



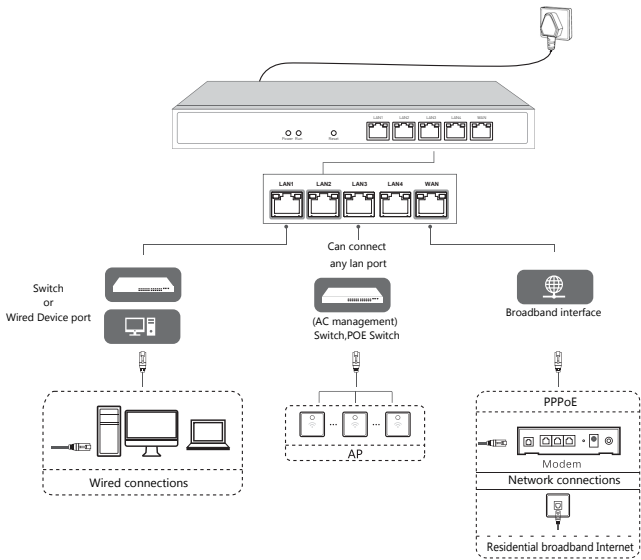
Enterprise Level Multi-Function  
flow control Gateway

# Quick Install Guide

## Multi-functional appliance

Gateway - Router - Load balance - Firewall - Controller - Captive portal

## 01/Route Connection



## 02/Route Settings

### 2.1 Login Device

Connect Lan port of device to PC, login in via IP:Port 172.16.0.1:2011 ,ID/Password: **admin** as below:

MULTI-FUNCTION GATEWAY									
Current operation System Status >> Device Info									
Refresh   Change password   Logout   Language   English									
<b>System Status</b>									
Device Info									
Interface Status									
LAN IP Flow									
Application Flow									
<b>Network Configure</b>									
Flow Control Policy									
AC Management									
Auth Internet Access									
Behavior Control									
Object Management									
Safety Protection									
Log Record									
VPN									
Device Maintenance									
<b>Network interface status</b>									
LAN1 LAN2 LAN3 LAN4 WAN1									
Interface Type Link mode IP address MAC address Receive speed Send speed									
WAN1 WAN port Online 100MFull duplex 192.168.1.2 88:21:15:17:00:00 2.24 MB/s 83.52 KB/s									
WAN2 WAN port Online 100MFull duplex 192.168.0.3 88:21:15:17:00:00 6.62 MB/s 239.93 KB/s									
LAN3 LAN port 1000MFull duplex 172.18.0.1 88:21:15:17:00:00 0.26 KB/s 0.30 KB/s									
LAN2 LAN port 1000MFull duplex 172.17.0.1 88:21:15:17:00:00 32.90 KB/s 614.29 KB/s									
LAN1 LAN port 1000MFull duplex 172.16.0.1 88:21:15:17:00:00 247.19 KB/s 8.35 MB/s									
<b>Device basic information</b>									
Device ID: 88:21:15:17:00:00 Max Users 256, Max AP can be managed 256									
Uptime: 23:21:57 up 7 days									
Memory utilization: 12% 59.69MB/498.17MB									
CPU utilization: 12%									
Connection monitoring: 8% 4237/50000									
Online users: 252 users									

Port	IP Address	Mask
LAN1	172.16.0.1:2011	255.255.0.0
LAN2	172.17.0.1:2011	255.255.0.0
LAN3	172.18.0.1:2011	255.255.0.0
LAN4	172.19.0.1:2011	255.255.0.0

\*Note:Please check the IP address of default port above .

### 2.2 WAN port settings

[Network configuration] [Interface Configuration] "External network configuration", select the network port to configure, and configure the information of the external network, as shown in the following image:

<b>System Status</b>	
<b>Network Configure</b>	
Interface Configure	
WAN Configure	
LAN DHCP	
Physical Port Definition	
Route Rule	
Multi-line Deversion Rules	
Static Route	
DDNS	
NAT/Port Forwarding	
Flow Control Policy	
AC Management	
Auth Internet Access	
Behavior Control	
<b>WAN1 Interface configure</b>	
Internet access ADSL/PPPoE Static IP DHCP	
Specify DNS:	
Line interruption detection:	
Please input two public network server IP which ping stable as IP detection	
Ping detect IP 1: 0.0.0.0 Ping detect IP 2: 0.0.0.0	
Advanced configuration	
DHCP obtaining status Obtain IP success!	
IP address: 182.17.0.101	
Netmask: 255.255.255.0	
Default gateway: 182.17.0.1	
DNS server: 182.17.0.1	
Smart QoS Enable	
Bandwidth setting Upstream 100000 / Downstream 100000 KBps	

**Internet access:** (choose how to access the Internet according to the actual situation)  
**ADSL/PPPoE:** Fill in bandwidth account numbers and passwords (this type of Internet access is recommended)  
**Fixed IP:** Fill in IP, mask, gateway and DNS provided by the operator  
**DHCP:** Direct access to lines provided by the operator to obtain IP  
**Line interruption check:** detect whether the line is connected to the network, if the line is not accessible or the linequality is poor, the packet is serious, the route is automatically processed, does not load to the Line.It is recommended to enable line interrupt detection.  
**Bandwidth configuration:** configure the bandwidth of the line, such as the dial-up fiber of the upstream 4M downlink 100M, can be configured with behavior 500KB, downside 10000KB.Configure the line Bandwidth is important, and intelligent streaming is automatically streamed based on the bandwidth that is matched. (The "Enable Smart Streaming" option needs to be checked to configure bandwidth values for effective)

### 2.3 Physical port division

This feature supports separate and merge port divisions.When the main road is recommended to use the merge port division, that is, open All LAN ports are one LAN1 port function. If it is bypass mode, it is recommended to turn this feature off.Select the corresponding according to the actual situation Physical port division type, check "Merge all LAN ports as one intranet port (LAN1)."

Note: After the definition of the physical port feature is modified, the route needs to be reconfigured. [Note: The version of the [X86 platform](#) does not support Ethernet port merge].

**X86 Platform** include model: **GAC9500, GAC9600, GAC9800**  
**These models will use separate LAN ports and integrated VLAN function on LAN**

## 03/AC Management

### 3.1 AP Device List

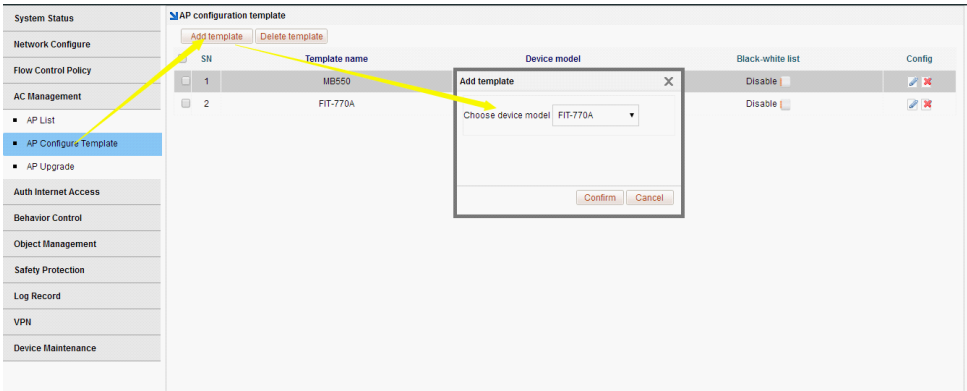
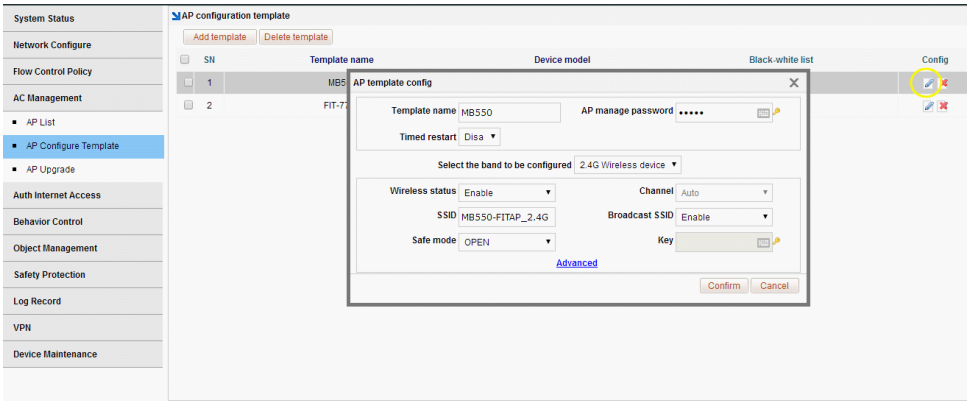
The AC controller feature allows centralized management and release configuration of the AP devices connected to it, with parameters including Line channels, SSIDs, transmit power, encryption modes and keys, AP coverage thresholds, number of access users, and VLAunID, as follows As shown in the figure:

<b>System Status</b>									
<b>Network Configure</b>									
Flow Control Policy									
<b>AC Management</b>									
AP List									
AP Configure Template									
AP Upgrade									
<b>Auth Internet Access</b>									
<b>Behavior Control</b>									
<b>Object Management</b>									
<b>Safety Protection</b>									
<b>Log Record</b>									
<b>VPN</b>									
<b>Device Maintenance</b>									
<b>AP list</b>									
Restart AP   Reset AP   Delete AP   Apply configuration template   Refresh   All device   device model filter   Search conditions: Device IP									
search									
Online AP quantity: Total AP: 6 / 7, AC service status: [online]									
SN AP name Device IP MAC address SSID(2.4G/5.8G) User Status Channel(2.4G/5.8G) Channel Analysis Power model AP version Uptime Black white list remarks Config									
1 My 172.16.0.102 88:21:15:17:00:00 770A_2.4G 0 online 10 2.4G 100% FIT- V5.3- 0:45:25 up Disable admin									
2 My 172.16.0.101 88:21:15:17:00:00 MB550- 0 offline 8 2.4G 100% FIT- V5.3- 0:45:25 up Disable admin									
3 My 172.16.0.111 88:21:15:17:00:00 Wireless_2.4G 1 online Auto[3] 2.4G 100% Pw1200 V3.2- 23:40:29 up Disable									
4 My 172.16.0.112 88:21:15:17:00:00 Wireless_5.8G 0 online Auto[11] 2.4G 100% FIT- V5.3- 23:40:5 up Disable									
5 My 172.16.0.113 88:21:15:17:00:00 Wireless_2.4G 0 online Auto[149] 5.8G 100% 770A Build20190419091759 4 days									

Note: The default configuration issued by AP is achieved by establishing the template, with one template for each model.  
Only in the AC list should The template of the corresponding model will be released normally.  
Note: An AP model can also create multiple templates.Apply to the same floor or geography of the same model A scene with a different location.

### 3.2 AP Device Configuration

AP device configuration, is a single AP or multiple APs in the list of parameter modifications, including the wireless state on or off, The modification of the channel, the modification of the wireless bandwidth mode, the modification of the AP coverage threshold, the modification of the transmit power, and the marking of the device location.



### 3.3 AP Upgrade Management

AP Upgrade Management allows you to upload the AP version that needs to be upgraded to the device, and then select the AP list in full or selected to upgrade, while also supporting the AP remote upgrade.

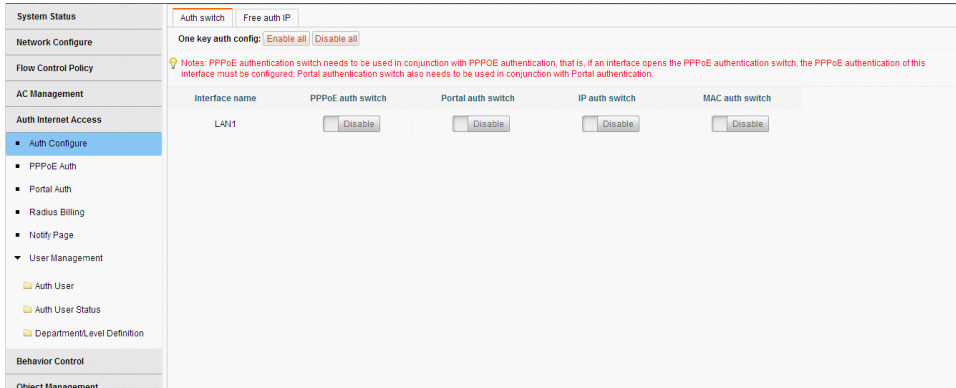


## 04/Authentications

### 4.1 Enable authentication to the Internet

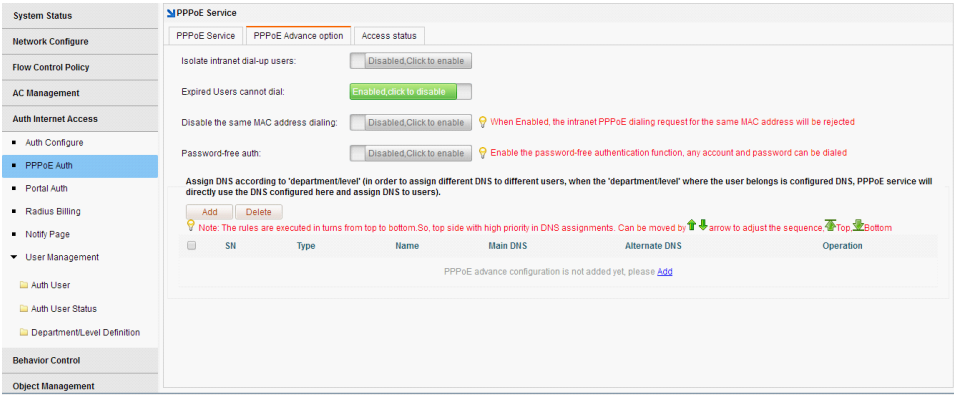
Enable authentication Online, means that only PPPoE dial-up authentication, WEB password authentication, IP authentication, MAC authentication.

Users can only access the Internet, for example, allow the user PPPoE dial-up Internet access under LAN1, certified Internet access , "Certification switch", select LAN1, enable the authentication network switch, check the type of "PPPoE dial" that allows Internet access, click Save.



### 4.2 PPPOE Authentications

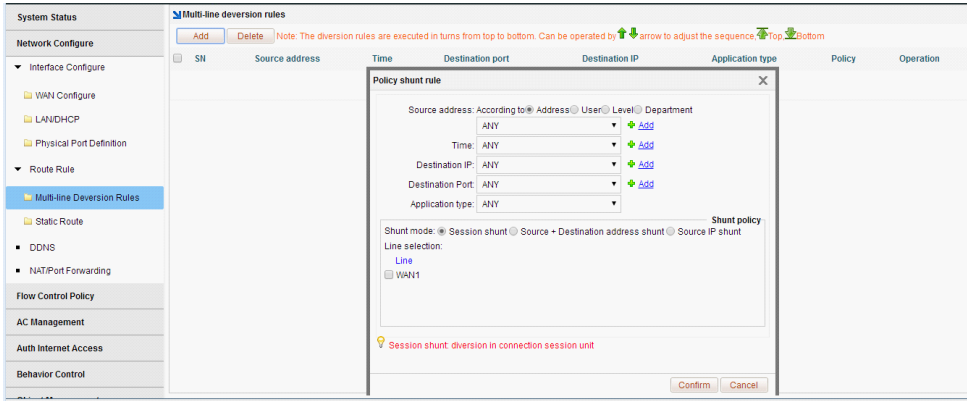
Users who use PPPoE dial-up Internet access need to enable PPPoE services at the intranet, such as PPPoE services on LAN1. (Certified Internet Access) (PPPoE Certification) (PPPoE Advanced Options) and select the app.



## 05/Configure shunt rules

### 5.1 Configuring shunt rules

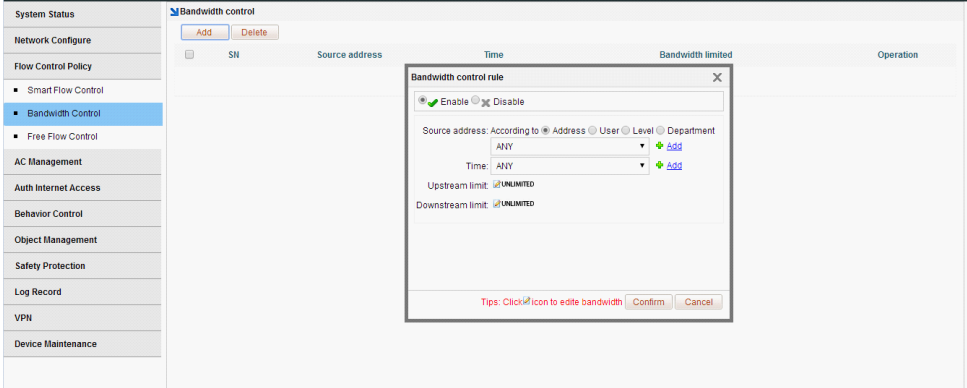
A single line can not configure a shunt rule; (Network configuration)  
Multi-line shunt rule, point Hit Add creates a policy shunt rule, selects the shunt mode, selects which apps the line hosts, and click OK after checking.



Note: Multi-line load balancing is achieved by shunt rules.

### 5.2 Configure bandwidth speed limit policy

Description: Routing has intelligent flow control function, configuration speed limit strategy, the purpose is to prevent the endonet machine poisoning, or advertising uncontrolled Upload, usually the speed limit up to 100-300KB, the downlink speed limit can be properly liberalized, such as the speed limit of 1000-3000, usually recommended The speed limit does not exceed one-third of the total bandwidth.



For example: a 50M peer fiber, then each machine speed limit up 100-300KB, down1000-3000 KB can be, advanced recommendation configuration P2P The limit allows 70% of the allowed for the upstream and 70% allowed for the downstream. As shown above (ANY means arbitrary, that is, anyone, any time)

## 06/Safety

### 6.1 End-network anomaly detection

Turn on DHCP detection to detect the presence of other DHCP servers in the intranet; Turn on Loop Detection to check the content for loops (for intranet fault positioning).

