open. Here you can **Enable/Disable Wireless User Isolation** to isolate wireless users. Also can setup **Timed Restart** or **Interval Restart** of the Access Points in that group.



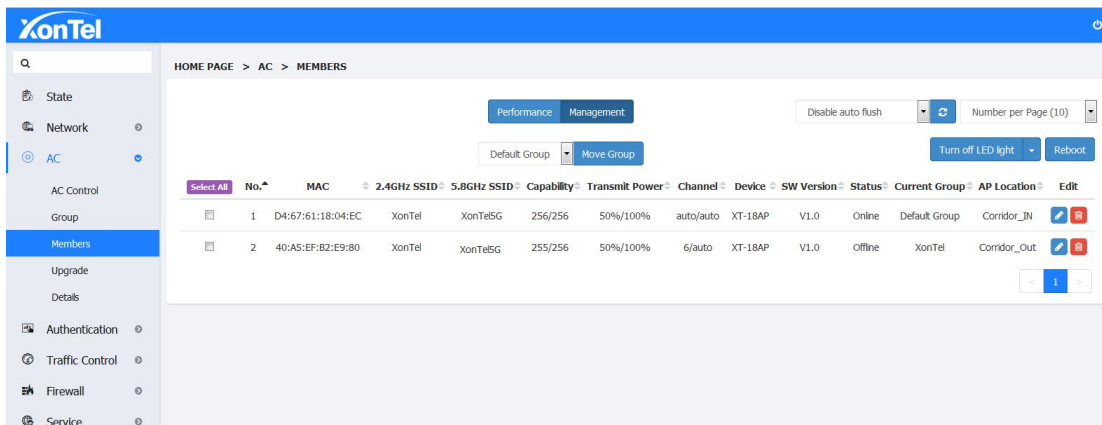
4.2 Members

If there multiple Access Points connect with XT-1000AC network, the managed device information will be shown on the Performance page. Click **Management** and here you can modify the corresponding device's wireless SSID, country, channel, transmitted power, wireless bandwidth, max-awating amount and alias.

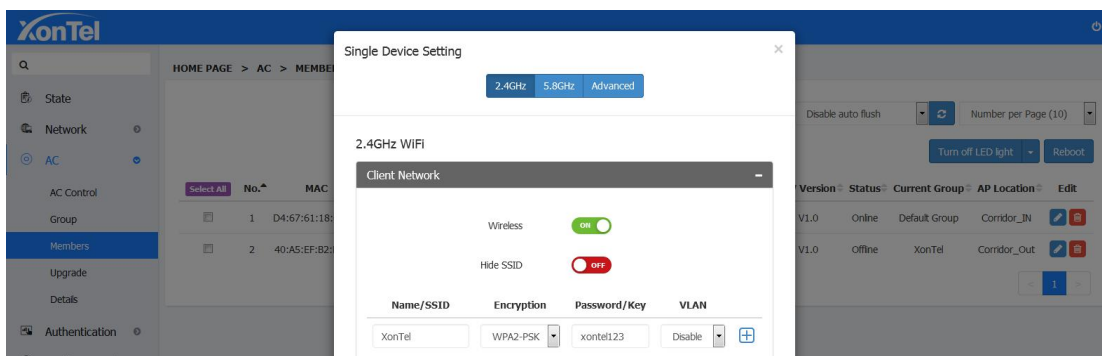
1. Open WEB home page and go into AC Control’s “Members” page,as below:



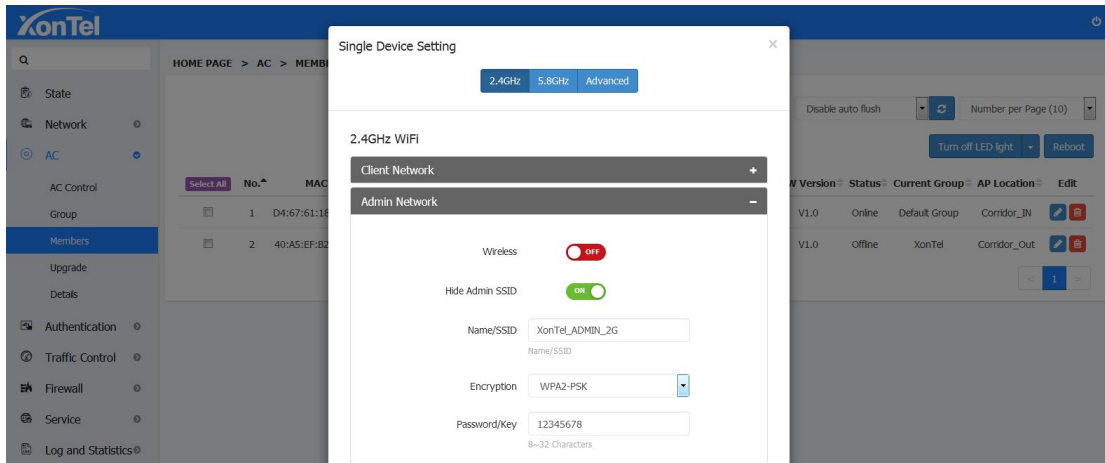
2. Click on above picture’s “Management”button and go into the managing page,as below:



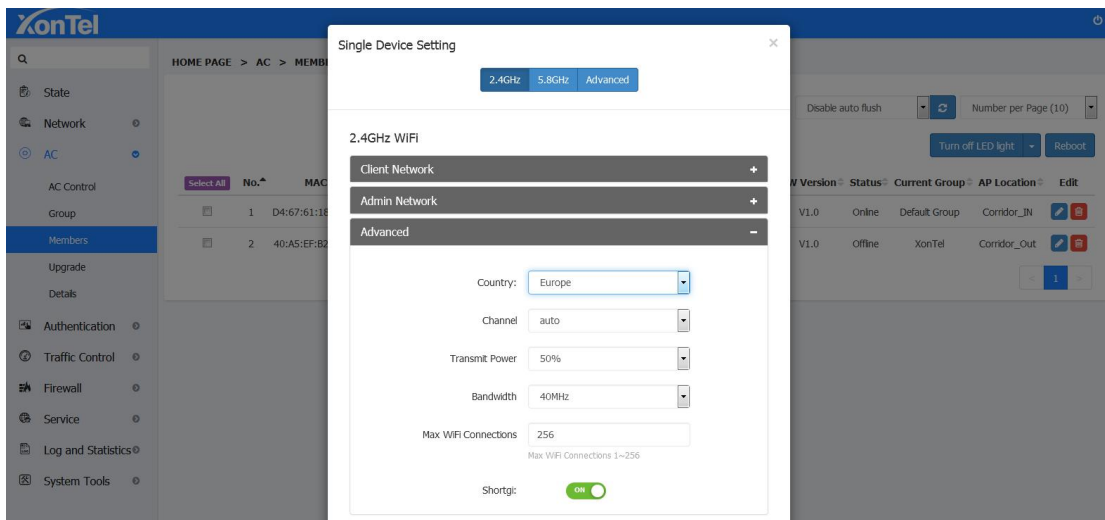
3. Click below picture’s “Edit”button so you can reconfigure the device’s SSID,Country,Channel and TX Power etc.details as below:



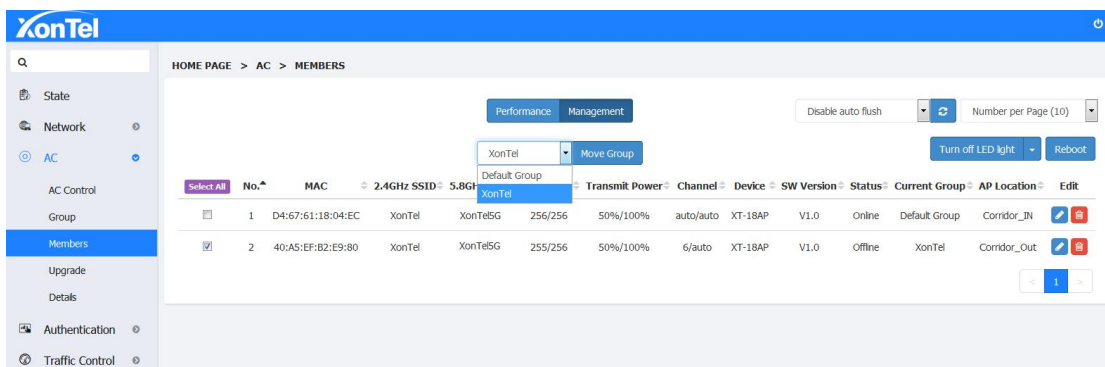
4. Click Admin Network



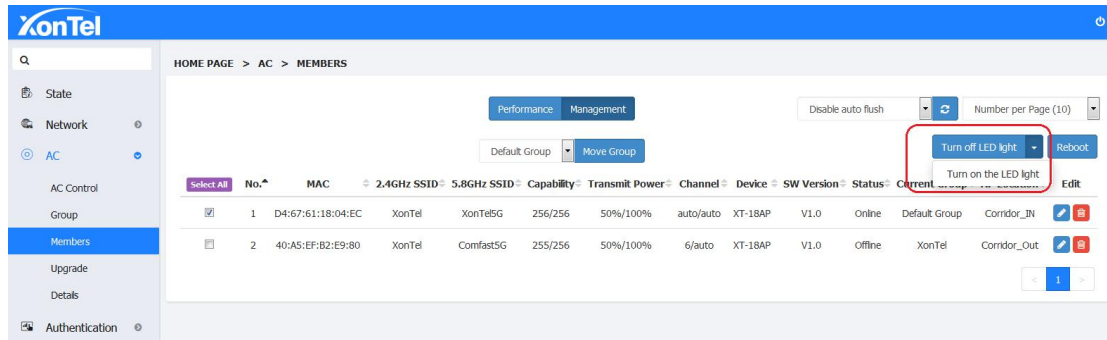
5. Click Advanced:



6. Move a device to different group: Select the devices you want to move to different group and choose the group name(XonTel)from the drop-down menu near “Move Group” button and then click on Move Group.



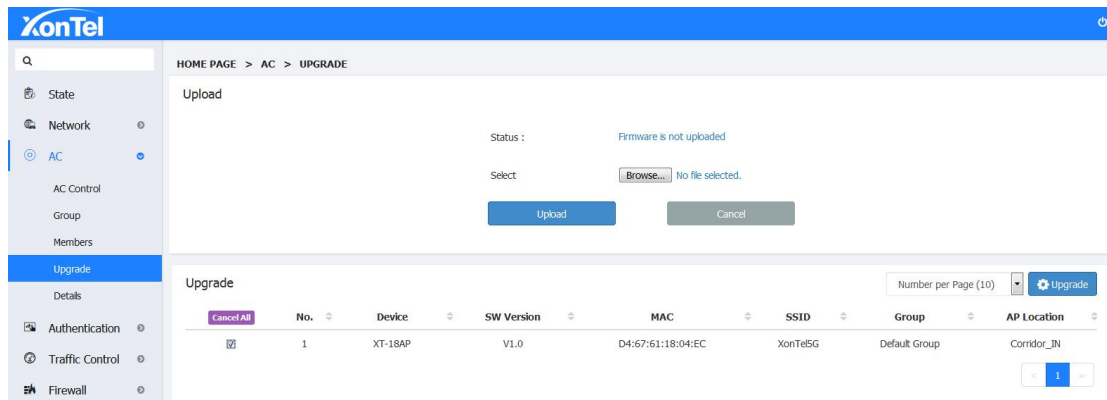
7. Click the LED light control button to turn off the LED light of the Access Points. Click again to open the LED light of the Access Points.



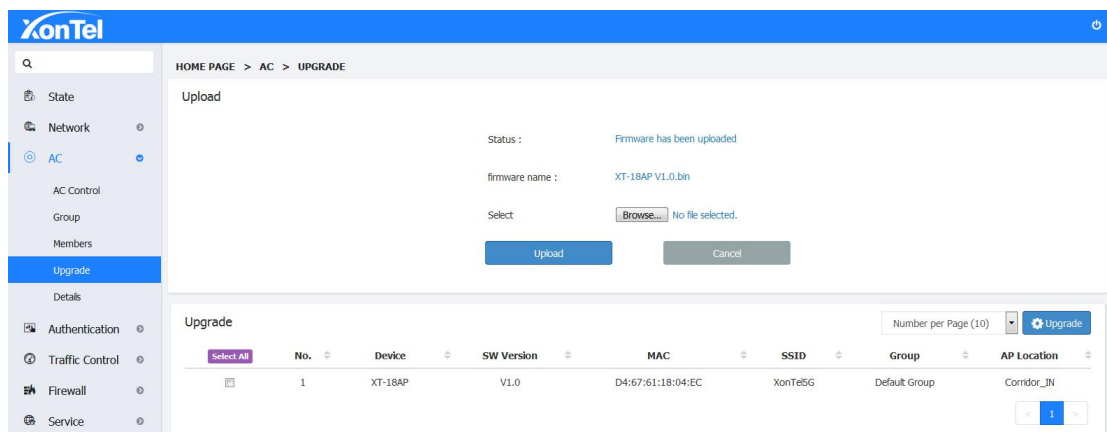
4.3 Upgrade

Upgrade option can upgrade all Access Points at same time. You have to upload a firmware file and select the devices you upgrade.

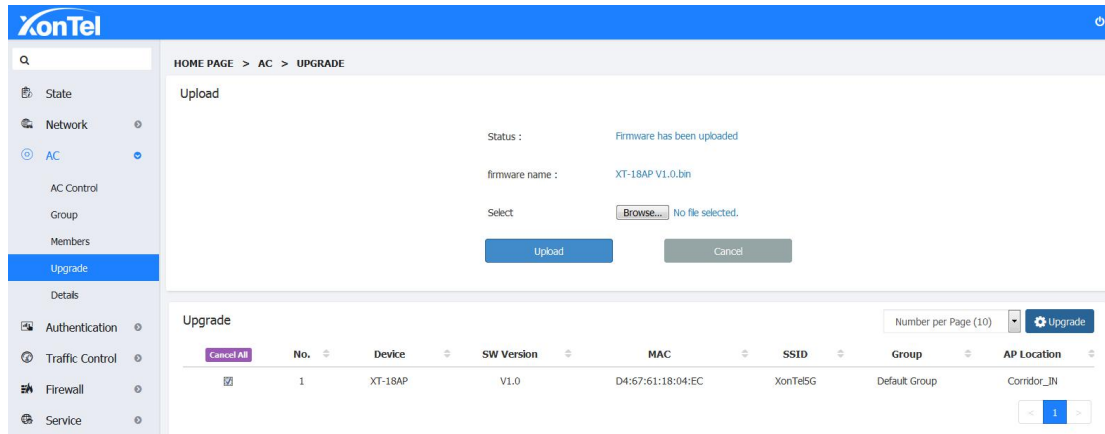
1. Open XT-1000AC's Upgrade page,as below:



2. Click above picture's "Browse" button,choose the newest firmware which you want to upgrade for the Access Points,click "Upload" button "Firmware has been uploaded",as below:



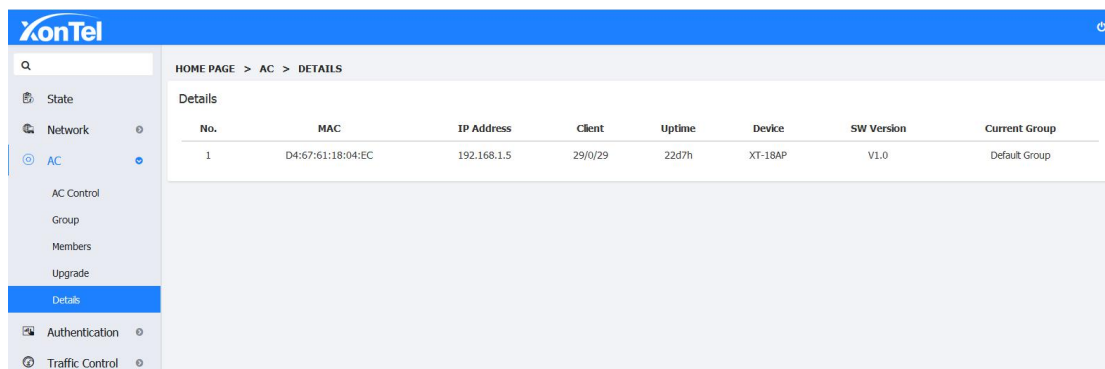
4. Choose the AP devices which you want to upgrade,click the "Upgrade" button on the right,then the devices are on upgrading.



4.4 Details

This function displays all terminal entries under XT-1000AC, including Access Points and wireless terminals connected to Access Points.

1. Login, enter the menu, AC Control-> Details.



2. Click on the AP entry, the details of the wireless terminals connected to the AP is displayed below

No.	MAC	IP Address	Client	Uptime	Device	SW Version	Current Group
1	D4:67:61:18:04:EC	192.168.1.5	23/0/23	22d8h	XT-18AP	V1.0	Default Group

Terminal IP	Terminal MAC	SSID	type	Signal(dBm)	Link time	Total Tx	Total Rx
192.168.1.72	D4:67	XonTel	2G	-46	4h39m	755 KB	429 KB
192.168.1.18	D4:67	XonTel	2G	-44	2h32m	1 MB	888 KB
192.168.1.95	C8:3D	XonTel	2G	-42	2h	13 MB	30 MB
192.168.1.40	C0:B6	XonTel	2G	-47	1h53m	4 MB	9 MB
192.168.1.24	34:2E	XonTel	2G	-50	1h32m	537 KB	939 KB
192.168.1.30	D8:C4	XonTel	2G	-52	1h30m	587 KB	957 KB
192.168.1.63	40:B8	XonTel	2G	-52	1h24m	6 MB	47 MB
192.168.1.33	D4:67	XonTel	2G	-50	59m56s	114 KB	67 KB
192.168.1.3	D4:67	XonTel	2G	-33	58m14s	528 KB	324 KB
192.168.1.94	7C:67	XonTel	2G	-59	56m29s	4 MB	12 MB
192.168.1.93	90:32	XonTel	2G	-51	40m23s	1 MB	2 MB
192.168.1.8	04:D3	XonTel	2G	-50	27m1s	898 KB	988 KB
192.168.1.42	4C:74	XonTel	2G	-58	19m31s	2 MB	2 MB
192.168.1.36	0C:9D	XonTel	2G	-55	15m44s	323 KB	686 KB
192.168.1.10	D4:67	XonTel	2G	-60	1m43s	20 KB	17 KB
192.168.1.16	4C:3B	XonTel	2G	-32	14m23s	225 KB	27 KB
192.168.1.59	D4:67	XonTel	2G	-32	13m50s	25 KB	34 KB

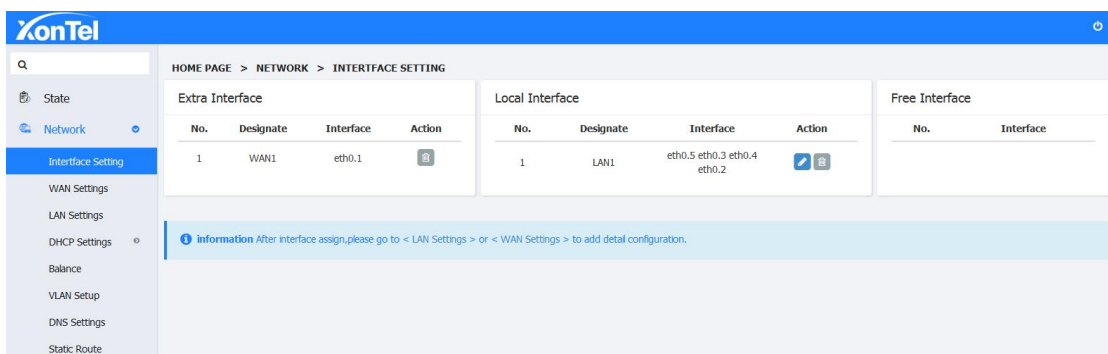
5 Authentication

5.1 Local Auth.

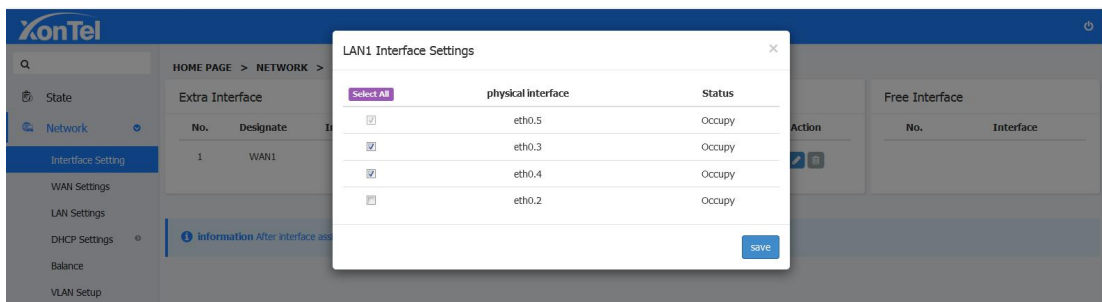
5.1.1 OneKey Authentication

Onekey Authentication to authenticate online by clicking on the authentication button on the page

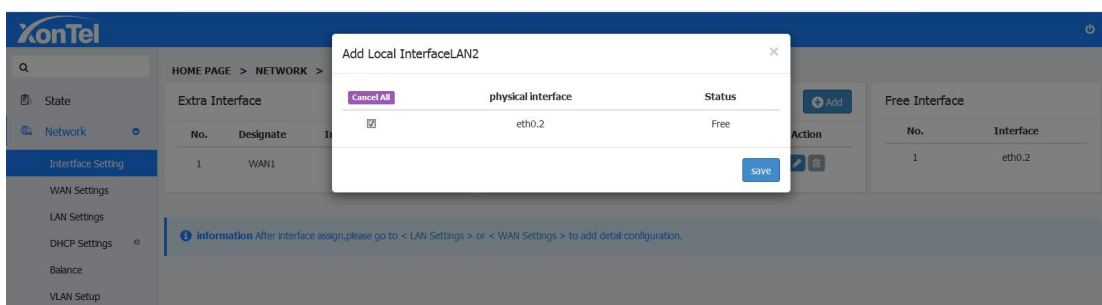
1. Login XT-1000AC and go into the home page,"Network "-->"Interface Setting".



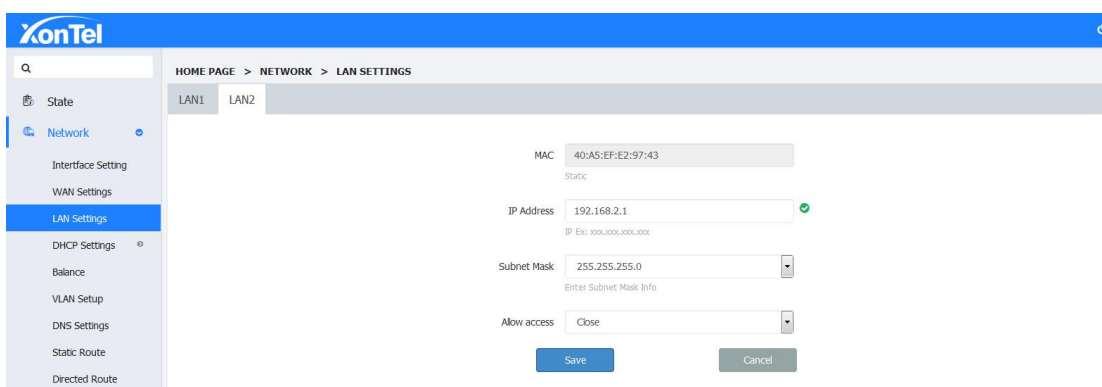
2. In the Local Interface, click "Edit" button, uncheck the eth0.2 from the LAN1 Interface Settings page, then the eth0.2 port will be freed, later click "Save".



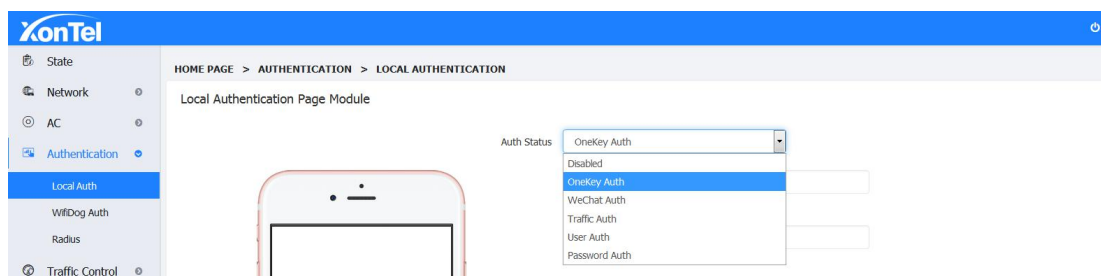
3. Add a New Local Interface: Click "Add" in the local interface, and select the port you need to allocate to Interface LAN2 then click save.



4. Go into Network--Local Network to setup LAN2's local address.

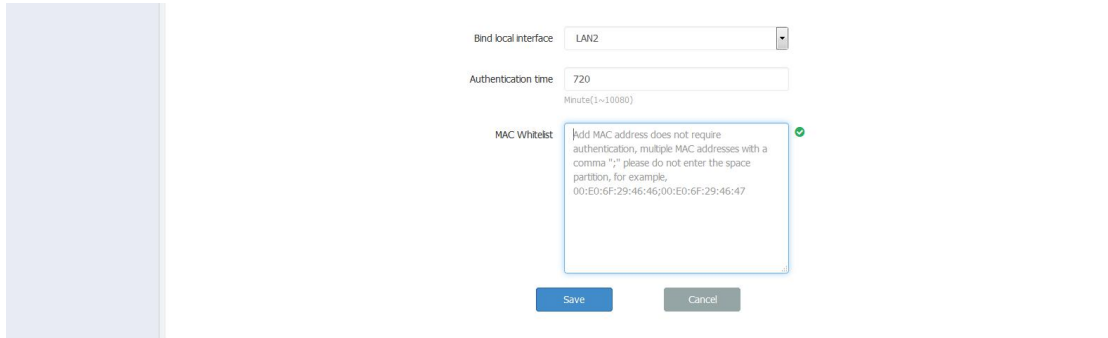


5. Click "Authentication Settings - Local Authentication" and select "Onekey Auth" from the authentication status.

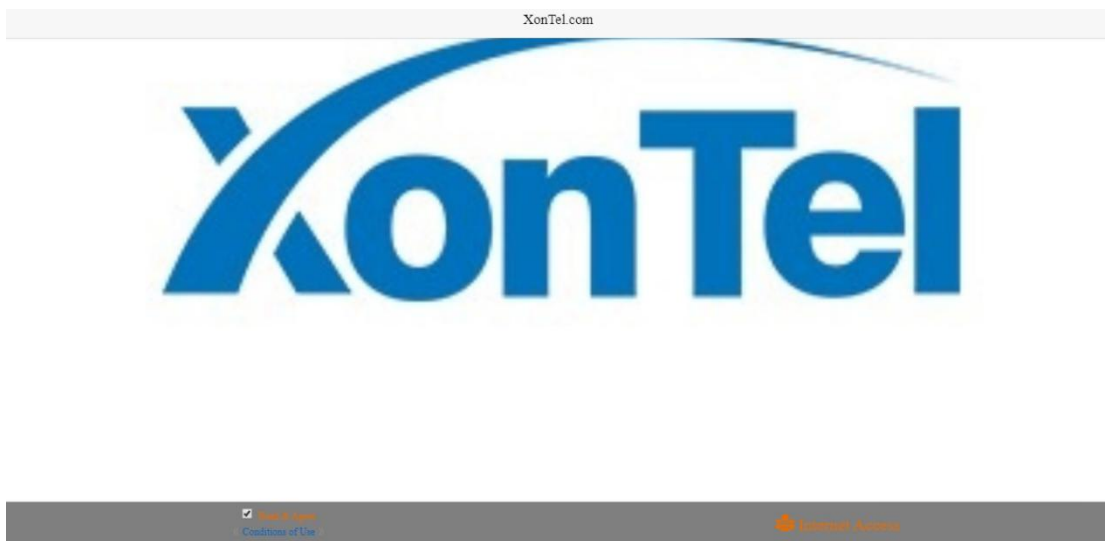


6. After you choose the Authentication type as One Key Auth, you can upload the ad image and fill in the link address (the link address need to fill in the full network address, such as <https://xontel.com/>).

7. Go to “Bind local interface” below the and select the newly created LAN2 to bind with Authentication and then Save.



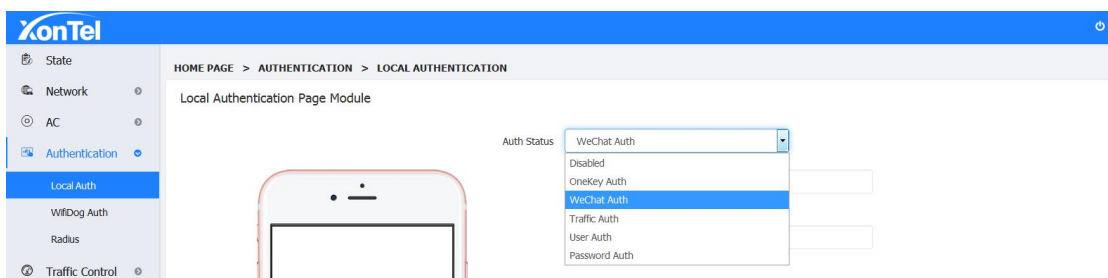
8. After finishing setup, clients connected with LAN2 Port(Direct with LAN2 or through Access Point connected on LAN2)when open any website in browser local portal page will appear and click for “Internet Access” button ,wait for 10 seconds,and system will allow access for internet.



5.1.2 WeChat Authentication

WeChat Authentication is authenticating through WeChat function.

1. Please refer to 5.1.1 1-4 steps to complete the follow-up operation, choose WeChat Authentication and go to WeChat authentication page, setup HTML title, ad title and static pic, then click save button.



2. Setup relative parameters, choose LAN2(It has already been set at local portal), then click save button,as below:

3. Once the setting is complete, use router's WAN port to connect with LAN2 of AC, setup obtain an IP address automatically, connect the router's WiFi by cellphone, after connection, open the browser and click any website then it will popping the WeChat Authentication page,as below:

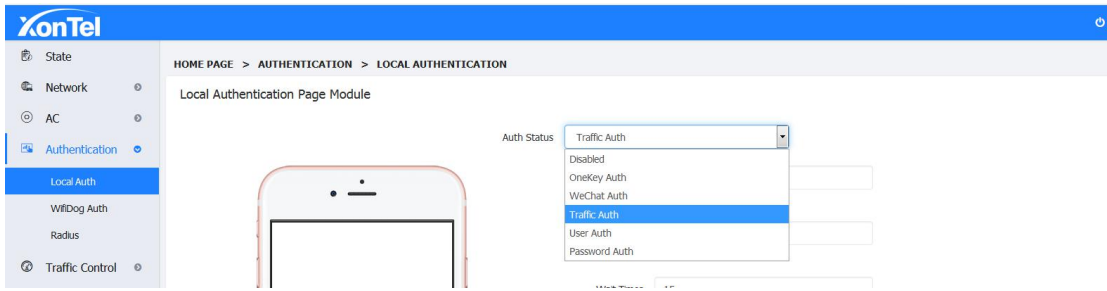
4.Click “A Key to open the WeChat connect with Wi-Fi” on the screen, then it will go into WeChat connecting Wi-Fi page.

5.Click on “Connect immediately”button,then it will show connecting Wi-Fi successfully and WeChat Authentication is finished,and the cellphone can surf the Internet normally. All devices which connect through LAN2(such as the example’s configuration is the physical port eth0.2) need to authenticate then only access the Internet.

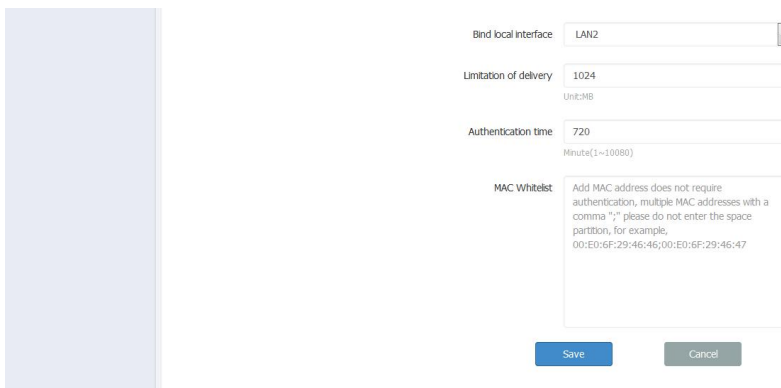
5.1.3 Traffic Authentication

Traffic Authentication: Restrict user re-authentication by restricting traffic

1. Please refer to 5.1.1 1-4 steps to complete the follow-up operation, choose Traffic Authentication and go to traffic authentication page, setup HTML title, ad title and static pic, then click save button.



2. Setup relative parameters, choose LAN2(It has already been set at local portal), fill in the restricted traffic (e.g.: 1024), then click save button,as below:

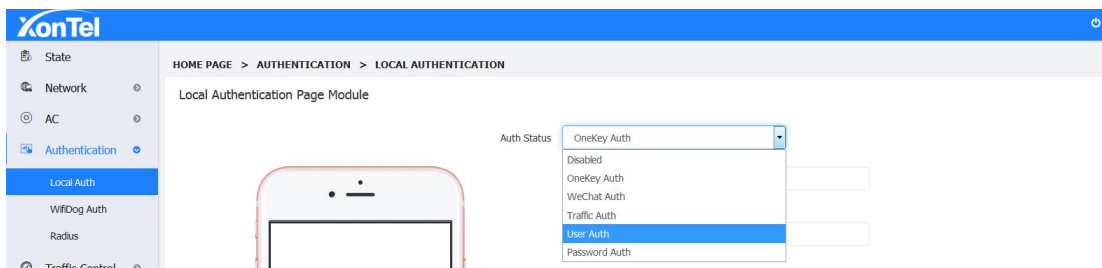


3. Once the setting is complete, after connection through Interface LAN2, open the browser and click any website then it will pop up the traffic authentication page, after the authentication Internet can be accessed. When the user uses more than 1024M of traffic, it will re-jump to the authentication page to re-authenticate.

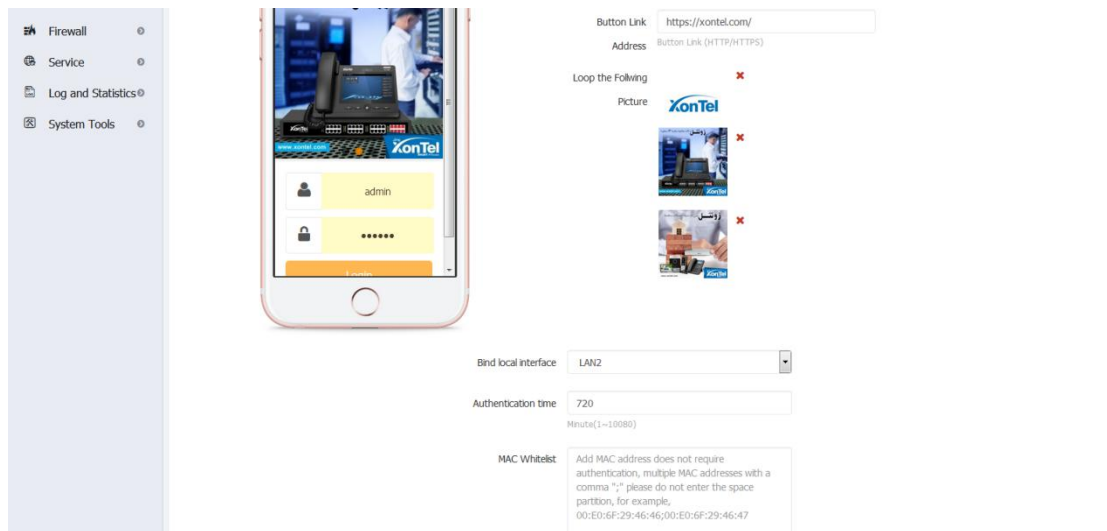
5.1.4 User Authentication

User Authentication: Authentication by account and password

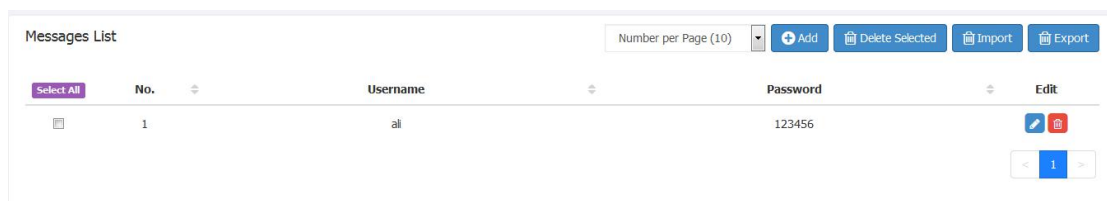
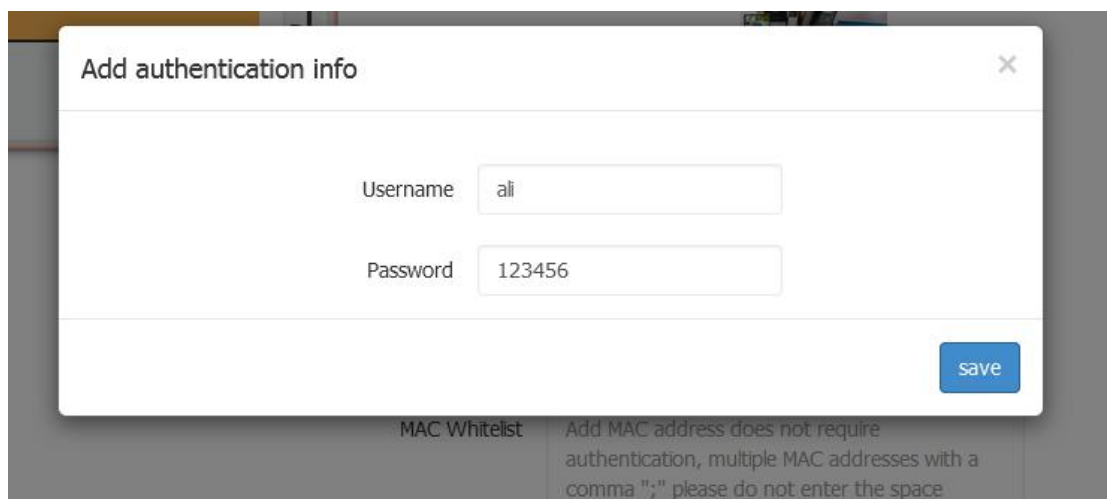
1. Please refer to 5.1.1 1-4 steps to complete the follow-up operation, choose User Authentication and go to user authentication page, setup HTML title, ad title and static pic, then click save button.



2. Bind local interface LAN2 port (LAN2 has already been set at local portal), set the authentication duration, and then click the save button, as below:



3. Add authentication user information at the bottom of the page, click the "+Add" button, enter the account username and password in the pop-up input box (e.g: ali/123456), click "Save"



4. Once the setting is complete, after connection through LAN2, open the browser and click any website then it will pop up the Authentication page, as below:



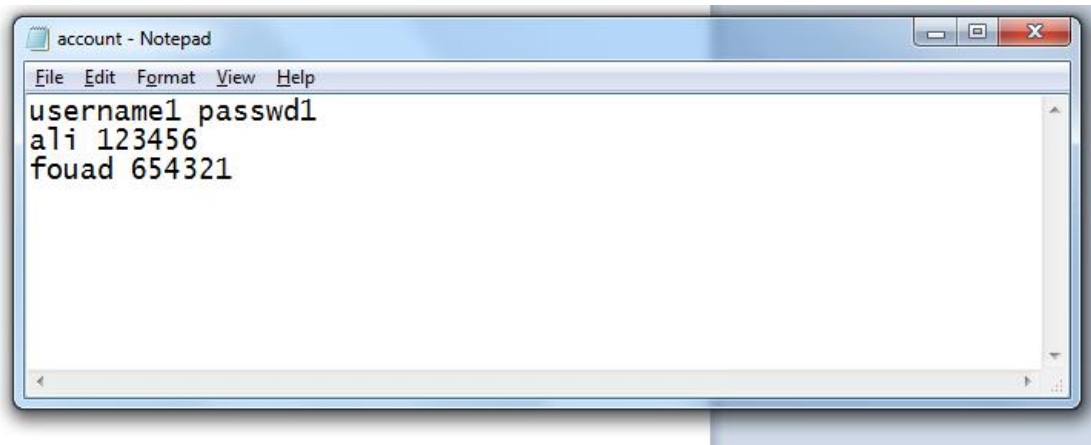
5. Enter the correct authentication password (such as: ali/123456), click on the login, automatically jump to the page after successful login, this time the certification is completed, you can normally access the Internet

6. You can import account information in batches by importing files. The file content format is:

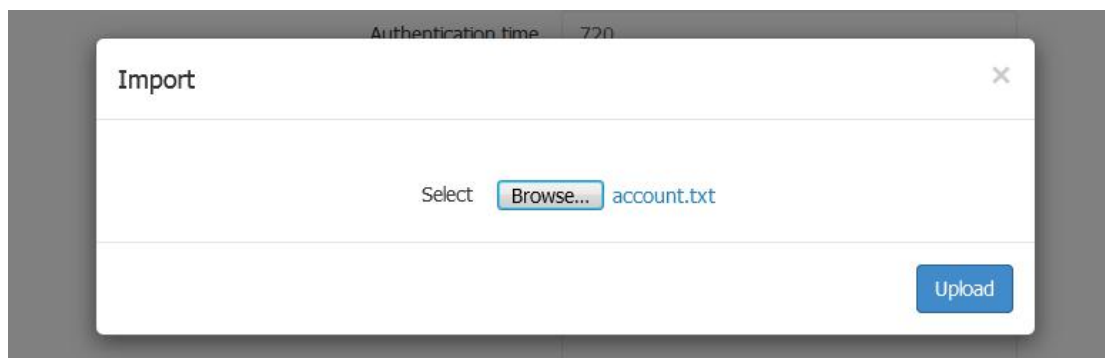
username1 passwd1

username2 passwd2

The file is encoded as ANSI or UTF-8 and does not support the Unicode format. Save as .txt suffix file. As shown below:





Click the Import File button and select the file account.txt.



You can see that the user name and password were imported successfully, and the previously added account configuration will be overwritten, so before you import, you can export the previously added accounts in advance.

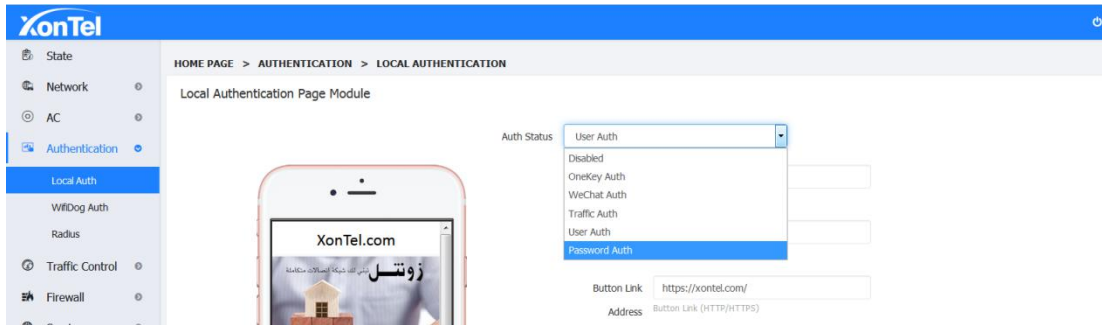


No.	Username	Password	Edit
1	username1	passwd1	 
2	ali	123456	 
3	fouad	654321	 

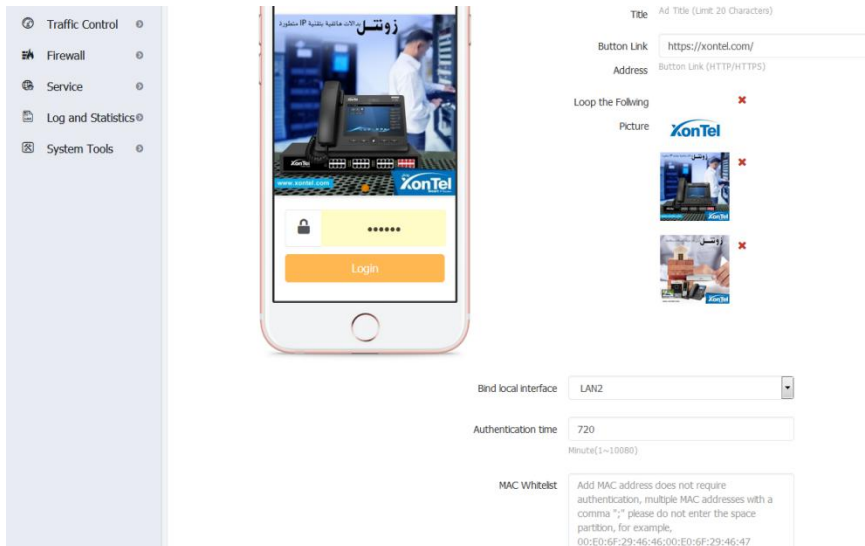
Click Export File to export the current account information to the account.txt file.

5.1.4 Password Authentication

1. Please refer to 5.1.1 1-4 steps to complete the follow-up operation, choose Password Authentication and go to password authentication page, setup HTML title, ad title and static pic.





2. Bind local interface- Select LAN2 port, set the authentication duration.



3. Add the authentication password at the bottom of the page, click the "+Add" button, enter the authentication password in the pop-up input box (e.g: 123456), click "Save"



Messages List				Number per Page (10)	Add	Delete Selected	Import	Export
Select All	No.	Password	Edit					
<input type="checkbox"/>	1	123456	 					
				< 1 >				

4. Once the setting is complete, after connection through LAN2, open the browser and click any website then it will pop up the Authentication page, as below:



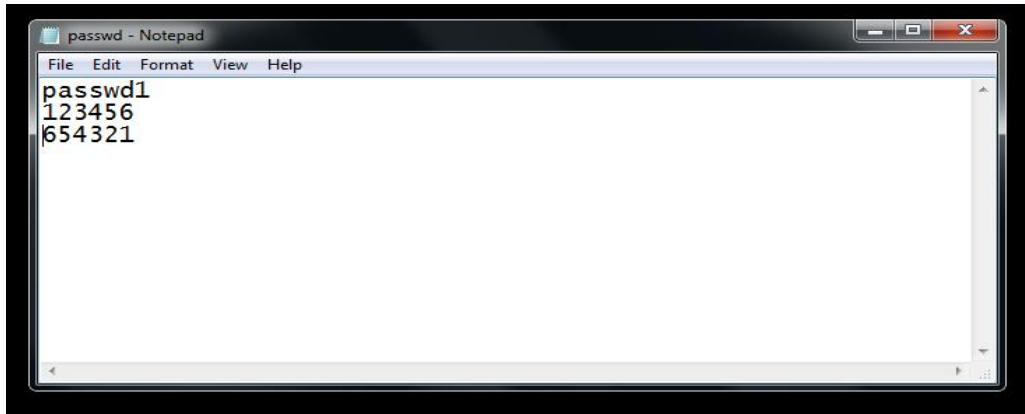
5. Enter the correct password (such as: 123456), click on the login, automatically jump to the page after successful login, this time the authentication is completed, you can normally access the Internet.

6. You can import account information in batches by importing files. The file content format is:

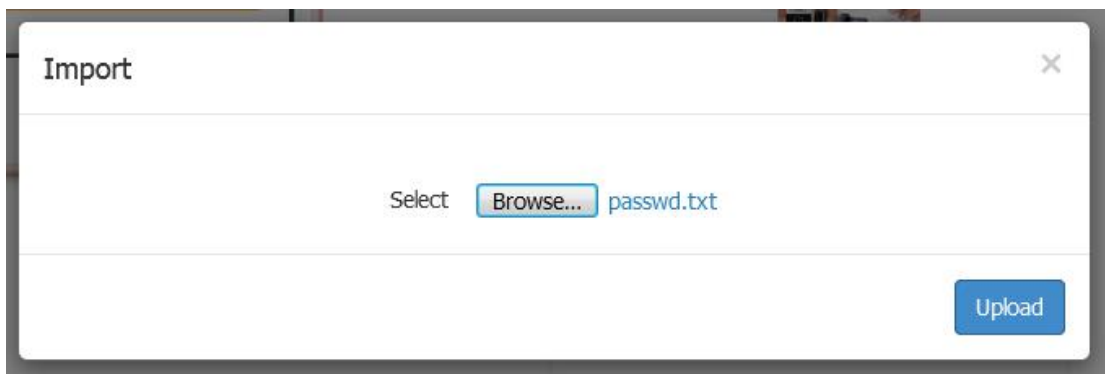
passwd1

passwd2

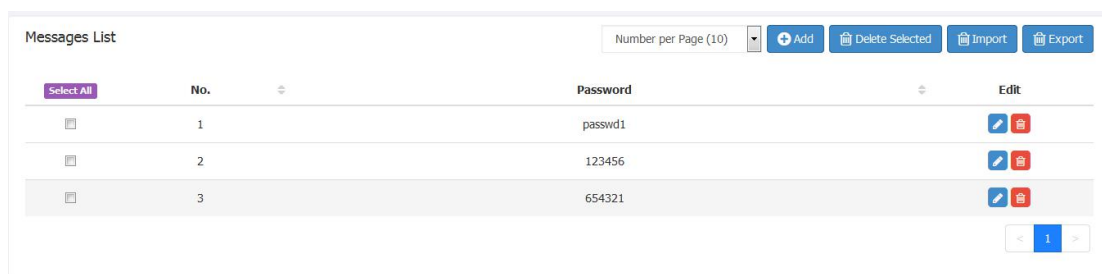
The file is encoded as ANSI or UTF-8 and does not support the Unicode format. Save as .txt suffix file. As shown below:



Click the Import File button and select the file passwd.txt:



You can see that the passwords were imported successfully, and the previously added account configuration will be overwritten, so before you import, you can export the previous useful account in advance.



Messages List				Number per Page (10)	Add	Delete Selected	Import	Export
Select All	No.		Password					
<input type="checkbox"/>	1		passwd1					
<input type="checkbox"/>	2		123456					
<input type="checkbox"/>	3		654321					

Click Export File to export the current account information to the passwd.txt file.

5.2 WifiDog Auth

1. Go to "Authentication" --- "Wifidog Auth", then choose the status as Enable, setup relative parameters, click save button.

HOME PAGE > AUTHENTICATION > WIFIDOG AUTH

Enable Status: Enabled

Cloud ID: f40a5
SN

Certified Cloud Address: c.wefenet.com
Certified Cloud Address

Authentication Port: 80
Port (1~65535)

Authentication Path: /
Authentication Path

Max Authentication: 32
(1~5000)

MAC Whitelist: Add MAC address does not require authentication, multiple MAC addresses with a comma "," please do not enter the space partition, for example, 00:E0:6F:29:46:46;00:E0:6F:29:46:47

Web Site Whitelist: Add the site does not require authentication, multiple sites ";" use comma separated, do not enter the space for example, qq.com,sina.com

Save Cancel

2. Open the browser in the local computer, open the other website which are not in the "Website White list", system will pop up the authentication page.

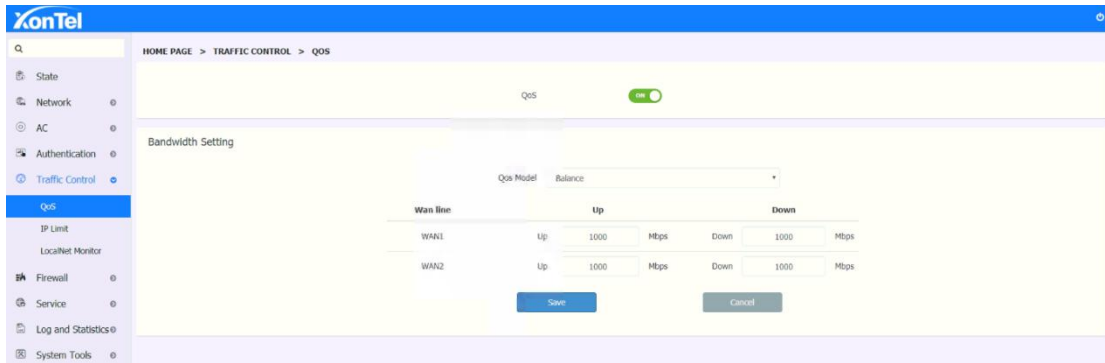
3. Use device's MAC address to add to white list to open the browser, and system will not pop up the authentication page in any websites.

6 Traffic Control

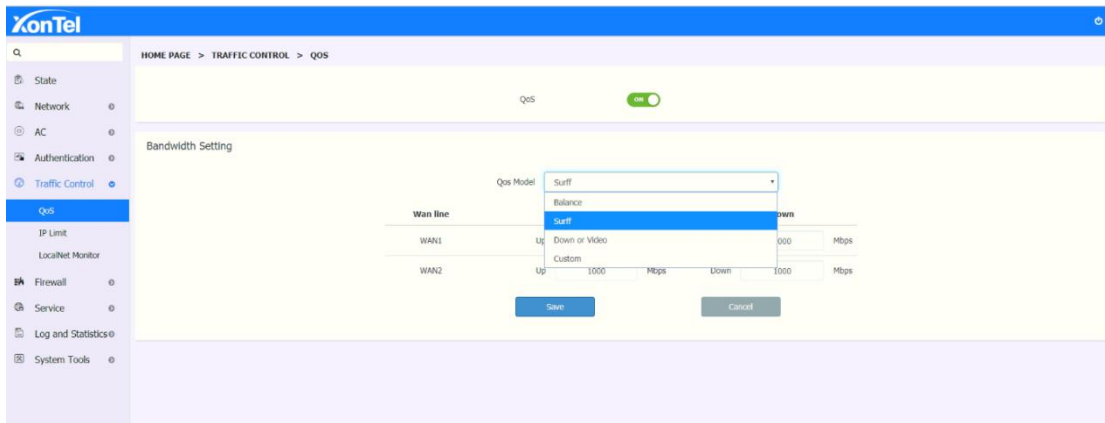
6.1 QoS

When there are many ISP lines connect to the device, open the traffic switch, setup every ISP line's upstream and downstream bandwidth by the real network situation.

1. Go to QoS page, setup the relative parameters, fill in the actual UP/Down bandwidth according to the bandwidth of each external network, and click save button, as below:



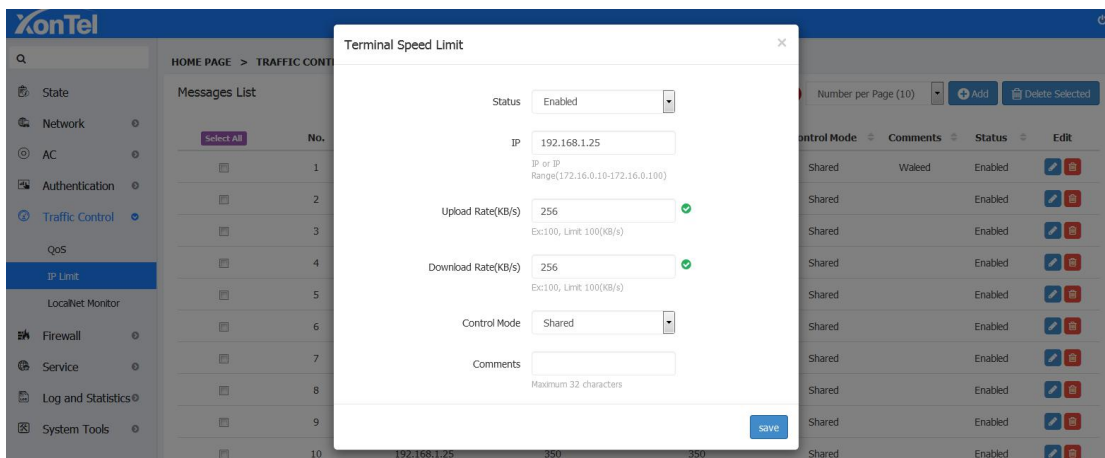
2. The line flow control mode can be adjusted according to the actual usage of the clients:



6.2 IP Limit

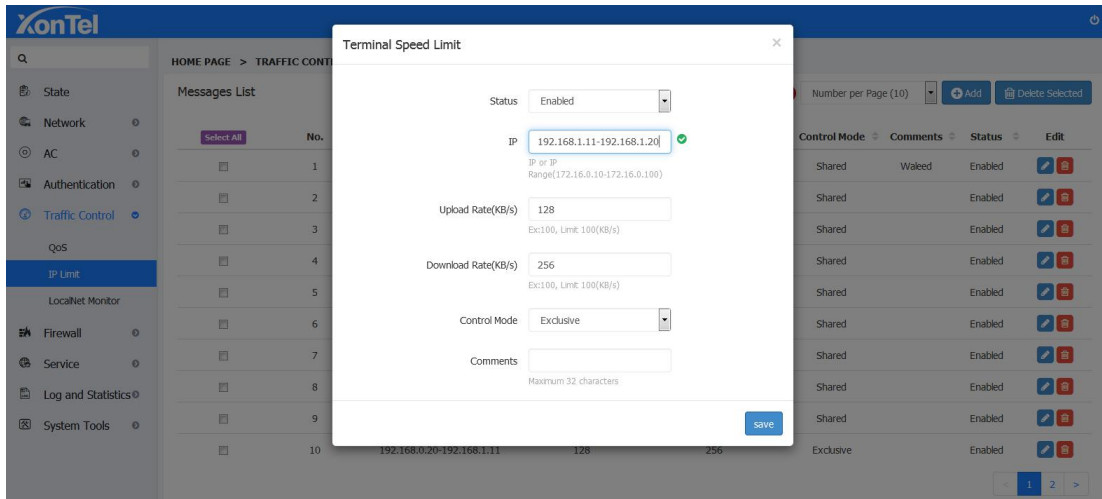
System can control the uplink and downlink traffic of single user according to the IP address.

1. Go into the IP LIMIT page, add a single IP speed limit information, e.g. IP: 192.168.1.25, up and down rate are 256 and 256, then the user's uplink and downlink speed values should be same.



2. Speed Limit for Range of IPs: Go to the IP Limit page and add the IP range limit information,

e.g.IP: 192.168.1.11-192.168.1.20, with 128 and 256 upstream and downstream respectively. The exclusive bandwidth is the independent speed limit setting for all users in the network segment. The bandwidth and the shared bandwidth are the bandwidths shared by all users in the network segment. In this case, the user's uplink and downlink rates are consistent with the speed limit values.



No.	IP	Upload Rate(KB/s)	Download Rate(KB/s)	Control Mode	Comments	Status	Edit
1	192.168.1.54	350	350	Shared	Waleed	Enabled	[Edit] [Delete]
2	192.168.1.34	350	350	Shared		Enabled	[Edit] [Delete]
3	192.168.1.53	350	350	Shared		Enabled	[Edit] [Delete]
4	192.168.1.55	350	350	Shared		Enabled	[Edit] [Delete]
5	192.168.1.75	350	350	Shared		Enabled	[Edit] [Delete]
6	192.168.1.78	350	350	Shared		Enabled	[Edit] [Delete]
7	192.168.1.243	350	350	Shared		Enabled	[Edit] [Delete]
8	192.168.1.30	350	350	Shared		Enabled	[Edit] [Delete]
9	192.168.1.45	350	350	Shared		Enabled	[Edit] [Delete]
10	192.168.1.11-192.168.1.20	128	256	Exclusive		Enabled	[Edit] [Delete]

6.3 LocalNet Monitor

Real-time monitoring of each user's uplink and downlink rates and uplink and downlink total traffic, and will automatically update real-time, you can manually add each user to a single IP speed limit list to control a single user speed.

1.Go into LocalNet monitor page, each user corresponding to the uplink and downlink rate and the total flow is of the same line with the actual value.

HOME PAGE > TRAFFIC CONTROL > LOCALNET MONITOR

Messages List Number per Page (100) Refresh

No.	IP	Upload Rate(KB/s)	Download Rate(KB/s)	Upload Bytes	Download Bytes	Online Time	Edit
1	192.168.1.30	8.24 KB	11.56 KB	45.87 MB	68.63 MB	2019-12-09 09:19:31	
2	192.168.1.200	5.28 KB	4.63 KB	862.14 MB	501.59 MB	2019-12-02 17:09:10	
3	192.168.1.45	3.28 KB	10.09 KB	347.05 MB	2.51 GB	2019-12-04 09:42:58	
4	192.168.1.232	3.06 KB	729.00 B	1.71 GB	413.25 MB	2019-12-02 17:09:10	
5	192.168.1.56	1.93 KB	20.52 KB	14.39 MB	121.50 MB	2019-12-09 09:08:18	
6	192.168.1.27	1.28 KB	16.74 KB	12.78 MB	227.02 MB	2019-12-09 08:32:22	
7	192.168.1.36	1.25 KB	22.92 KB	10.57 MB	176.37 MB	2019-12-09 09:19:55	
8	192.168.1.95	1.22 KB	3.49 KB	20.23 MB	319.90 MB	2019-12-09 08:57:07	
9	192.168.1.54	1.14 KB	3.76 KB	11.66 MB	58.55 MB	2019-12-09 09:01:06	
10	192.168.1.93	849.00 B	989.00 B	6.74 MB	11.88 MB	2019-12-09 09:22:27	
11	192.168.1.52	816.00 B	14.00 KB	189.05 MB	4.86 GB	2019-12-04 08:53:54	
12	192.168.1.3	789.00 B	4.08 KB	7.63 MB	25.93 MB	2019-12-09 08:55:21	
13	192.168.1.19	705.00 B	2.57 KB	5.09 MB	28.18 MB	2019-12-09 09:00:53	

2. Click on the 'Edit' icon of any user, to setup single IP speed limit of that user:

Terminal Speed Limit

Upload Rate(KB/s)

Excl:100, Limit: 100(KB/s)

Download Rate(KB/s)

Excl:100, Limit: 100(KB/s)

3. An abnormal traffic user can be added to the black list to prevent the user from accessing the Internet.

Terminal Speed Limit

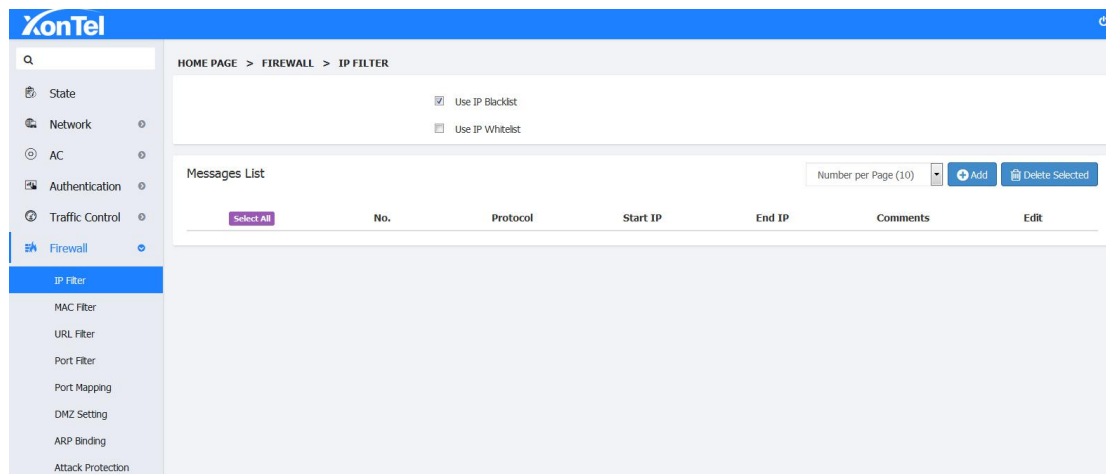
Warning Are you sure you can add* 0C:9D:92:99:C1:9A to the black list ?

7 Firewall

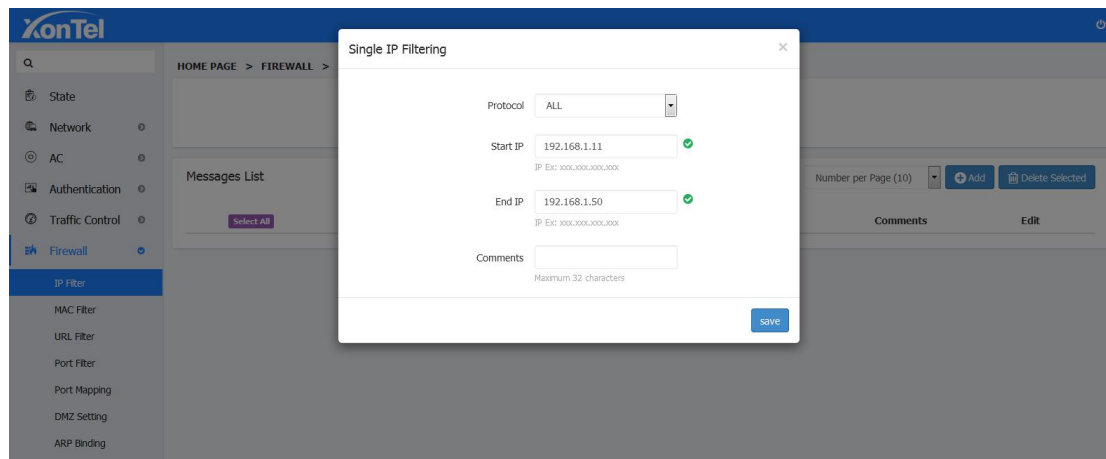
7.1 IP Filter

Here you must know the IP of the computer achieved and the device allocated, and confirm that which computer achieved IP or IP segment need to filter forbid visit network base on the practical situation.

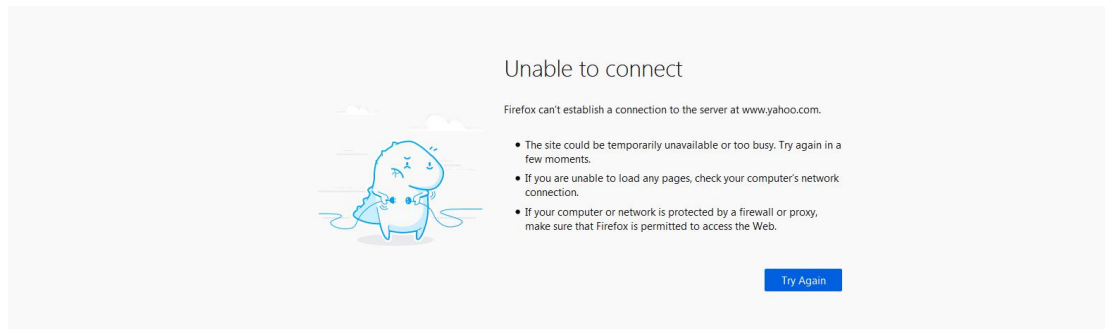
1. Click the home page “Firewall” and go into the IP Filter page, as below:



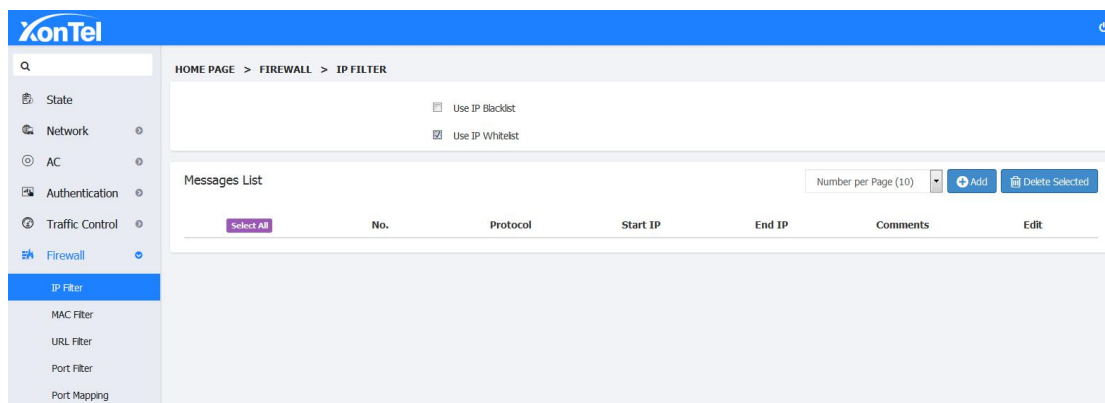
2. Click “Add” and go into IP Filter’s detail setup page, setting the Black List IP segment range which you need, then click “Save” as below:



3. Open the native’s browser, and it can not open the website normally, because the native IP: 192.168.1.11 is in the IP Black List range:



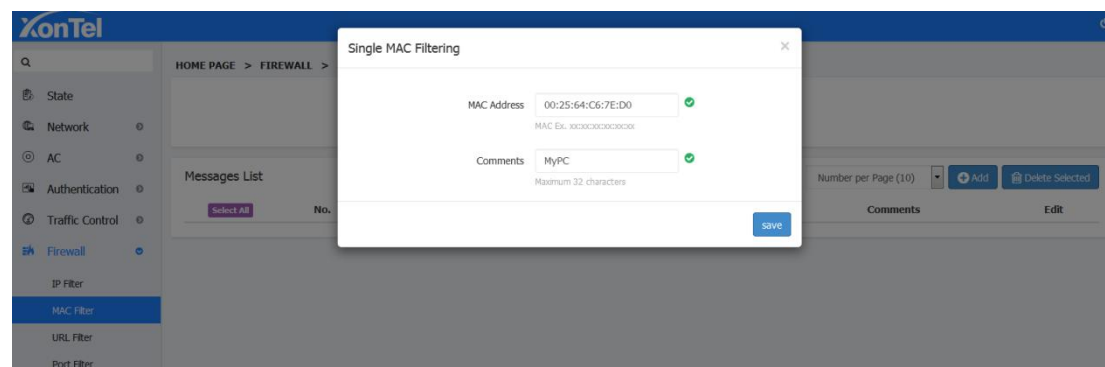
4. Switch to the White list. Only users in the White list can access the Internet. Other users cannot access the Internet. (Use this option with caution)



7.2 MAC Filter

Here you must know the computer LAN card's MAC address, then enter the corresponding computer MAC address to block Internet in MAC Filter.

1. Login the router's WEB page, go into the "MAC Filter" page in Firewall, setup PC's MAC address which you want block and save the setting.



HOME PAGE > FIREWALL > MAC FILTER

Use MAC Blacklist
 Use MAC Whitelist

Messages List

Select All	No.	MAC Address	Comments	Edit
<input type="checkbox"/>	1	00:25:64:C6:7E:D0	MyPC	

2. Open the local browser. The filtered device cannot access the Internet normally.

Unable to connect

Firefox can't establish a connection to the server at www.yahoo.com.

- The site could be temporarily unavailable or too busy. Try again in a few moments.
- If you are unable to load any pages, check your computer's network connection.
- If your computer or network is protected by a firewall or proxy, make sure that Firefox is permitted to access the Web.

[Try Again](#)

3. Modify the MAC address whitelist mode. Only devices in the whitelist can access the Internet. Other devices cannot access the Internet. (Use this option with caution)

HOME PAGE > FIREWALL > MAC FILTER

Use MAC Blacklist
 Use MAC Whitelist

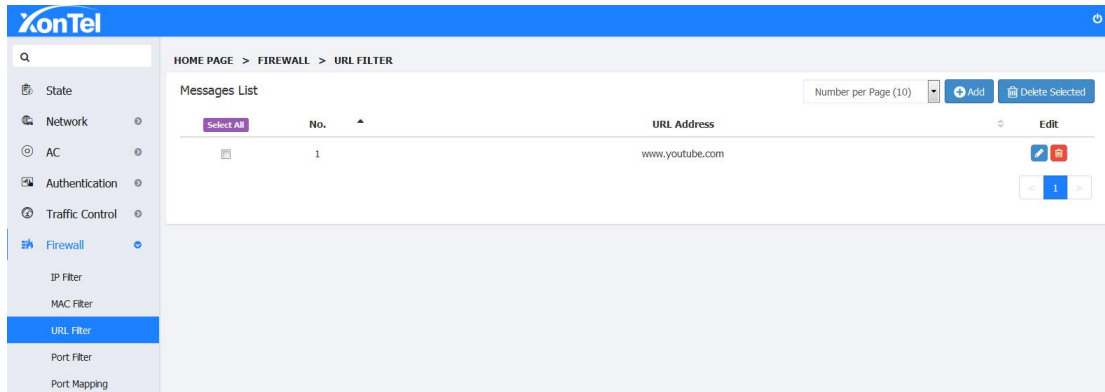
Messages List

Select All	No.	MAC Address	Comments	Edit
------------	-----	-------------	----------	------

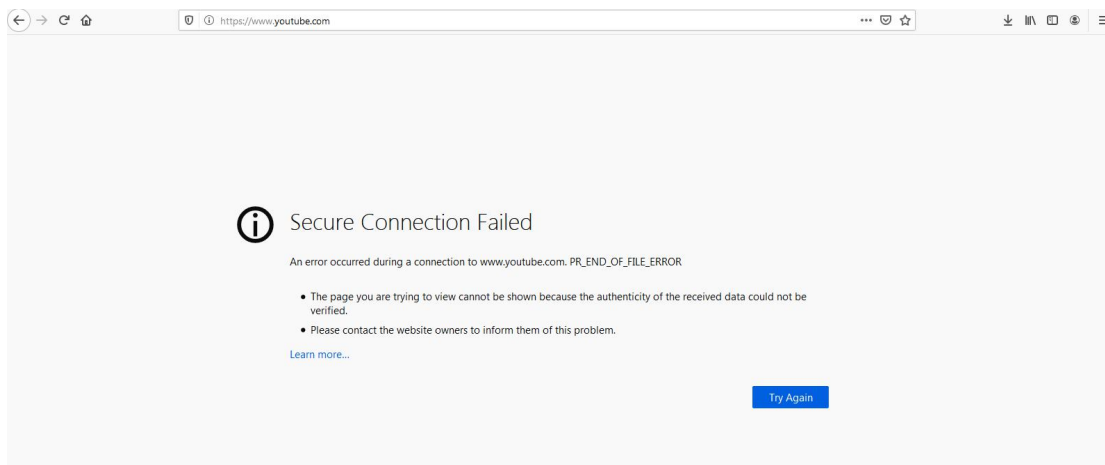
7.3 URL Filtering

Here you can setup the website address to filter which you need, and the saved address (URLs) can not be accessed.

1. Login the router's WEB page, click URL Filter in Firewall and enter "www.youtube.com" in the website filter.



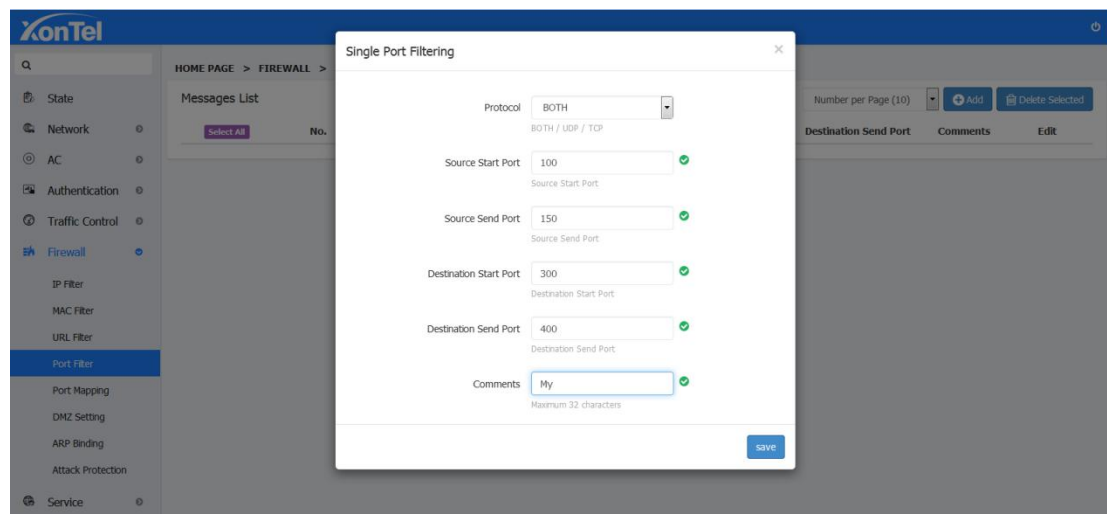
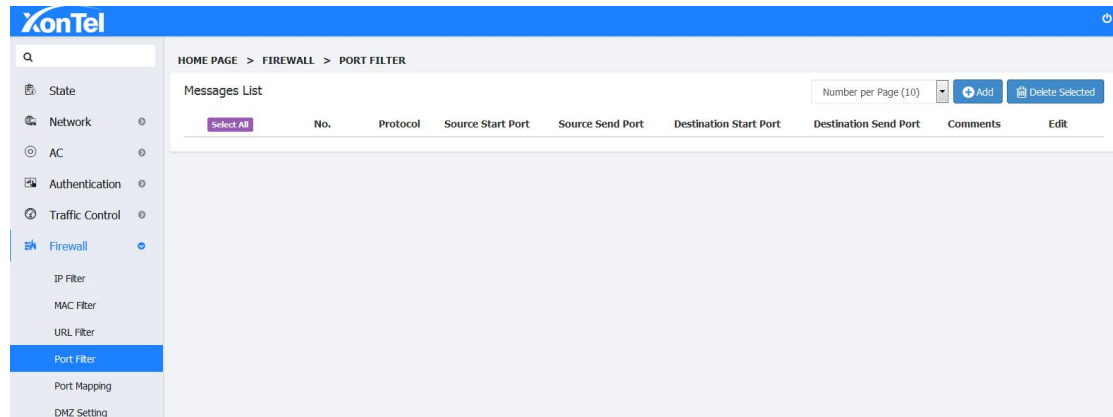
2. Open browser and try to visit www.youtube.com, the PC cannot access the website, but can visit other websites.



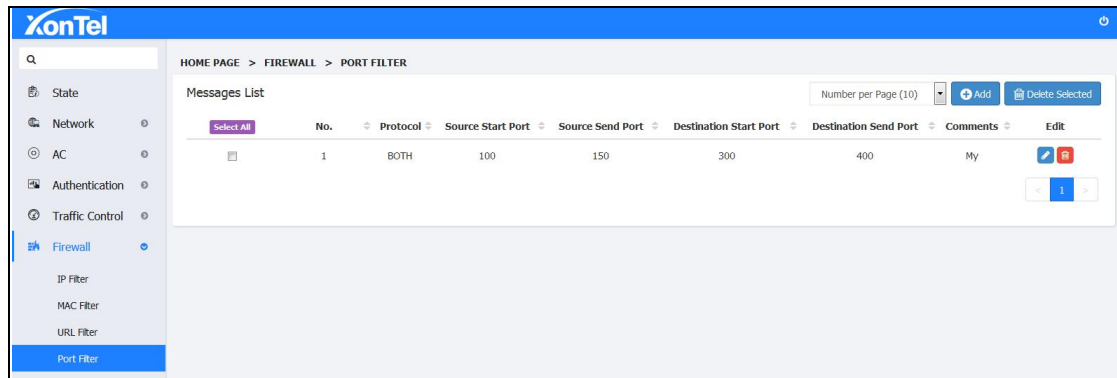
7.4 Port Filter

When in actual use, certain ports need to be filtered, the port filtering module allows some internal services to be used or prohibited by internal users by opening or closing some ports.

1. On home page click on "Firewall-Port Filter" to enter the port filter page, click on the "+ Add" button to pop up into the port filter settings box:



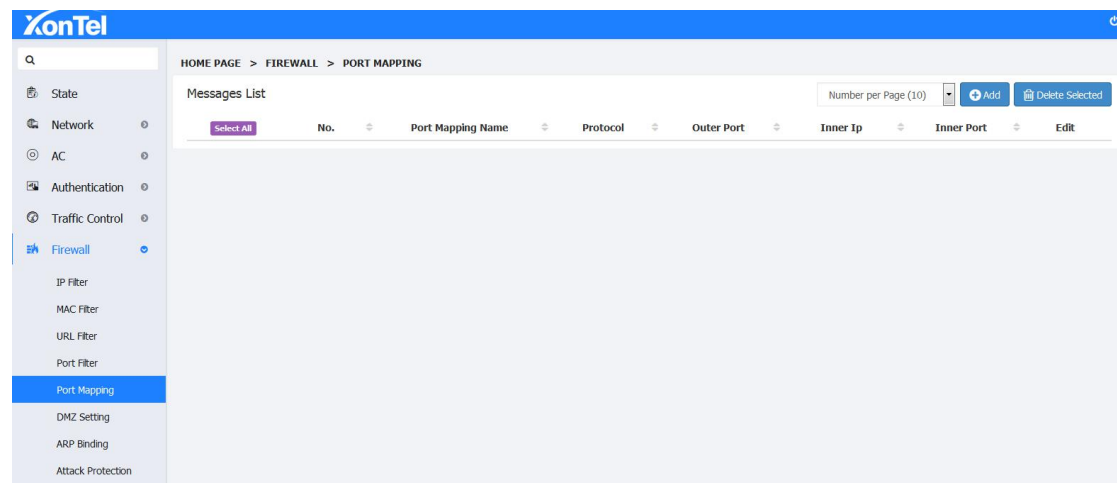
2. Fill in the source port and the destination port (set according to the actual situation). The source port refers to the local port and the destination port is the remote port. Then click Save. After the setting is successful, filter the local port 100-150, remote port 300-400



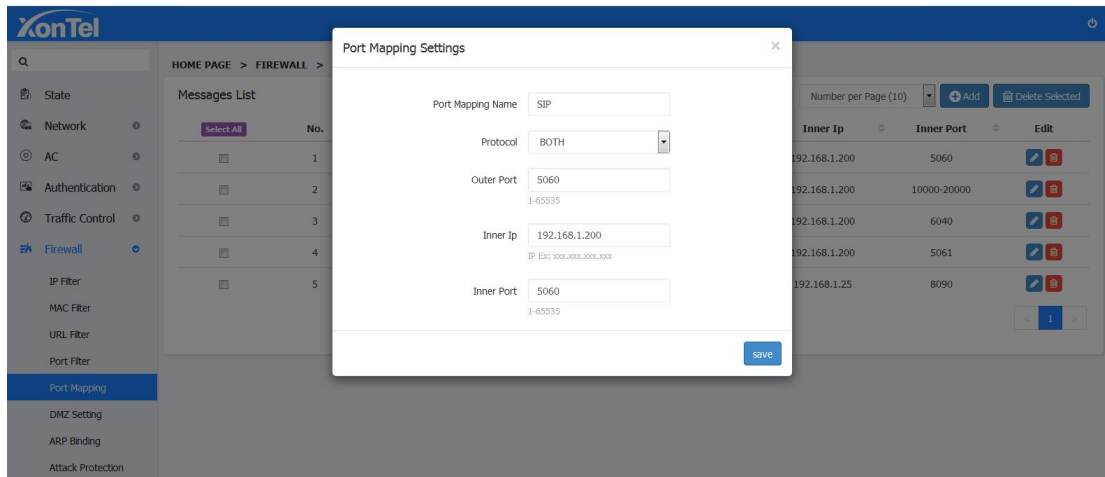
7.5 Port Mapping

Port Mapping or **Port Forwarding** is an application of network address translation (NAT) that redirects a communication request from one address and **port** number combination to another while the packets are traversing a network gateway, such as XonTel XT-1000AC.

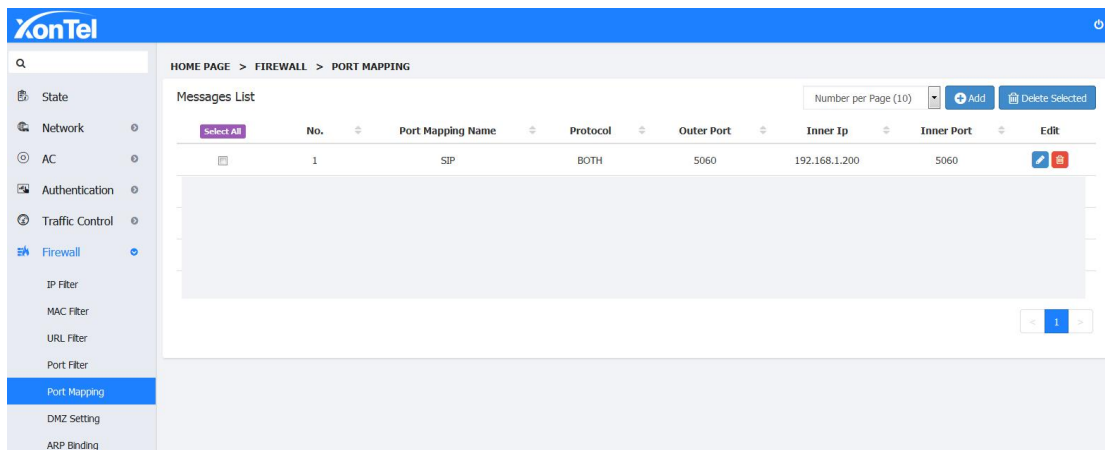
1. Login the XT-1000AC's Web page, finish setup in the Firewall page.



2. Click above picture's "+add" button, go into the Single Port Filtering page, setup the relative parameters.

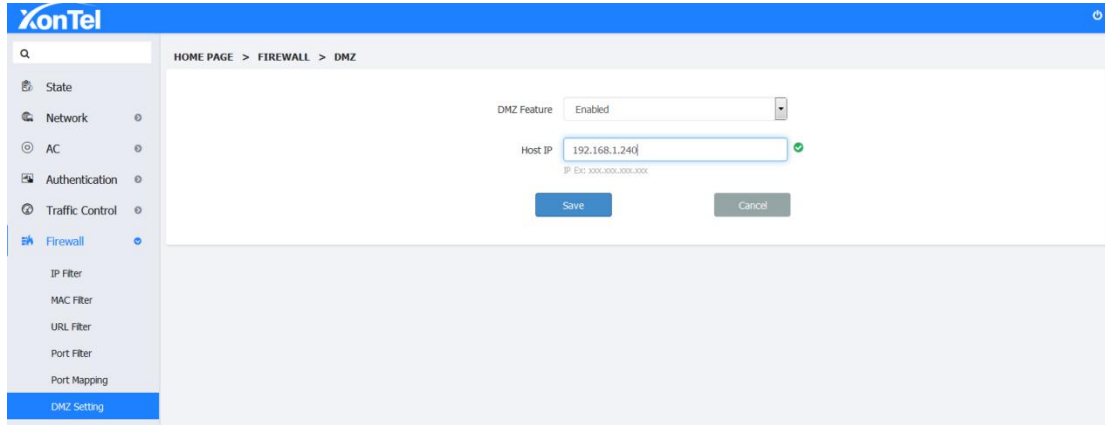


3. Click save and go into the Messages List page, and the port forwarding function is successfully configured (the port is mapped to the external network port 5060 to the internal network port 5060 on IP Address 192.168.1.200).



7.6 DMZ settings

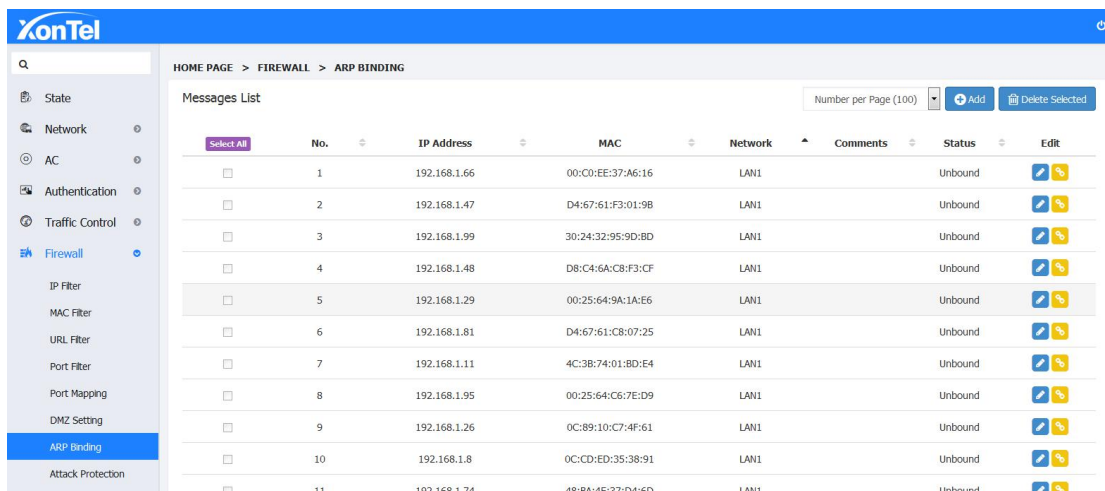
A *DMZ* or *demilitarized zone* (sometimes referred to as a perimeter network or screened Subnet) is a physical or logical sub-network that contains and exposes an organization's external-facing services to an untrusted network, usually a larger network such as the Internet. You can place some server facilities which needs to be public in this small web area, such as enterprise Web server, FTP server and forum, etc. On the other hand, through this DMZ area, it is more effectively to protect the internal network.



7.7 ARP Binding

The Address Resolution Protocol is a communication protocol used for discovering the link layer address, such as a MAC address, associated with a given internet layer address, typically an IPv4 address.

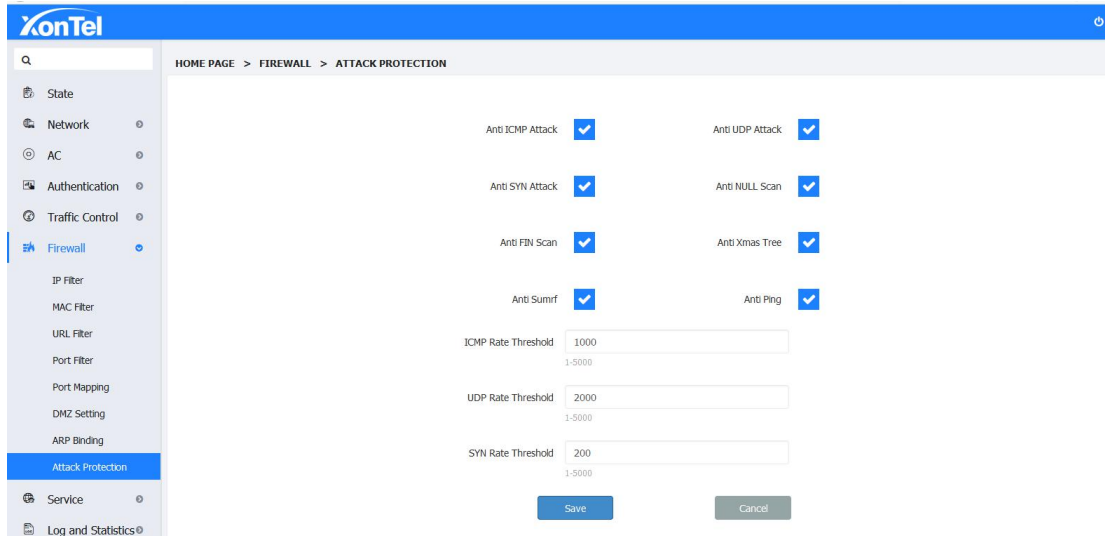
Attention:ARP Binding isn't a option of your device can receive the static IP, it can only receive it when you tick to choose compatible ARP binding list in DHCP static allocation.



7.8 Attack Protection

A distributed denial-of-service (DDoS) attack is a malicious attempt to disrupt normal traffic of a targeted server, service or network by overwhelming the target or its surrounding infrastructure with a flood of Internet traffic. Attack Protection can effectively protect the network from attacks and protect the network security.

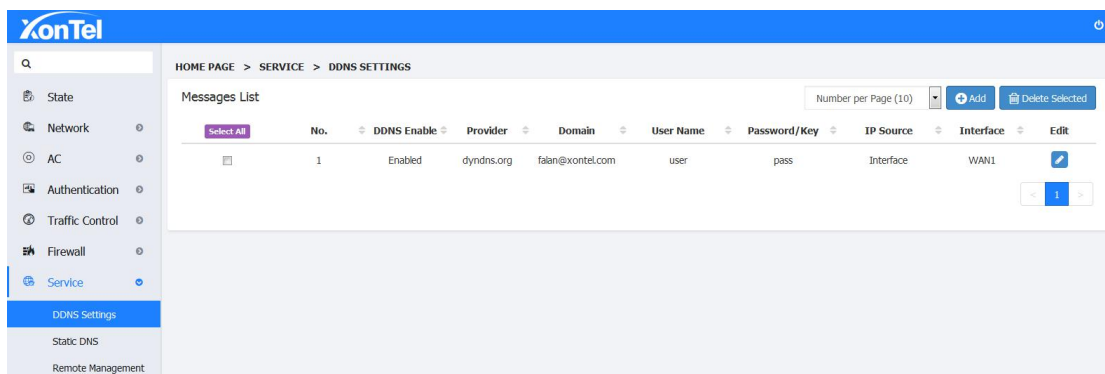
1. Go to the home page, click on "Firewall - Attack Protection" to enter the attack protection page, check the protection types, and click on Save:



8 Service

8.1 DDNS Settings

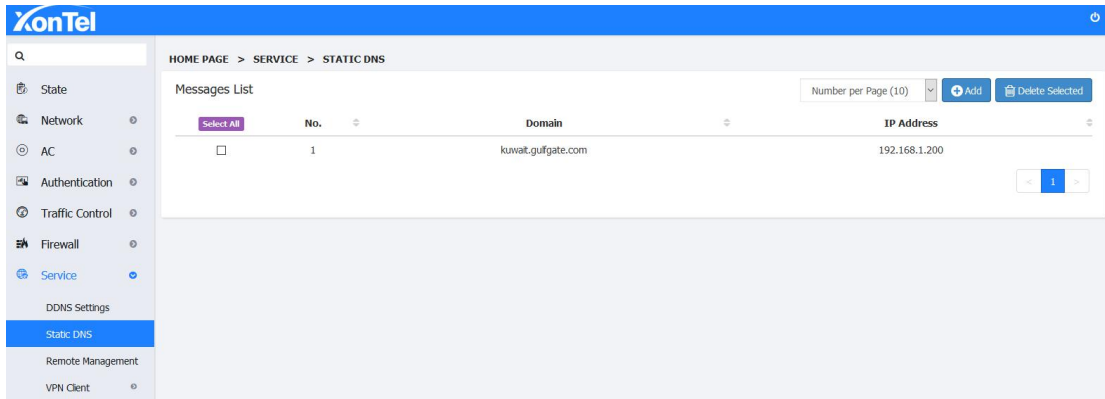
DDNS supports dyndns, 3322, Oray three ways of domain name resolution. (Note: If the device is used as the primary router for PPPoE dial up, the source of the IP address is selected to resolve the network adapter. If you are using as the secondary or lower route, the source of the IP address here is to select the network) Add your domain name and password here:



8.2 Static DNS

Sometimes it required to use some service from your home/office device through Mobile App, locally and remote. Static DNS useful in that case. Static DNS can map a local IP address of the

device with a Domain name. So the mobile app can work with that domain name either in private WiFi network or on public network (4G/5G, Public WiFi)

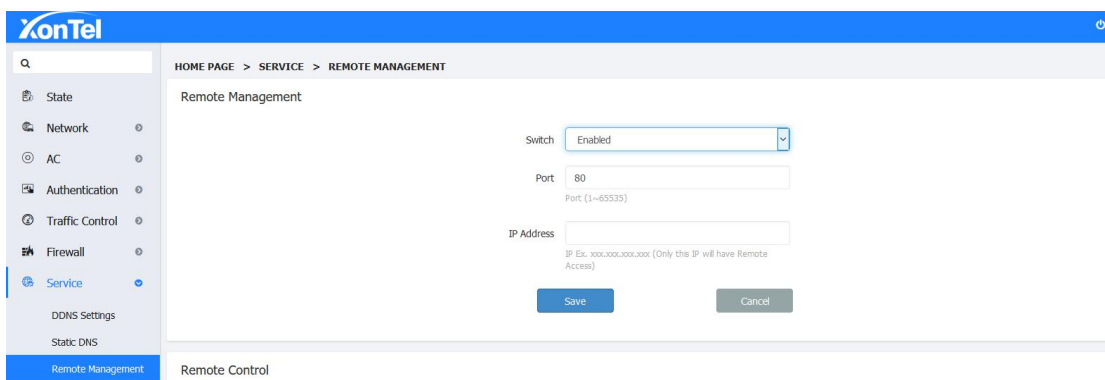


8.3 Remote Management Setting

Enterprise network administrators want to manage routers from anywhere on the network, allowing them to be managed and configured in real time and securely. Remote WEB management function can allow remote management of routers in the place of access to the Internet.

1. Click "Service - Remote Management" on the main interface of the XT-1000AC to enter the remote setup page, as shown below:

2. Enable the service, the port enters 1-65535 any one port, IP address default to remain empty, enter the specific IP only allow that particular IP remote access, do not enter any external network IP remote access, and then click Save.



3. Enter the gateway of the upper-level route to set up the virtual server, IP is the WAN port IP of the XT-1000AC, and the port number of the external network port and internal network port is the same as the port number set on the remote management page.

Interface Status			
Name	Designate	IP Address	Status
Interface0	WAN1	192.168.22.106	✓
Interface1	LAN2	192.168.3.3	✓
Interface2	LAN1	172.16.0.1	✗
Interface3	LAN1	172.16.0.1	✗
Interface4	LAN1	172.16.0.1	✗

4. After added, connect to the upper-level route, enter the WAN port address of the device in the browser: port number (such as "192.168.22.106:80"), press Enter, you can access the gateway of the device remotely.

8.4 VPN Client

8.4.1 PPTP Client

PPTP Client: PPTP is Point to Point Tunneling Protocol. This protocol is a new enhanced security protocol which base on the PPP protocol, it support VPN, PAP and EAP, etc. enhanced security. It can also let the remote clients safety visit the enterprise network through dial-in ISP, directly connect the Internet or other network.

Use the PPTP client function, enabled the PPTP switch, enter the Username, Password and Server/IP, click "save" and finish the setting.

8.4.2 L2TP Client

L2TP Client: L2TP is an industrial standard Internet tunneling protocol, the function is the same as PPTP protocol, such as it can also encryption for the network traffic. But it also have the different, such as PPTP require the network as the IP network, L2TP require point to point

connection for the data packet. PPTP use the single tunnel, L2TP use multi-tunnels. L2TP provide header compression and tunnel verify, but PPTP not support it.

Use L2TP Client, enabled L2TP Switch, enter the username, password and server/IP, click save then finish the L2TP client function setting.

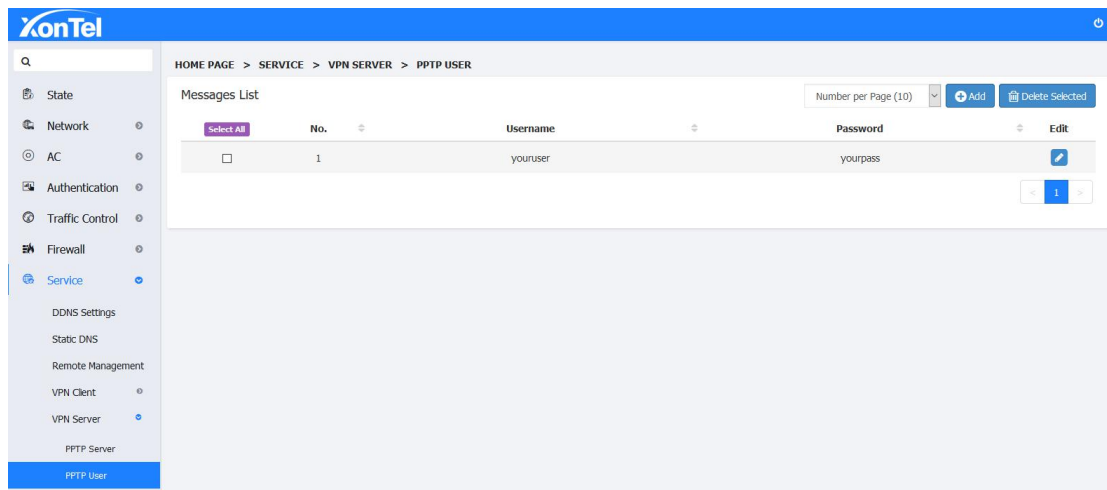
8.5 VPN Server

VPN is Virtual Private Network, it built up a temporary, safety and simulated point to point connection through a public network (such as Internet). This is an information tunnel which pass through the public network, the data can safely transmitting in the public network through this tunnel. So the user can vividly call it "Network of Network".

8.5.1 PPTP Server

1. Go into PPTP Server setting page, enter VPN account and password, as below:

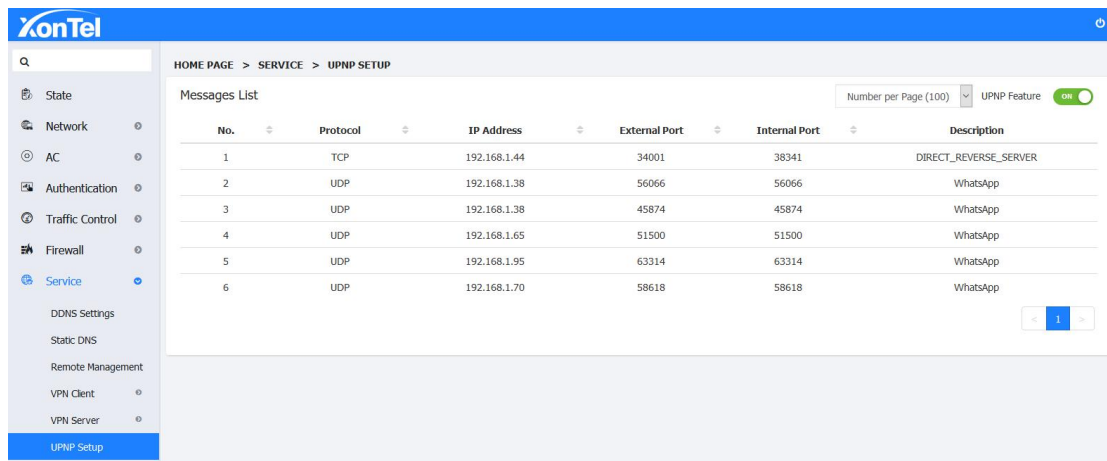
2.Go into PPTP USER page, set up the user



3. Setup a VPN connection in laptop which is on different network, enter the user name and password added by PPTP, test the connection, and get the specified IP address.

8.6 UPNP Settings

UPnP is a variety of intelligent devices,wireless devices and PC to realize peer to peer network connection (P2P) structure throughout the world. UPnP is a distributed and open network structure.



9 Log and Statistics

9.1 Log

Here you can view the system's working status when the device is working.

1.Go to WEB Interface and go to Log and Statistics-Log page,click "GET LOG"button,then the page will refresh the log details every moments,as below:

Date	Level	Log
2020/1/6 16:25:31	Info	DHCPREQUEST for 192.168.1.87 (192.168.1.1) from d4:67:61:c8:07:03 via br-lan: database update failed
2020/1/6 16:25:31	Info	Wrote 93 leases to leases file.
2020/1/6 16:25:29	Info	DHCPACK on 192.168.1.22 to d4:67:61:c8:06:f8 via br-lan
2020/1/6 16:25:29	Info	DHCPREQUEST for 192.168.1.22 (192.168.1.1) from d4:67:61:c8:06:f8 (android-cc8fa0cee33eae7) via br-lan
2020/1/6 16:25:29	Debug	reuse_lease: lease age 3 (secs) under 25% threshold, reply with unaltered, existing lease
2020/1/6 16:25:26	Info	DHCPREQUEST for 192.168.1.22 (192.168.1.1) from d4:67:61:c8:06:f8 via br-lan: database update failed
2020/1/6 16:25:26	Info	Wrote 93 leases to leases file.
2020/1/6 16:24:38	Error	CGI error: -32601/Method not found
2020/1/6 16:24:37	Info	User admin/xontel authorized OK
2020/1/6 16:24:37	Info	DHCPACK on 192.168.1.10 to 00:08:7b:16:af:a4 via br-lan
2020/1/6 16:24:37	Info	DHCPREQUEST for 192.168.1.10 from 00:08:7b:16:af:a4 (PDECT00087B16AFA4) via br-lan
2020/1/6 16:24:37	Debug	reuse_lease: lease age 60 (secs) under 25% threshold, reply with unaltered, existing lease
2020/1/6 16:24:36	Error	CGI error: -32002/Access denied
2020/1/6 16:24:16	Info	Wrote 93 leases to leases file.
2020/1/6 16:24:05	Info	DHCPREQUEST for 192.168.1.10 from 00:08:7b:16:af:a4 (PDECT00087B16AFA4) via br-lan

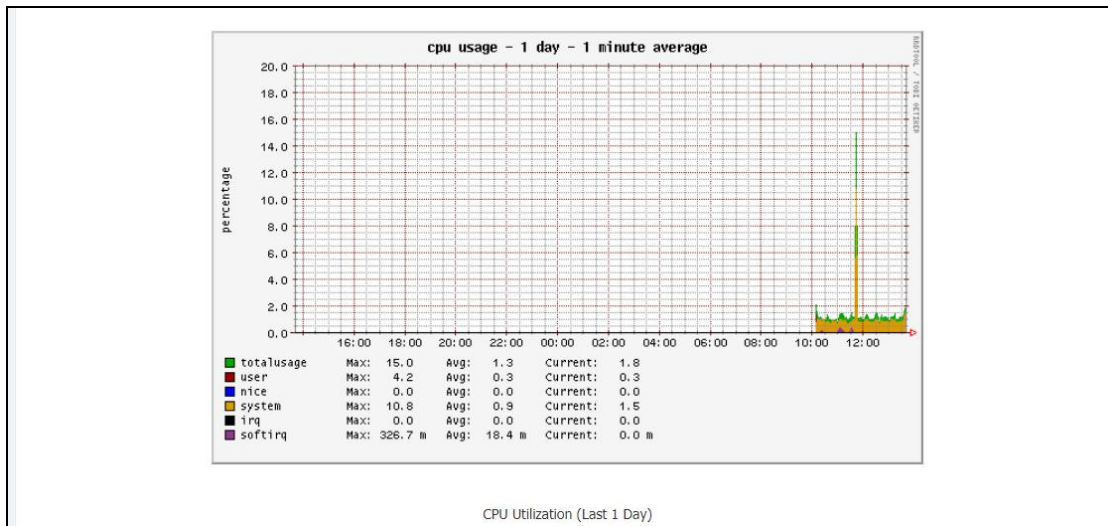
9.2 Status Chart

Historical Statistics

1.CPU: here record the CPU usage information when the devise working 8 hours,one day and one week.

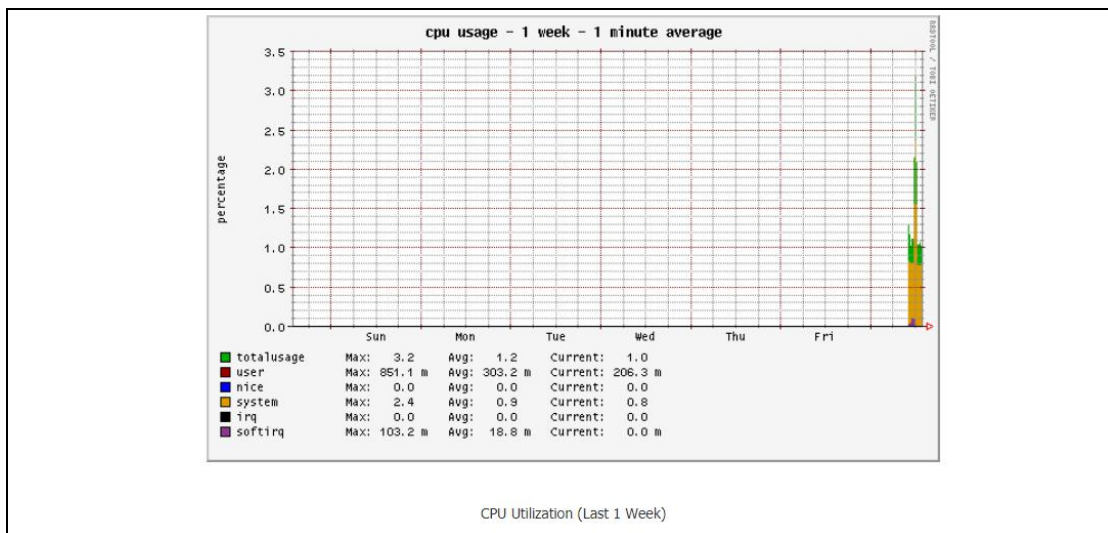
Component	Max	Avg	Current
totalusage	75.6	8.9	4.6
user	15.9	0.9	0.5
nice	0.0	0.0	0.0
system	39.3	3.4	2.8
irq	0.0	0.0	0.0
softirq	20.4	4.6	1.4

<8 Hours>



CPU Utilization (Last 1 Day)

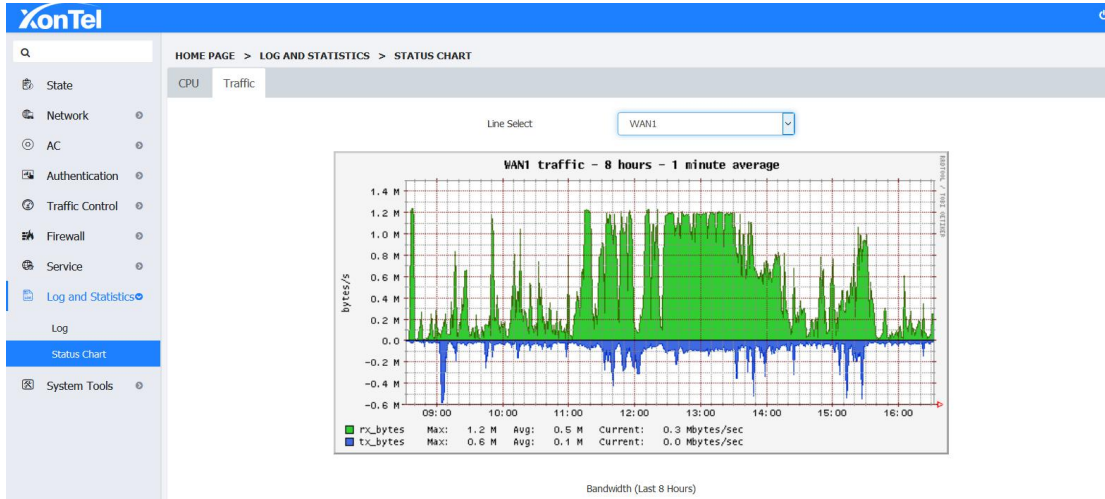
<One Day>



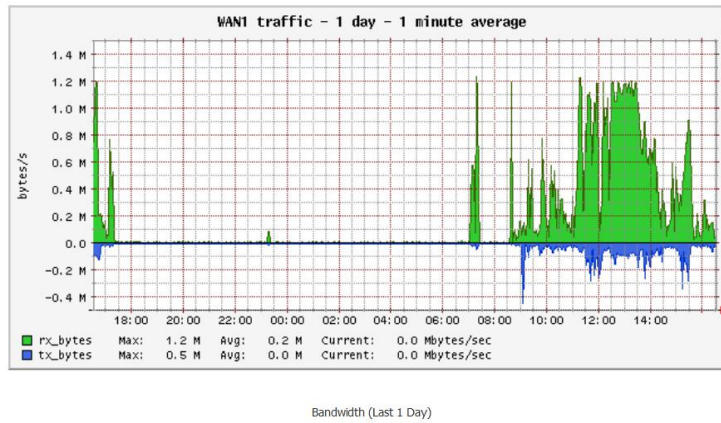
CPU Utilization (Last 1 Week)

<One Week>

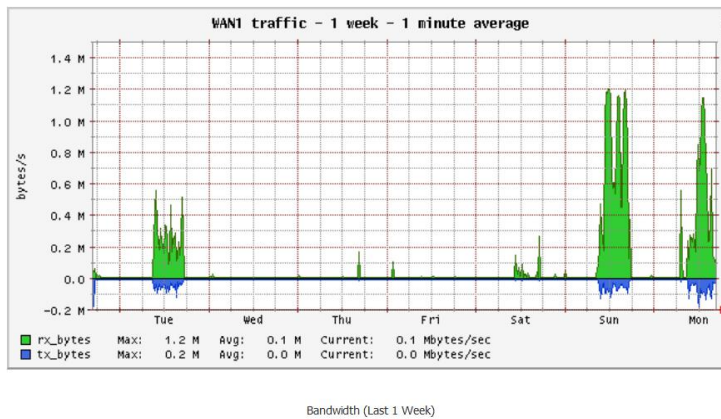
2.Traffic: Here record the traffic status information when the devise working 8 hours,one day and one week.



<8 Hours>



<One Day>

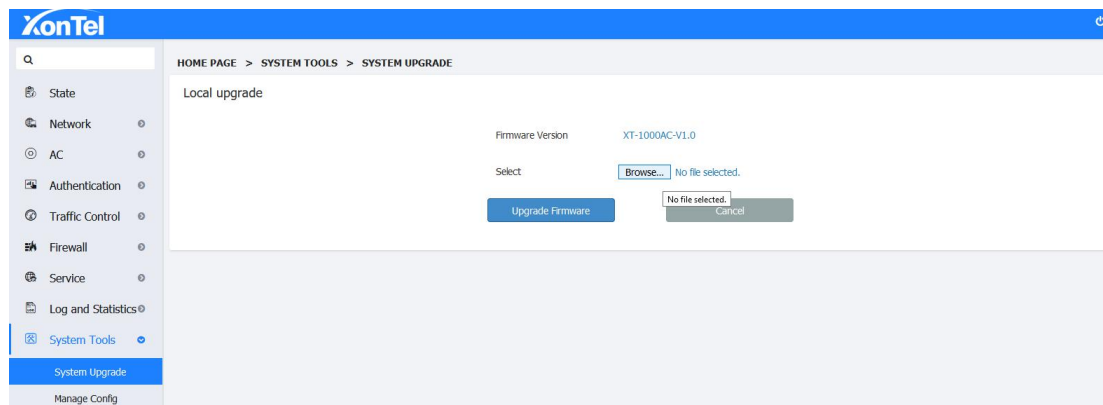


<One Week>

10 System Tools

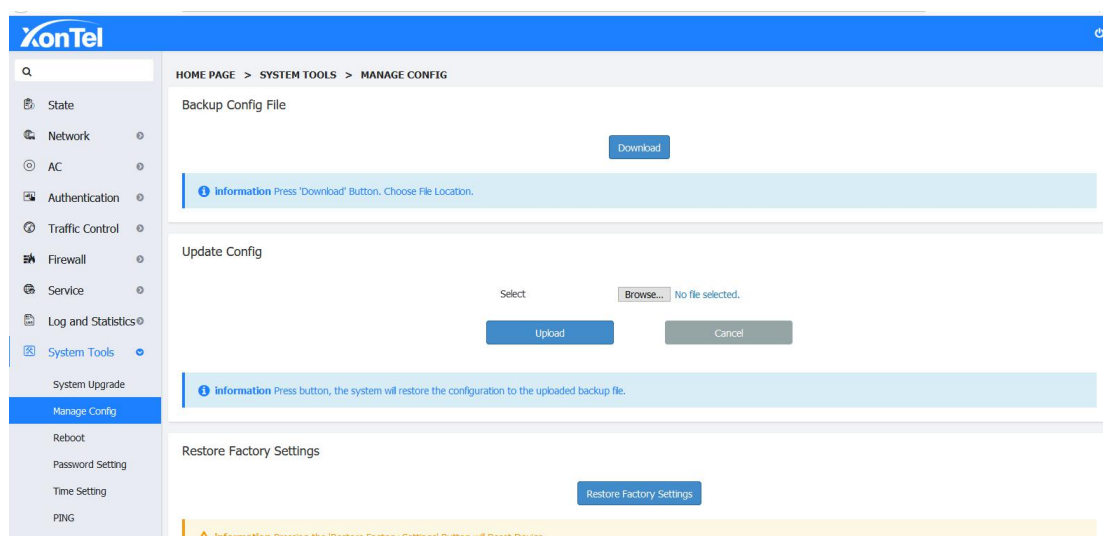
10.1 System upgrade

Download the latest XT-1000AC firmware from the website <https://xontel.com>, download and save it on the computer. Go into the system upgrade page,click Browse to choose the firmware file you had downloaded in this page. Then click “Upgrade Firmware”button to upgrade.

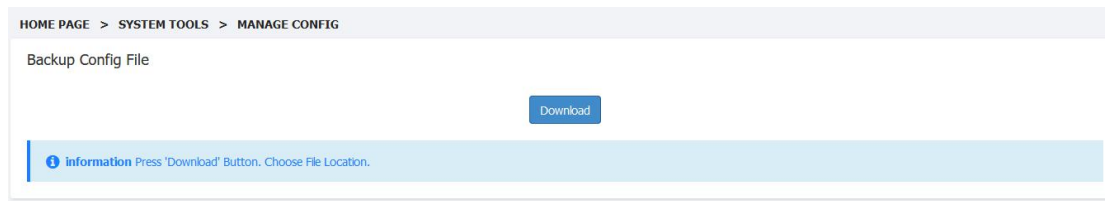


10.2 Manage Config

Backup Config: After you configure the device’s parameters,you can click “download”button to save the configure parameters in file to be used later.



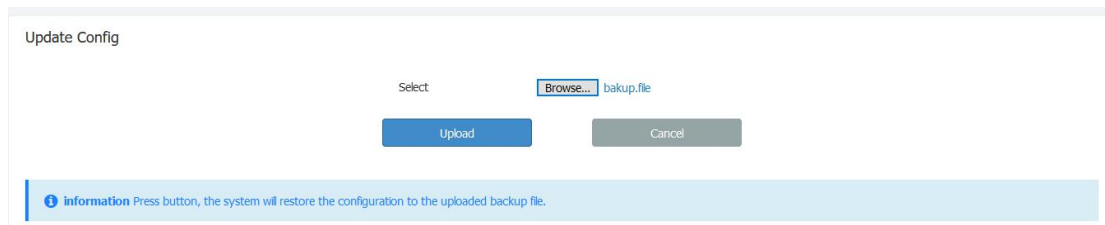
1. Go into the configure backup page,click the configuration backup's "download"button.



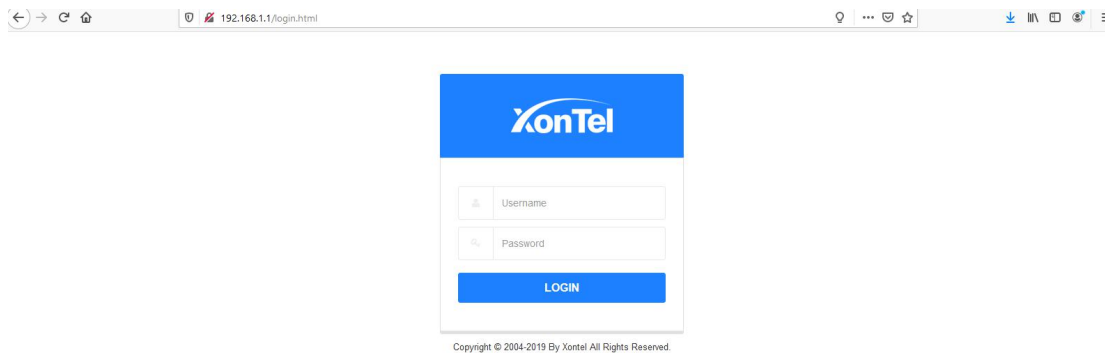
2. Select the path to save the configuration, and then click OK, the current configuration has been saved on the local computer.

Update Config: If you need to change the configure temporary or the device was restored the default settings,you can select to choose the configure file that you save before.

1. Choose the configure file that you save before, Click "Upload"button to restore.

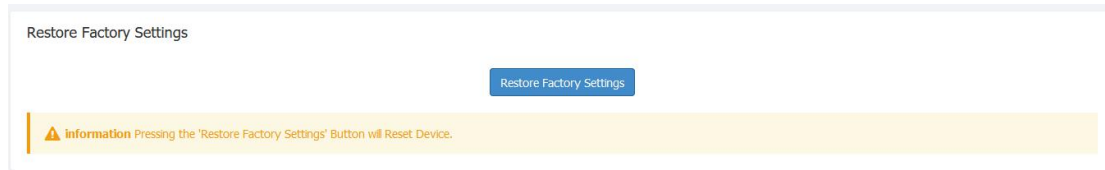


2. Click "Upload" and after a while system will popping the interface to login again.

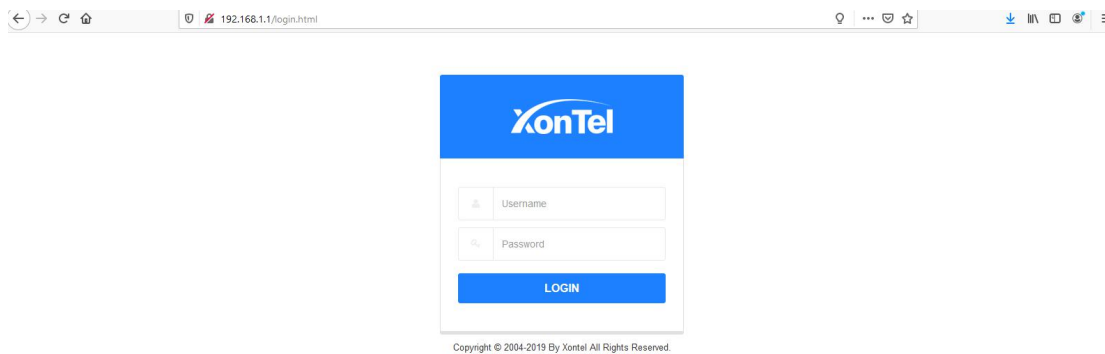


Restore Factory Settings: If you want to reset the device to its factory default,you can click "Restore Factory Settings"button at the bottom of the Manage Config page.

1. Go to the Manage Config page,click "Restore Factory Settings"



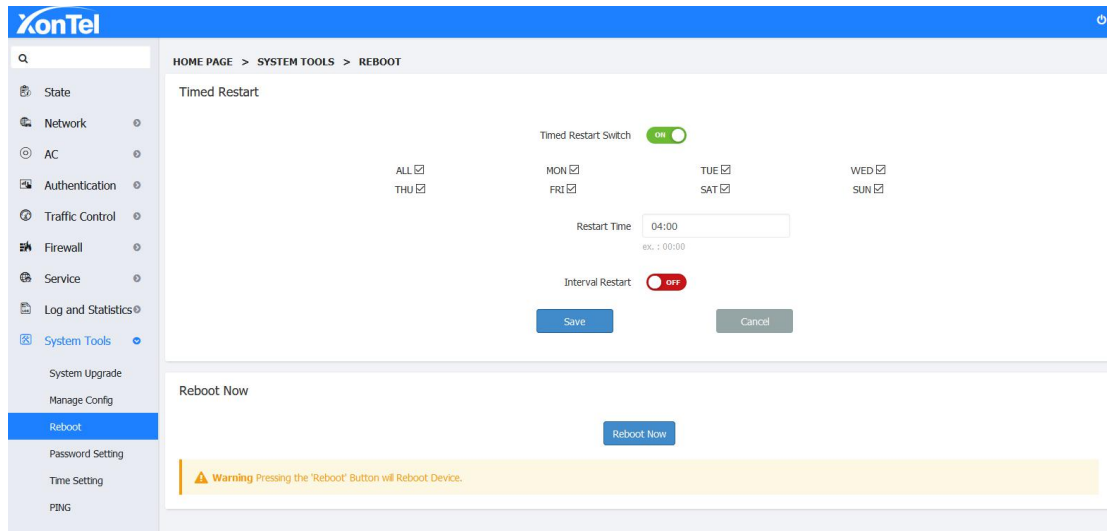
2. System will pop the notice information, configuration will set to factory defaults, please wait for <180> seconds and Do Not disconnect the power.
3. 3 minutes later system will automatic interface to login again, it is success to restore factory settings.



10.3 System Reboot

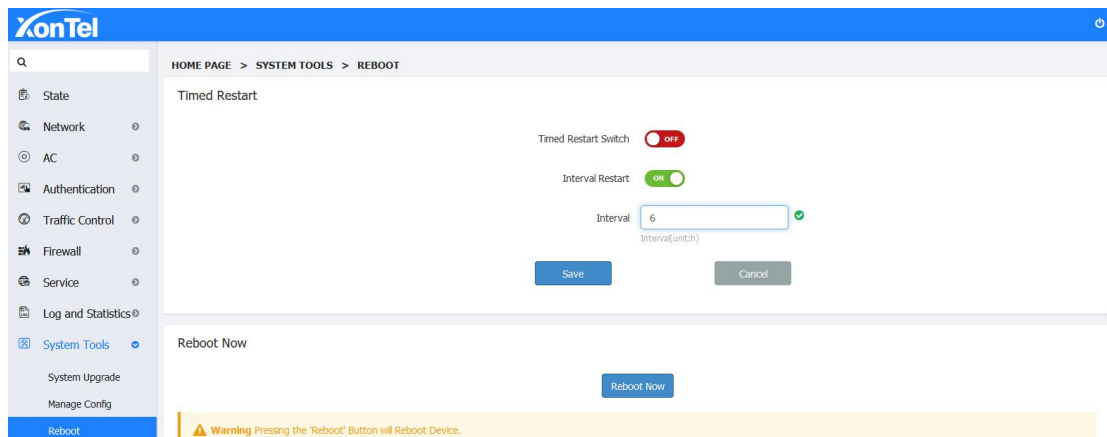
10.3.1 Timed Restart

1. Go into the System Tools- Reboot page, you can On or Off scheduled reboot, select or remove the restart days of week, input the restart time click Save.



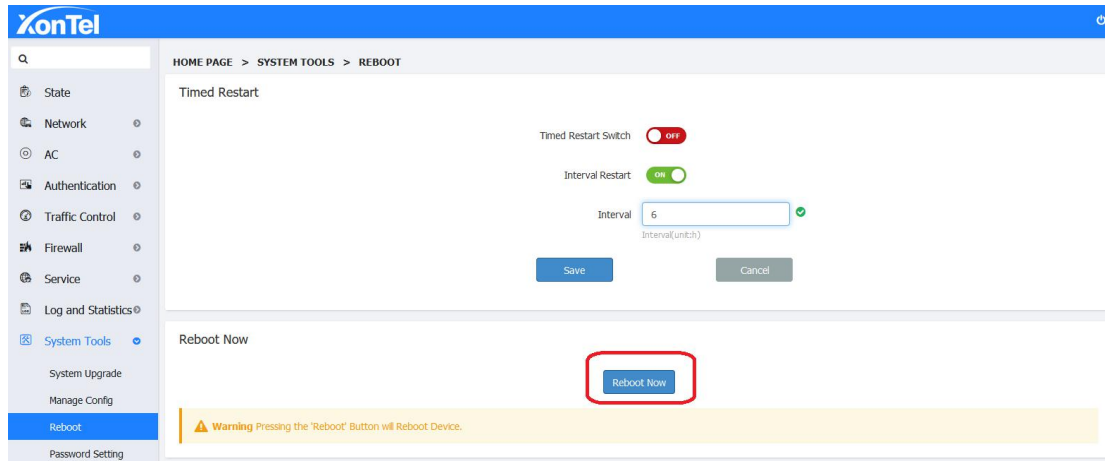
2. After this setup the device will restart automatically on the days and time your setup above.

Interval Restart: Go into the System Tools-reboot page, you can set up an interval Restart. Turn On the Interval Restart, input the interval restart time, click Save. As shown below the device restarts every 6 hours.



10.3.2 Reboot Now

1. If system required immediate restart go into the System Tools-Reboot page,click “Reboot Now” button.

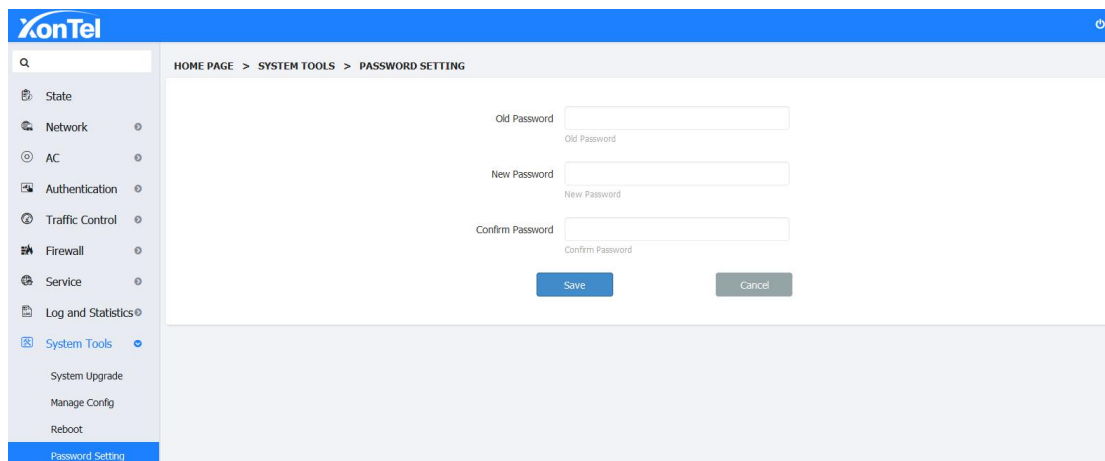


2. Wait for 1 minute for the system to come up again.

10.4 Password Setting

Here you can change the Admin Password. After setting you need to use the new password to login.

1. Go into System home page and go to System Tools “Password Setting” page as below:



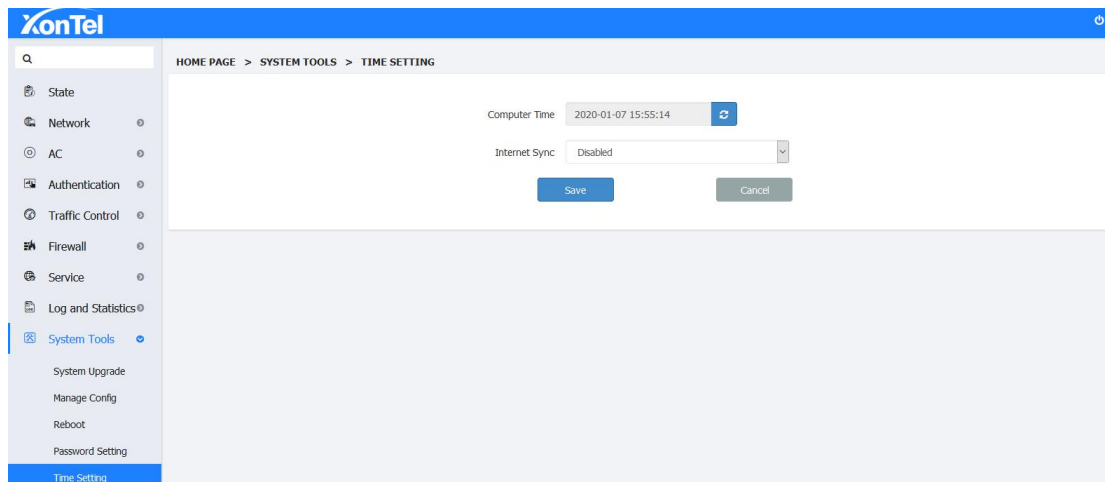
2. Enter the new password two times and click Save:

3. After setting you need to use the new password to login again.

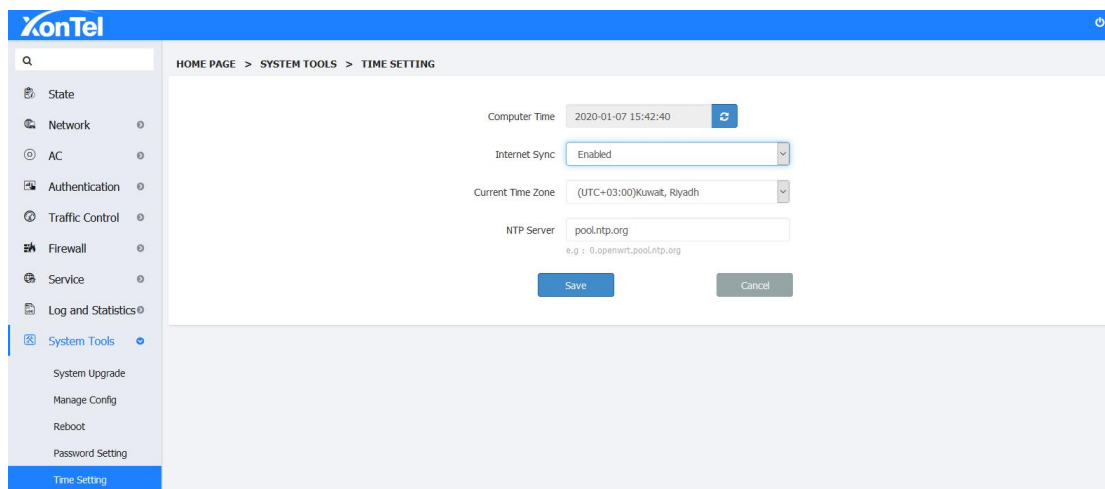
10.5 Time Setting

Here you can sync the system time with Computer time from where you logged in, Enable/Disable Internet Sync time. The device will be automatic sync system time with NTP server configured.

1. Go into System home page and go to System Tools - "Time Setting" page as below:



2. Click Internet Sync switch's button, choose "Enabled" then click Save.



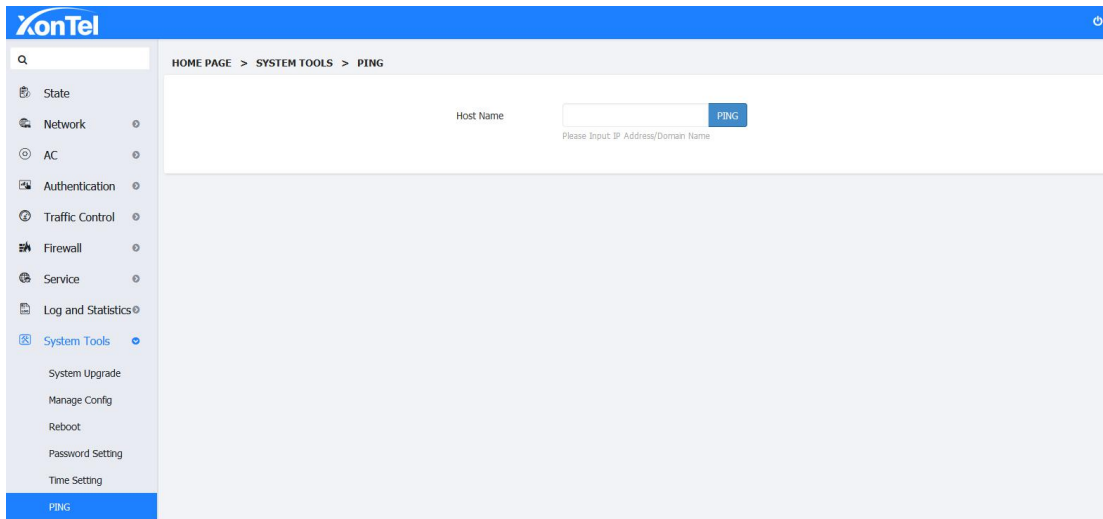
3. Wait for 5 seconds, the system time will be synchronized with the network time.

4. Disable the Internet Sync, use the option to sync time from the computer from which you logged in. This will be a onetime sync.

10.6 PING (Diagnostic Tool)

Here you can PING any IP address or Domain name to confirm the connectivity of the system to Internet.

1. Go into system home page and go to the System Tools “PING” page as below:



2. Enter IP address of google.com as 8.8.8.8 or the domain google.com itself, click “PING” button, wait some seconds, it will show the result as below:

