FLYINGVOICE

VOIP ADAPTER USER GUIDE
FTA5120

Version 1.0.0
Sep. 2021

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Trademark

Warranty

1. Warranty

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2. Disclaimer

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Patent Information

China, the United States, EU (European Union) and other countries are protecting one or more patents of accompanying products and/or patents being applied by Flyingvoice.

Technical Support

Visit www.flyingvoice.com for product documents and FAQ, or contact Flyingvoice by email at support@flyingvoice.com. We'll offer the help you need.

Declaration of Conformity

Part 15 FCC Rules

This device complies with Part 15 of the FCC Rules. Operation is subject to the following three conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.
- The distance between user and products should be no less than 20cm.

Note: This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help.

Note: the manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate this equipment.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE

Manufacturer: Flyingvoice Network Technology Co., Ltd.

Address: Room 207~209, 2/F, Bldg B52#, Zhongchuang Industrial park, Liuxian Avenue, Taoyuan Street, Nanshan District, Shenzhen.

Hereby, Flyingvoice Network Technology Co., Ltd. declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU

A copy of the declaration of conformity can be obtained with this user manual; this product is not restricted in the EU.

The wireless operation frequency.

WIFI: 2412MHz-2472MHz, Max EIRP Power 19.36dBm.

Safety Warning and Attentions

If use adapter, adapter is required to comply 2014/30/EU Directive.

Adapter Caution: Adapter shall be installed near the equipment and shall be easily accessible.

Do not store or use your product in temperatures higher than 50ºC.

RF Exposure Statement

The distance between user and products should be no less than 20cm.

GNU GPL INFORMATION

Flyingvoice ATA firmware contains third-party software under the GNU General Public License (GPL). Flyingvoice uses software under the specific terms of the GPL. Please refer to the GPL for the exact terms and conditions of the license.

The original GPL license, source code of components licensed under GPL and used in Flyingvoice products can be downloaded online:

https://www.flyingvoice.com/download/gpl.html

Risk Warning Statement

This risk warning statement contains a summary of external network servers that FTA5120 will access under its factory settings in order to obtain necessary service support. If you want to prohibit these accesses based on security considerations, you can disable them through the web management page.

Number	Server Domain Name	Description	Factory Setting
1	https://prv3.flyingvoice.net:442	Flyingvoice Provision web management configuration server	Disable
2	http://acs3.flyingvoice.net:8080	Flyingvoice TR069 web management server	Disable
3	clock.fmt.he.net	NTP server	Enable
4	cn.pool.ntp.org	NTP Secondary server	Enable

Table of Contents

About This Guide

Thank you for choosing Flyingvoice FTA5120, which will allow you to make ATA call using your broadband connection.

This guide provides everything you need to quickly use your new ATA. Firstly, verify with your system administrator that the IP network is ready for ATA configuration. Also be sure to read the Quick Start Guide which can be found in your ATA package before you set up and use the IP ATA. As you read this guide, keep in mind that some features are configurable by your system administrator or determined by your ATA environment. As a result, some features may not be enabled or may operate differently on your ATA. Additionally, the examples and graphics in this guide may not directly reflect what is displayed or is available on your ATA screen.

Related Documents

The following types of related documents are available on each page:

- Datasheet
- Quick start guide

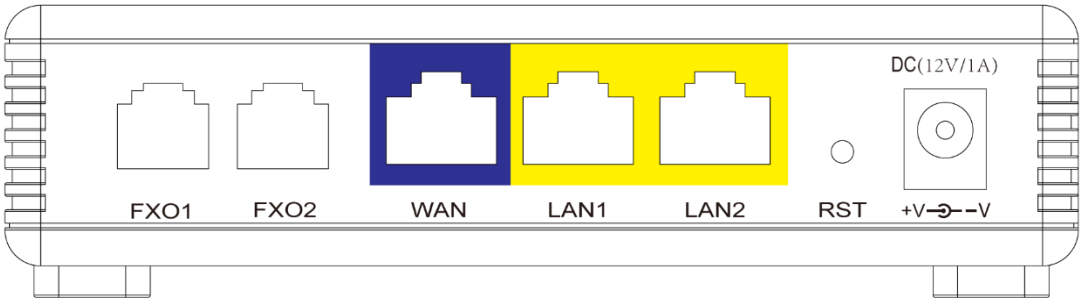
Getting Started with Your ATA

This chapter provides the overview of ATA hardware, and how to navigate your ATA for the best performance.

Hardware Overview

Topics

FTA5120 Hardware



NO.	Item	Description
1	DC (12V1A)	Power adapter interface
2	LAN1-LAN2	Local Area Network interface, connect RJ45 cable
3	WAN	Wide Area Network interface, connect RJ45 cable
4	FXO1-FXO2	FXO port, connect RJ11 cable

LED Indicator

The LED indicator indicates the call, message and ATA's system status.

LED	LED Status	Description
Power	ON(GREEN)	Powered on
	OFF	Powered off
WAN	ON(GREEN)	Connected (Data), running as active WAN
	On Blinking (GREEN)	Connected (Registered)

	OFF	Disconnected/Power off
LAN	ON(GREEN)	Connected (Data)
	On Blinking (GREEN)	Connected (Registered)
	OFF	Disconnected/Power off
FXO	ON(GREEN)	Connected (Registered)
	On Blinking (GREEN)	Connected (Data)
	OFF	Disconnected/Register fail
FXO	ON(GREEN)	Connected (Registered)
	On Blinking (GREEN)	Connected (Data)
	OFF	Disconnected/Register fail

Hardware Installation

Before configuring your ATA, please see the procedure below for instructions on connecting the device in your network.

1. Connect analog phone to FXO Port with a RJ11 cable.
2. Connect the WAN port to your ISP's ATA/switch with a RJ45 cable.
3. Connect one end of the power cord to the power port of the device. Connect the other end to the wall outlet.
4. Check the device LED to confirm network connectivity.

Warning

Please do not attempt to unsupported power adapters and do not remove power during configuring or updating the device. Using other power adapters may damage the device and will void the manufacturer warranty.

Warning

Changes or modifications not expressly approved by the party responsible for compliance can void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency cause harmful interference to radio communications. However, there is no energy and, if not installed and used in accordance with the instructions, may guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Documents

Name	Content	Location	Language
Quick Guide	Basic functions and customization	Package	CN/EN
		Flyingvoice Official website	CN/EN
User Guide	Web setting and advanced functions	Flyingvoice Official website	CN/EN

Basic Features

You can use the ATA to make a place and answer calls, ignore incoming calls, transfer a call to someone else, conduct a conference call and perform other basic call features.

Topics

ATA initialization

After the ATA is powered on, the following steps will be performed:

1. Please make sure that the network cable connected to the adapter can access the Internet normally, and the adapter is in DHCP mode by default.

2. Please connect the LAN port of the device to the computer. After the connection is successful, the computer will obtain the IP of 192.168.1.x and can access the Internet normally.

Note: If the ATA cannot obtain the network configuration through the DHCP server, please perform the basic network settings on page 11.

ATA Status

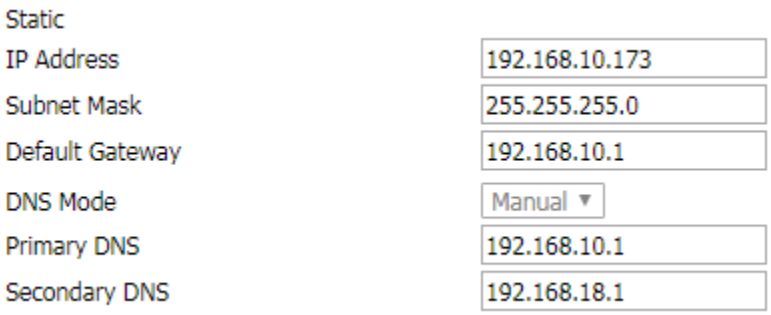
You can check the ATA status through the adapter web interface. The status information of the adapter includes:

1. Network status (currently active uplink status, etc.)
2. IPv4 address length is 32 bits
3. Device information (product name, hardware version, firmware version, product serial number, MAC address)
4. Account information (registered information for SIP account)

Basic Network Setting

Static IP

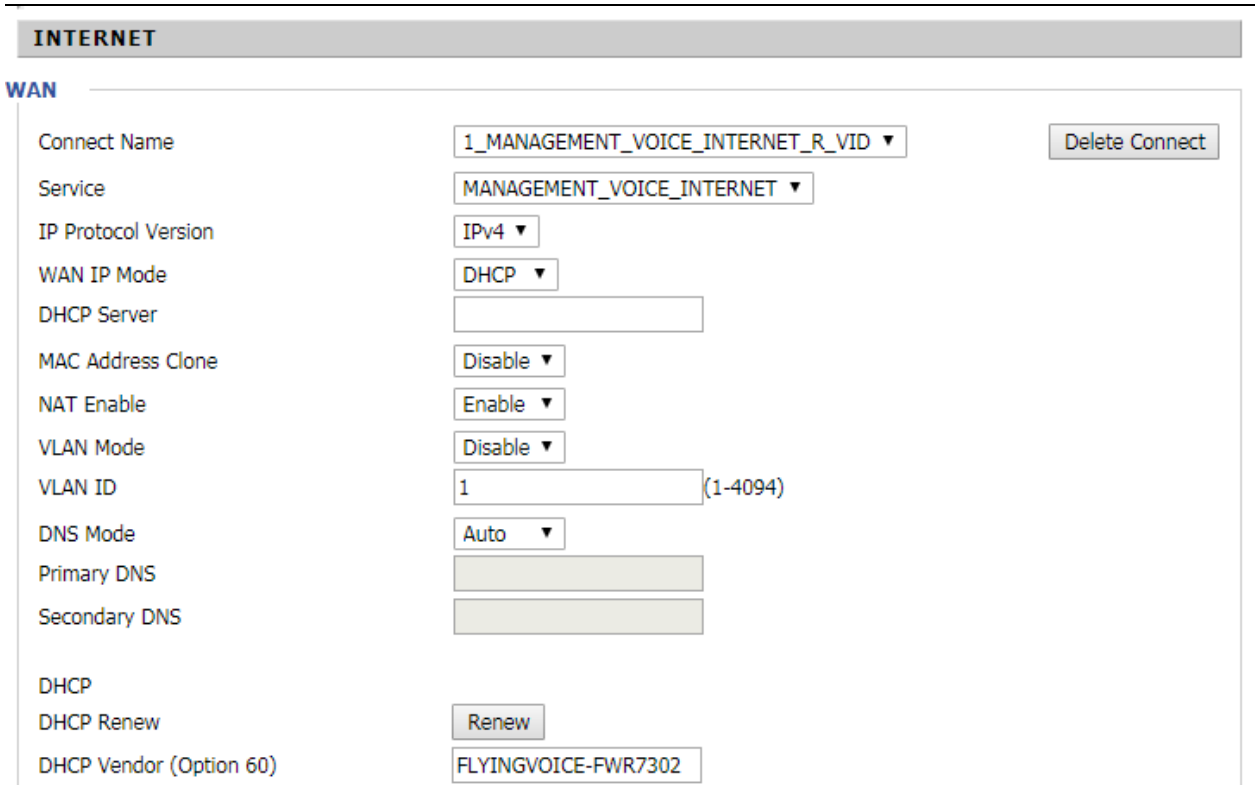
This configuration may be utilized when a user receives a fixed public IP address or a public subnet, namely multiple public IP addresses from the Internet providers. In most cases, a Cable service. provider will offer a fixed public IP, while a DSL service provider will offer a public subnet. If you have a public subnet, you can assign an IP address to the WAN interface.



Field Name	Description
IP Address	The IP address of Internet port
Subnet Mask	The subnet mask of Internet port
Default Gateway	The default gateway of Internet port
DNS Mode	Select DNS mode, options are Auto and Manual: 1. When DNS mode is Auto, the device under LAN port will automatically obtain the preferred DNS and alternate DNS 2. When DNS mode is Manual, the user manually configures the preferred DNS and alternate DNS information
Primary DNS Address	The primary DNS of Internet port
Secondary DNS Address	The secondary DNS of Internet port

DHCP

The ATA has a built-in DHCP server that assigns private IP address to each local client.
The DHCP feature allows to the ATA to obtain an IP address automatically from a DHCP server. In this case, it is not necessary to assign an IP address to the client manually.

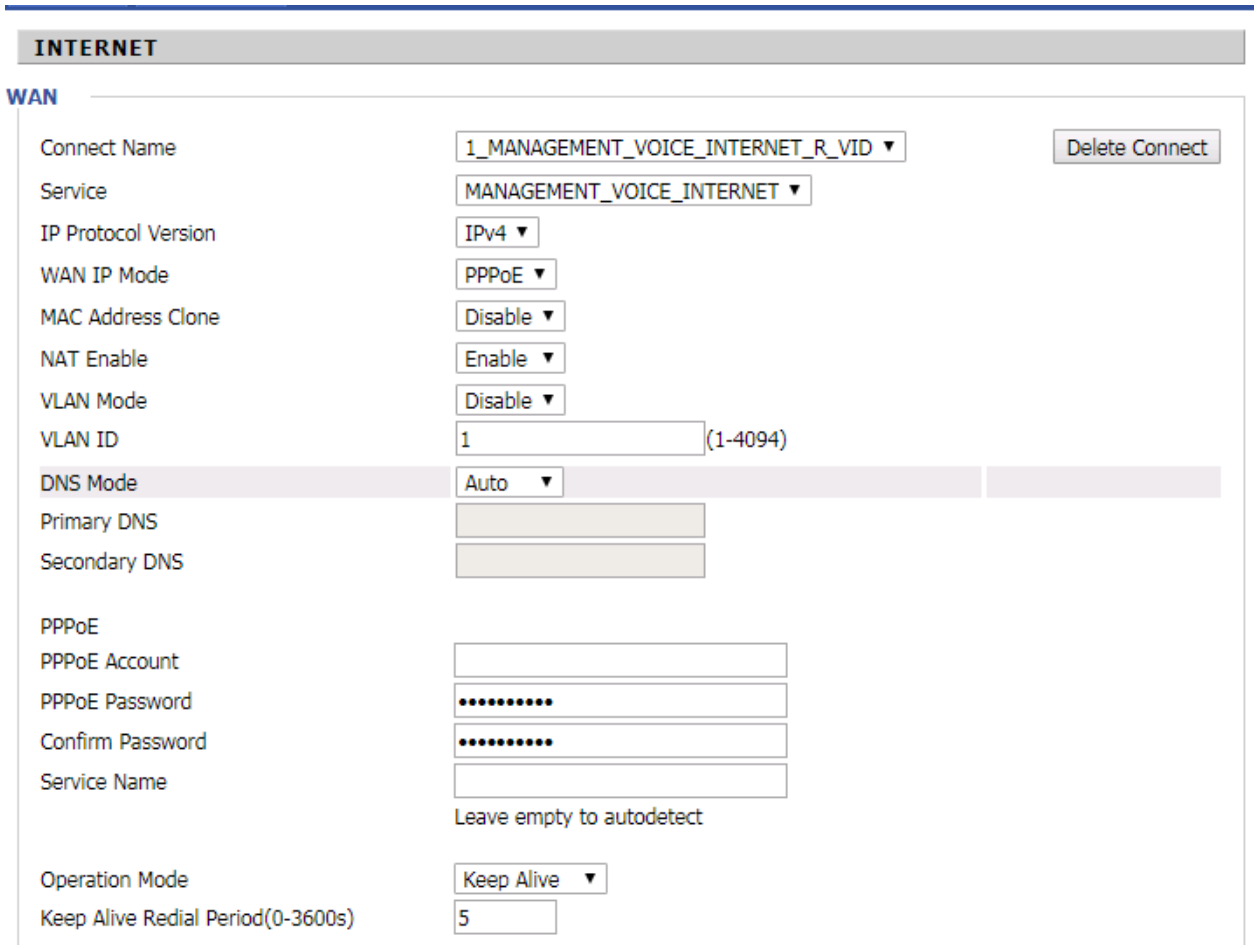


Field Name	Description
DNS Mode	Select DNS mode, options are Auto and Manual: When DNS mode is Auto, the device under LAN port will automatically obtain the preferred DNS and alternate DNS. When DNS mode is Manual, the user should manually configure the preferred DNS and alternate DNS.
Primary DNS Address	Primary DNS of Internet port.
Secondary DNS Address	Secondary DNS of Internet port.
DHCP Renew	Refresh the DHCP IP address.
DHCP Vendor (Option60)	Specify the DHCP Vendor field. Display the vendor and product name.

PPPoE

PPPoE stands for Point-to-Point Protocol over Ethernet. It relies on two widely accepted standards: PPP and Ethernet. It connects users through an Ethernet to the Internet with a common broadband medium, such as a single DSL line, wireless device or cable modem. All the users over the Ethernet can share a common connection.

PPPoE is used for most of DSL modem users. All local users can share one PPPoE connection for accessing the Internet. Your service provider will provide you information about user name, password, and authentication mode.



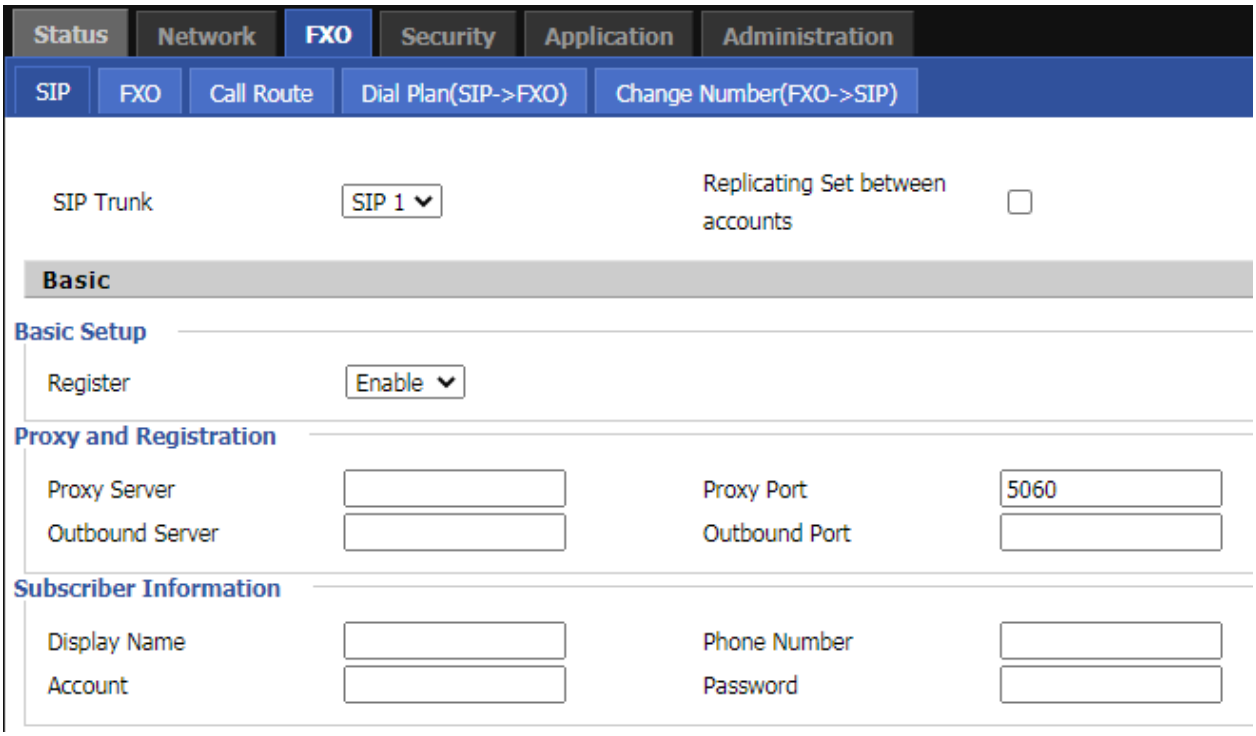
Field Name	Descriptio
PPPoE Account	Enter a valid user name provided by the ISP.
PPPoE Password	Enter a valid password provided by the ISP. The password can contain special characters and allowed special characters are $, +, *, #, @ and ! For example, the password can be entered as #net123@IT!$+*

Confirm Password	Enter your PPPoE password again.
Service Name	Enter a service name for PPPoE authentication. If it is left empty, the service name is auto detected.
Operation Mode	Select the mode of operation, options are Keep Alive, On Demand and Manual: When the mode is Keep Alive, the user sets the 'keep alive redial period' values range from 0 to 3600s, the default setting is 5 minutes; When the mode is On Demand, the user sets the 'on demand idle time' value in the range of 0-60 minutes, the default setting is 5 minutes;  When the mode is Manual, there are no additional settings to configure.
Keep Alive Redial	Set the interval to send Keep Alive messaging.
PPPoE Account	Assign a valid user name provided by the ISP.

Configuring SIP trunk

FTA5120 support forward call between SIP trunk and FXO.

SIP trunk register

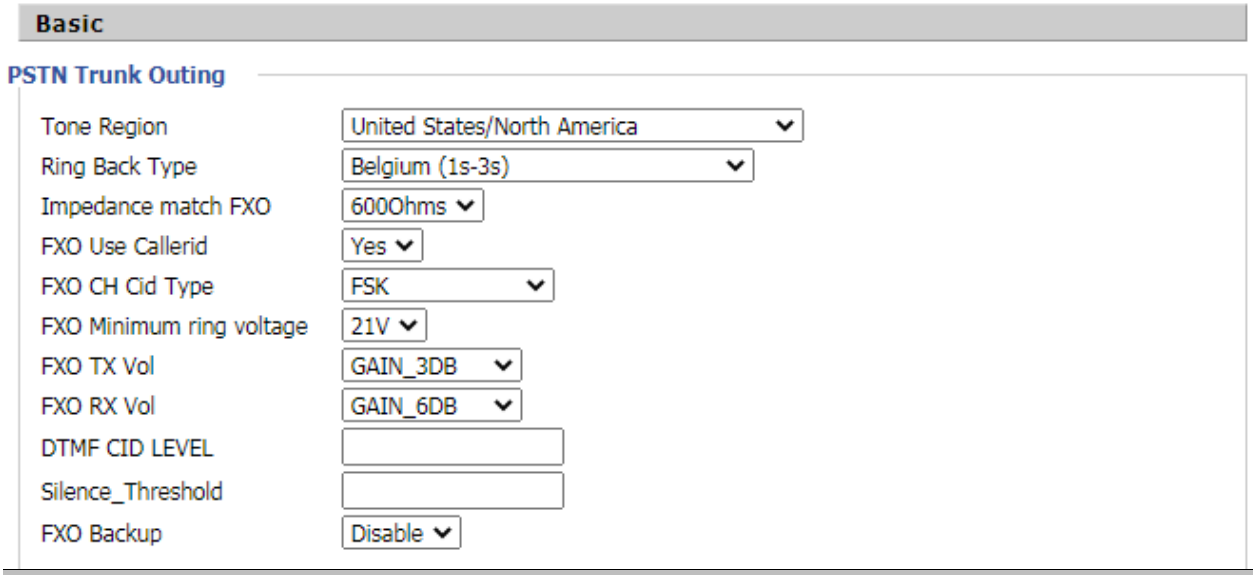


Procedure

1. Navigate to the FXO/SIP Account web page.

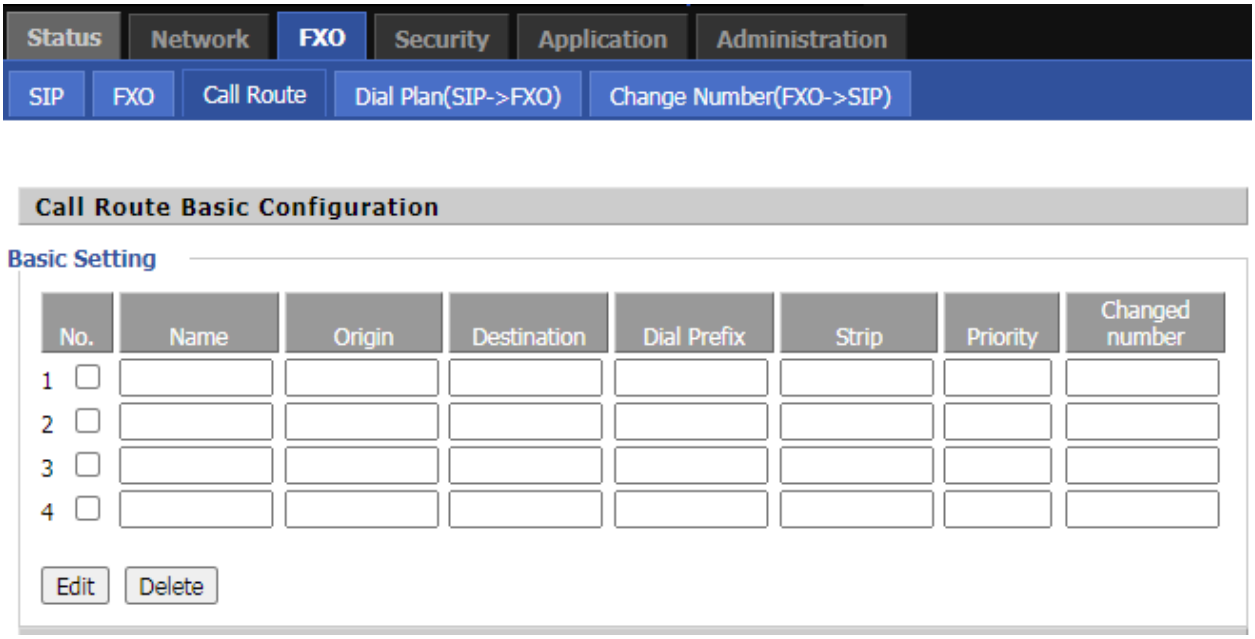
2. Input the SIP Server address and SIP Server port number (from server provider) into parameters: Proxy Server and Proxy Port.
3. Input account details received from your administrator into Display Name, Phone Number and Account details.
4. Type the password received from your administrator into the Password parameter.
5. Press Save button in the bottom of the web page to save changes.
6. Press Reboot button in the bottom of the web page to make setting effective.
7. Navigate to Status page check register status.

PSTN setting



Field Name	Description
Tone Region	Used to match gateway's tone region setting for DTMF CID detect
Ring Back Type	Used to match gateway's ring back type for DTMF CID detect
Impedance match FXO	FXO impedance setting
FXO Use Callerid	FXO CID enable/disable
FXO CH Cid Type	FXO CID type setting: FSK or DTMF
FXO Minimum ring	FXO ring voltage setting
FXO TX Vol	FXO volume gain setting
FXO RX Vol	FXO volume gain setting
DTMF CID LEVEL	DTMF energy setting, when DTMF CID LEVEL > Silence_Threshold, device will detect DTMF CID number
Silence_Threshold	Device default energy setting
FXO Backup	FXO backup setting, enable, FXO1 and FXO2 are backup for each other

Call Route



Procedure

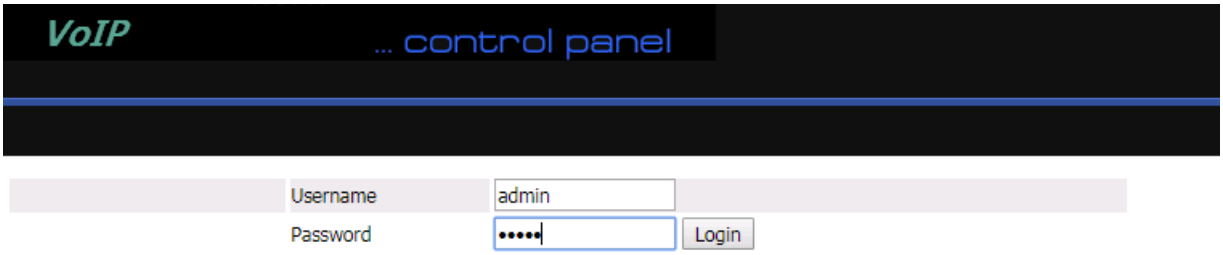
1. Navigate to the FXO/Call Route web page.
2. Add call route: call is from SIP trunk1 , need forward to FXO1,please refer to call route 1 like picture.
3. Please note: when setting call route from sip trunk to FXO, change number is not mandatory, but the call from FXO to sip trunk, you must input change number, this means the call from FXO only could forward to change number.
4. Press Save button in the bottom of the web page to save changes.
5. Press Reboot button in the bottom of the web page to make setting effective.
6. Navigate to Status page check register status.

Advanced Web Configuration

This chapter guides users to execute advanced (full) configuration through admin mode operation.

Topics:

Login



Procedure	
1.	Connect the LAN port of the ATA to your PC an Ethernet cable
2.	Open a web browser on your PC and type http://192.168.1.1.
3.	Enter Username admin and Password admin
4.	Click Login

Status

This webpage shows the status information about the Product, Network, and System including Product Information, SIP Account Status, FXS Port Status, Network Status. and System Status.

System status

Network Status

Ethernet WAN Port Status

WAN Port Status	Link Down
Connection Type	
IP Address	
Subnet Mask	
Default Gateway	
Primary DNS	
Secondary DNS	
Link-local IPv6 Address	fe80::221:f2ff:fe00:8101/64
IPv6 PD Prefix	
IPv6 Domain Name	
IPv6 Primary DNS	
IPv6 Secondary DNS	
WAN Down Speed	0B/s
WAN Upload Speed	0B/s

VPN Status

VPN Type	Disable
Initial Service IP	
Virtual IP Address	

LAN Port Status

IP Address	192.168.1.1
Subnet Mask	255.255.255.0
LAN1	100Mbps Full
LAN2	Link Down

System Status

System Status

Current Time	2021-07-29 13:11:31
Elapsed Time	3 Mins

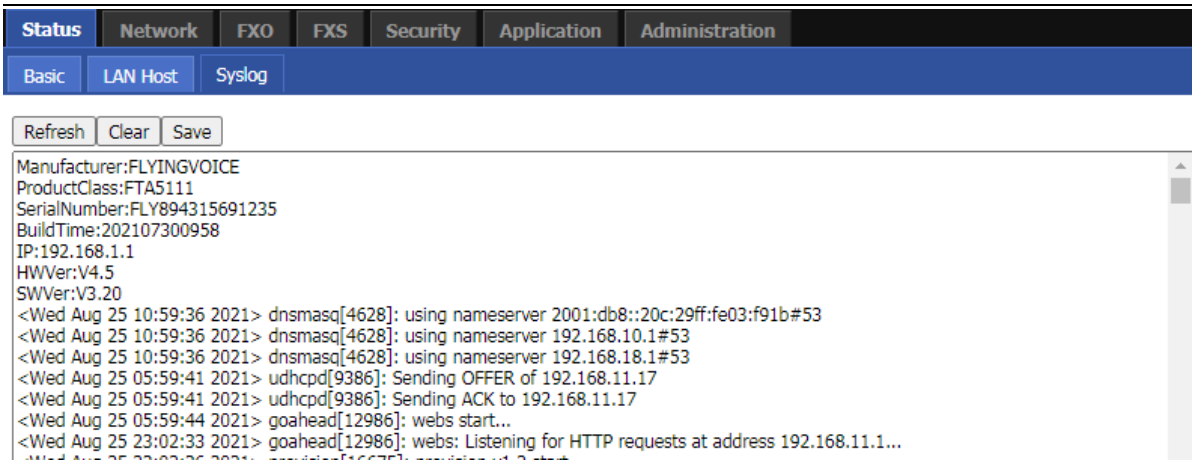
LAN Host

Basic | LAN Host | Syslog

LAN Host Info

MAC Address	IP Address	Interface Type	Address Source	Expires	Host Name	Status
00:21:F2:25:72:A1	192.168.1.43	LAN1	DHCP	14:14:22	FIP16	Active

System Log



Description
If you enable the system log in Status/syslog webpage, you can view the system log in this webpage.

Network

You can configure the WAN port, LAN port, DDNS, Multi WAN, DMZ, Port Forward and other parameters in this section of the web management interface.

Topics

WAN

This page allows you to set WAN configuration with different modes. Use the Connection Type drop down list to choose one WAN mode and then the corresponding page will be displayed.

Static IP

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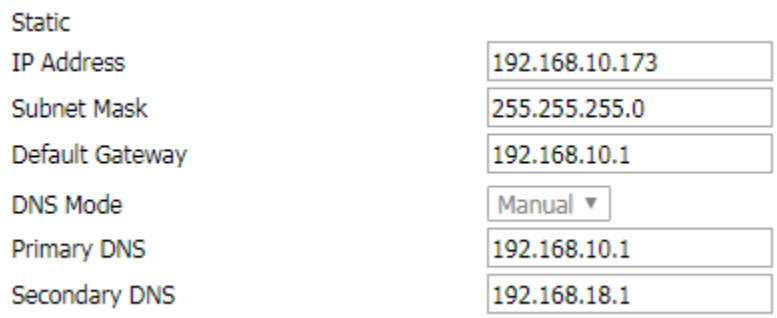

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DHCP

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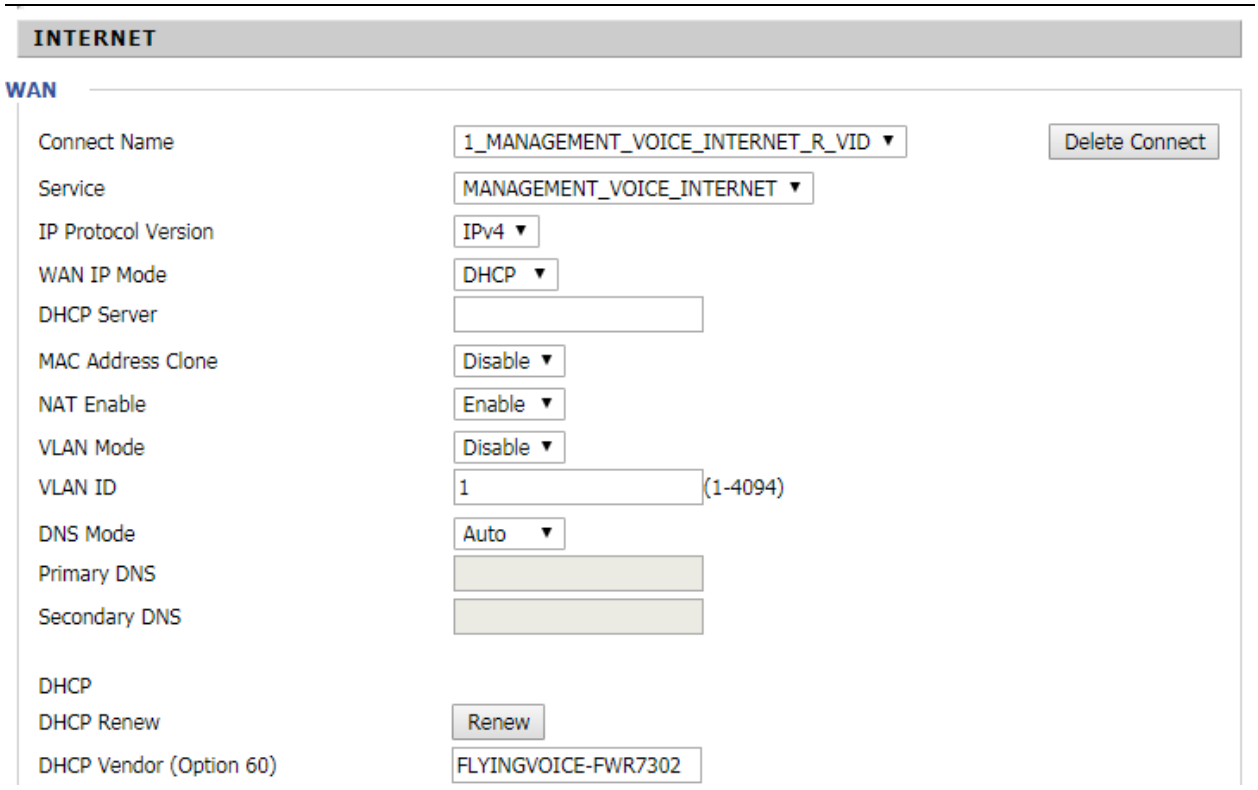

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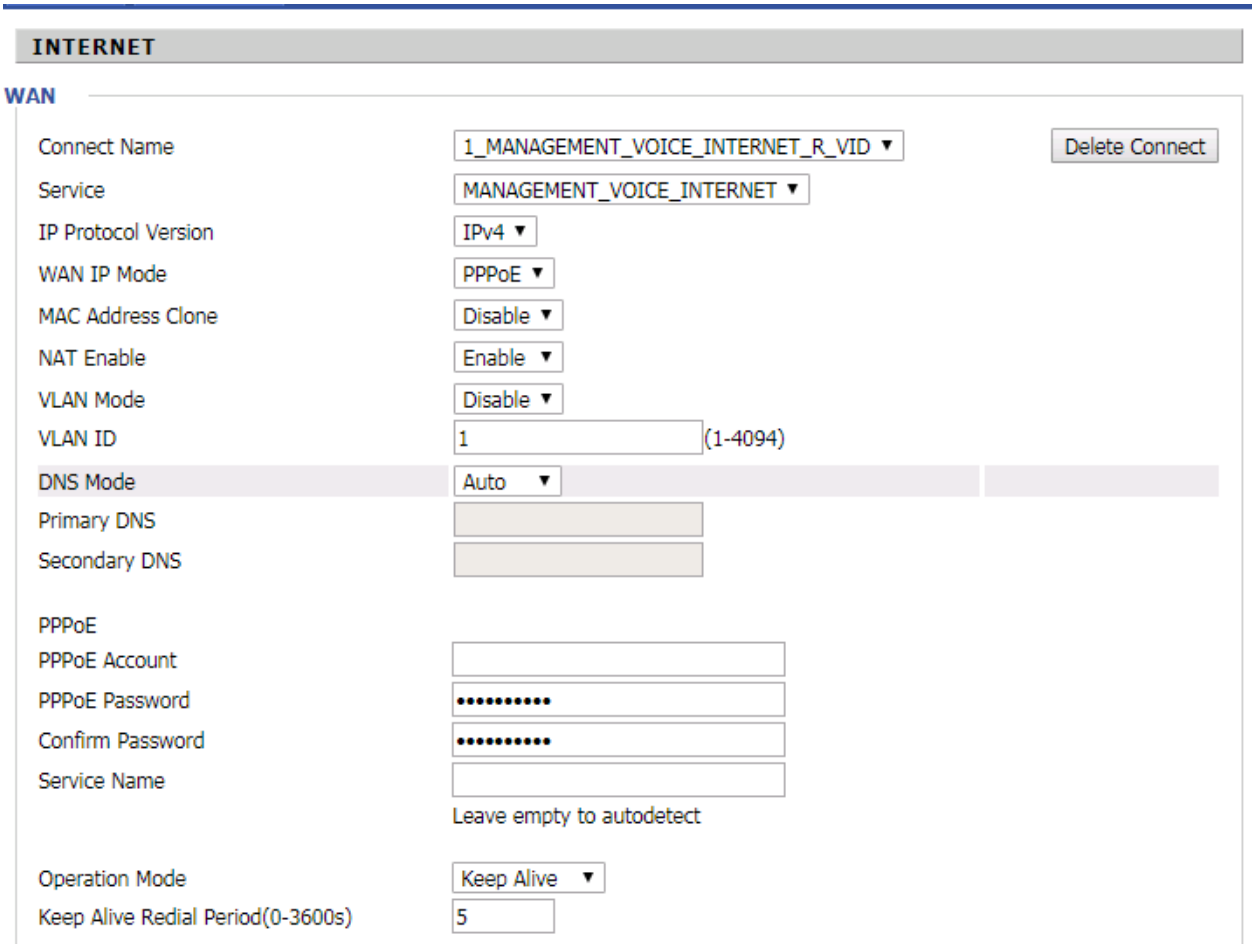

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Confirm Password	Enter your PPPoE password again.
Service Name	Enter a service name for PPPoE authentication. If it is left empty, the service name is auto detected.
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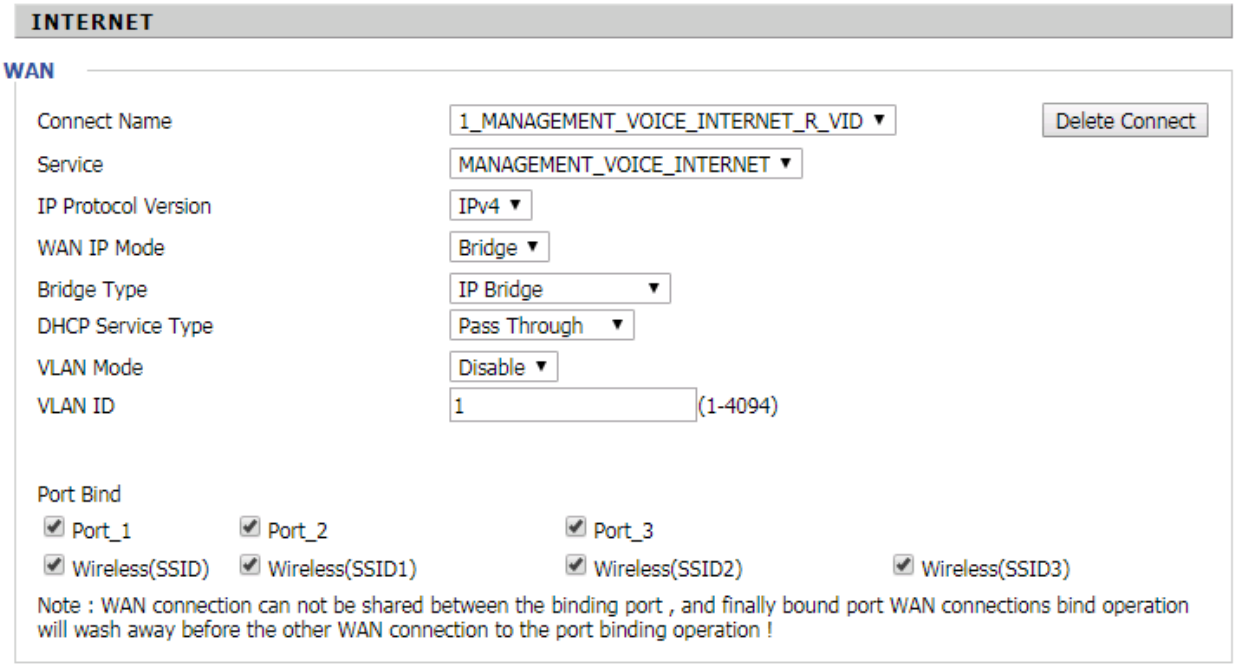
Keep Alive Redial	Set the interval to send Keep Alive messaging.
PPPoE Account	Assign a valid user name provided by the ISP.

Bridge Mode

Bridge Mode under Multi WAN is different with traditional bridge setting. Bridge mode employs no IP addressing and the device operates as a bridge between the WAN port and the LAN port. Route Connection has to be built to give IP address to local service on device.



Field Name	Descriptio
Bridge Type	
IP Bridge	Allow all Ethernet packets to pass. PC can connect to upper network directly.
PPPoE Bridge	Only Allow PPPoE packets pass. PC needs PPPoE dial-up software.
Hardware IP Bridge	Packets pass through hardware switch with wired speed. Does not support wireless port binding.
DHCP Service Type	
Pass Through	DHCP packets can be forwarded between WAN and LAN, DHCP server in gateway will not allocate IP to clients of LAN port.
DHCP Snooping	When gateway forwards DHCP packets form LAN to WAN it will add option82 to DHCP packet, and it will remove option82 when forwarding.

	DHCP packet from the WAN interface to the LAN interface. Local DHCP service will not allocate IP to clients of LAN port.
Local Service	Gateway will not forward DHCP packets between LAN and WAN, it also blocks DHCP packets from the WAN port. Clients connected to the LAN port can get IP from DHCP server run in gateway.

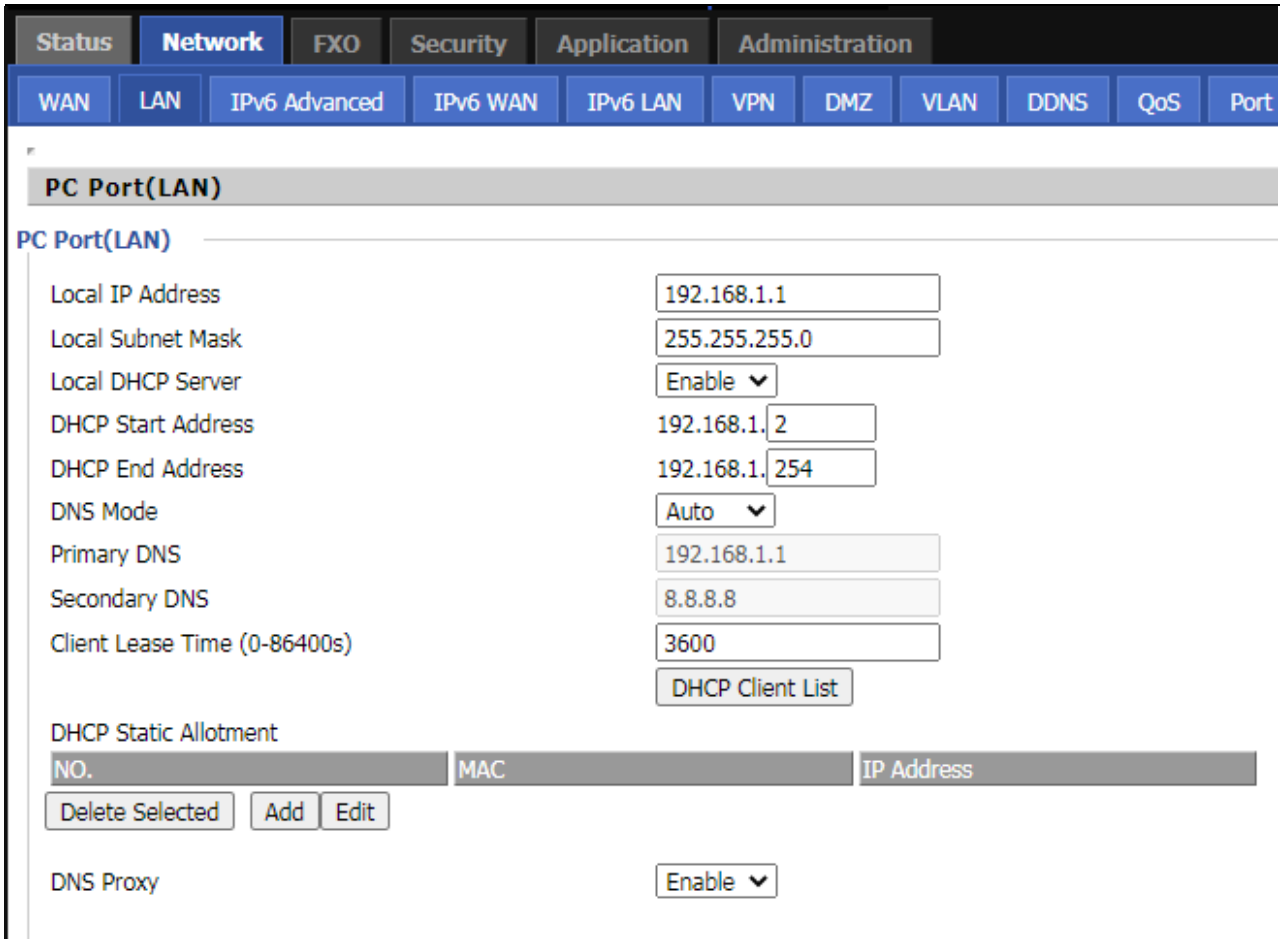
VLAN Mode

Disable	The WAN interface is untagged. LAN is untagged.
Enable	The WAN interface is tagged. LAN is untagged.
Trunk	Only valid in bridge mode. All ports, including WAN and LAN, belong to this VLAN Id and all ports are tagged with this VLAN id. Tagged packets can pass through WAN and LAN.
VLAN ID	Set the VLAN ID. **Note** Multiple WAN connections may be created with the same VLAN ID.
802.1p	Set the priority of VLAN, Options are 0~7.

LAN

LAN Port

NAT translates the packets from public IP address to local IP address to forward packets to the proper destination.

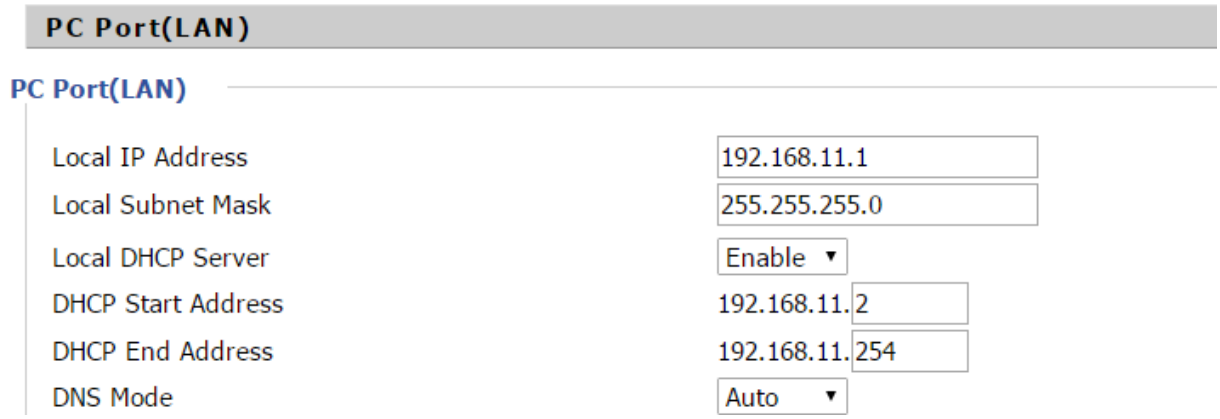


Field Name	Description
IP Address	Enter the IP address of the ATA on the local area network. All the IP addresses of the computers which are in the ATA's LAN must be in the same network segment with this address, and the default gateway of the computers must be this IP address. (The default is 192.168.11.1).
Local Subnet Mask	Enter the subnet mask to determine the size of the network (default is 255.255.255.0/24).
Local DHCP Server	Enable/Disable Local DHCP Server.

DHCP Start Address	Enter a valid IP address as a starting IP address of the DHCP server, and if the ATA's LAN IP address is 192.168.11.1, starting IP address can be 192.168.11.2 or greater, but should be less than the ending IP address.
DHCP End Address	Enter a valid IP address as an end IP address of the DHCP server.
DNS Mode	Select DNS mode, options are Auto and Manual: When DNS mode is Auto, the device under LAN port will automatically obtains the preferred DNS and alternate DNS. When DNS mode is Manual, the user should manually configure the preferred DNS and alternate DNS.
Primary DNS	Enter the preferred DNS address.
Secondary DNS	Enter the secondary DNS address.
Client Lease Time	This option defines how long the address will be assigned to the computer within the network. In that period, the server does not assign the IP address to the other computer.
DNS Proxy	Enable or disable; If enabled, the device will forward the DNS request of LAN-side network to the WAN-side network.

DHCP Server

The ATA has a built-in DHCP server that assigns private IP address to each local client. DHCP stands for Dynamic Host Configuration Protocol. The ATA, by factory default acts a DHCP server for your network so it automatically dispatches related IP settings to any local user configured as a DHCP client. It is highly recommended that you leave the ATA enabled as a DHCP server if you do not have a DHCP server for your network.



Field Name	Description
Local DHCP Server	Enable/Disable DHCP server.
DHCP Start Address	Enter a value of the IP address pool for the DHCP server to start with when issuing IP addresses.
DHCP End Address	Enter a value of the IP address pool for the DHCP server to end with when issuing IP addresses.
DNS Mode	If DNS information is to be received from a network server, set this parameter to Auto. If DNS information is to be configured manually, set this parameter to Manual.

DHCP server, DNS and Client Lease Time

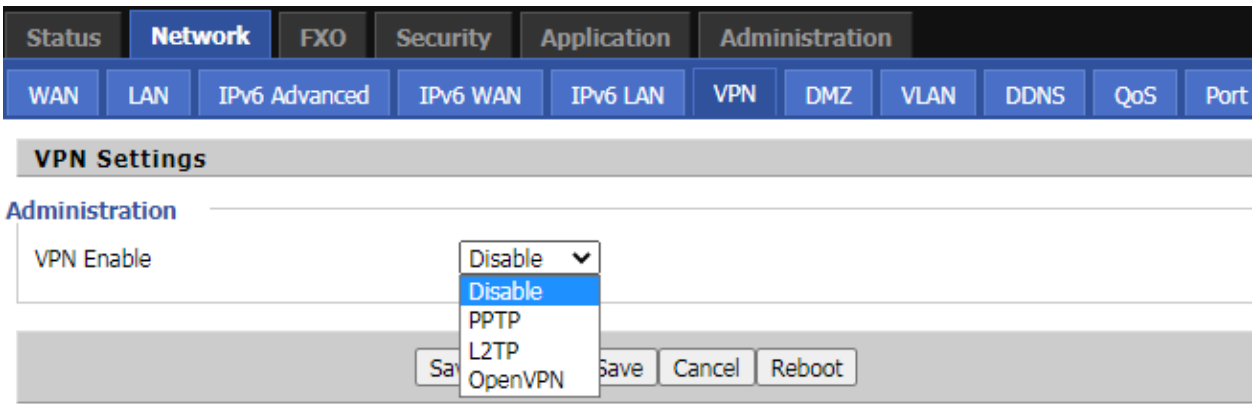
Field Name	Description
Primary DNS	Specify the Primary DNS address provided by your ISP. If your ISP does not provide it, the ATA will automatically apply default DNS Server IP address: 202.96.134.33 to this field.

Secondary DNS	Specify the Secondary DNS address provided by your ISP. If your ISP does not provide this address, the ATA will automatically apply default Secondary DNS Server IP of 202.96.128.86 to this field. If both the Primary IP and Secondary IP Address fields are left empty, the ATA will assign its own IP address to local users as a DNS proxy server and maintain a DNS cache.
Client Lease Time	It allows you to set the leased time for the specified PC.

VPN

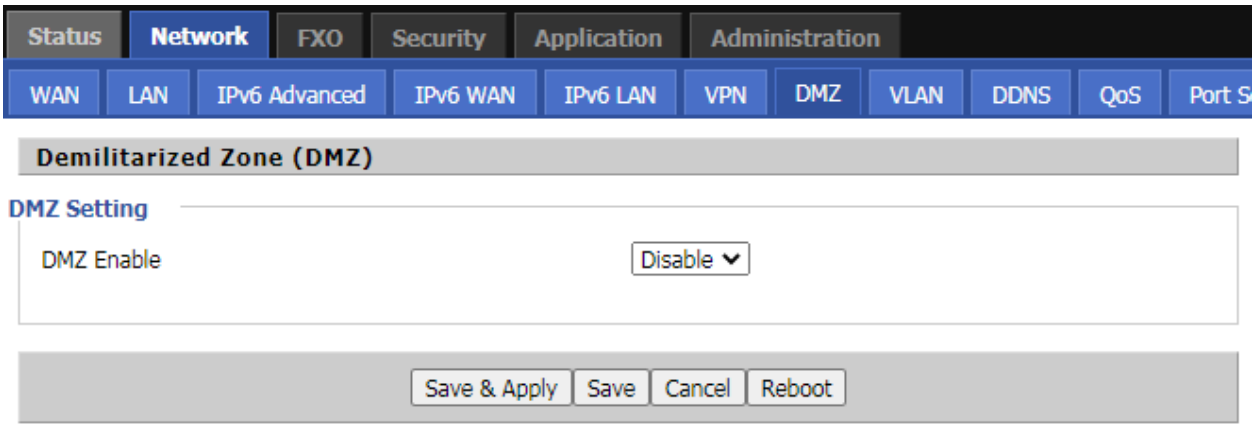
The ATA supports VPN connections with PPTP-based VPN servers.

VPN



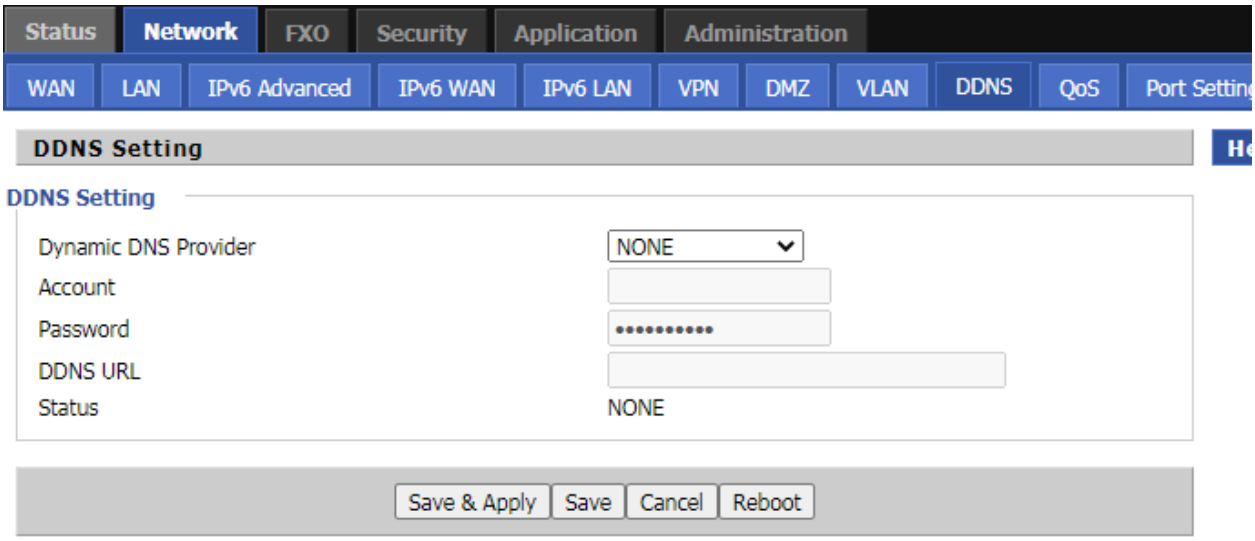
Field Name	Description
VPN Enable	Enable/Disable VPN. If the VPN is enabled, user can select PPTP and L2TP mode VPN.
Initial Service IP	Enter VPN server IP address.
User Name	Enter authentication username.
Password	Enter authentication password.

DMZ



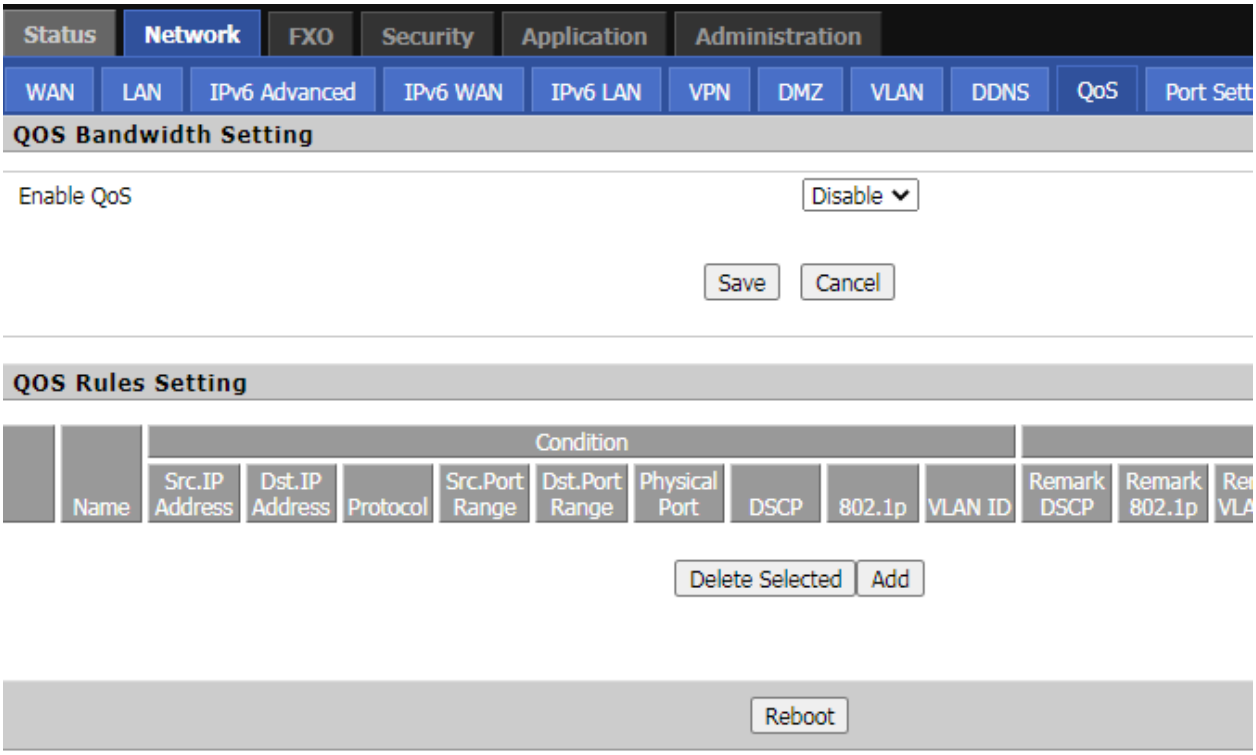
Field Name	Description
DMZ Enable	Enable/Disable DMZ.
DMZ Host IP Address	Enter the private IP address of the DMZ host.

DDNS



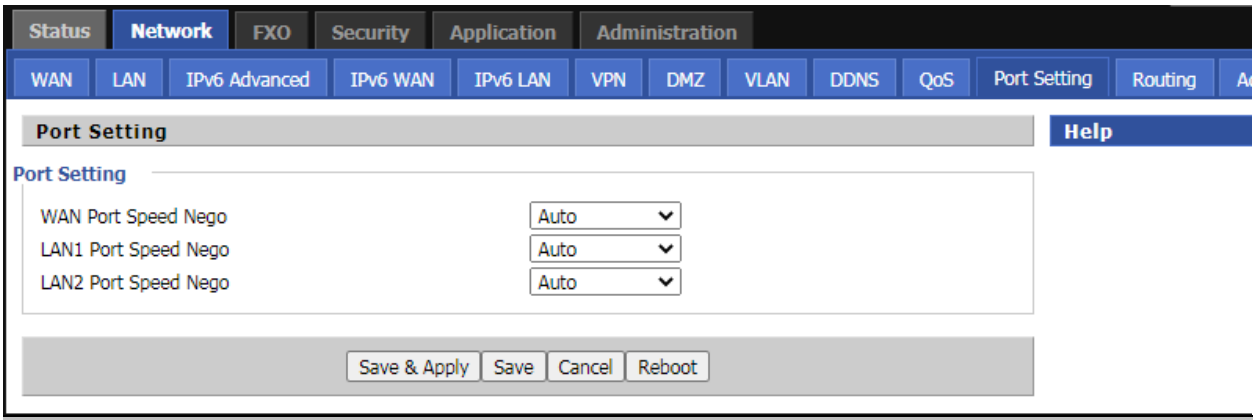
Field Name	Description
Dynamic DNS	Enable DDNS and select the DDNS service provider
Account	Fill in the DDNS service account
Password	Fill in the DDNS service account password
DDNS URL	Fill in the DDNS domain name or IP address
Status	Check if DDNS is successfully upgraded

QoS



Field Name	Description
QoS Enable	Enable/Disable QoS function
Upstream	Set the upstream bandwidth
Downstream	Set the downstream bandwidth
Delete Selected	In NO., Check the items you want to delete, click the Delete option
Add	Click Add to add a new parameter

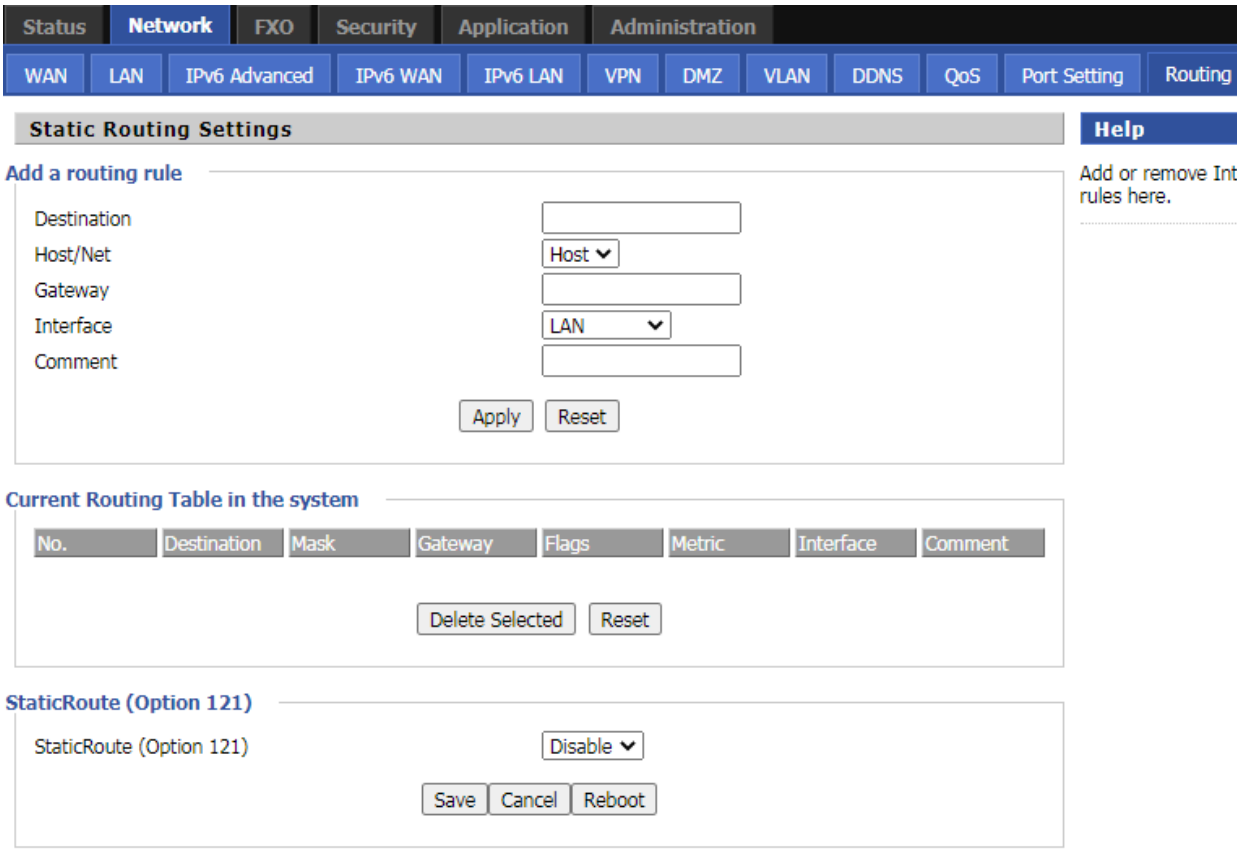
Port Setting



Field Name	Description
WAN Port speed Nego	Auto-negotiation, options are Auto, 100M full, 100M half-duplex, 10M half and full.

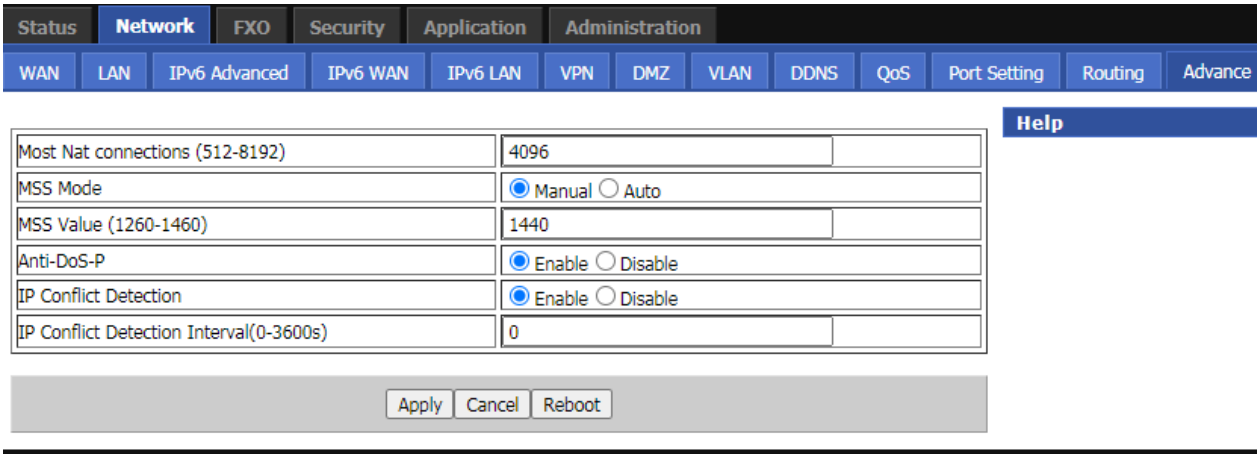
LAN1~LAN2 Port Speed Nego	Auto-negotiation, options are Auto, 100M full, 100M half, 10M half and 10M full.

Routing



Field Name	Description
Destination	Destination address
Host/Net	Both Host and Net selection
Gateway	Gateway IP address
Interface	LAN/WAN/Custom three options, and add the corresponding address
Comment	Comment

Advanced



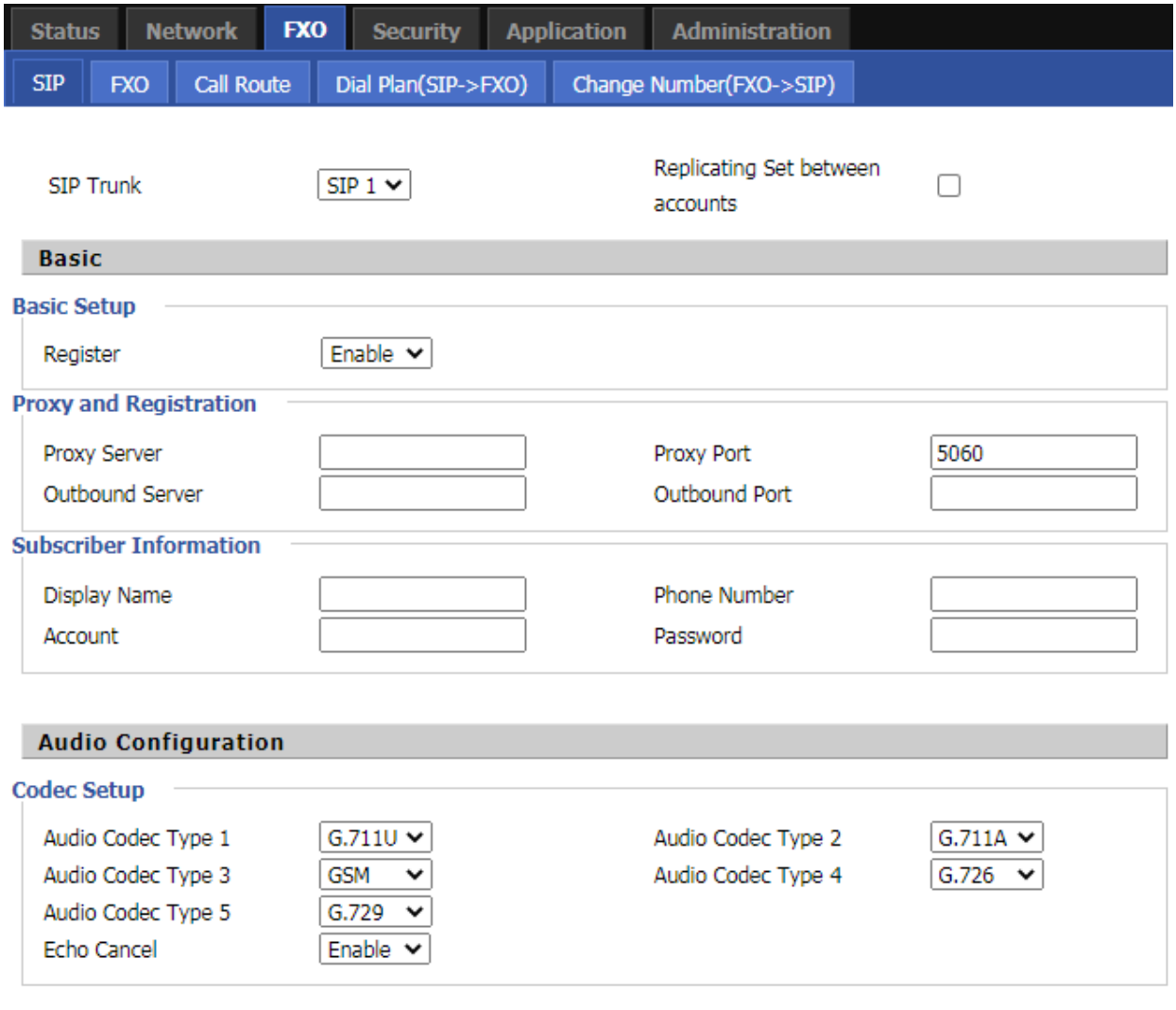
Field Name	Description
Most Nat connections	The largest value
MSS Mode	Choose MSS Mode from Manual and Auto
MSS Value	Set the value of TCP
Anti-Dos-P	You can choose to enable or prohibit
IP conflict detection	Select enable if enabled, phone IP conflict will have tips or prohibit
IP conflict Detecting Interval	Detect IP address conflicts of the time interval

FXO

Topics

SIP

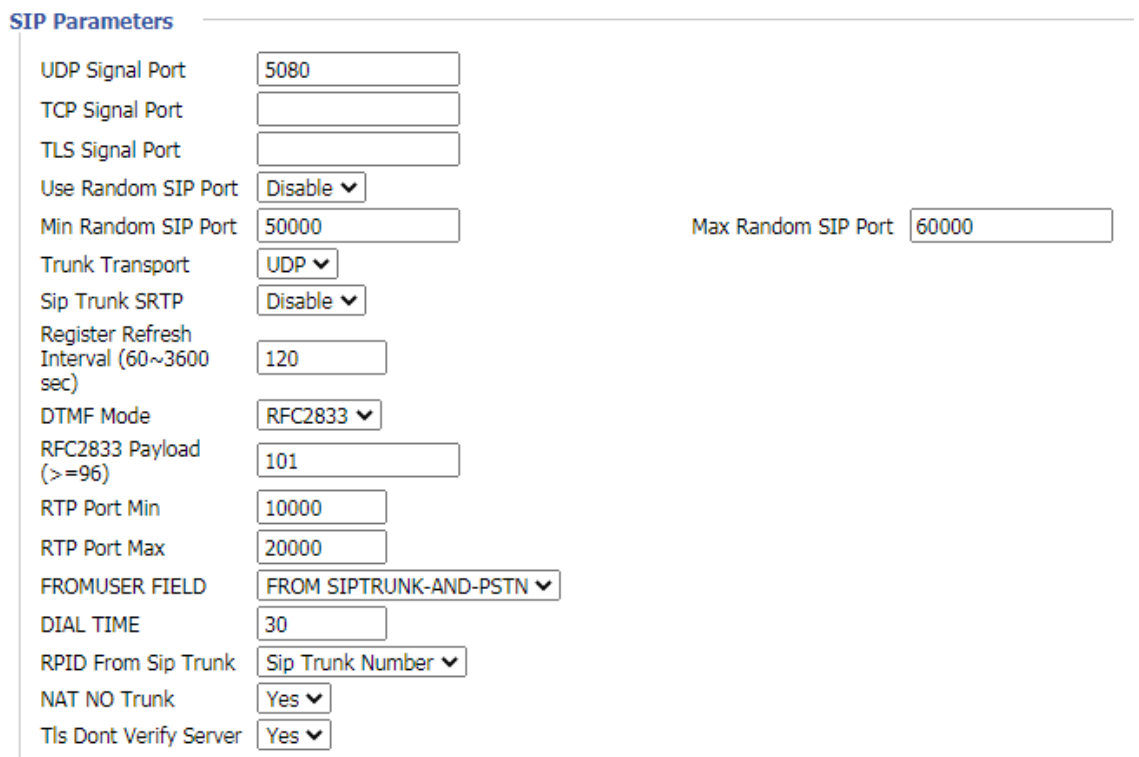
Basic



Field name	Description
SIP trunk	Choose SIP trunk
Register	Enable: as VoIP terminal, register another SIP server Disable: SIP trunk use peer to peer mode
Proxy Server	The IP address or the domain of SIP Server
Outbound Server	The IP address or the domain of Outbound Server
Backup Outbound Server	The IP address or the domain of Backup Outbound Server
Proxy port	SIP Service port, default is 5060
Outbound Port	Outbound Proxy's Service port, default is 5060
Backup Outbound Port	Backup Outbound Proxy's Service port, default is 5060
Display Name	The number will be displayed on LCD
Phone Number	Enter telephone number provided by SIP Proxy
Account	Enter SIP account provided by SIP Proxy
Password	Enter SIP password provided by SIP Proxy

Audio Codec Type1	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Audio Codec Type2	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Audio Codec Type3	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Audio Codec Type4	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Audio Codec Type5	Choose the audio codec type from G.711U, G.711A, GSM, G.729, G.726
Echo Cancel	Enable/Disable echo cancel. By default, it is enabled

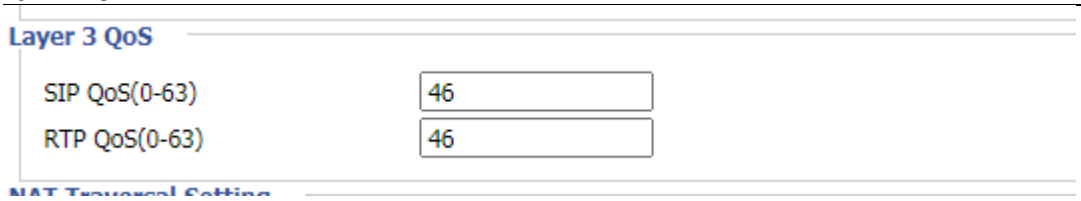
SIP Parameters



Field Name	Description
UDP Signal Port	The local port of SIP protocol, default is 5080
Use Random SIP port	The local random port of SIP protocol
Min Random SIP port	Min Random SIP port, default is 50000
Max Random SIP port	Max Random SIP port, default is 60000
Trunk Transport	SIP protocol: UDP,TCP,TLS
SIP Trunk SRTP	Enable = RTP encrypt / disable = RTP unencrypt
Register Refresh Interval (60~3600 sec)	The interval between two normal Register messages. default setting is 120
DTMF Mode	Choose the DTMF type from Inband, RFC2833 and INFO
RFC2833Payload (>=96)	User can use the default setting
RTP Port min	Min Random RTP port, default is 10000
RTP Port max	Min Random RTP port, default is 20000
FROMUSER FIELD	FROM SIPTRUNK-AND-PSTN: SIP header data from field=SIP trunk number and PSTN number FROM SIPTRUNK: SIP header data from field=SIP trunk number FROM PSTN: SIP header data from field=PSTN number
DIAL TIME	Call route from FXO to SIP trunk timeout setting
RPID From Sip Trunk	SIP header data Remote-Party-ID setting

NAT NO Trunk	IP directly call with NAT
Tls Dont Verify Server	TLS peer to peer call

Layer 3 QoS

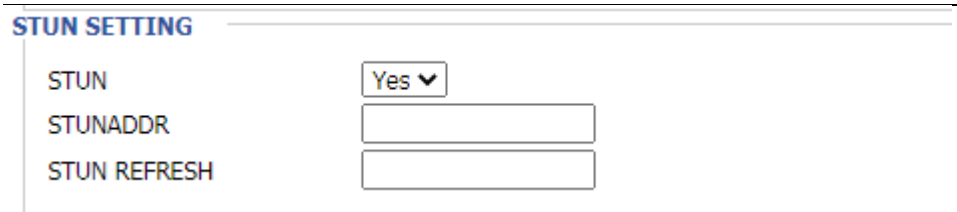


Field Name	Description
SIP QoS(0-63)	VoIP SIP data QoS setting
RTP QoS(0-63)	VoIP RTP data QoS setting

NAT Traversal Setting

Field Name	Description
Extern Host	Upper ATA's domain name which use to do NAT
Extern IP	Upper ATA's IP which use to do NAT
Extern Refresh	NAT setting refresh time
Localnet	Device's IP net
NAT MODE	Enable/disable NAT traversal

STUN SETTING

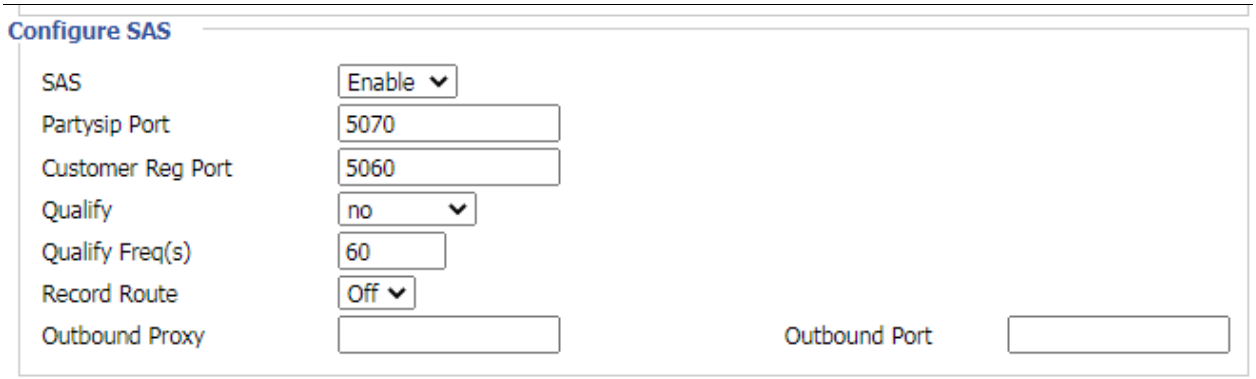


Field Name	Description
STUN	Enable/disable STUN
STUNADDR	STUN server IP
STUN REFRESH	Refresh time to refresh stun information

Configure SAS

Stand-alone survivability (SAS) is a resource that allows it to assume the functions of an IP PBX in a limited manner, should the latter become unavailable. This way, it is possible to maintain the basic

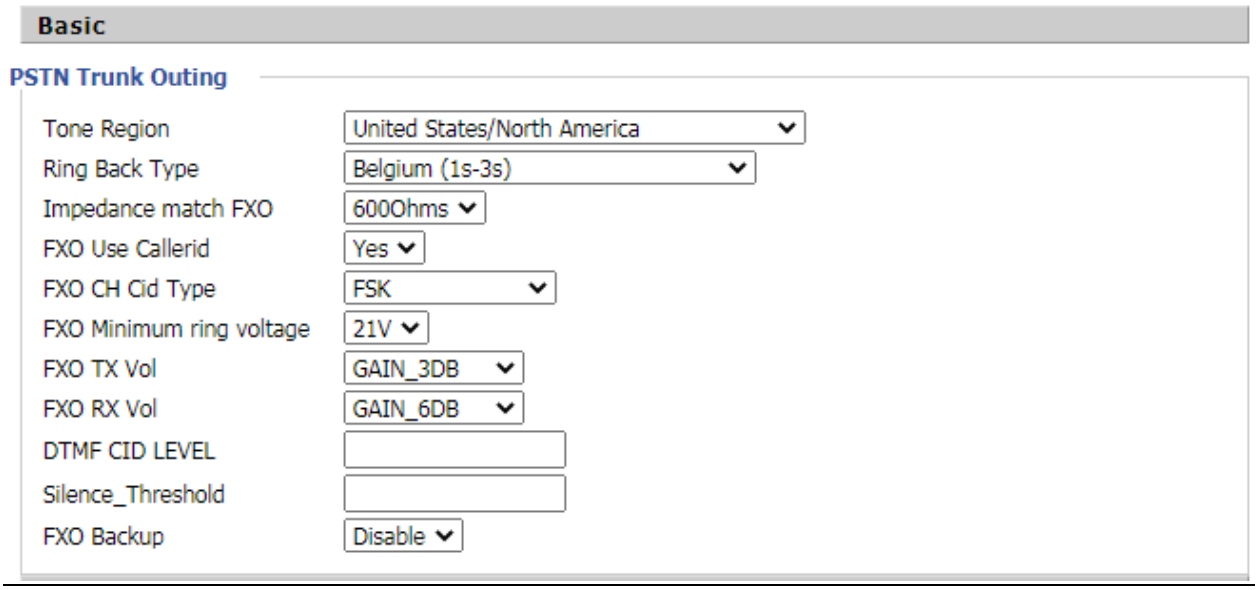
telephony functions until the IP PBX is made available again. It is a useful resource for environments with a cloud-based IP PBX, for example, where communications need to be kept active in case the connection with the IP PBX becomes unavailable. It is necessary to configure the extensions in a way that the ATA will be defined as a proxy SIP. The survivability module verifies the availability of the IP PBX at a configurable interval of seconds through the SIP OPTIONS command. If there is no response to the SIP OPTIONS command within the defined time interval, its mode of operation is changed from proxy to survival mode.



Field Name	Description
SAS	Enable/disable SAS
Partysip Port	Cloud PBX's SIP listen port
Customer Reg Port	Client register port
Qualify	Enable/disable to monitor PBX
Qualify Freq(s)	Device monitoring PBX interval
Record Route	NAT setting refresh time
Outbound Proxy	Device's IP net
Outbound Port	Enable/disable NAT traversal

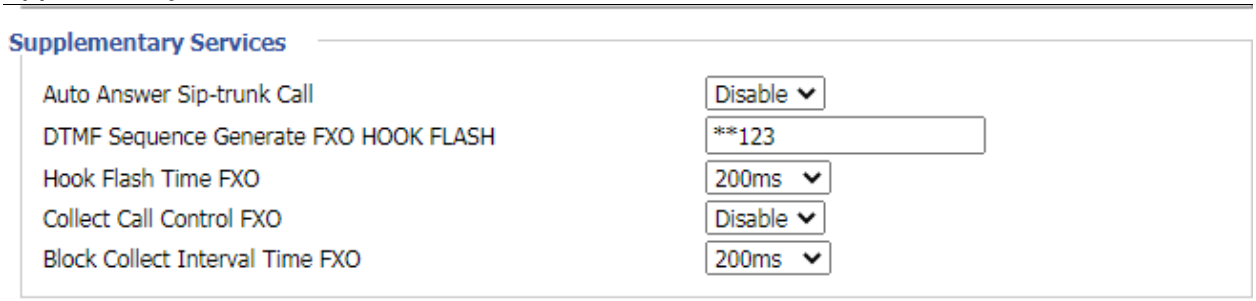
FXO

PSTN Trunk Outing



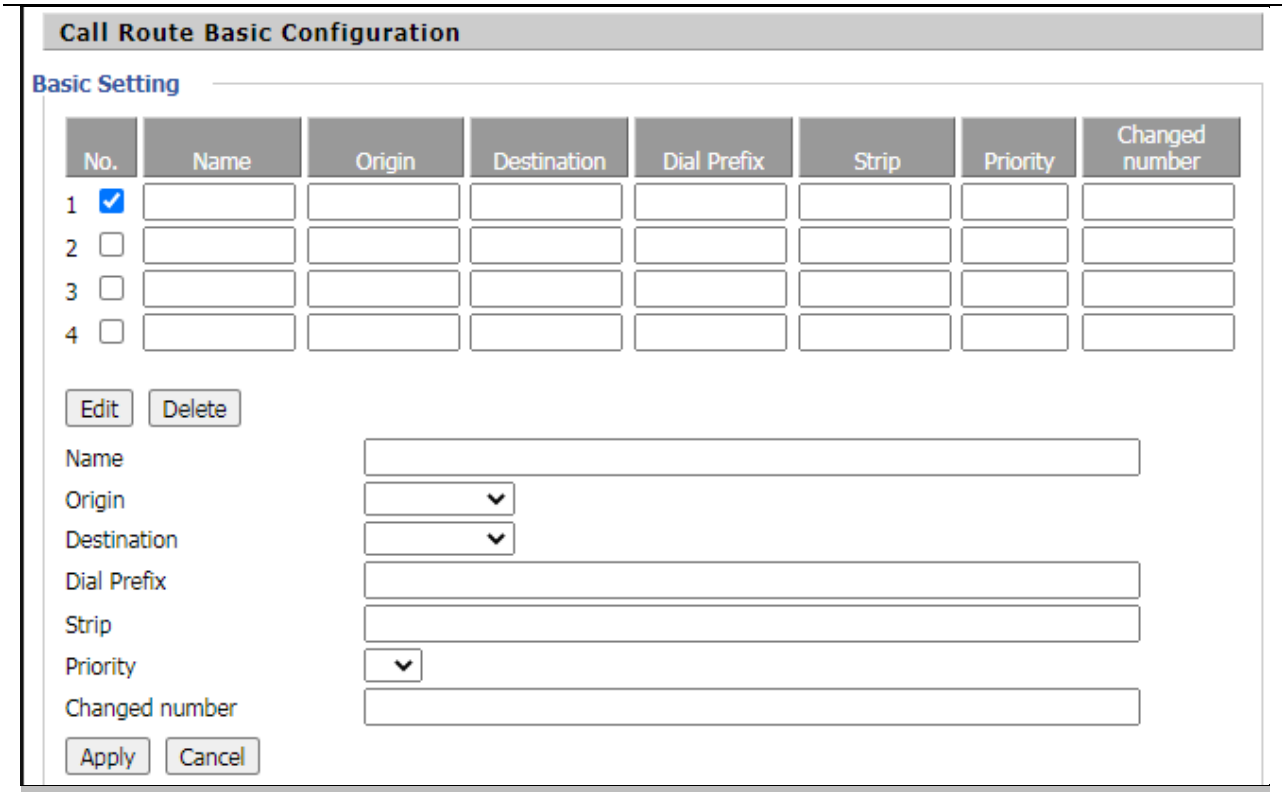
Field Name	Description
Tone Region	Used to match gateway's tone region setting for DTMF CID detect
Ring Back Type	Used to match gateway's ring back type for DTMF CID detect
Impedance match FXO	FXO impedance setting
FXO Use Callerid	FXO CID enable/disable
FXO CH Cid Type	FXO CID type setting: FSK or DTMF
FXO Minimum ring	FXO ring voltage setting
FXO TX Vol	FXO volume gain setting
FXO RX Vol	FXO volume gain setting
DTMF CID LEVEL	DTMF energy setting, when DTMF CID LEVEL > Silence_Threshold, device will detect DTMF CID number
Silence_Threshold	Device default energy setting
FXO Backup	FXO backup setting, enable, FXO1 and FXO2 are backup for each other

Supplementary Services



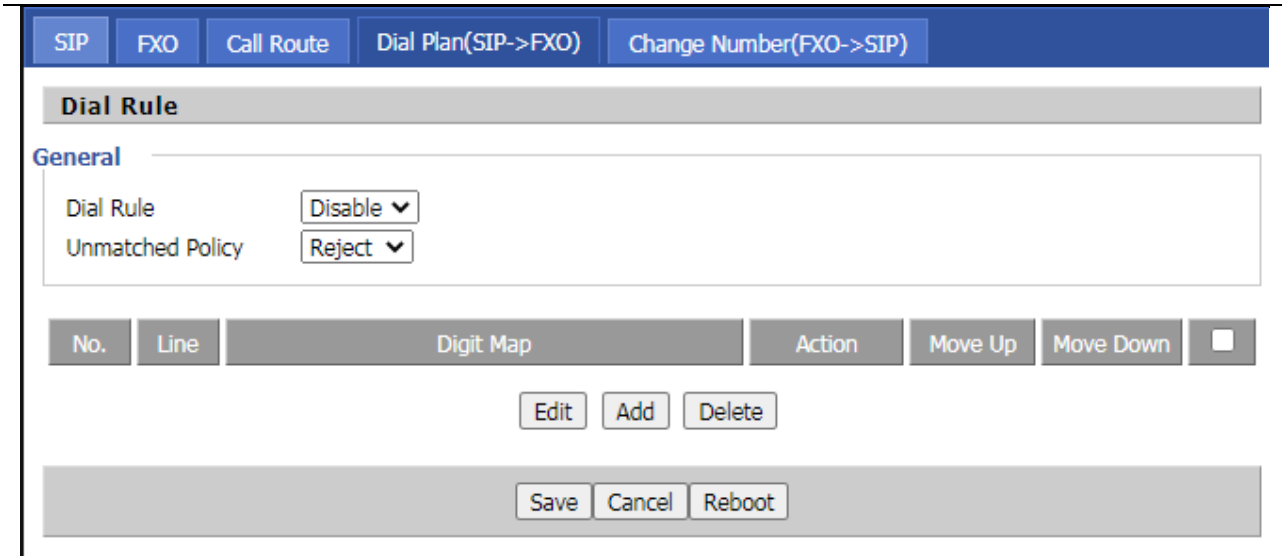
Field Name	Description
Auto Answer Sip-trunk Call	Enable: support two-stage dialing users could call sip trunk number, then dial outgoing number again Disable: doesn't support two-stage dialing
DTMF Sequence Generate FXO HOOK FLASH	DTMF number which used to do HOOK FLASH
Hook Flash Time FXO	Within this time, if users press DTMF number, then device will hold the call
Collect Call Control FXO	Block collect call, Collect call is a call that the user receiving this call from PSTN line will pay for
Block Collect Interval Time FXO	Block collect call interval setting

Call Route



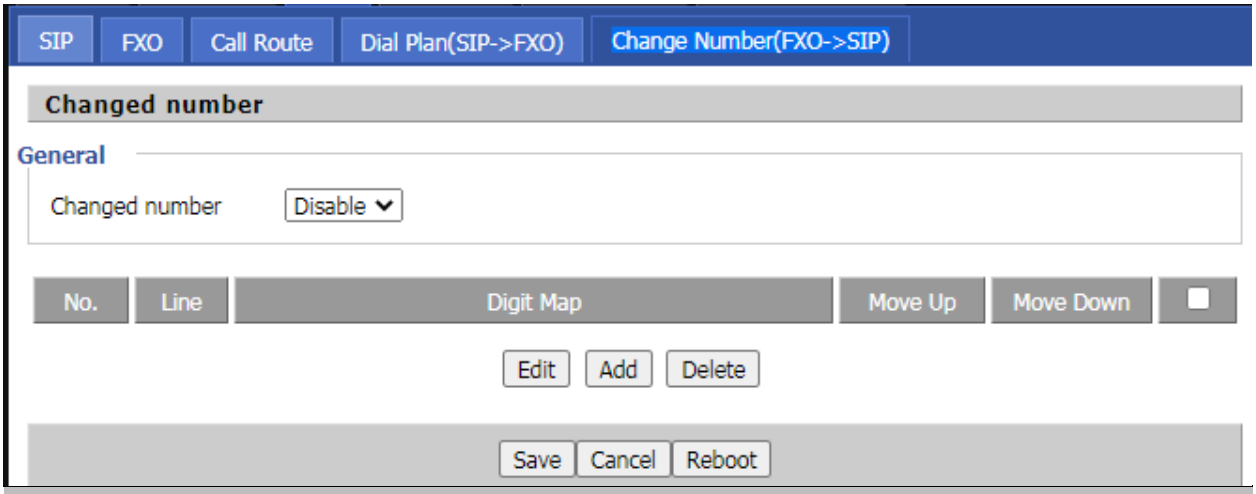
Field Name	Description
Name	Call route name
Origin	Call route source interface, where the call from
Destination	Call route destination interface, where the call will to
Dial Prefix	Call dial prefix setting
Strip	Dial prefix number setting, strip=2, there should be 2 dial prefix number
Priority	Call route priority setting
Changed number	The destination number setting When the call from FXO to SIP trunk, changed number is mandatory When the call from sip trunk to FXO, changed number is not mandatory

Dial Plan (SIP->FXO)



Field Name	Description
Controls how calls will be dialed using this line. It can add a Prefix to Matched Numbers and remove Digits by setting Dial Cuts	
Dial Plan	Enable/Disable dial plan
Line	Set the line
Digit Map	Enter the sequence used to match input number
Action	Choose the dial plan mode from Deny and Dial Out
Move Up	Move the dial plan up the list
Move Down	Move the dial plan down the list

Change Number (FXO->SIP)



Field Name	Description
Handles the source number of the KAP dial-in call to the server by changing in the “from” field in the KAP INVITE	
Dial Plan	Enable/Disable dial plan
Line	Set the line
Digit Map	Enter the sequence used to match input number
Move Up	Move the dial plan up the list
Move Down	Move the dial plan down the list

Dial Plan Syntactic

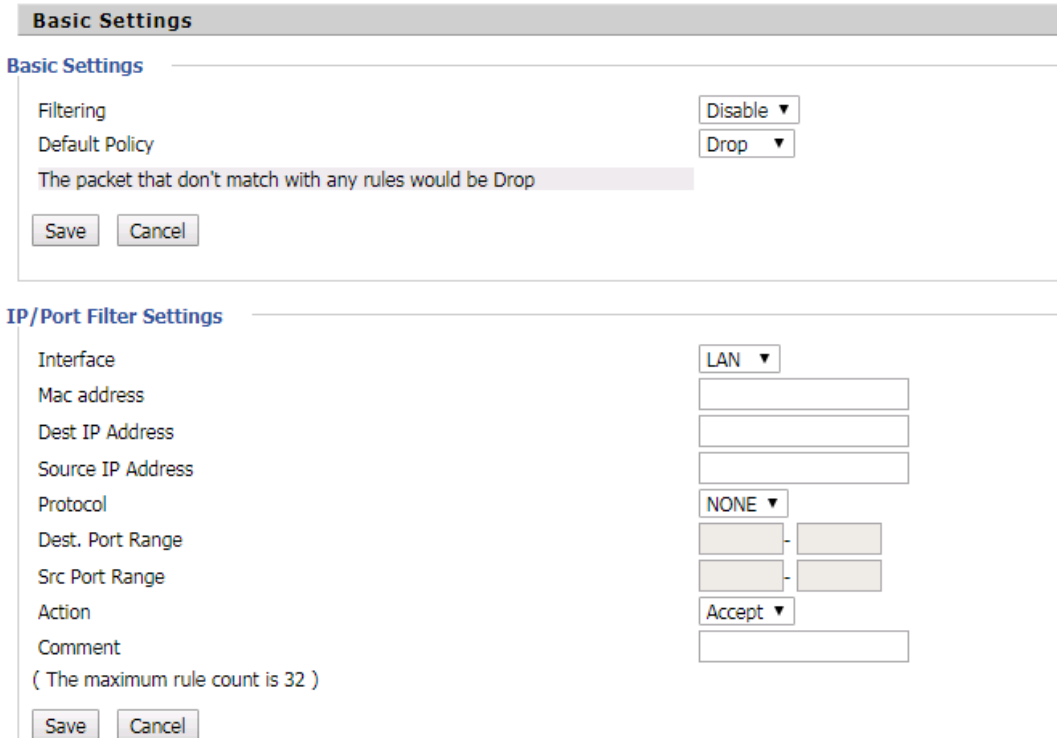
No.	String	Description
1	0 1 2 3 4 5 6 7 8 9 * #	Allowed characters
2	x	Lowercase letter “x” stands for one legal character
3	[sequence]	To match one character from sequence. For example: [0-9]: match one digit from 0 to 9 [23-5*]: match one character from 2 or 3 or 4 or 5 or *
4	x.	Match to x, xx, xxx, xxxx and so on. For example: “01” can be match to “0”,”01”,”011”...”011111...” and so on
5	<dialed: substituted>	Replace dialed with substituted For example: <8:1650>123456: input is “85551212”, output is”16505551212”

6	x,y	Make outside dial tone after dialing “x”, stop until dialing character “y” For example: “9,1xxxxxxxxx”: the device reports dial tone after inputting “9”, stops tone until inputting “1” “9,8,010x”: make outside dial tone after inputting “9”, stop tone until inputting “0”
7	T	Set the delayed time. For example: “<9:111>T2”: The device will dial out the matched number “111” after 2 seconds

Security

Topics

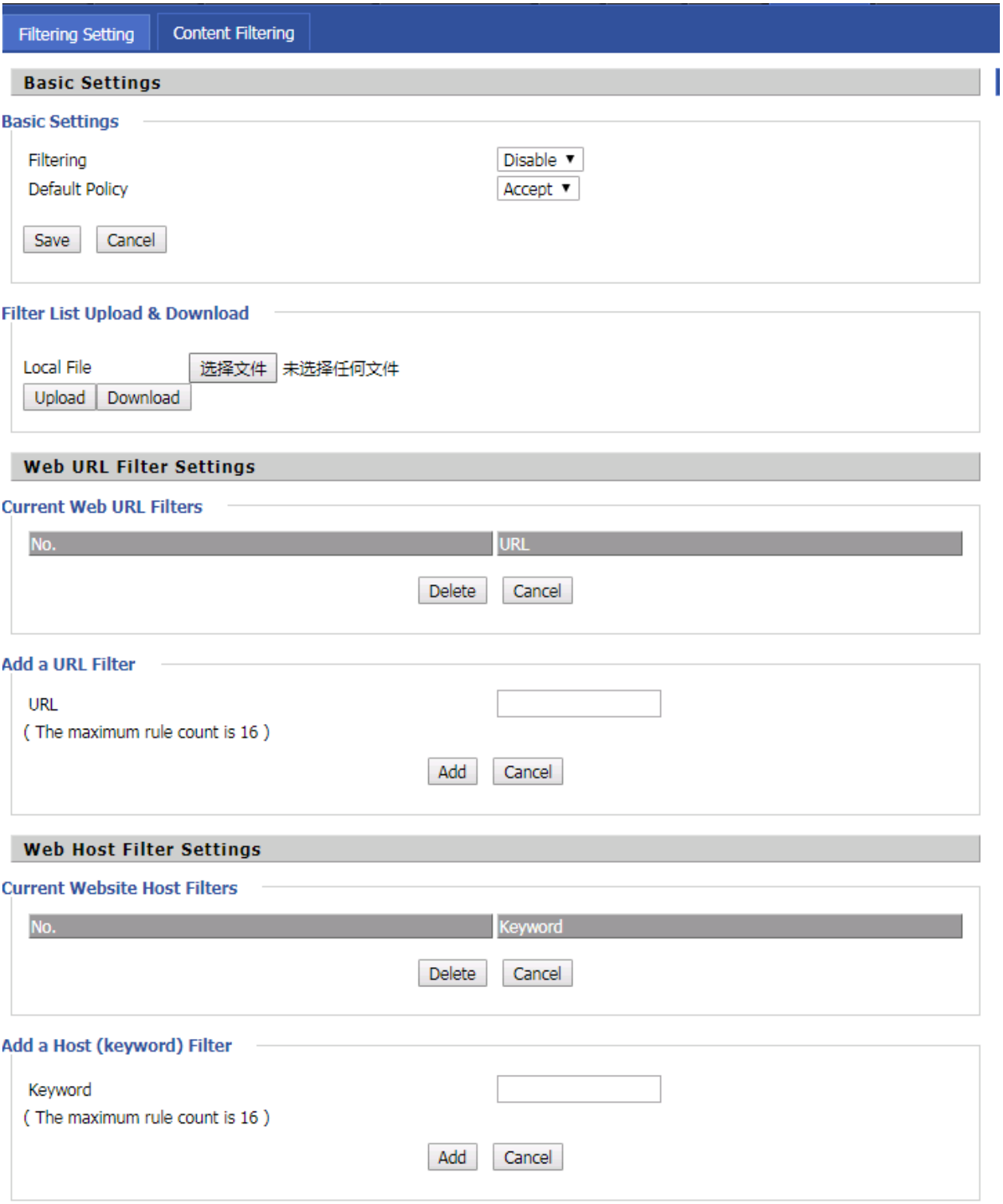
Filtering Setting



Field Name	Description
Filtering	Enable/Disable filter function
Default Policy	Choose to drop or accept filtered MAC addresses
Mac address	Add the Mac address filtering
Dest IP address	Destination IP address
Source IP address	Source IP address

Protocol	Select a protocol name, support for TCP, UDP and TCP/UDP
Dest. Port Range	Destination port ranges
Src Port Range	Source port range
Action	You can choose to receive or give up; this should be consistent with the default policy
Comment	Add callout
Delete	Delete selected item

Content Filtering

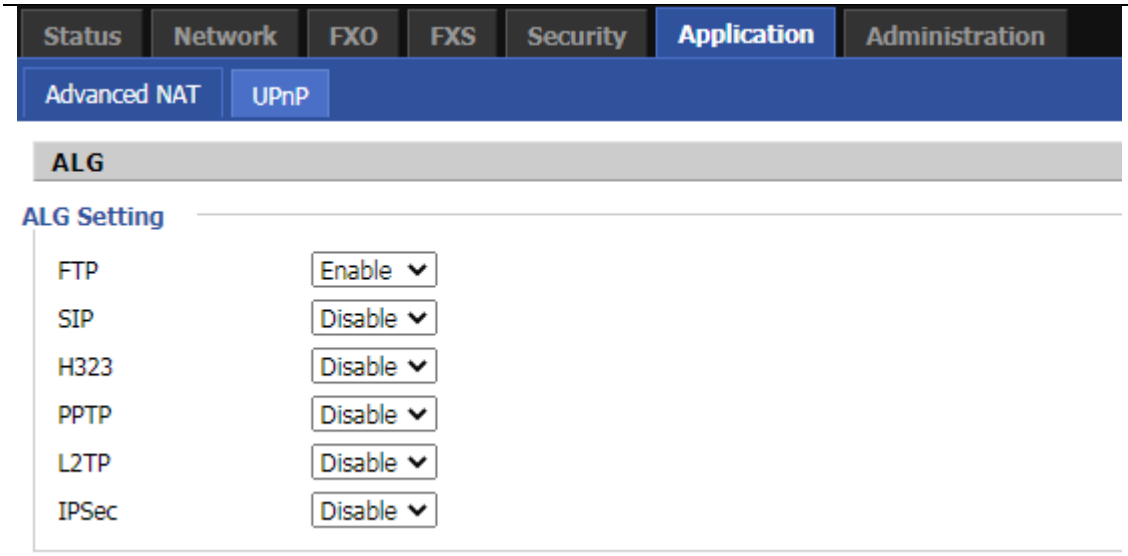


Field Name	Description
Filtering	Enable/Disable content Filtering
Default Policy	The default policy is to accept or to prohibit filtering rules
Current Webs URL	List the URL filtering rules that already existed (blacklist)
Delete/Cancel	You can choose to delete or cancel the existing filter rules
Add a URL Filter	Add URL filtering rules
Add/Cancel	Click adds to add one rule or click cancel
Current Website Host Filters	List the keywords that already exist (blacklist)
Delete/Cancel	You can choose to delete or cancel the existing filter rules the existing
Add a Host Filter	Add keywords
Add/Cancel	Click the Add or cancel

Application

Topics

Advance NAT

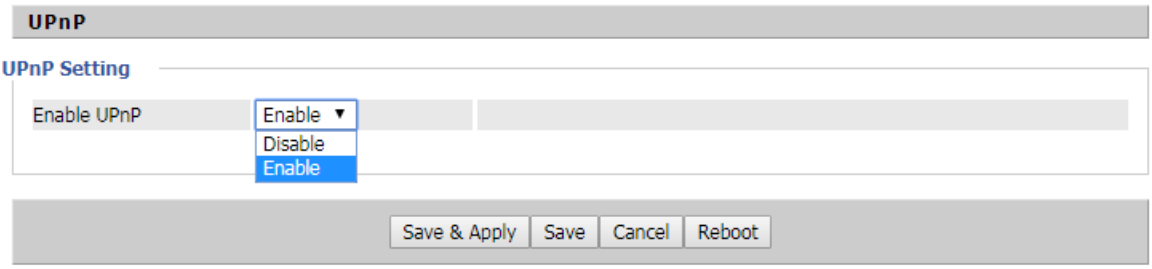


Description
Enable/Disable these function(FTP/SIP/H323/PPTP/L2TP/IPSec).

UPnP

UPnP (Universal Plug and Play) supports zero-configuration networking, and can automatically discover a variety of networked devices. When UPnP is enabled, the connected device is allowed to access the network, obtain an IP address, and convey performance information. If the network has a DHCP and DNS server, the connected device can automatically obtain DHCP and DNS services.

UPnP devices can be automatically added to the network without affecting previously-connected devices.



Field Name	Description
UPnP enable	Enable/Disable UPnP function

Administration

The user can manage the device in these webpages; you can configure the Time/Date, password, web access, system log and associated configuration TR069.

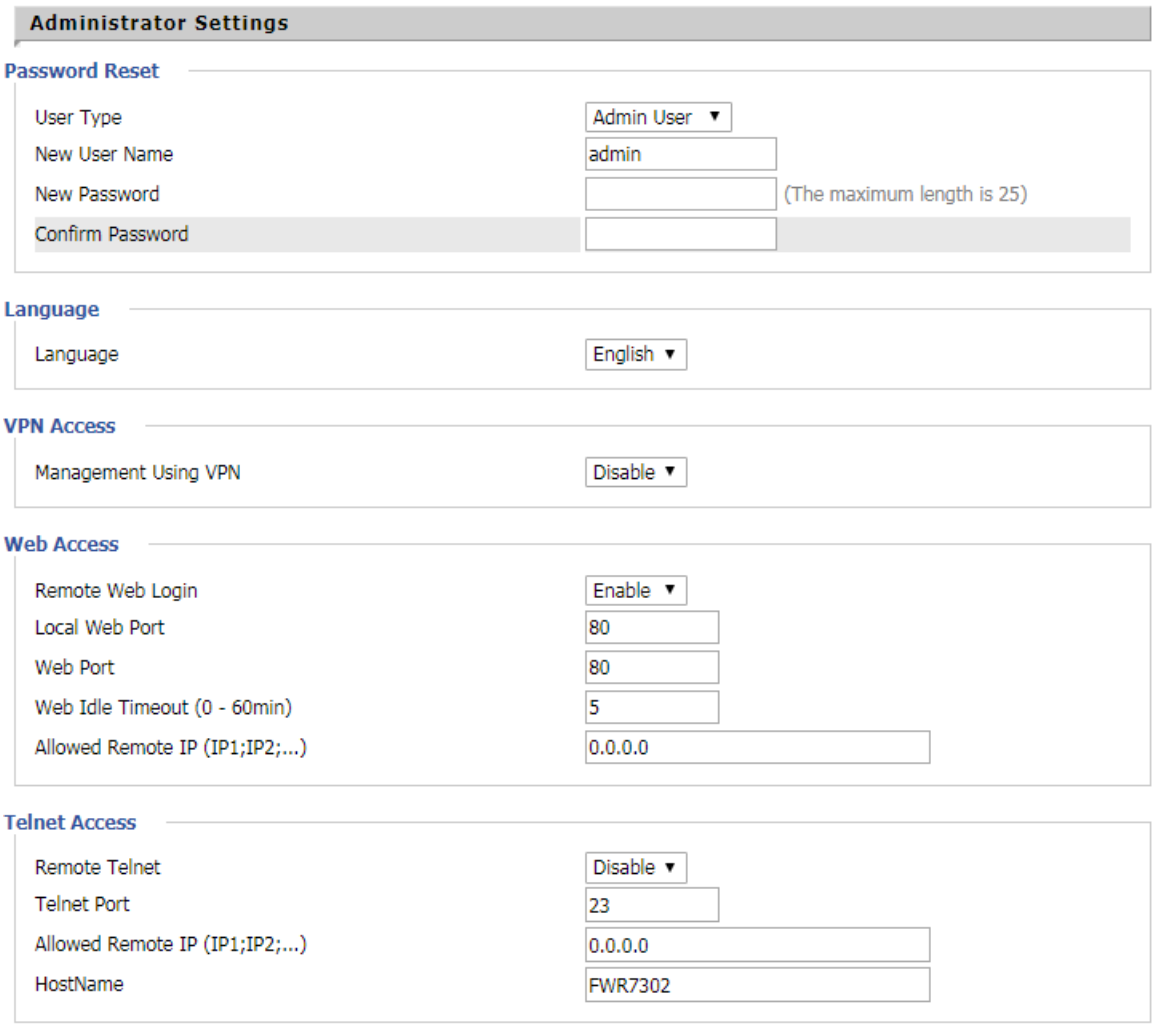
Topics

Management

Save config file

Field Name	Description
Config file upload and download	Upload: click on browse, select file in the local, press the upload button to begin uploading files
	Download: click to download, and then select contains the path to download the configuration file

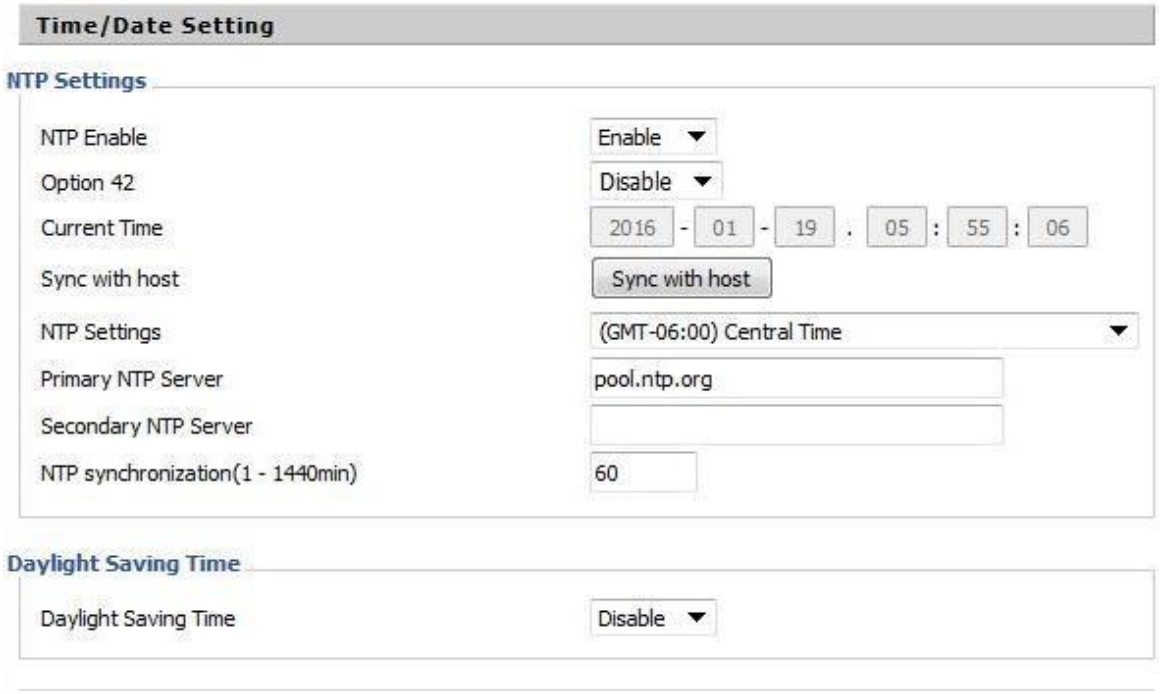
Administrator settings



Field Name	Description
User type	Choose the user type from admin user and normal user and basic user
New User Name	You can modify the user name, set up a new user name
New Password	Input the new password
Confirm Password	Input the new password again
Language	Select the language for the web, the device support Chinese, English, and Spanish and so on
Remote Web Login	Enable/Disable remote Web login
Web Port	Set the port value which is used to login from Internet port and PC port, default is 80

Web Idle timeout	Set the Web Idle timeout time. The webpage can be logged out after Web Idle Timeout without any operation
Allowed Remote IP(IP1,IP2,...)	Set the IP from which a user can login the device remotely
Telnet Port	Set the port value which is used to telnet to the device

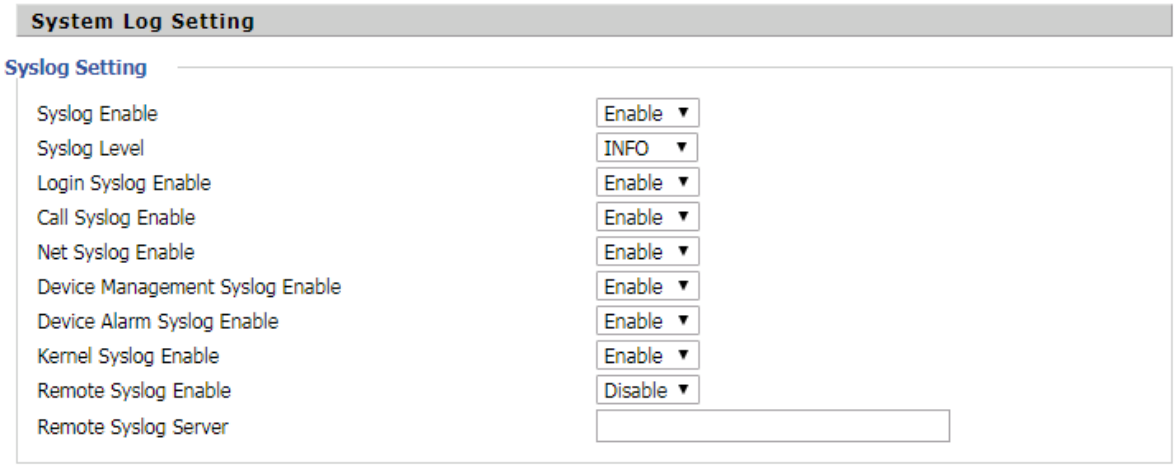
NTP settings



Field Name	Description
NTP Enable	Enable/Disable NTP
Option 42	Enable/Disable DHCP option 42. This option specifies a list of the NTP servers available to the client by IP address
Current Time	Display current time
NTP Settings	Setting the Time Zone
Primary NTP Server	Primary NTP server's IP address or domain name

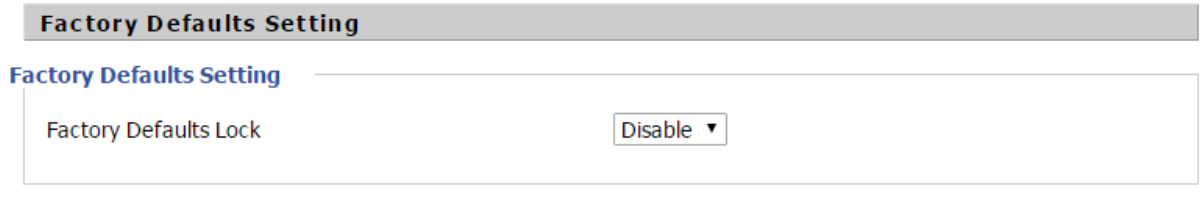
Secondary NTP Server	Options for NTP server's IP address or domain name
NTP synchronization	NTP synchronization cycle, cycle time can be 1 to 1440 minutes in any one, the default setting is 60 minutes

System Log Setting



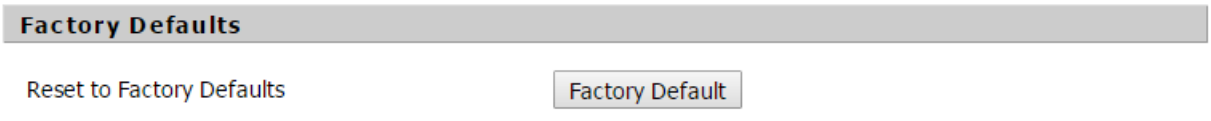
Field Name	Description
Syslog Enable	Enable/Disable syslog function
Syslog Level	Select the system log, there is INFO and Debug two grades, the Debug INFO can provide more information
Remote Syslog	Enable/Disable remote syslog function
Remote Syslog	Add a remote server IP address
Syslog Enable	Enable/Disable syslog function

Factory Defaults Setting



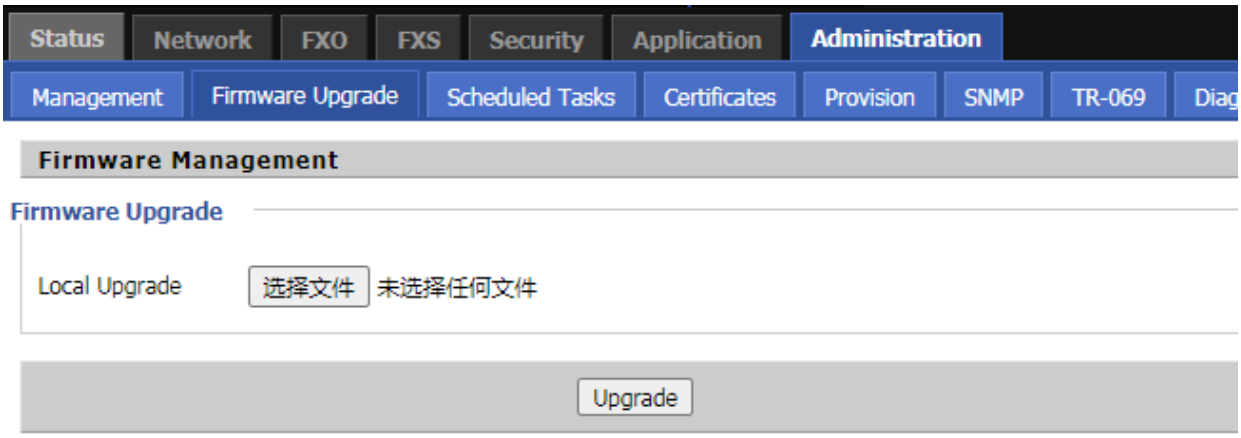
Description
When enabled, the device may not be reset to factory defaults until this parameter is reset to Disable.

Factory Defaults



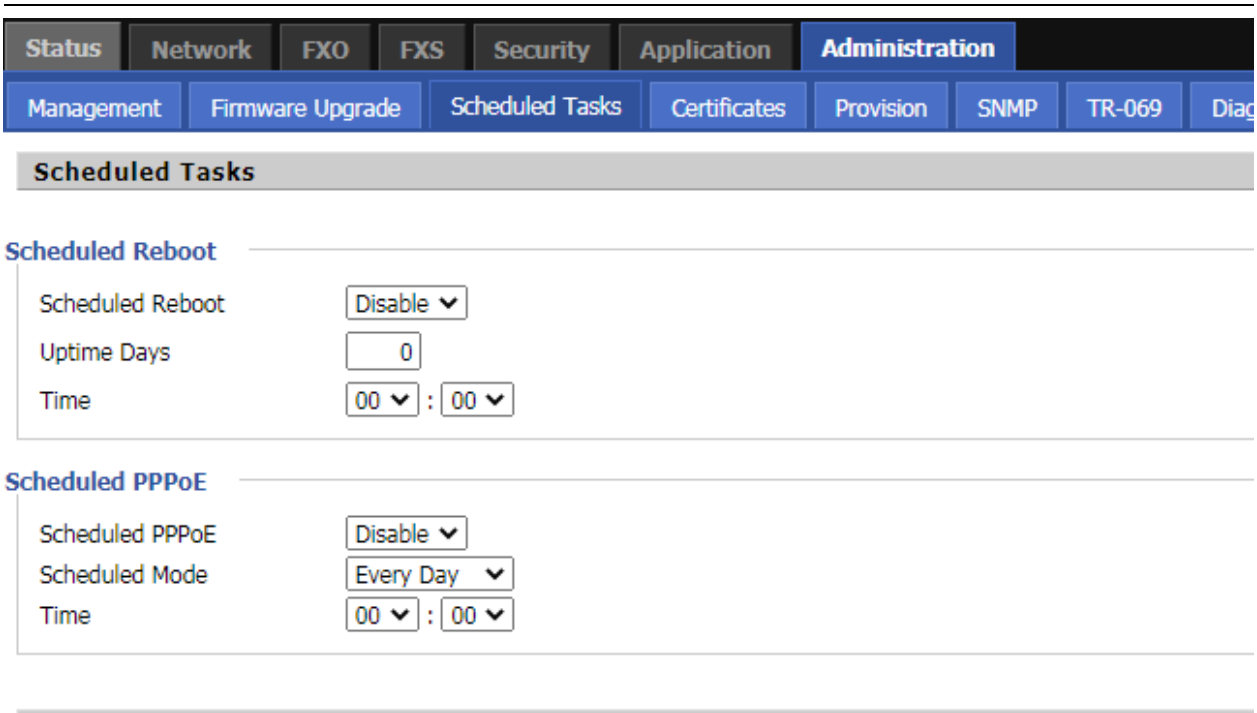
Description
Click Factory Default to restore the residential gateway to factory settings.

Firmware Upgrade



Description	
1.	Choose upgrade file type from Image File and Dial Rule
2.	Press “Browse..” button to browser file
3.	Press Upgrade to start upgrading

Scheduled Tasks

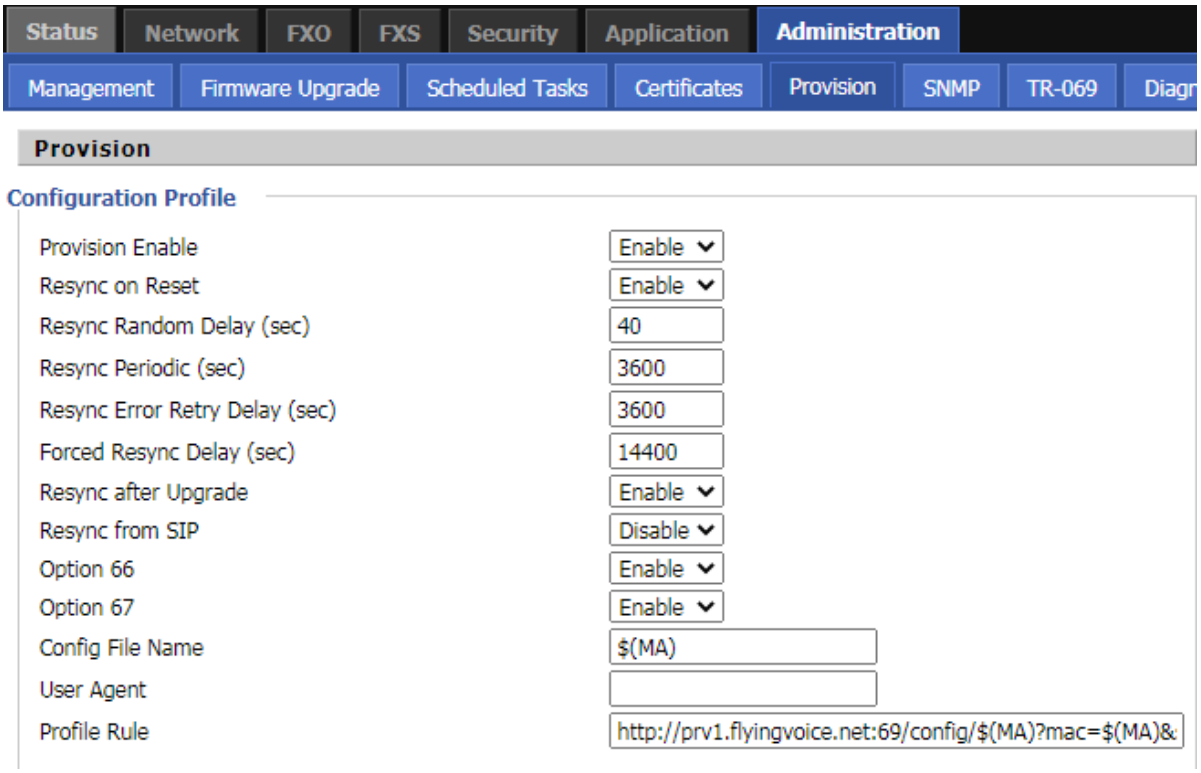


Field Name	Description
Scheduled Reboot	
Scheduled Reboot	Enable / disable scheduled reboot
Scheduled Mode	Choose work mode every day / week
Time	Set the time for scheduled reboot
Scheduled PPPoE	
Scheduled PPPoE	Enable / disable restart PPPoE
Scheduled Mode	Choose work mode every day / week
Time	Set the time for scheduled PPPoE

Provision

Provisioning allows the ATA to auto-upgrade and auto-configure devices which support TFTP, HTTP and HTTPs.

- Before testing or using TFTP, user should have TFTP server and upgrading file and configuring file.
- Before testing or using HTTP, user should have HTTP server and upgrading file and configuring file.
- Before testing or using HTTPS, user should have HTTPS server and upgrading file and configuring file and CA Certificate file (should same as https server's) and Client Certificate file and Private key file.
- User can upload a CA Certificate file and Client Certificate file and Private Key file in the Security page.

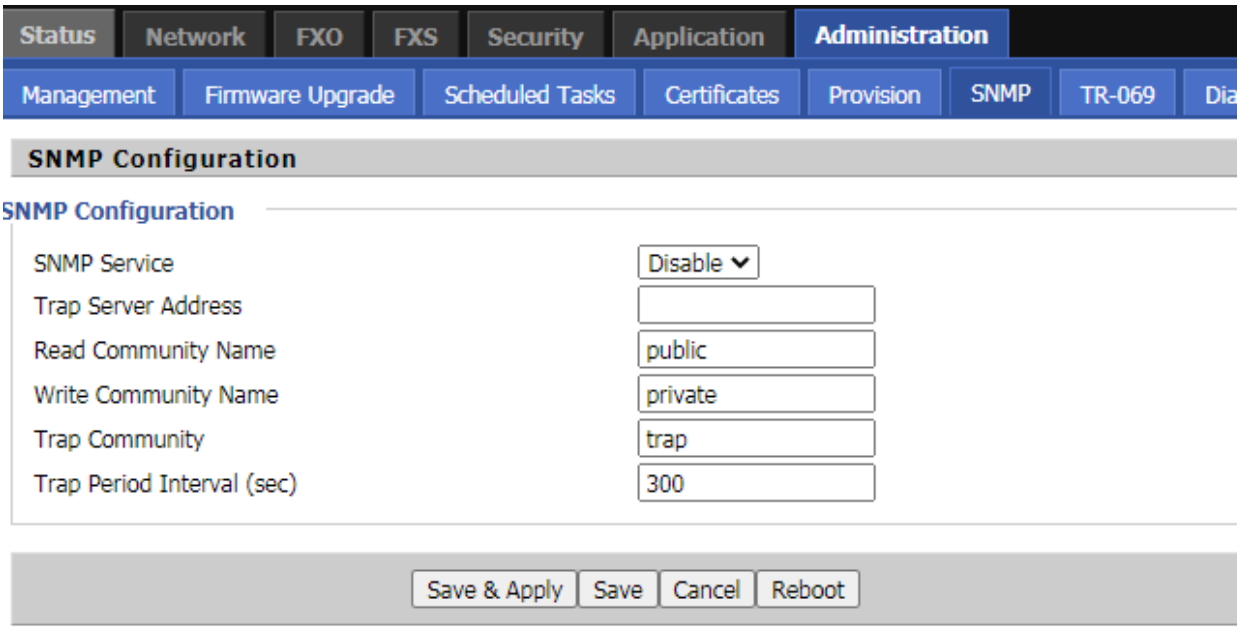


Field Name	Description
Provision Enable	Enable provision or not.
Resync on Reset	Enable resync after restart or not.
Resync Random Delay(sec)	Set the maximum delay for the request of synchronization file. The default is 40.
Resync Periodic(sec)	If the last resync was failure, The ATA will retry resync after the "Resync Error Retry Delay" time, default is 3600s.
Resync Error Retry	Set the periodic time for resync, default is 3600s.
Forced Resync Delay(sec)	If it's time to resync, but the device is busy now, in this case, the ATA will wait for a period time, the longest is "Forced Resync Delay", default is 14400s, when the time over, the ATA will forced to resync.
Resync After	Enable firmware upgrade after resync or not. The default is Enabled.
Resync From SIP	Enable/Disable resync from SIP.
Option 66	It is used for In-house provision mode only. When use TFTP with option 66 to realize provisioning, user must input right configuration file name in the webpage. When disable Option 66, this parameter has no effect.
Config File Name	It is used for In-house provision mode only. When use TFTP with option 66 to realize provisioning, user must input right configuration file name in the webpage. When disable Option 66, this parameter has no effect.

Profile Rule	URL of profile provision file. Note that the specified file path is relative to the TFTP server's virtual root directory.

Field Name	Description
Upgrade Enable	Enable firmware upgrade via provision or not
Upgrade Error Retry Delay(sec)	If the last upgrade fails, the ATA will try upgrading again after "Upgrade Error Retry Delay" period, default is 3600s
Upgrade Rule	URL of upgrade file

SNMP



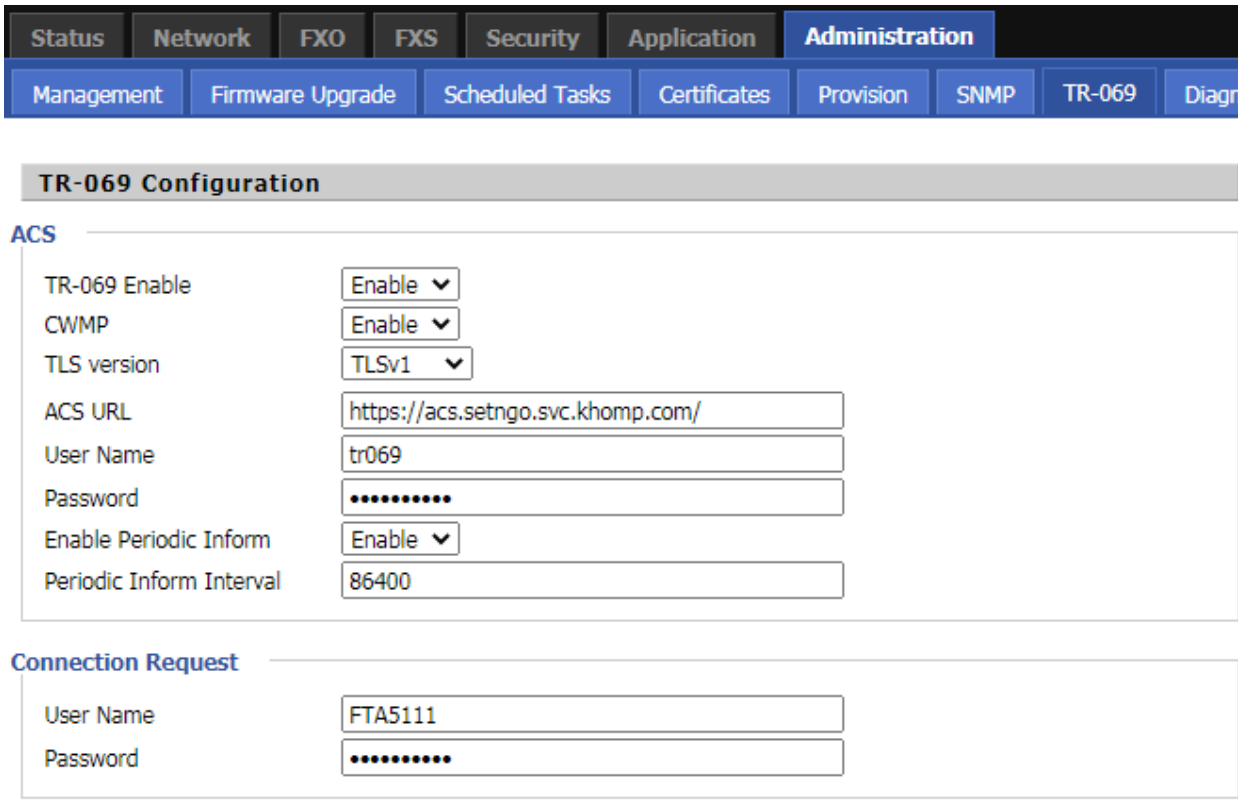
Field Name	Description
SNMP Service	Enable or Disable the SNMP service
Trap Server Address	Enter the trap server address for sending SNMP traps
Read Community Name	String value that is used as a password to request information via SNMP from the device
Write Community Name	String value that is used as a password to write configuration values to the device via SNMP
Trap Community	String value used as a password for retrieving traps from the device
Trap period interval(sec)	The interval for which traps are sent from the device

TR-069

TR-069 provides the possibility of auto configuration of internet access devices and reduces the cost of management. TR-069 (short for Technical Report 069) is a DSL Forum technical specification entitled CPE WAN Management Protocol (CWMP). It defines an application layer protocol for remote management of end-user devices. Using TR-069, the terminals establish connection with the Auto Configuration Servers (ACS) and get configured automatically.

Device Configuration using TR-069

The TR-069 configuration page is available under Administration menu.

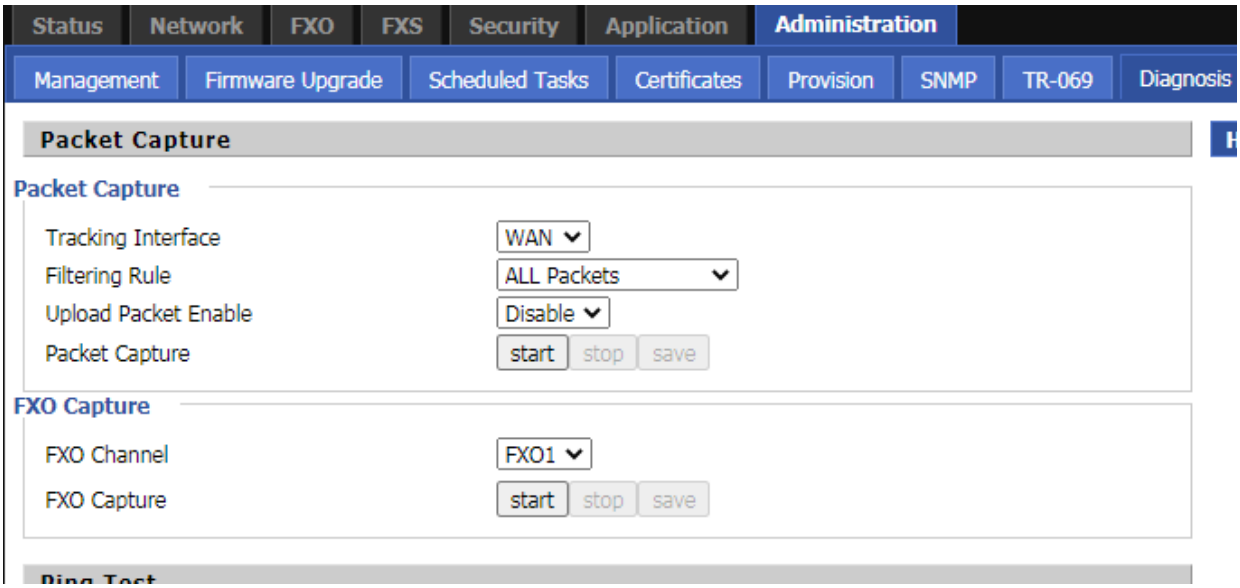


Field Name	Description
ACS parameters	
TR069 Enable	Enable or Disable TR069
CWMP	Enable or Disable CWMP
ACS URL	ACS URL address
User Name	ACS username
Password	ACS password

Periodic Inform Enable	Enable the function of periodic inform or not. By default it is Enabled
Periodic Inform Interval	Periodic notification interval with the unit in seconds. The default value is 3600s
Connect Request parameters	
User Name	The username used to connect the TR069 server to the DUT
Password	The password used to connect the TR069 server to the DUT

Diagnosis

In this page, user can do packet trace, ping test and traceroute test to diagnose the device's connection status.



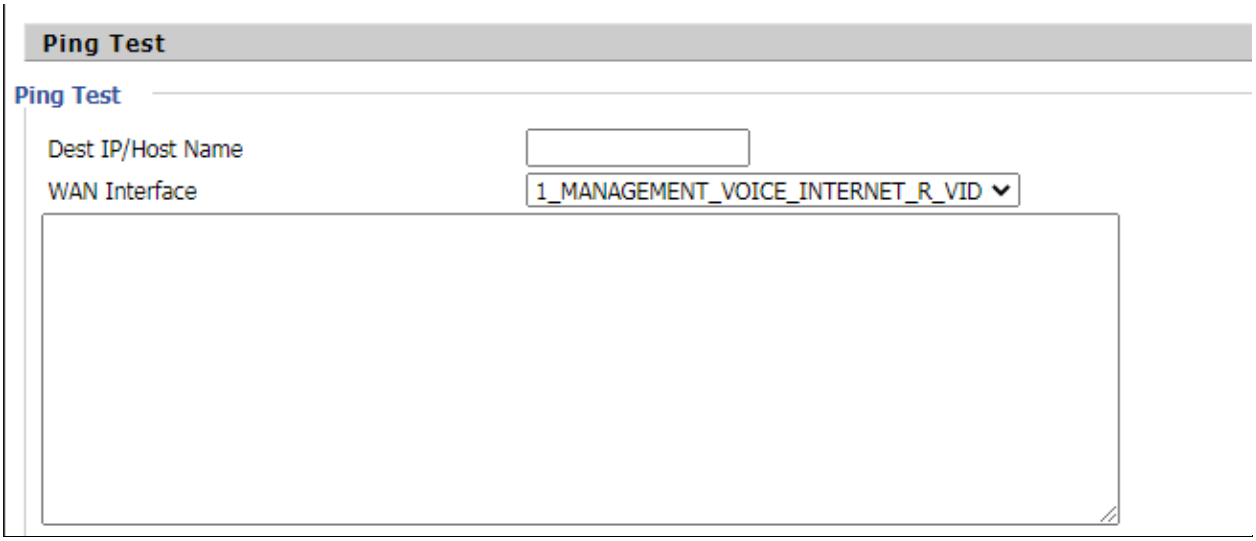
Description

1. Packet Trace

Users can use the packet trace feature to intercept packets which traverse the device. Click the Start button to start home gateway tracking and keep refreshing the page until the message trace shows to stop, click the Save button to save captured packets.

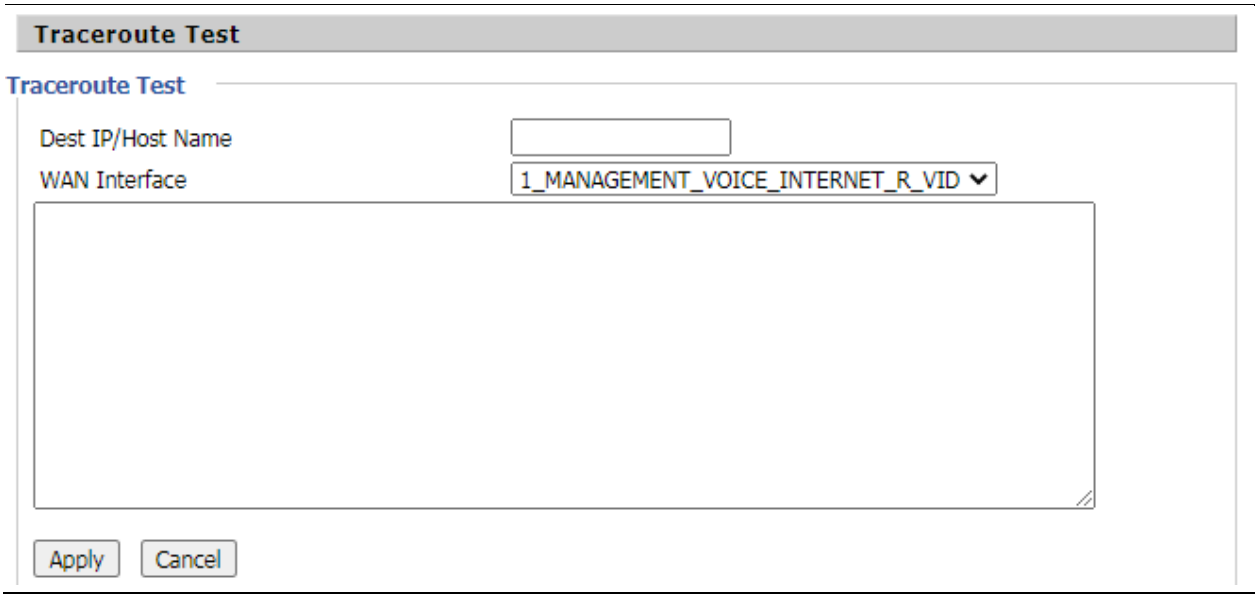
2. Ping Test

Enter the destination IP or host name, and then click Apply, device will perform ping test.

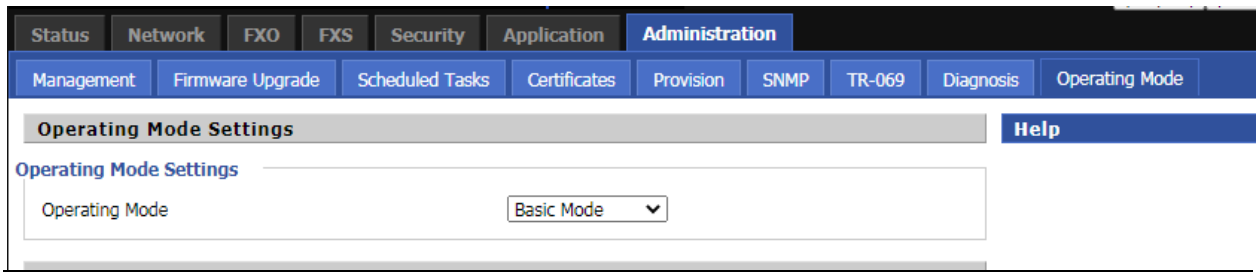


3. Traceroute Test

Enter the destination IP or host name, and then click Apply, device will perform traceroute test.



Operating Mode



Description
Choose the Operation Mode as Basic Mode or Advanced Mode.