

OrangeOS-AC User Manual

Product Name: OrangeOS-AC

Hardware Version: R124M_VER 2.0

Software Version: <u>V2.3.0</u>



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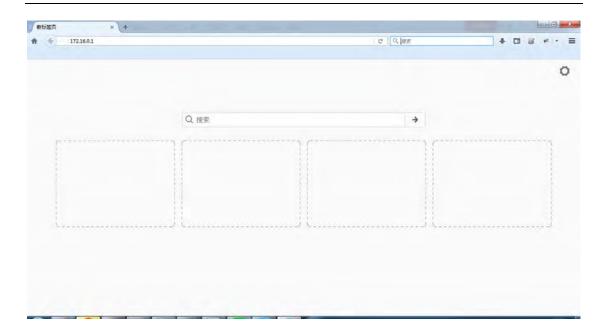
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1 Log In

1.OrangeOS is based on the browser's configuration interface. Open your browser, and input IP address:172.16.0.1.



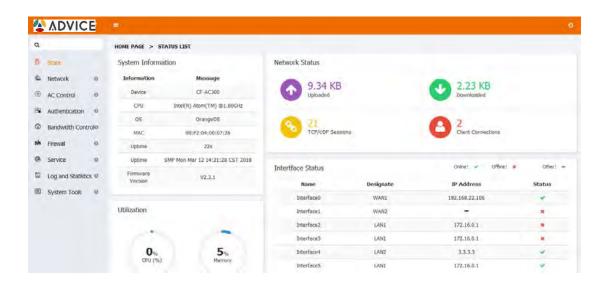


2. After finished the IP address and click Enter. Then it will get into OrangeOS' LOGIN interface as below:



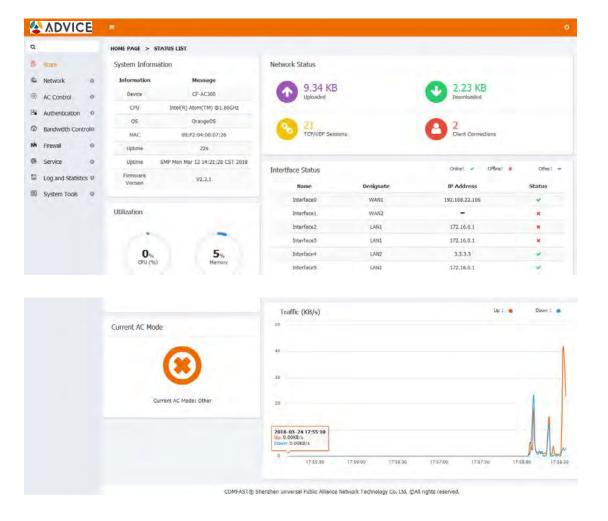
3.Input user name "admin", Password "admin". Then click LOGIN to get into the home page as below:





2 State

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





3 Network

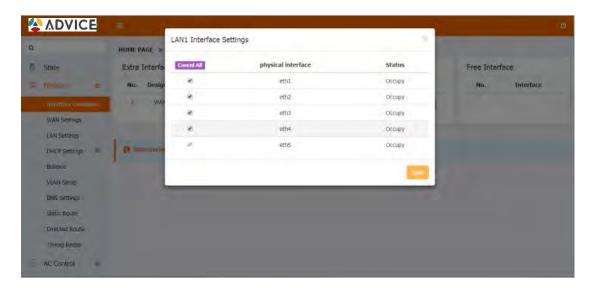
3.1 Interface Designate

The "eth0" is defaulted to be WAN port. "eth5" is defaulted to be LAN port and it can not edit. The rest "eth1-eth4" is customized to be WAN port or LAN port. After designated the WAN port or LAN port, pls set up the inner net and outer net by "Local Network" and "Internet Settings".

1. Click "Interface Designate" and get into the its setting page as below:

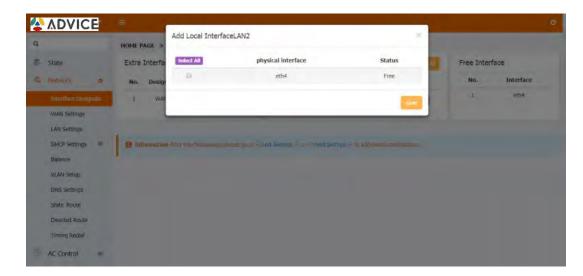


2.Click the "Edit" button to go into the "LAN1 Interface Settings " page, freely release 2 ethernet ports



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:

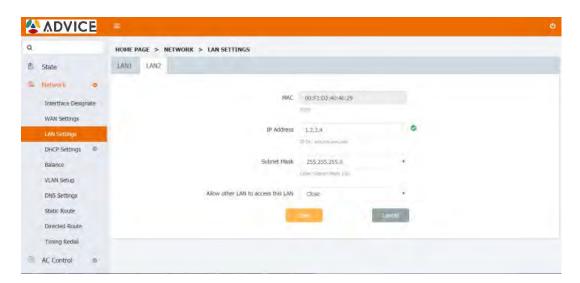




4.Click "Save" and the INTERFACE list which you add will appear in the local Interface.



5.Click "Local Network", Setting the LAN2's IP Address and Subnet Mask parameter .

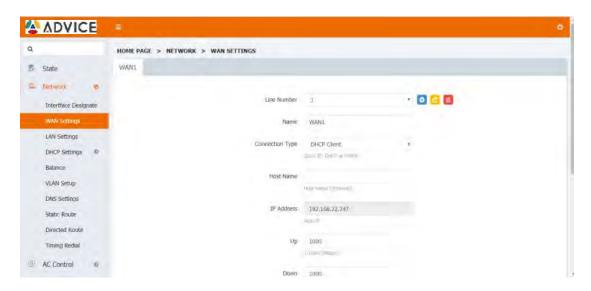




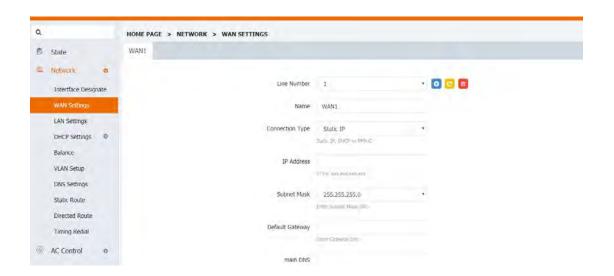
3.3 Internet Settings

In "Internet Setting", you can set up DHCP Client, Static IP, PPPoE this three connection types, it support Clone MAC address.

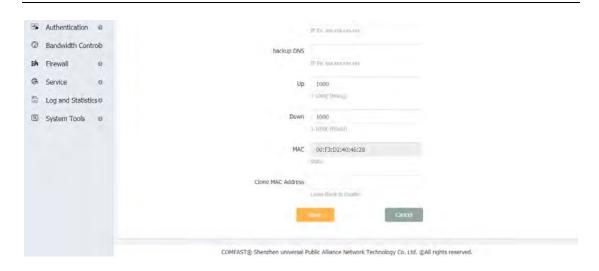
1.DHCP: if the internet achieve the IP automatically by the DHCP, you can use this connection type.



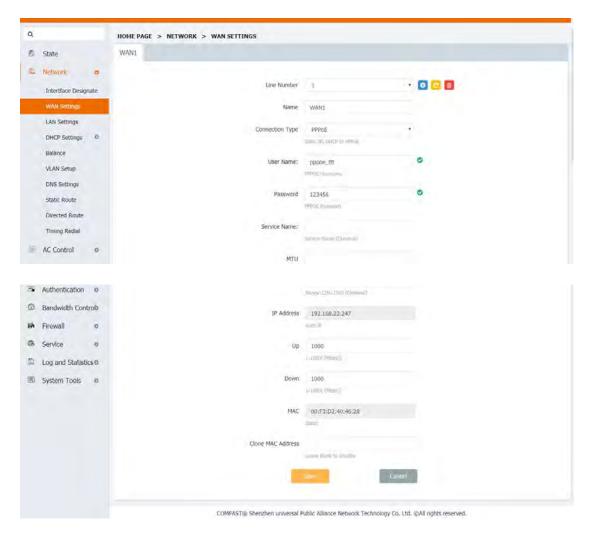
2.Static IP:configure the fixed IP,Subnet Mask,Defaust Gateway and DNS to surf the internet.The fixed IP fiber optic always choose this connection type.





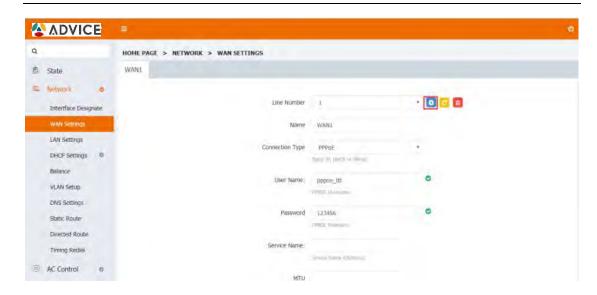


3.ADSL/PPPoE:after choose this connection type, fill in the related User Name and Password, the state will show connected after success to dial.

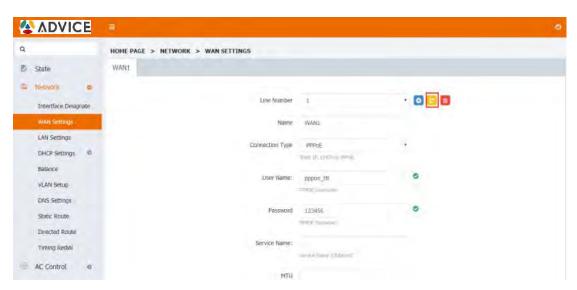


4.Clik"+",to add multiple network connections on the same interface.



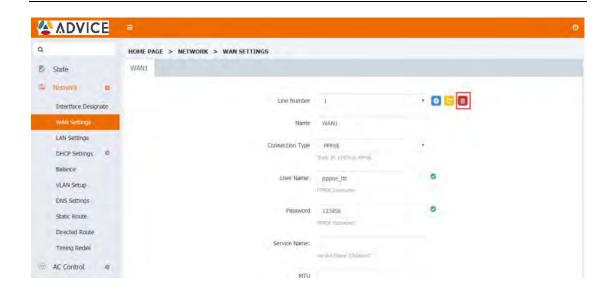


5.Click "Redial" button to redial the network line



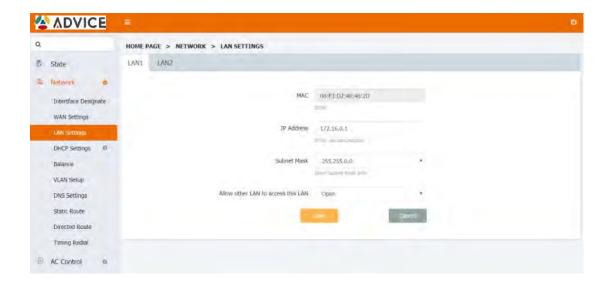
6.Click the delete button to delete unnecessary Internet lines. The first one cannot be deleted





3.2 Local Network Settings

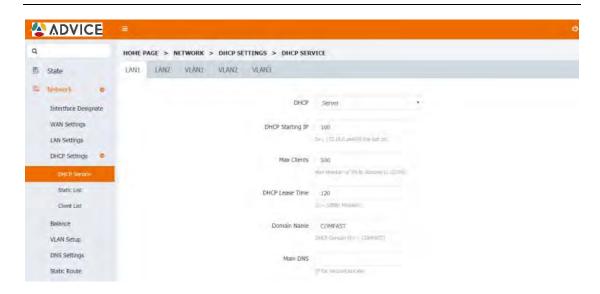
Can manual setting each Local Interface's IP Address and Subnet Mask, the default IP address is 172.16.0.1



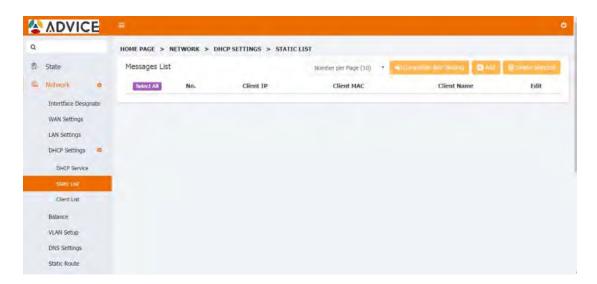
3.5 DHCP Settings

DHCP Settings:Here you can set up DHCP 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 and the device manage IP in the same segment)



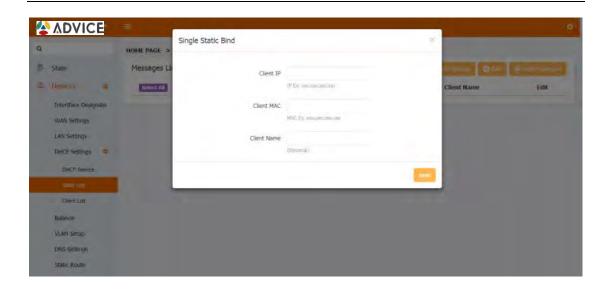


Static List:Local network client get the IP address to the designated IP address by the DHCP, you can add it in this place. Here you can installed the compatible ARP binding information, and also can installed the PC or mobile device IP address to static allocation, then those device will get the fixed IP.

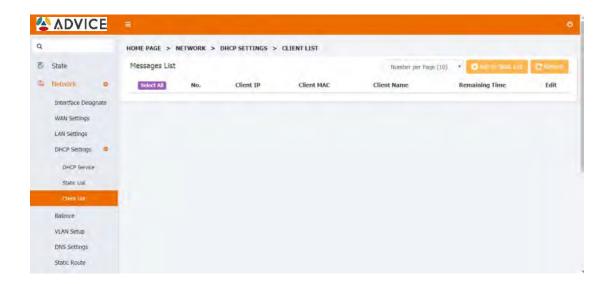


Add single static bind, click "Add" button in the static list and got to set up.





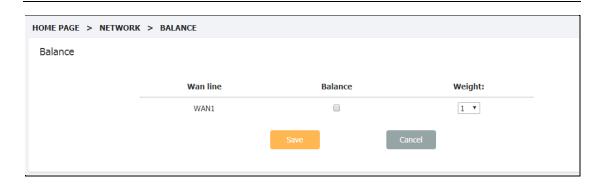
Client List:Here will display the DHCP allocated CLIENT IP, CLIENT MAC, CLIENT NAME when you connect with the device. You can install which client IP to the static list by your actual needs.



3.5 Balance

Balance: when the multiple ISP line insert, choose balance strategy, install corresponding rate. the same or different ISP line will allocate the bandwidth by balance strategy.





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



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







Port division

1. It will go through the specific exit when the local network appointed IP to visit some internet ports.

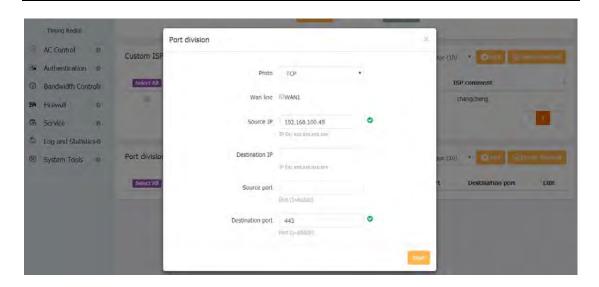
Choose the appointed wan line you need, and enter the appointed IP in SOURCE IP.Enter your DESTINATION PORT.

Attention:At the normal situation,you can not 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 shutting into WAN1.



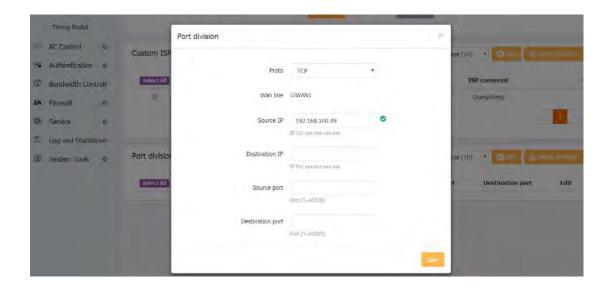




2. You can install local internet appointed IP in specific wam line

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

Example:192.168.100.49 enter in WAN2.



3.7 VLAN Settings

VLAN is a LAN device can be logically divided into a network segment, in order to achieve the virtual workgroup's emerging data exchange technology. This emerging technology is mainly used in switches and routers, but the mainstream application is still in the switch, but not all

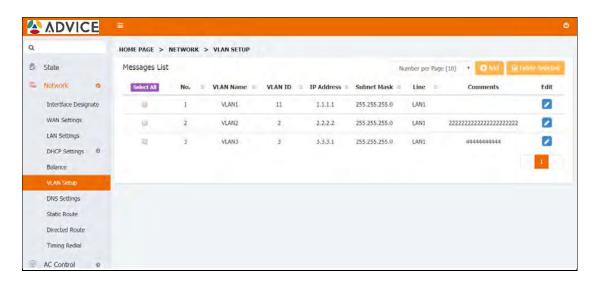


switches have this feature, only the VLAN protocol on the second floor of the switch with this feature, which can be through the corresponding switch Of the manual can be learned.

VLAN SETUP;

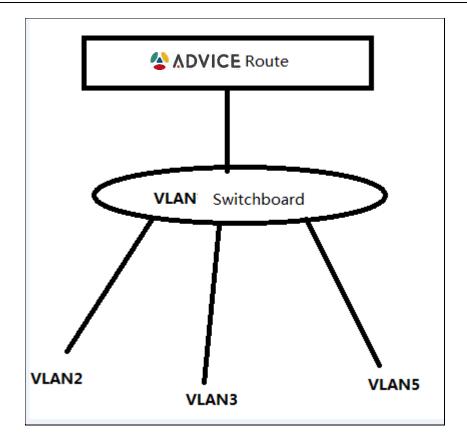
Visit the VLAN SETUP page, click "add" on the upper right corner. Create a VLAN and set a virtual IP address.

VLAN ID: Virtual LAN ID number, used to distinguish between different VLANs IP: This IP address is the address of this VLAN.



Basic VLAN topology:





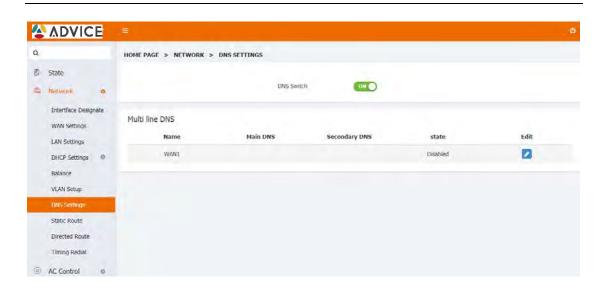
Note: The VLAN ID must correspond to the VLAN ID in the switch. The LAN port of the router directly connect to the trunk of VLAN switch.

3.7 DNS Settings

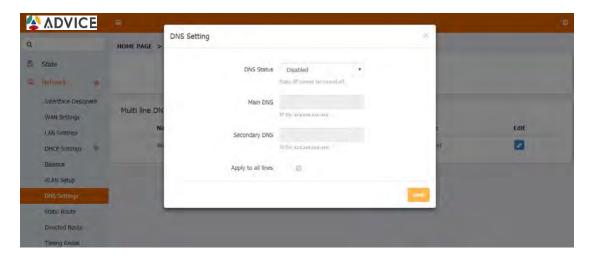
DNS Settings:DNS(Domain Name System), in the Internet, it use as one distributed database by mutual mapping between the domain name and IP address. The process of finally get this hostname related IP through the hostname, it called DNS(or Hostname Resolution). At the Static IP Mode, need to manual set up Main DNS and Secondary DNS. If you don't know your local DNS address, you can contact with your broadband network operator.

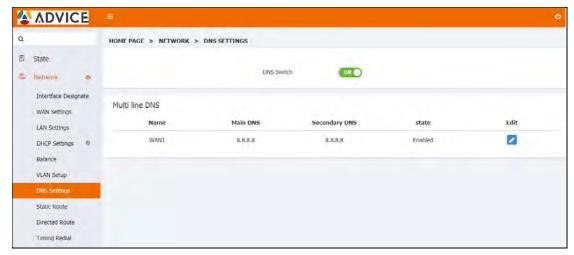
- 1、首页点击"网络设置-DNS设置",进入 DNS设置界面,打开 DNS开关
- 1. Homepage Click "Network DNS Settings" to enter the DNS setting interface, open the DNS switch





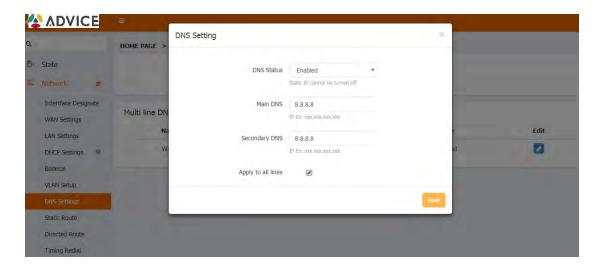
2. Select the need to set the DNS line, click the operation button, pop-up action box, DNS state is selected as enabled, enter the main DNS or secondary DNS, click save

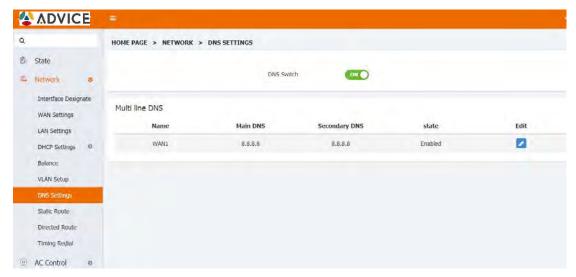






3. Click "Apply to all lines" in the action box and click save to apply the current settings to all lines

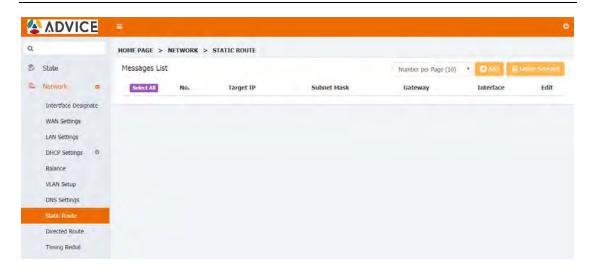


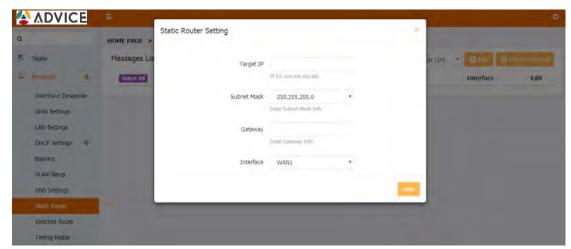


3.8 Static Route

The route static allocation function, once the computer add the static allocation, the IP is appointed by the static allocation when you starting up next time.





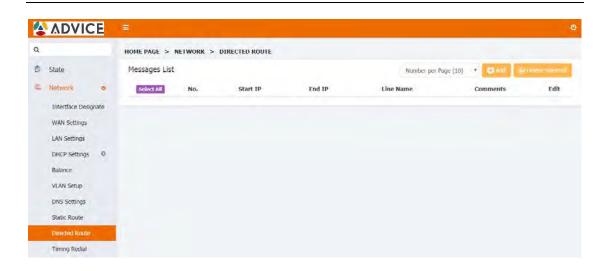


3.9 Directed Route

Directed route means setting a fixed network flow direction and pointing data from one port to another fixed port instead of wide area and no purpose.

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

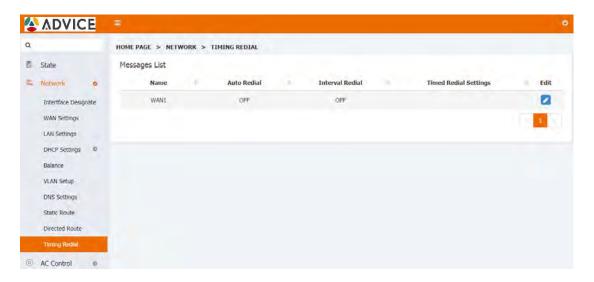




3.9 Auto Redial

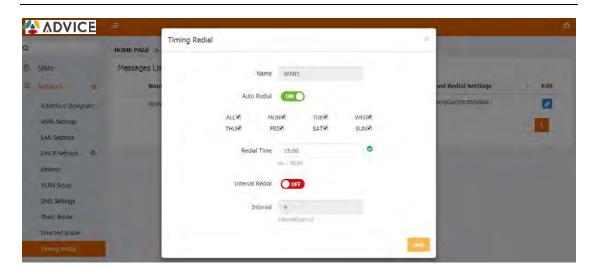
Auto redial: set a specific time or a specific interval to allow automatic redialing of a specific line

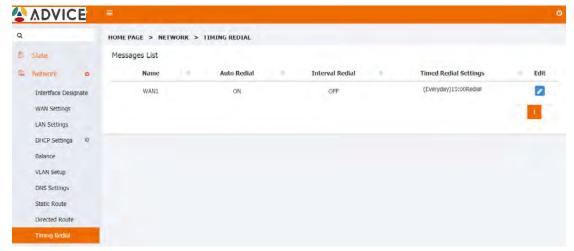
1. Click "Network - Auto Redial" to enter the auto redial page



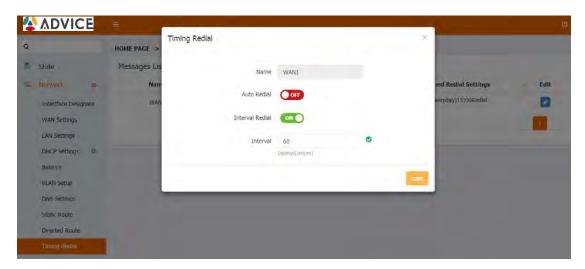
2. Click on the operation button of one of the lines to pop up the operation box, enable the auto redial status, check the date, and click save after completing the time. As shown in the photo below, the WAN1 line automatically redials at 15:00 every day.



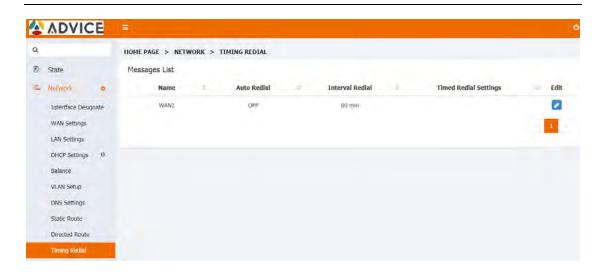




3. The operation box to open the interval redial, enter the interval restart time, click save, as shown below, after successful preservation WAN1 line re-dial every 60 minutes







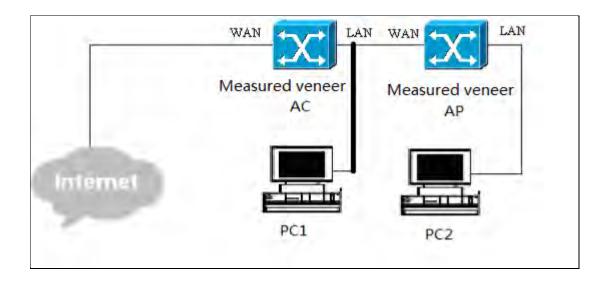
4 AC Control

Uplink AC and By-pass AC is the network develop type.

Uplink AC is the AP in AC's next level, the AP connect with the AC's internal network, and the connection way is AC's LAN port connect with AP's WAN port, detail as chart 1.

By-pass AC is AP and AC connect with the same network, the connection way is the up one level gateway connect with the WAN port of AC and AP, after the AC and AP consult successfully, you can visit AC manage page through AC's WAN port IP, detail as chart 2.

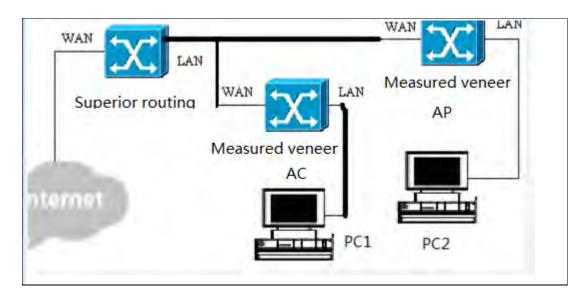
Uplink AC Management





<Chart 1>

By-pass AC Management



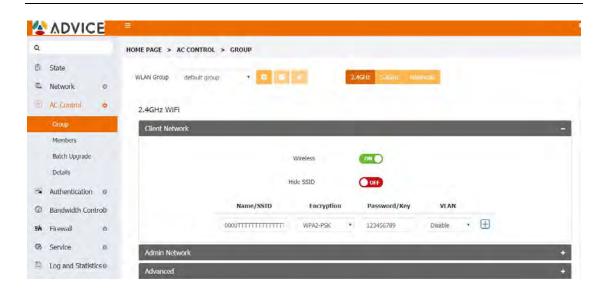
<Chart 2>

4.1 Group

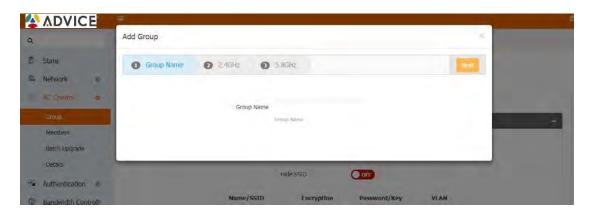
Here you can install a new group, can install 2.4G and 5.8G SSID, wireless advanced install those parameters.

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





2. Click above picture's "+" button and go into the add group page, as below:



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



4. Setup 5.8GHz relative parameter(SSID/Encryption/Password), click Next:





5.Click "Apply" and it will go to "GROUP" page, then it is success to add group. Choose the group name: comfast and you can detail setup this group.

Chart 1:Employee network, you can setup the NAME/SSID and PASSWORD/KEY.

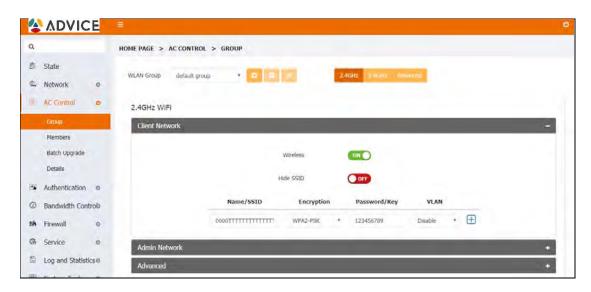


Chart 2:Management network, you can setup the NAME/SSID and PASSWORD/KEY.



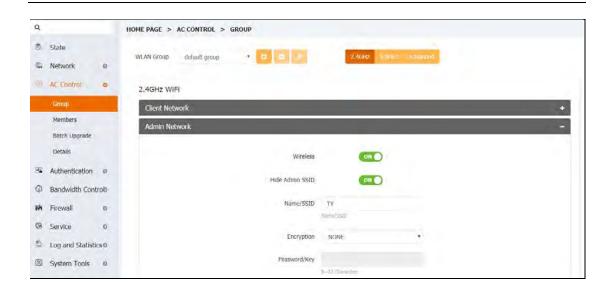
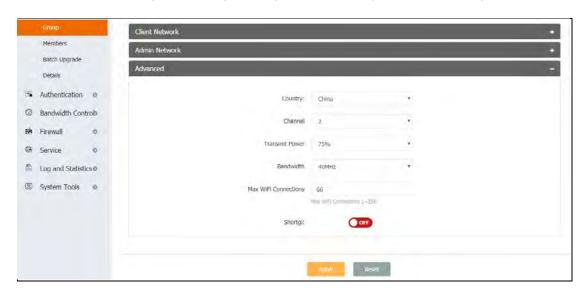


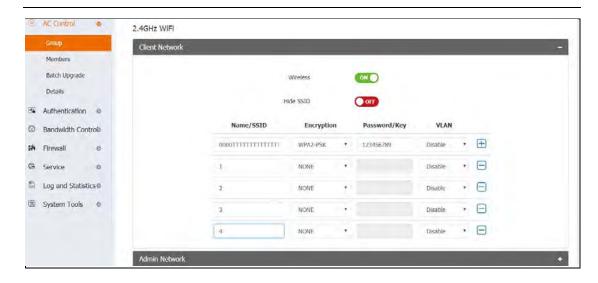
Chart3:Advanced, here you can setup Country, Channel and Txpower etc. relative parameters.



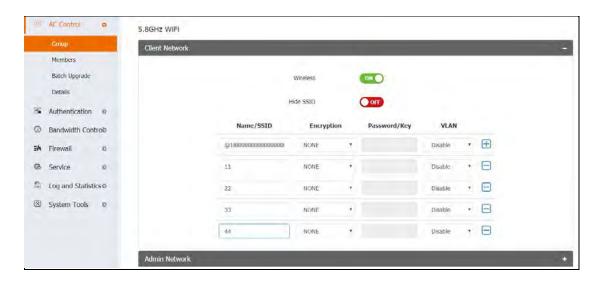
6. Click "Employee" bottom right "blue+" in above chart 1,you can setup multi SSID function,the most you can add 8 SSID(2.4G and 5.8G can add 4 SSID separately),as below:

2.4G Multi -SSID:





5.8G Multi -SSID:



8. Click Advanced Settings to open Wireless User Isolation to isolate wireless users

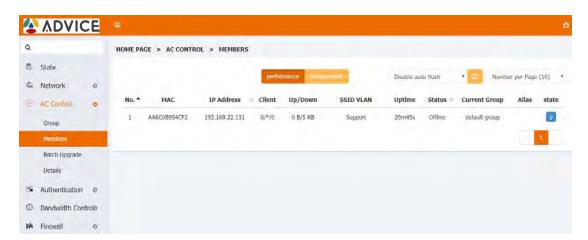




4.2 Members

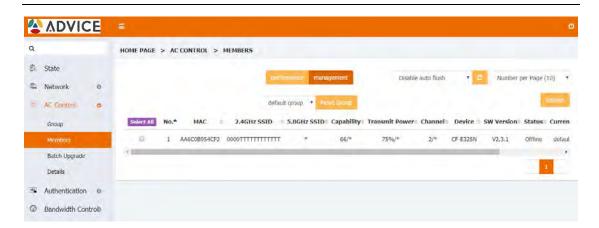
If there have other devices connect with x86 network, the managed device information will be show on the performance page. Click management, and here you can modify the corresponding device's wireless SSID, country, channel, transmitted power, wireless bandwidth, max-awaiting amount and alias.

1. Open WEB home page and go into AC Control's "Members" page, as below:

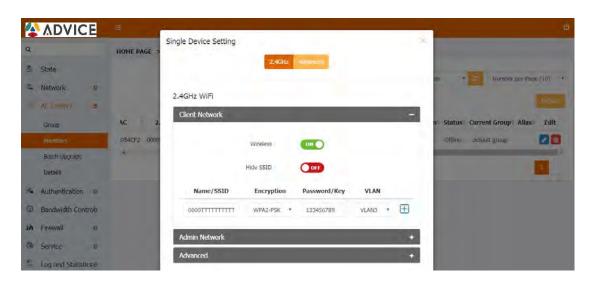


2. Click above picture's middle position "management" button, and go into the managing page, as below:

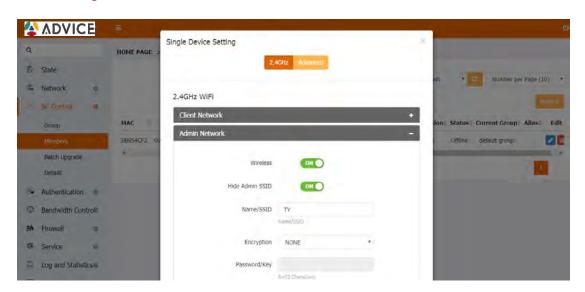




3. Click above picture's "blue" button then you can renew the device's SSID, Country, Channel and Txpower etc. detail managing information, as below:

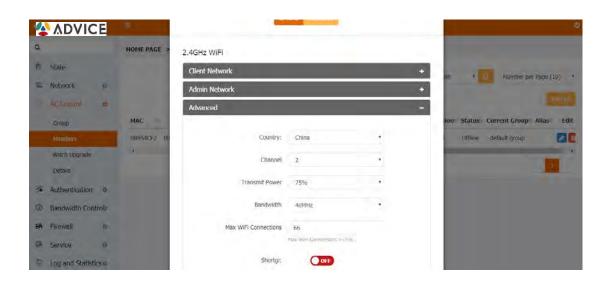


4.Click Management network

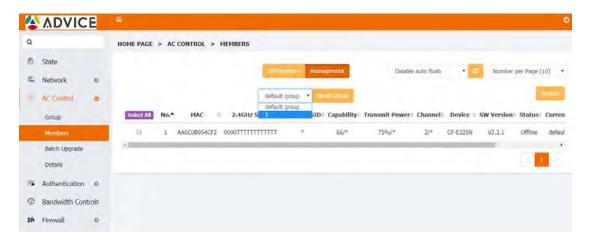


5.Click Advanced:



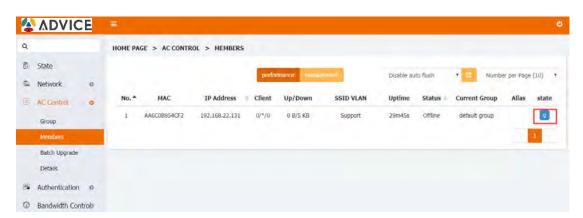


6.Change the group name:click the middle trilateral drop-down button -> choose the group name(comfast) -> select the devices -> click "move group" button.



6.Click "Performance" button to enter the performance display interface. Click the LED light control button to turn off the LED light of the management device.

Click again to open the LED light of the management device.

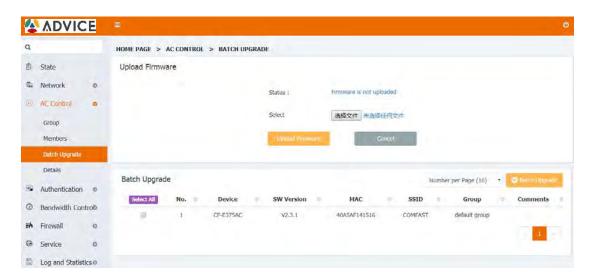


4.3 Batch Upgrade

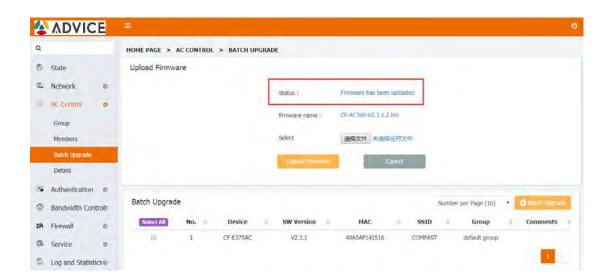


When all devices in one group are batch upgrading, connect with the upgrading computer will appear"Network connection is broken, pls reconnection", You can check the firmware version and other information in the relogin upgrade device, and you will find that the firmware version was changed, but the wireless configuration information will keep the old configuration.

1. Open WEB home page,go into AC Control's Batch Upgrade page,as below:

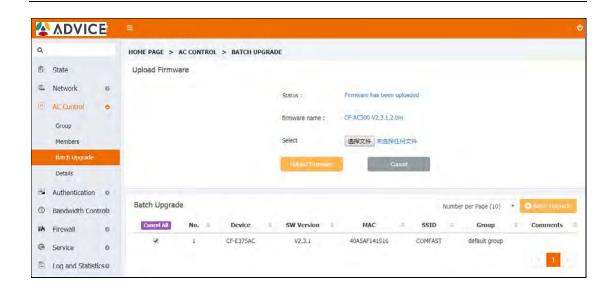


2. Click above picture's "Browse" button, choose the newest firmware which you want to upgrade in the local computer, click "Upload Firmware" button, it will be success to upload after 5 seconds, and the status will show "Firmware is uploaded", as below:



3.Choose the AP devices which you can to upgrade, click the "Batch Upgrade" button on the right, then the devices are on upgrading.





4.3 Details

This function displays all terminal entries under AC, including APs and wireless terminals connected to APs.

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



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





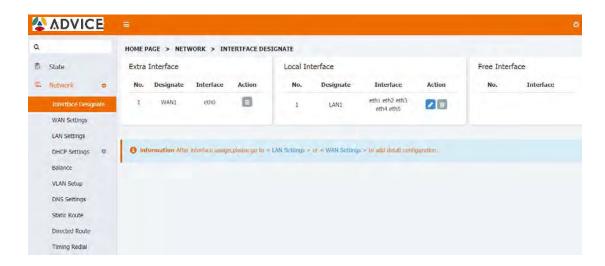
5 Authentication

5.1 Local Auth

5.1.1 OneKey Authentication

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

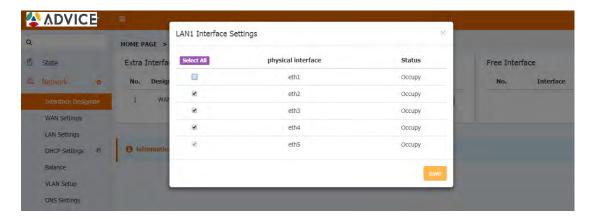
1.Login OrangeOS and go into the home page,"Network "-->"Interface Designate".



2.In the Local Interface, click above picture's "blue" Edit button which under the local interface, click edit cancel the eth1 select in the LAN1 port setting page, then the eth1 prot will



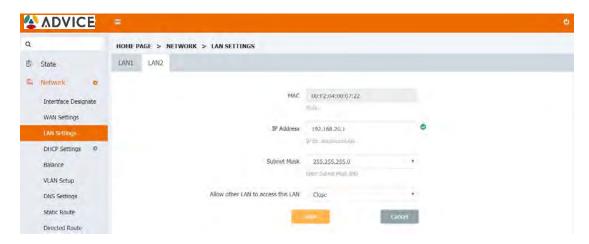
be freed, later clive "save".



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

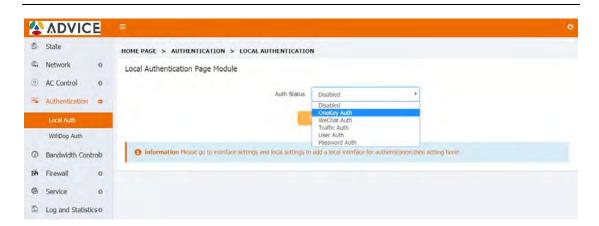


4.Go into Network--Local Network to setup LAN2's local address.

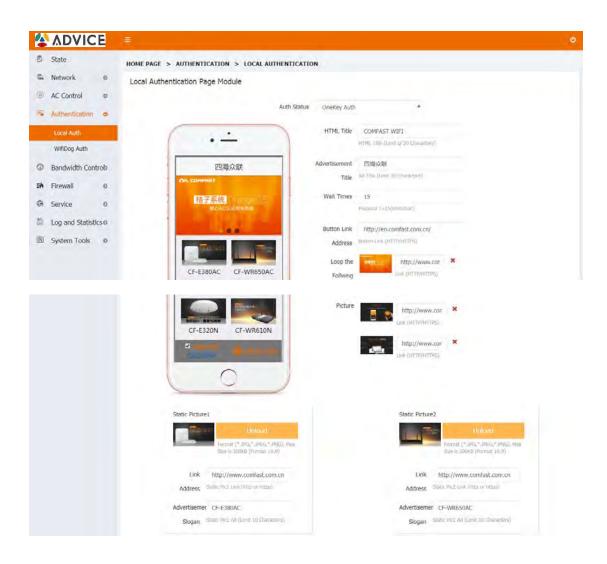


5. Click "Authentication Settings - Local Authentication" and select "Onekey Auth" for the authentication status.





6. Back to the Local Authentication page module and choose the Authentication type as local portal, click Upload to choose the ad image and fill in the link address (the link address need to fill in the full network address, such as http://www.comfast.com.cn), click save button, as below:





7. Bind the local interface below the interface and select the newly created LAN2.



8. Finished setup,use laptop connect AC's LAN2, setup obtain an IP address Automatically, once connected pls open the browser and click the local portal page which popping from any website, wait for 10 seconds, and click below's "connect to surf the Internet" (All devices which connect through LAN2 (such this example's configuration is the physical port eth1) all need to authenticate then can surf the Internet).

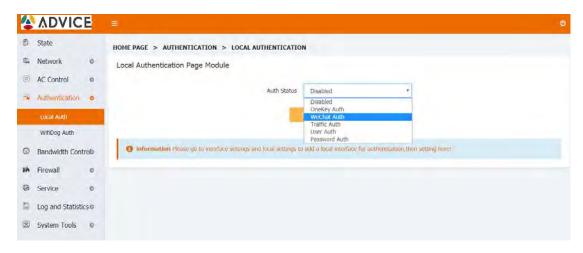


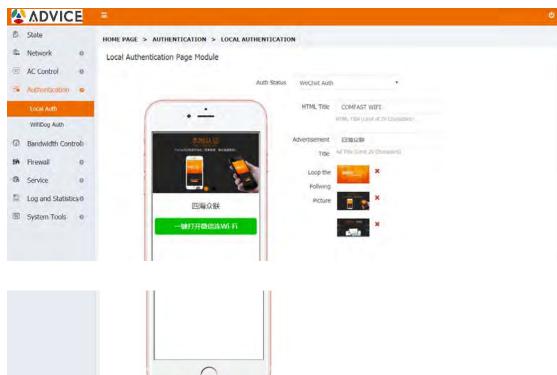
5.1.2 WeChat Authentication

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 above picture, then it will go into Wechat connecting Wi-Fi page, as below:



5.Click above picture's "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 eth1) need to authenticate then can surf the Internet.



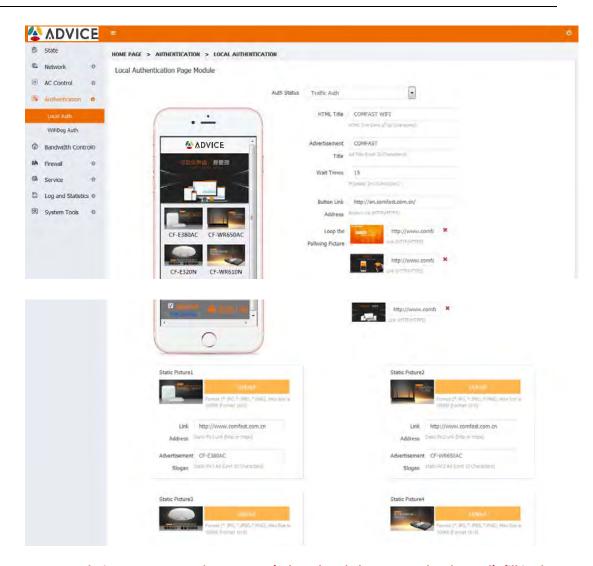


5.1.3 Traffic Authentication

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 (eg: 1024), then click save button, as below:



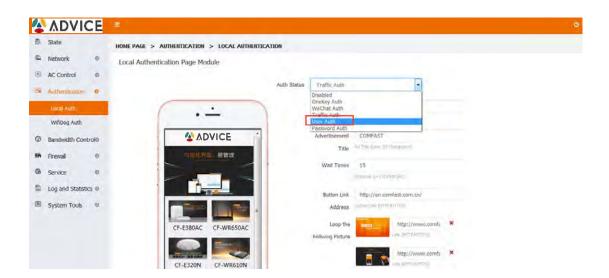


3. Once the setting is complete, use router's WAN port to connect with LAN2 of AC, setup obtain an IP address automatically, connect the router's wifi by cellphone, after connection, open the browser and click any website then it will popping the traffic authentication page, after the authentication can be normally 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

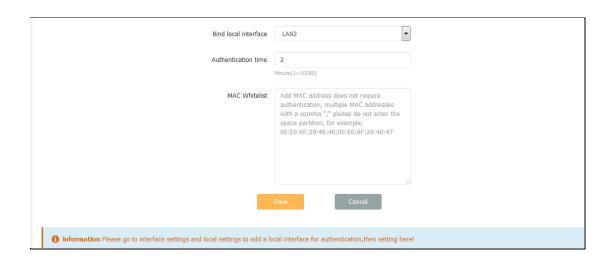
User authentication: authenticated by account and password

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.

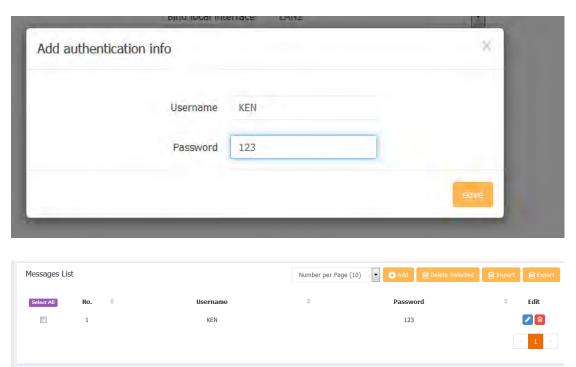


2. Bind local interface Select LAN2 port (Lit has already been set at local portal), set the authentication duration, and then click the save button, as below;





3. Add authentication user information at the bottom of the page, click the "+Add" button, enter the account number and password in the pop-up input box (eg: KEN/123), click "Save"



4.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:





5. Enter the correct authentication password (such as: KEN/123), click on the login, automatically jump to the page after successful login, this time the certification is completed, you can normally access the Internet



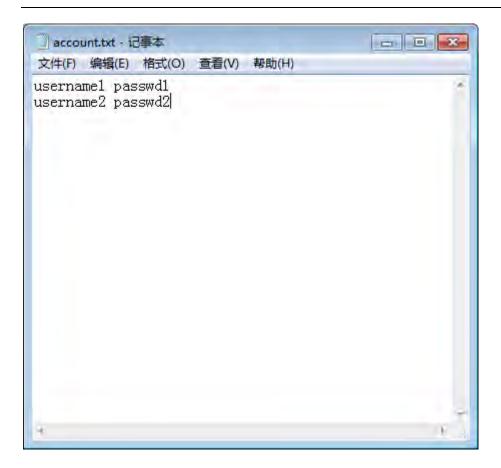


6. You can import account information in batches by importing files. The file content format is: username1 passwd1

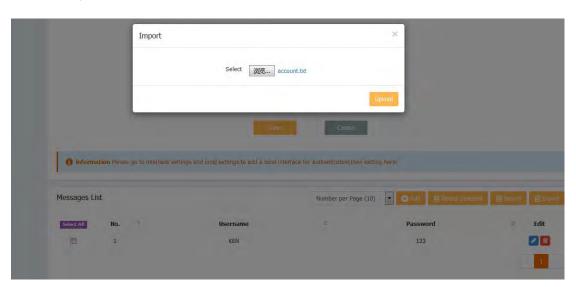
username2 passwd2

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



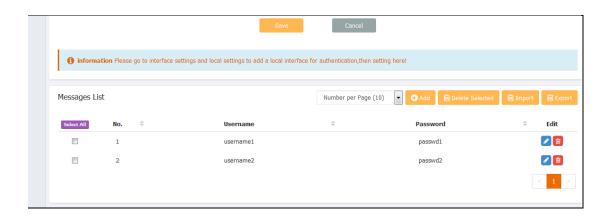


Click the Import File button and select the file account.txt.



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 previous useful account in advance.

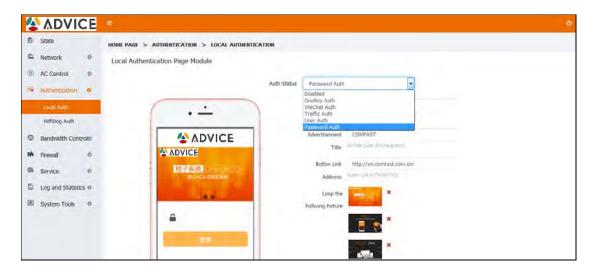




Click Export File to export the current account information to the account.txt file.

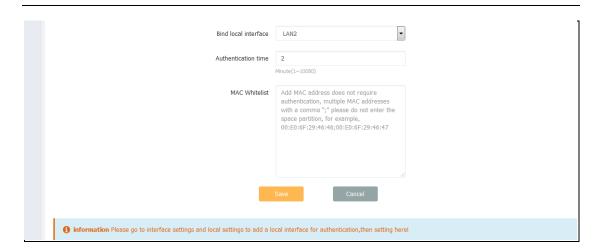
5.1.4 Password Authentication

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, then click save button.

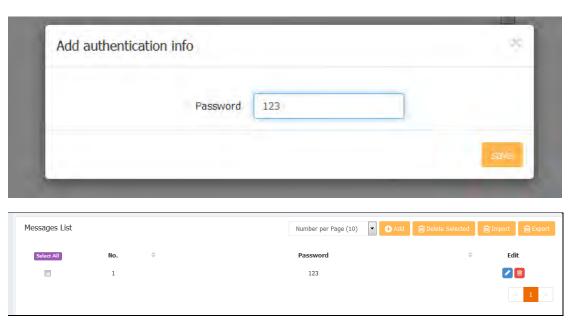


2. Bind local interface Select LAN2 port (LIt has already been set at local portal), set the authentication duration, and then click the save button, as below;





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 (eg: 123), click "Save"



4.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 Password Authentication page, as below:





5. Enter the correct authentication password (such as: 123), click on the login, automatically jump to the page after successful login, this time the certification is completed, you can normally access the Internet

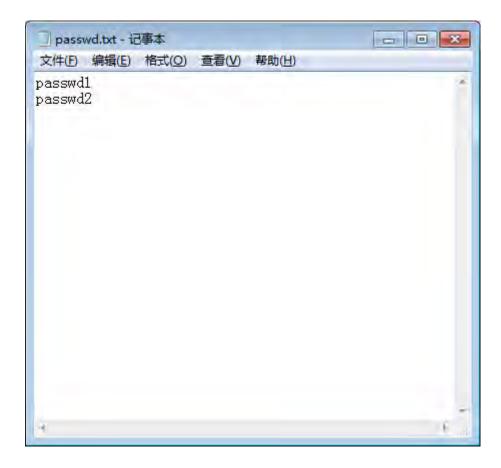


7. You can import account information in batches by importing files. The file content format is: passwd1



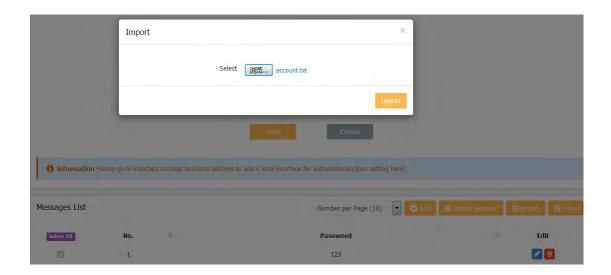
passwd2

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 user name and password 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.

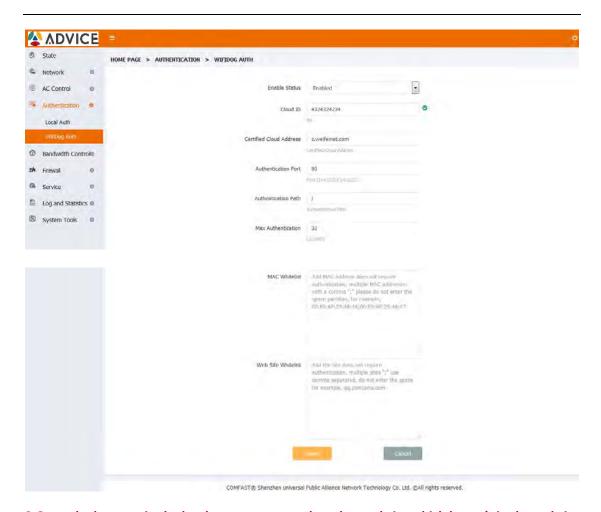


Click Export File to export the current account information to the passwd.txt file.

5.2 Wifidog Auth

1.Go into WEB home page,"Authentication"---"wifidog auth",then choose the Enable status as Enable,setup relative parameters,click save button,as below:





2.Open the browser in the local computer, open the other website which haven't in the website white list, then it will popping the authentication page, as below:



3.Use device's PC which use MAC white list(two MAC all is the laptop's MAC) to open the browser, and here will not popping the authentication page in any websites, as below:





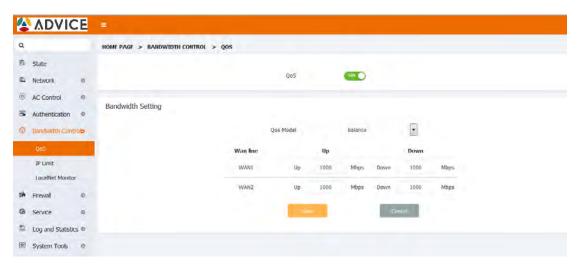
6 Traffic Control

6.1 Qos

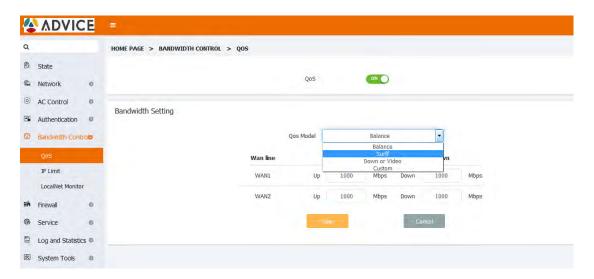
When here are many ISP lines connect to the device, open the traffic switch, setup every ISP line's upstream and downstream bandwidth by the real network situation.

1. Go to Oos page, setup the relative parameters, fill in the actual downlink 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 use of the user

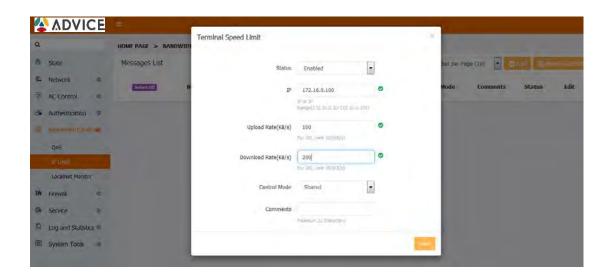


6.2 IP Limit

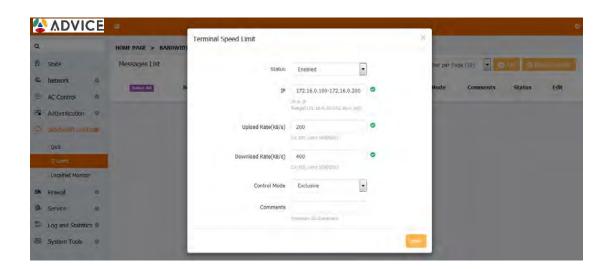
According to the IP address can control the uplink and downlink traffic of signal user.

1. Go into the IP LIMIT page, add a single IP speed limit information, IP: 172.16.0.100, up and down are 10 and 10, then the user's uplink and downlink speed and speed limit values should be same.

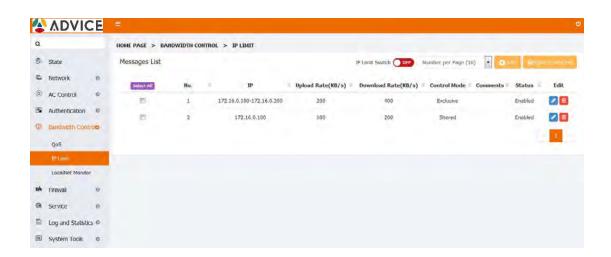




2. Go to the IP Limit page and add the IP limit information, ip: 172.16.0.100-172.16.0.200, with 200 and 400 upstream and downstream respectively. The exclusive bandwidth is the independent speed limit setting for all users in the network segment. The bandwidth and the shared bandwidth are the bandwidths 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.



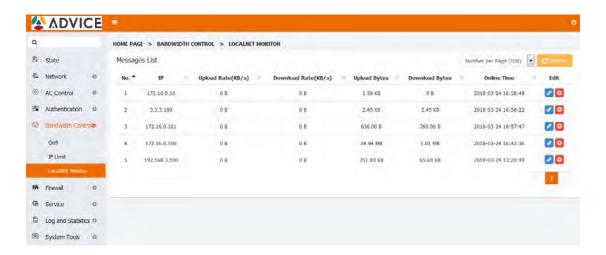




6.3 Localnet Monitor

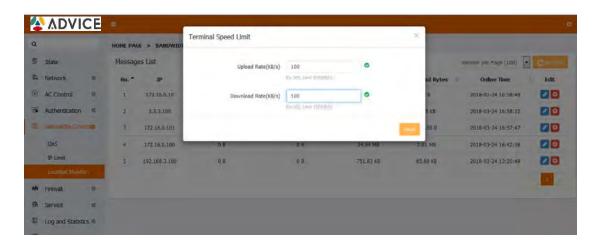
Real-time monitoring of each user's uplink and downlink rates and uplink and downlink total traffic, and will automatically update real-time, you can manually add each user to a single IP speed limit list to control a single user speed.

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

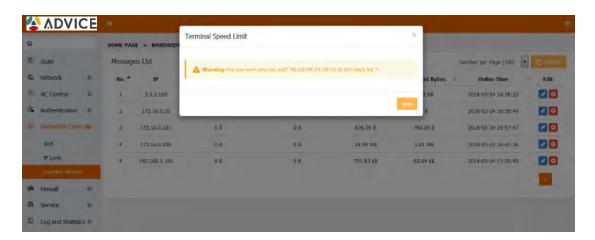


2. Click on the 'Edit' icon of one user, to realize single IP speed limit of the user





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



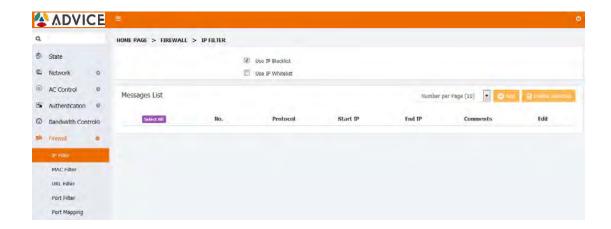
7 Firewall

7.1 IP Filter

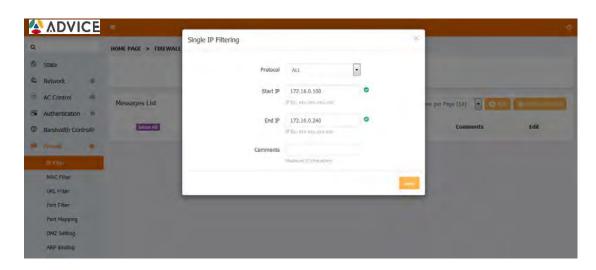
Here you must know the IP which the computer achieved and the device allocated, and confirm that which computer achieved IP or IP segment neet to filter forbid visit network base on the practical situation.

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 settup page, setting the filterable IP segment range which you need, then click "save" as below:

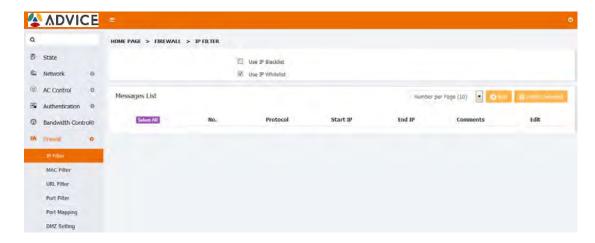


3.Open the native's browser, and it can not open the website normally, because the native IP:192.168.10.101 is in the filterable segment range, as below:





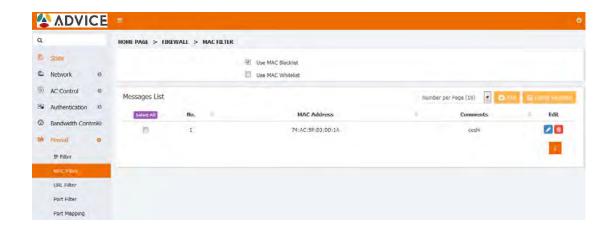
4. Switch to the white list. Only users in the white list can access the Internet. Other users cannot access the Internet.



7.2 MAC Filter

Here you must know the computer native lan card's MAC address, then enter the corresponding computer MAC address forbid visit network in the device MAC Filter.

1. Login the router's WEB page,go into the "MAC Filter" page in Firewall, setup PC1 MAC address and save the setting.

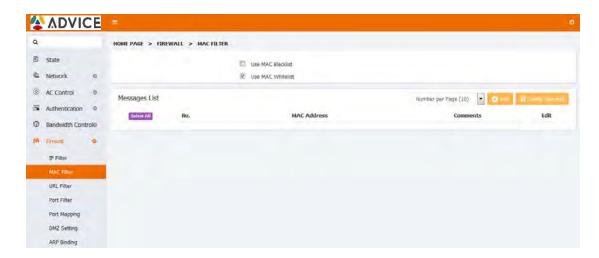


2. Open the local browser. The filtered device cannot access the Internet normally.





3. Modify the MAC address whitelist mode. Only devices in the whitelist can access the Internet. Other devices cannot access the Internet.



7.3 URL Filtering

Here you can setup the website address to filter which you need, and the setup address can not open.

1. Login the router's WEB page, click function setting and enter "www.baidu.com" in the website filter.





2. Open browser, visit www.baidu.com in the Internet, and this moment, the PC can not success to visit the website, but can visit the others.





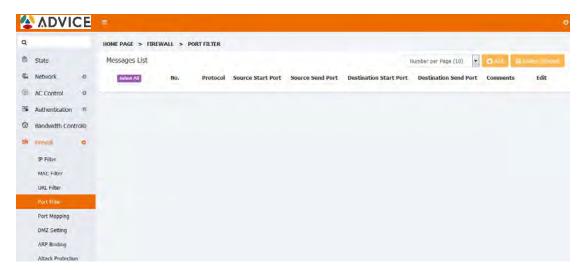
7.4 Port Filter

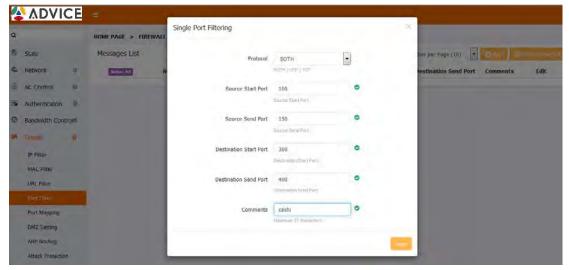
When in actual use, certain ports need to be filtered, the port filtering module allows some



internal services to be used or prohibited by internal users by opening or closing some ports.

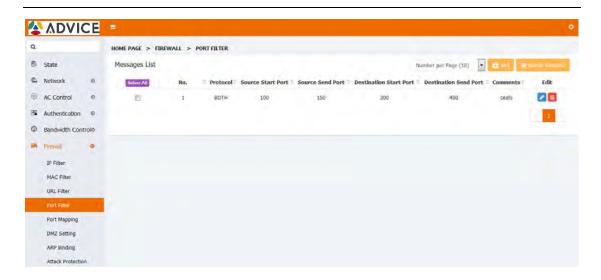
1. Home page click on "Firewall-Port Filter" to enter the port filter page, click on the "+ Add" button to pop up the port filter settings box





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

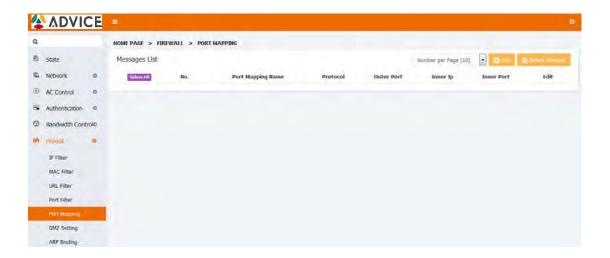




7.5 Port Mapping

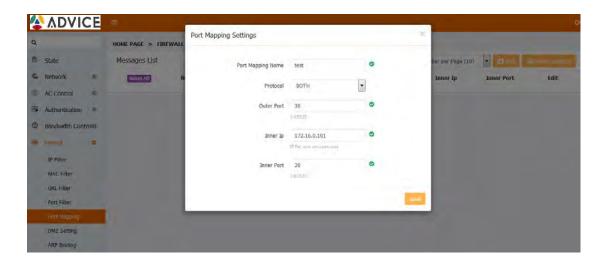
Sometime called channel, it is one way for the save shell (SSH) use for the network safety communication. Port Forwarding is the behavior of forward one network port from one network node to the others, it is one port to let the external user reach one private inner IP(internal Internet) through one activated NAT router.

1. Login the router's Web page, finish setup in the firewall page.

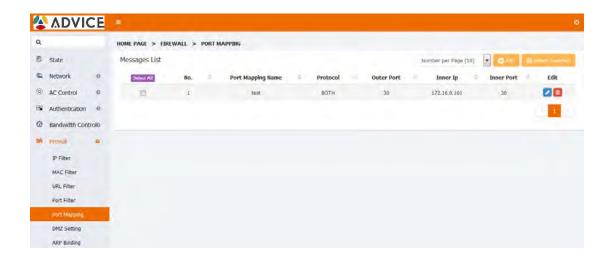




2. Click above picture's "+add" button,go into the Single Port Filtering page,setup the relative parameters.



3. Click save and go into the Massages List page, and now the port forwarding function is successful configuration (the port is mapped to the external network port 30 to the internal network port 40).

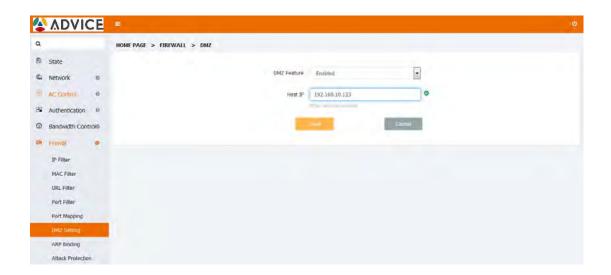


7.6 DMZ settings

DMZ settings:DMZ is Demilitarized Zone. For solving the problem of external network accessing user can not visit the internal web server after install the firewall, so that set up this buffer



between nonsafety system and safety system. That buffer is located in a small web area between enterprise internal network and external network. You can place some server facilities which need to 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. (Attn: when you use DMZ area, you need to eliminate your router's visit port in your DMZ.)

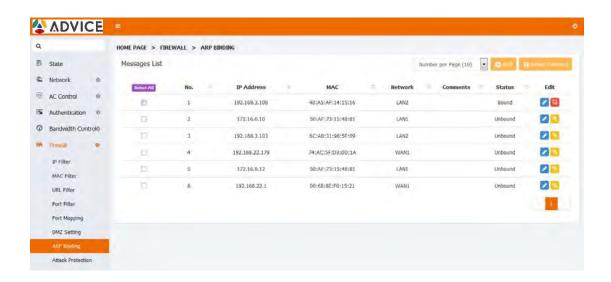


7.7 ARP Binding

ARP Binding:Address Resolution Protocol, it is a TCP/IP protocol which receive the physical address by IP.

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

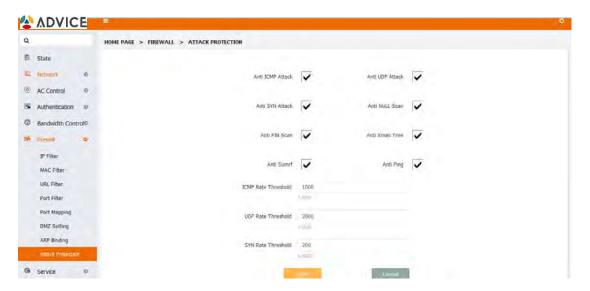




7.8 Attack Protection

Distributed Denial of Service (DDoS) attack is currently a common network attack method, and its English name is called Distributed Denial of Service. DDoS attacks are very harmful and difficult to prevent, and can directly cause website downtime and server crashes, causing authority. Damage, brand shame, loss of property, and other huge losses, open DDOS 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 items, and click on save

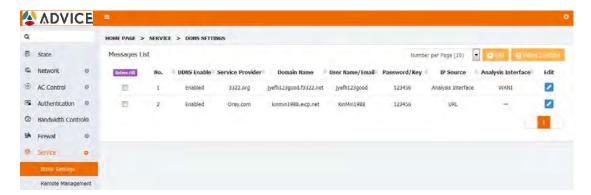




8 Service

8.1 DDNS Settings

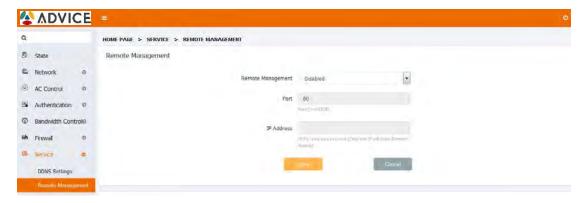
Add your domain name, domain name and password here. This supports dyndns, 3322, Oray three ways of domain name resolution. (Note: If the device is used as the primary route for PPPoE dialup, the source of the IP address is selected to resolve the network adapter. If you are doing the secondary or lower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



8.2 Distance Setting

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

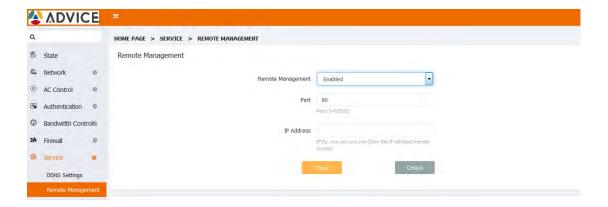
1. Click "Service - Remote Management" on the main interface of the product to enter the remote setup page, as shown below



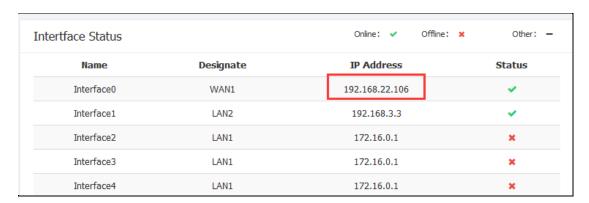
2. Switch is selected to start, the port enters 1~65535 any one port, ip address default to

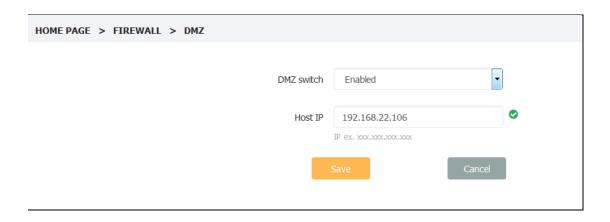


remain empty, enter the specific ip only allow other network ip remote access, do not enter any external network IP remote access, and then click Save



3. Enter the gateway of the upper-level route to set up the virtual server, ip is the WAN port ip of the AC300, 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.





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.

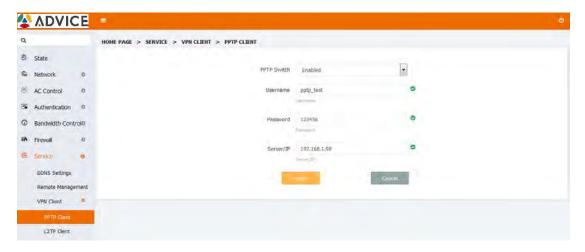


8.3 VPN Client

8.3.1 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.

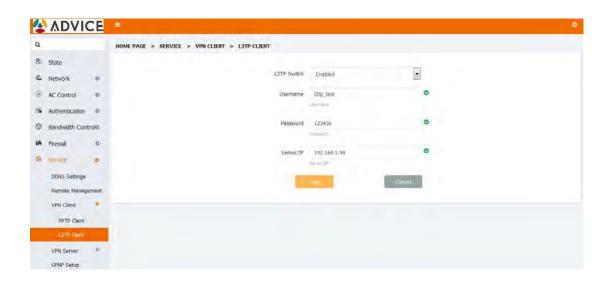


8.3.2 L2TP Client

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.



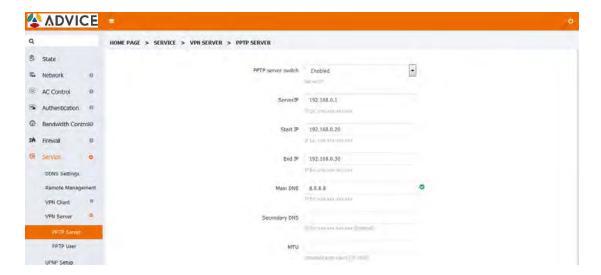


8.4 VPN Server

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 safety transmitting in the public network through this tunnel. So the user can vividly call it "Network of Network".

8.4.1 PPTP Server

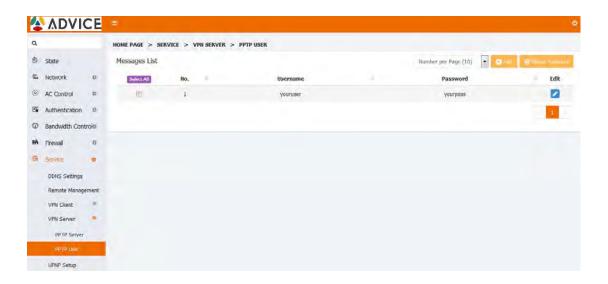
1.Go into PPTP Server setting page, enter VPN account and password, as below:







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



3. Open another laptop, connect to the external network, ip address must follow the map VPN server is not in the same network segment, and set up a destination host ip 192.168.100.157 VPN connection, as below







3. Open the VPN quick connection to the laptop network connection, enter the user name and password added by PPTP, test the connection is successful, and assign the specified IP address, as below:





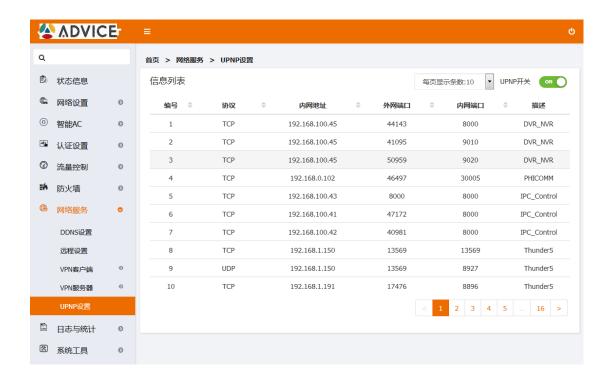


8.5 **UPNP Settings**

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.



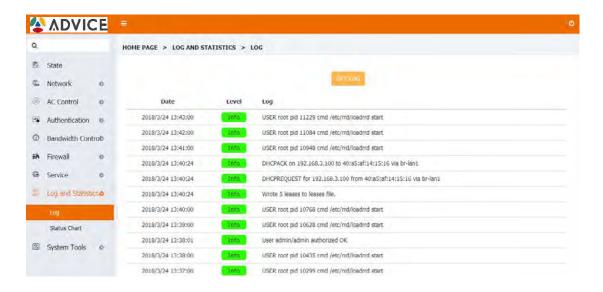
9 Log and Statistics

9.1 Log

User log: Here recorded the system's working status situation when the device is working.

1. Go to WEB and open Log's User log page, click "GET LOG" button, then the bottom of the page will refresh the log details every moments, as below:

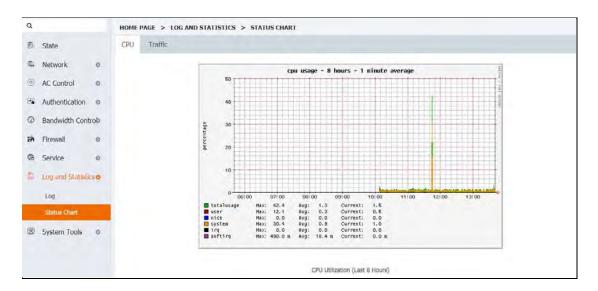




9.2 Status chart

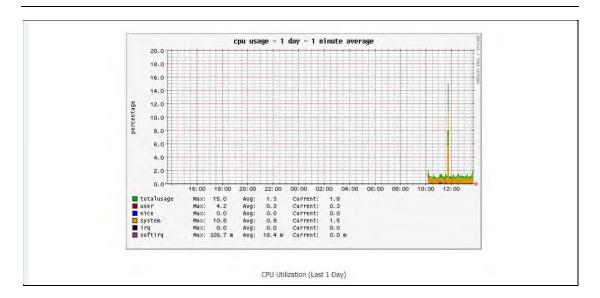
Historical Statistics

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

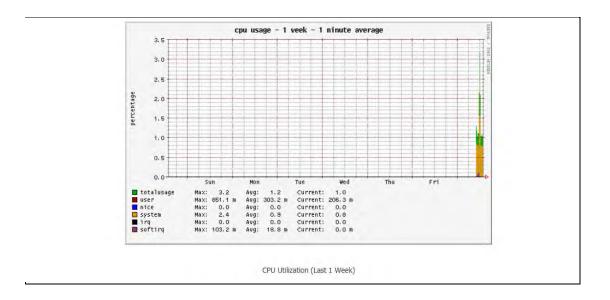


<8 Hours>





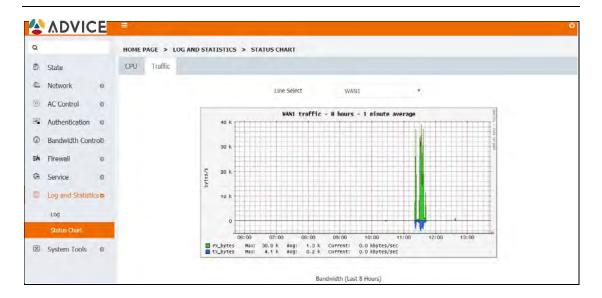
<One Day>



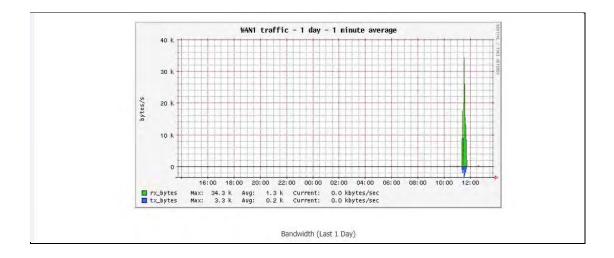
<One Week>

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



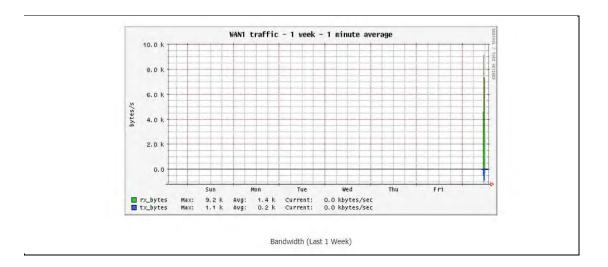


<8 Hours>



<One Day>





<One Week>

10 System Tools

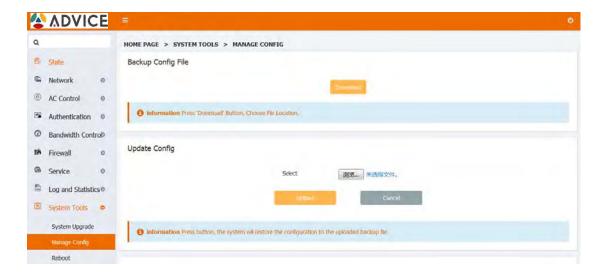
10.1 System upgrade

1.Download the newest X86 OrangeOS firmware in the website www.comfast.com.cn, download and keep it on the computer.Go into the system upgrade page, click to choose the firmware you had downloaded in this page.Then click "Upgrade Firmware" button to upgrade.





10.2 Configure Backup



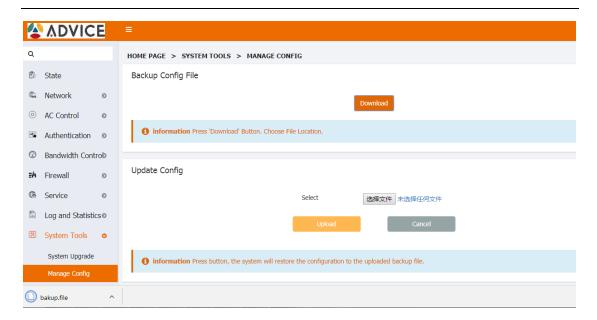
Configuration backup:after you configure the device's parameters, you can click "download" button to save the configure parameters.

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 desktop;





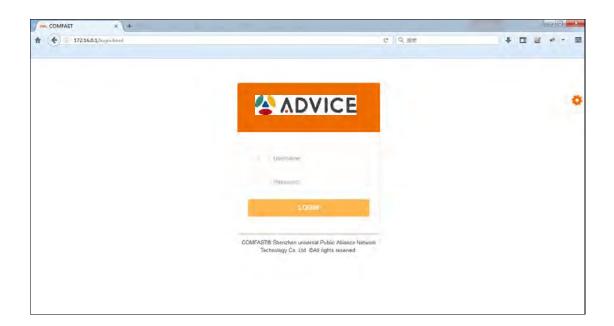
Configure Update:If you need to change the configure temporary or the device was restored the default settings carelessly,you can select to choose the configure file that you save before.click "upload" button to restore.

1.Go into the configure backup page, click configure update's scan, choose the bakup. file you save before.



2. Click "Upload" and some times later here will popping the interface to login again.





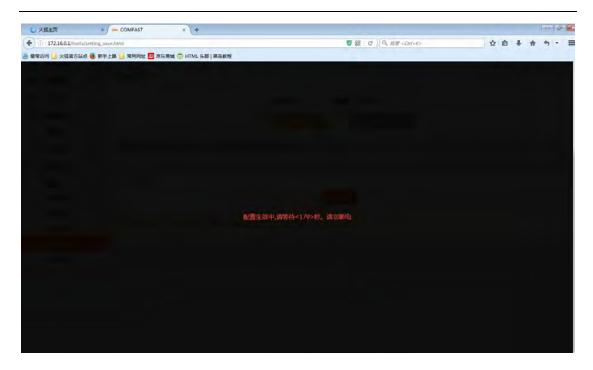
Restore factory settings:when you have setting lots of parameters or the devise network throughput is unusually,you can click "restore factory settings" button to restore the factory status.

1.the configure backup page, click "restore factory settings" button

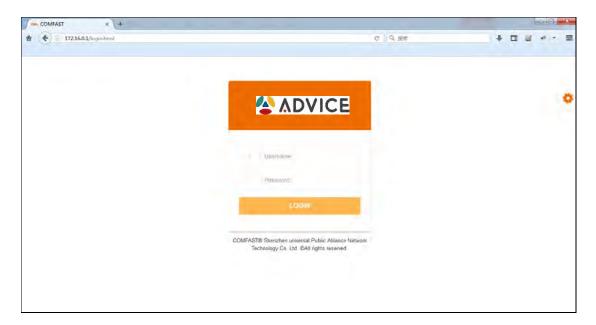


2.Here will popping the notice information: the configuration is effecting, pls wait for <180> seconds, Pls do not outage.





3. 3 minutes later here will automatic popping a interface to login again, it is success to restore factory settings.

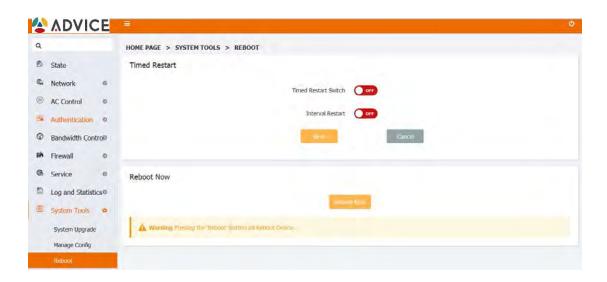


10.3 System Reboot

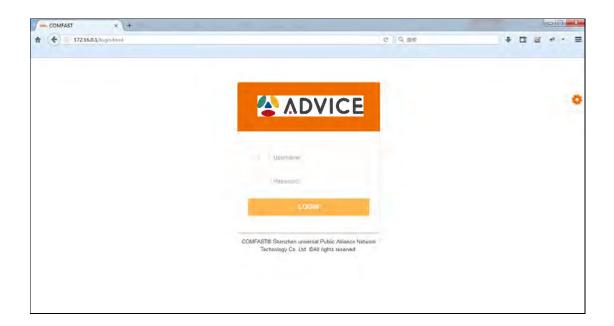
10.3.1 Reboot Now

1. Go into the system reboot page, click "Reboot Now" botton.





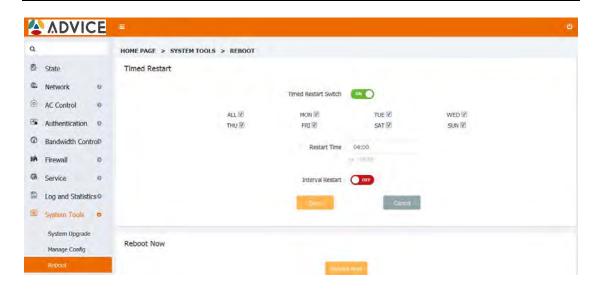
2. Wait for 1 minute, it will restart and come out login interface.



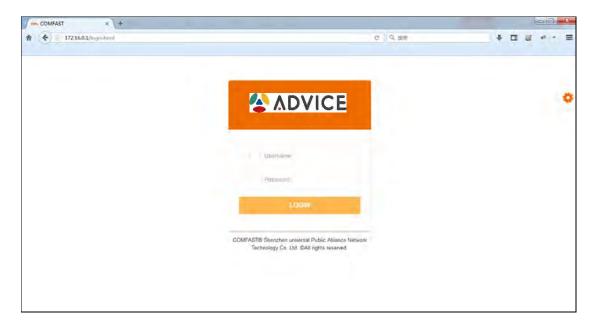
10.3.2 Timed Restart

1. Go into the system restart page, you can open a scheduled reboot, check the restart date, fill in the restart time, click Settings



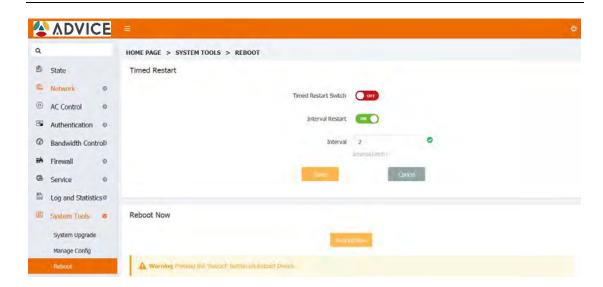


2. After successful saving, the device will restart automatically every time you fill in, automatically pop-up to re-enter the system interface

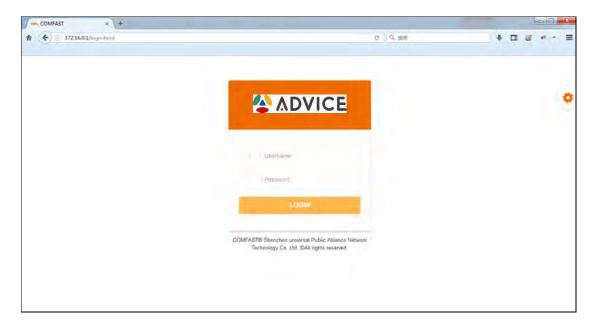


3. Go into the system restart page, you can restart the function interval, fill in the interval restart time, click Settings





4. As shown above, the device restarts every two hours. After the restart is successful, the system will automatically re-enter the login interface.

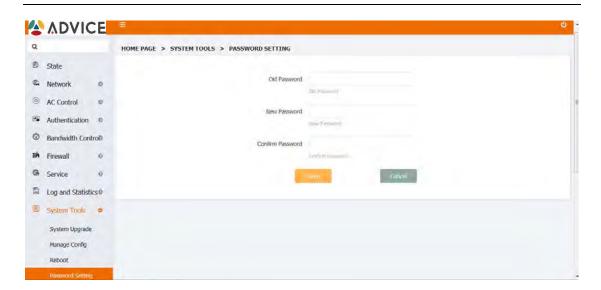


10.4 User setting

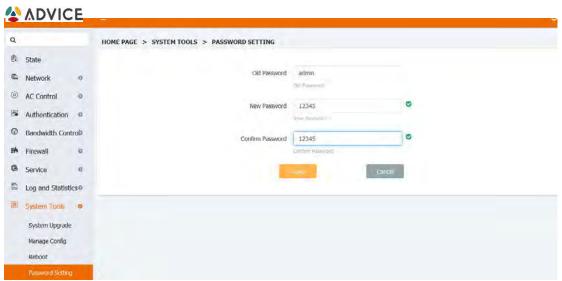
Here you can renew the Username and Password,after setting you need to use the new username and new password to login.(ATTN:the username support Chinese)

1.Go into WEB home page and open system tool "User setting" page, as below:



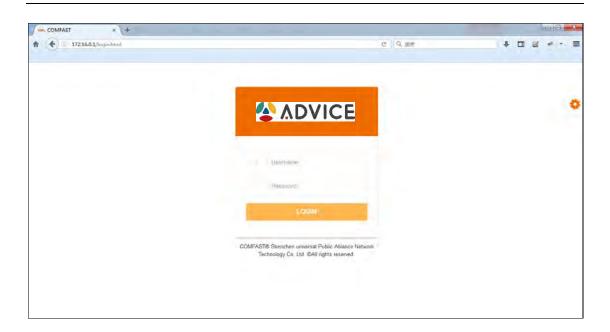


2.Enter the new password, click save:



3. Wait for some seconds and here will popping anew login interface, and you need to enter the new password to login.

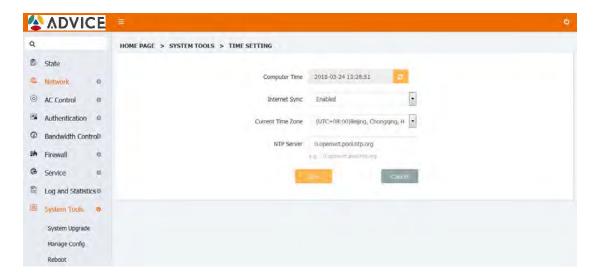




10.5 Time Setting

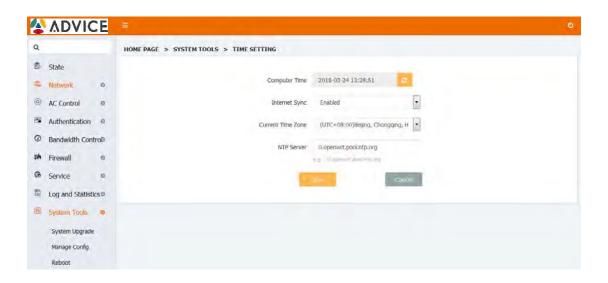
Here you can setting the sync Computer time, open Internet sync time, the device will be automatic sync server time at the situation of networking.

1.Go into WEB home page and open the system tool "PING" page, as below:

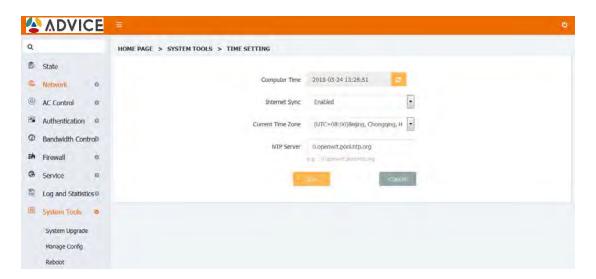


2. Click Internet sync switch's black button, choose "Enabled", then click save.





- 3. Wait for 5 seconds, the computer time will be consistent with the network time, and will automatically synchronize;
- 4. Disable the computer time, use the time set by the machine, you can turn off the Internet time synchronization, manually set the device time.

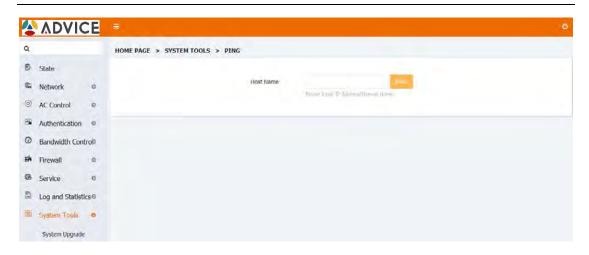


10.6 PING Tools

Here fill in the IP/Domain name, the system will show the situation that if it is connected, transmitted or received and delay.

1. Go into WEB home page and open the system tool "PING tools" page, as below:





2.Enter IP: 172.16.0.1,click "PING"button,wait some seconds later,it will show the result,as below:

