FLYINGVOICE

User Manual
FTA5102E2/FTA5101

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About This User Guide

FTA5102E2, which has two FXS port , one LAN port and one WAN port, is one of the most popular VoIP ATAs researched and produced by FlyingVoice. This product can not only provide two SIP lines for users to make calls, but also it is a wire-speed NAT router, make you enjoy easy network atmosphere. What’ s more, FTA5102E2 support T.38 real time FAX and T.30 FAX with G.711.FTA5102E2 is a stand-alone device, which requires no PC to make Internet calls. This ATA guarantees clear and reliable voice quality on Internet, which is fully compatible with SIP industry standard and able to interoperate with many other SIP devices and software on the market. The FTA5102E2, 2 FXS Analogue Telephone Adapter products in Flyingvoice, which enables customers to register to different SIP Proxy server, IP PBX and establish up to 2 concurrent VoIP calls for more flexibility in the voice communication. Their compact size, excellent voice quality, packed feature functionality and best-in-class price-performance point enable consumers to maximize the power of IP voice and data connectivity. FTA5102E2 is based on SIP V2.0 standard and compatibility with most service providers.TR069 CPE management & monitoring protocols and a base stand for vertical positioning.

This guide contains the following chapters:

- Chapter 1: Product description
- Chapter 2: Configuring Basic Settings
- Chapter 3: Web Interface
- Chapter 4: IPv6 address configuration on WAN interface
- Chapter 5: Troubleshooting Guide

Contacting FlyingVoice

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Purpose

The documents are intended to instruct and assist personnel in the operation, installation and maintenance of the FlyingVoice equipment and ancillary devices. It is recommended that all personnel engaged in such activities be properly trained.FlyingVoice disclaims all liability whatsoever, implied or express, for any risk of damage, loss or reduction in system performance arising directly or indirectly out of the failure of the customer, or anyone acting on the customer's behalf, to abide by the instructions, system parameters, or recommendations made in this document.

Cross references

References to external publications are shown in italics. Other cross references, emphasized in blue text in electronic versions, are active links to the references.

This document is divided into numbered chapters that are divided into sections. Sections are not numbered, but are individually named at the top of each page, and are listed in the table of contents.

Feedback

We appreciate feedback from the users of our documents. This includes feedback on the structure, content, accuracy, or completeness of our documents. Send feedback to support@flyingvoice.com.

Declaration of Conformity

Part 15 FCC Rules

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

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Class B Digital Device or Peripheral

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 can generate, use and radiate radio frequency energy. If not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference does not occur in a particular installation.

Note

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

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 interferences 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.

Warnings and Notes

The following describes how warnings and notes are used in this document and in all documents of the FlyingVoice document set.

Warnings

Warnings precede instructions that contain potentially hazardous situations. Warnings are used to alert the reader to possible hazards that could cause loss of life or physical injury. A warning has the following format:

⚠	**Warning** Warning text and consequence for not following the instructions in the warning.

Notes

A note means that there is a possibility of an undesirable situation or provides additional information to help the reader understand a topic or concept. A note has the following format:

▲	**Notes** Notes text and consequence for not following the instructions in the Notes.

Chapter 1 Product description

This chapter covers:

- FTA5102E2/FTA5101
- LED Indicators and Interfaces
- Hardware Installation
- Voice Prompt

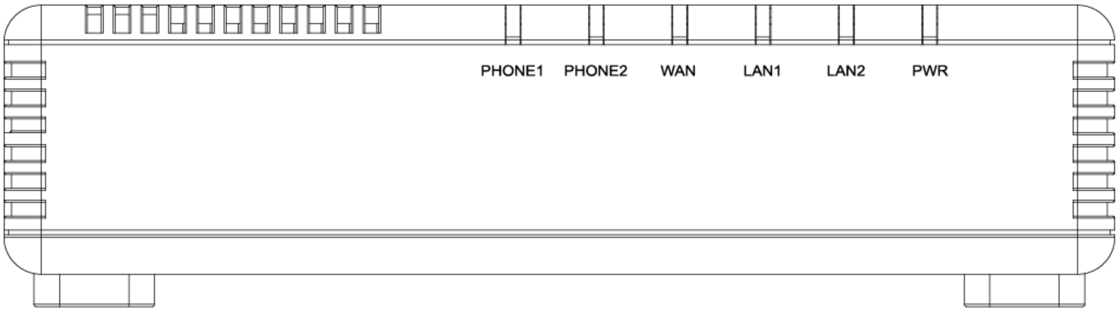
FTA5102E2/FTA5101

Table 1 Features at-a-glance

Port/Model	FTA5102E2	FTA5101
Picture		
WAN	1	1
LAN	2	2
FXS	2	1
Ethernet interface	3* RJ45 10/100M	3* RJ45 10/100M
Fax	T.30, T.38 Fax	
Wire-speed NAT	Support	
Voice Code	G.711 (A-law, U-law), G.729A/B, G.723, G.722 (Wide band)	
Management	Voice menu, Web Management, Provision: TFTP/HTTP/HTTPS, TR069, SNMP	
VLAN	Support	

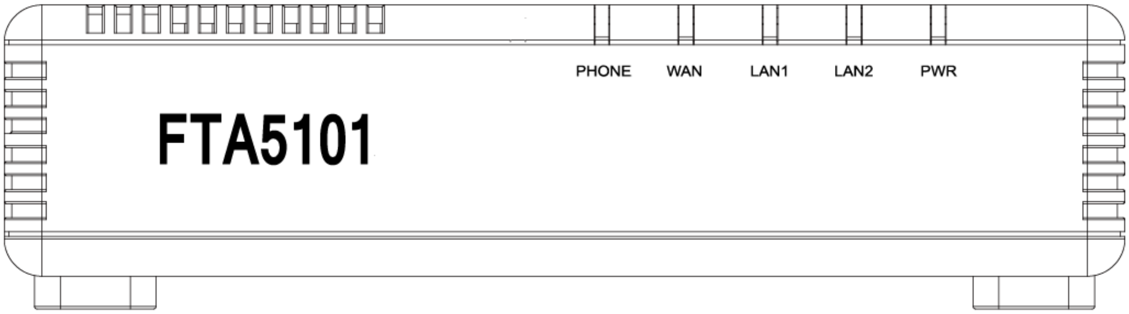
LED Indicators and Interfaces

Table 2 FTA5102E2 LED Indicators



LED	Status	Explanation
PHONE1/PHONE2	Blinking (Green)	Using
	On (Green)	Registered
	off	Not registered
WAN	On (Green)	The port is connected with 100Mbps.
	Off	The port is disconnected.
	Blinking (Green)	It will blink while transmitting data.
LAN1/2	On (Green)	The port is connected with 100Mbps.
	Off	The port is disconnected.
	Blinking (Green)	It will blink while transmitting data.
POWER	On (Green)	The router is powered on and running normally.
	Off	The router is powered off.

Table 3 FTA5101 LED Indicators



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	Off	The port is disconnected.
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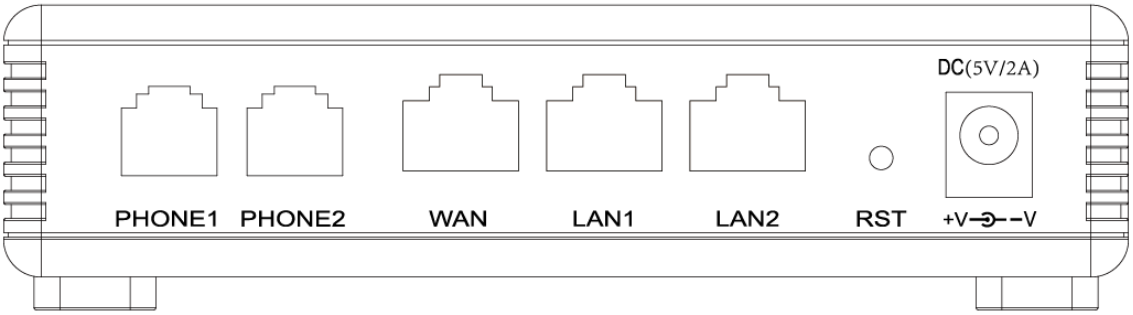
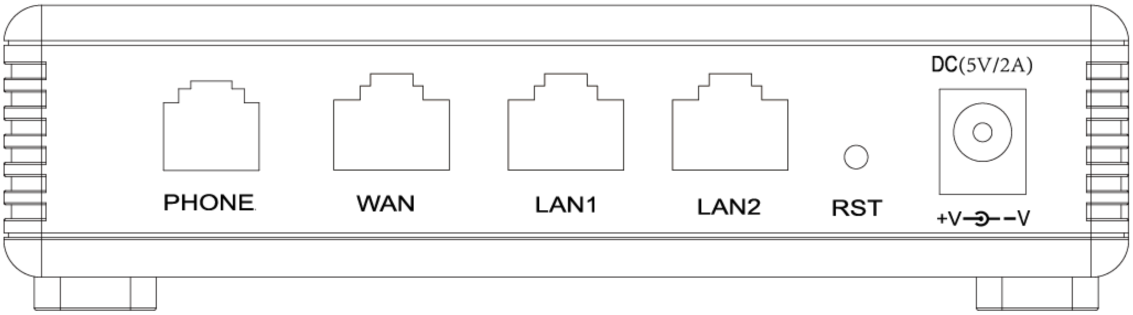
	Off	The router is powered off.

Table 4 FTA5102E2 Interfaces



Interface	Description
PHONE1/PHONE2	Analog phone connector
WAN	Connector for accessing the Internet
LAN 1/2	Connectors for local networked devices
RESET	Restore the factory settings button, press and hold the device after 5s to restore
POWER	Connector for a power adapter

Table 5 FTA5101 Interfaces



Interface	Description
PHONE	Analog phone connector
WAN	Connector for accessing the Internet
LAN 1/2	Connectors for local networked devices
RESET	Restore the factory settings button, press and hold the device after 5s to restore
POWER	Connector for a power adapter

Hardware Installation

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

Procedure 1 Configuring the Router

1. Connect analog phone to ATA Port with an RJ11 cable.
2. Connect the WAN port to the Interne your network’ s modem/switch/router/ADSL
3. equipment using an Ethernet cable.
4. Connect one end of the power cord to the power port of the device. Connect the other end to the wall outlet.
5. Check the Power, WAN, and LAN LED to confirm network connectivity.

Warning

Please do not attempt to use unsupported power adapters and do not remove power during configuring or updating the device. Using other power adapters may damage FTA5102E2/FTA5101 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.

Chapter 2 IVR Voice Prompt

This chapter contains:

Voice Gateway Configuration Method (IVR)

The device can be configured in two ways, as follows:

(1) Use IVR (Interactive Voice Response)

(2) the use of web pages

This chapter mainly introduces how to configure the voice gateway through IVR.

Start IVR

Users follow these steps to achieve IVR:

(1) Go off-hook and press the "****" key to start the IVR. Then the user will hear the voice prompt "1 WAN port configuration...".

(2) According to different options, press any digit between 0 and 9, the device will broadcast the corresponding content, the numbers 0 to 9 represent the details as shown in the chart below.

(3) After each setting is successful, the device will play "Please input option, 1 WAN port configuration...".

Note

Before using IVR,please confirm analog phone is connected with ATA correctly.

IVR Description

The following chart lists the IVR requirements and a detailed description:

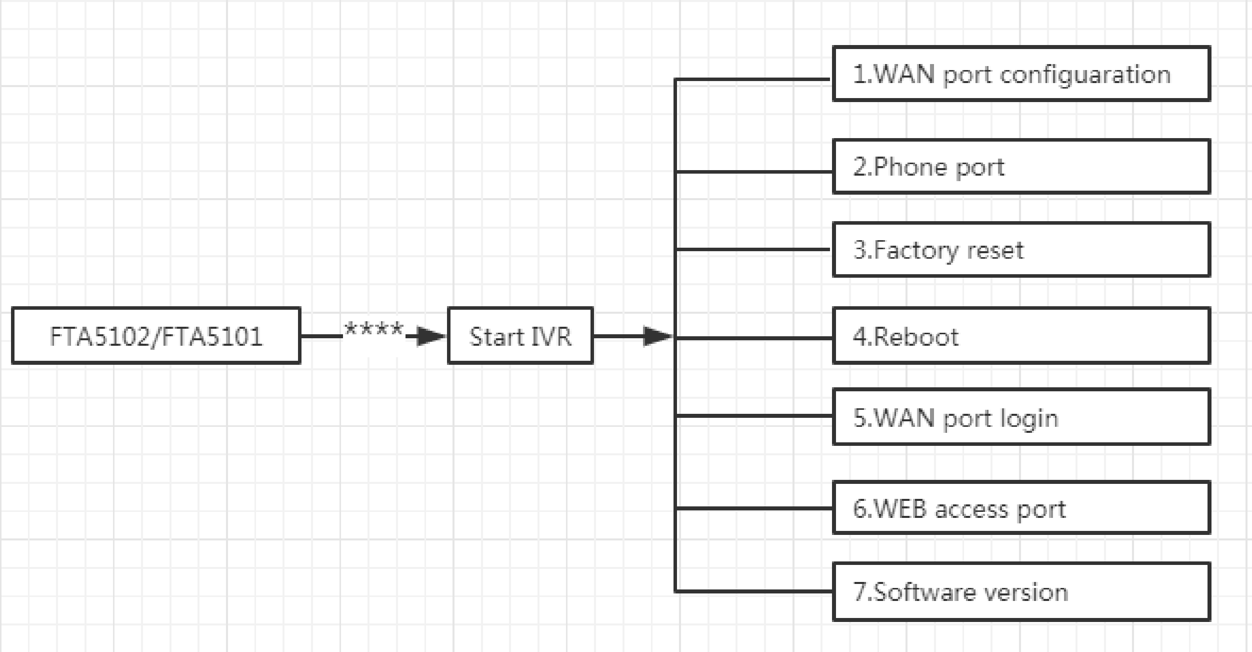


Table 6 IVR Menu Setting Options

Operation code	Menu Navigation
1 (1) WAN Port Connection Type	1. Pick up phone and press “****” to start IVR 2. Choose “1”, and The router reports the current WAN port connection type 3. Prompt "Please enter password”, user needs to input password and press “#” key, if user wants to configuration WAN port connection type. The password in IVR is same as web management interface login, the user may use phone keypad to enter password directly For example: WEB login password is “admin”, so the password in IVR is “admin”. The user may “23646” to access and then configure the WAN connection port. The unit reports “Operation Successful” if the password is correct. 4. Prompt "Please enter password”, user needs to input password and press “#” key if user wants to configuration WAN port connection type. 5. Choose the new WAN port connection type (1) DHCP or (2) Static The unit reports “Operation Successful” if the changes are successful. The router returns to the prompt “please enter your option …” 6. To quit, enter “*”
(2) WAN Port IP Address	1. Pick up phone and press “****” to start IVR 2. Choose “2”, and The router reports current WAN Port IP Address 3. Input the new WAN port IP address and press “#” key: 4. Use “*” to replace “.”, for exampleuser can input 192*168*20*168 to set the new IP address 192.168.20.168 5. Press # key to indicate that you have finished 6. Report “operation successful” if user operation is ok. 7. To quit, enter “**”.

(3) WAN Port Subnet Mask	1. Pick up phone and press “****” to start IVR 2. Choose “3”, and router reports current WAN port subnet mask 3. Input a new WAN port subnet mask and press # key: 4. Use “*” to replace “.”, user can input 255*255*255*0 to set the new WAN port subnet mask 255.255.255.0 5. Press “#” key to indicate that you have finished 6. Report “operation successful” if user operation is ok. 7. To quit, enter “**”.
(4) Gateway	1. Pick up phone and press “****” to start IVR 2. Choose “4”, and the router reports current gateway 3. Input the new gateway and press “#” key: 4. Use “*” to replace “.”, user can input 192*168*20*1 to set the new gateway 192.168.20.1. 5. Press “#” key to indicate that you have finished. 6. Report “operation successful” if user operation is ok. 7. To quit, press “**”.
(5) DNS	1. Pick up phone and press “****” to start IVR 2. Choose “5”, and the router reports current DNS 3. Input the new DNS and press # key: 4. Use “*” to replace “.”, user can input 192*168*20*1 to set the new gateway 192.168.20.1. 5. Press “#” key to indicate that you have finished.

2 phone port configuration	1. Pick up phone and press “****” to start IVR 2. Select "2", then the device will continue to broadcast prompts the user to select current phone number; 2. registration server address; 3. registration port; 4. call forwarding configuration，5. DNS configuration ; 3. Continue pressing "1" and the unit will continue to broadcast the phone number of the current phone port. The device will then broadcast "1. Phone number ..." again.
3 Factory Reset	1. Pick up phone and press “****” to start IVR 2. Choose “6” , and the router reports “Factory Reset” 3. Prompt "Please enter password", the method of inputting password is the same as operation 1. 4. If you want to quit, press “*” . 5. Prompt “operation successful” if password is right and then the router will be
4 Reboot	1. Pick up phone and press “****” to start IVR 2. Choose “7”, and the router reports “Reboot” 3. Prompt "Please enter password", the method of inputting password is same as operation 1. 4. the router reboots if password is right and operation
5 WAN Port Login	1. Pick up phone and press “****” to start IVR 2. Choose “8”, and the router reports “WAN Port Login” 3. Prompt "Please enter password", the method of inputting password is same as operation 1. 4. If user wants to quit, press “*”.

6 WEB Access Port	1. Pick up phone and press “****” to start IVR 2. Choose “9”, and the router reports “ WEB Access Port” 3. Prompt “Please enter password”, the method of inputting password is same as operation 1. 4. Report “operation successful” if user operation is ok. 5. Report the current WEB Access Port
7 Firmware Version	1. Pick up phone and press “****” to start IVR 2. Choose “0” and the router reports the current Firmware version

Note

1.While using Voice menu, press * (star) to return to main menu.

2.If any changes made in the IP assignment mode, the router must be rebooted in order for the settings to take effect.

3.While entering an IP address or subnet mask, use "*" (star) to enter "." (Dot) and use "#" (hash) key to finish entering IP address or subnet mask:

4.For example, to enter the IP address 192.168.20.159 by keypad, press these keys: 192*168*20*159, use the #(hash) key to indicate that you have finished entering the IP address.

5.Use the # (hash) key to indicate that you have finish entering the IP address or subnet mask

6.While assigning an IP address in Static IP mode, setting the IP address, subnet mask and default gateway is required to complete the configuration. If in DHCP mode, please make sure that a DHCP server is available in your existing broadband connection to which WAN port of FTA5102E2/FTA5101 is connected.

7.The default LAN port IP address of FTA5102E2/FTA5101 is 192.168.11.1 and this address should not be assigned to the WAN port IP address of FTA5102E2/FTA5101 in the same network segment of LAN port.

8.The password can be entered using phone keypad, the mapping table between number and letters as follows:

To input: D, E, F, d, e, f -- press ‘3’

To input: G, H, I, g, h, i -- press ‘4’

To input: J, K, L, j, k, l -- press ‘5’

To input: M, N, O, m, n, o -- press ‘6’

To input: P, Q, R, S, p, q, r, s -- press ‘7’

To input: T, U, V, t, u, v -- press ‘8’

To input: W, X, Y, Z, w, x, y, z -- press ‘9’

To input all other characters in the administrator password-----press ‘0’.

Chapter 3 Basic Settings

This chapter covers:

- Two-Level Management
- Web Management Interface
- Configuring
- Making a Call

WEB Page

About Password

Our device supports two levels of management: administrators and users.

(1) Administrator mode can browse and set all configuration parameters.

(2) User mode can set all configuration parameters except SIP1/2 that some parameters can not be changed, such as server address and port.

- Default user with administrator mode： Username: admin, Password: admin
- Default user with user mode: Username: admin, Password: user

URL Format

FTA5102E2 / FTA5101 has a built-in web server in response to HTTP get / post requests. Users can use a web browser, such as Microsoft's IE, to log in to the FTA5102E2 / FTA5101 page and configure the FTA5102E2 / FTA5101.

LAN port Login

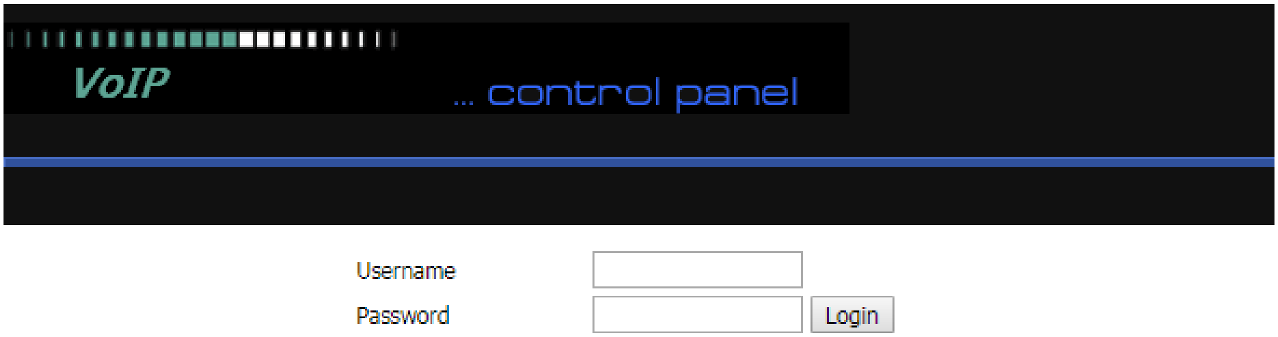
1.Ensure your PC is connected to the router’ s LAN port correctly.

Note

You may either set up your PC to get an IP dynamically from the router or set up the IP address of the PC to be the same subnet as the default IP address of router is 192.168.1.1. For detailed information, see Chapter 5: Troubleshooting Guide.

2.Open a web browser on your PC and input “http://192.168.1.1” .

3.The following window appears and prompts for username , password.



4.For administrator mode operation, please type admin/admin on Username/Password and click Login to begin configuration.

5.For user mode operation, please type user/user on Username/Password and click Login to begin configuration.

Note

If you are unable to access the web configuration, please see Chapter 5: Troubleshooting Guide for more information.

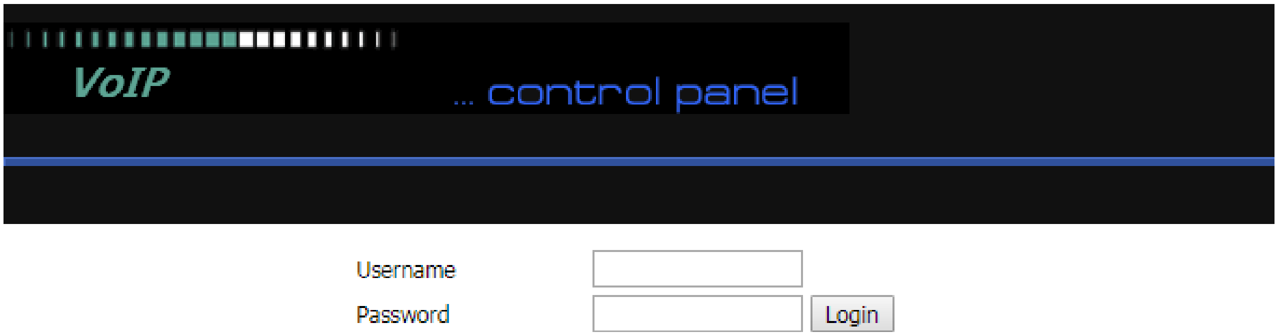
6.The web management interface automatically logs out the user after 5 minutes of inactivity.

WAN port Login

1.Ensure your PC is connected to the router’s WAN port correctly.

2.Obtain the IP addresses of WAN port using Voice prompt or by logging into the device web management interface via a LAN port and navigating to Network > WAN.

3.Open a web browser on your PC and input http://<IP address of WAN port>. The following login page will be opened to enter username and password.



4.For administrator mode operation, type admin/admin on Username/Password and click Login to begin configuration.

5.For user mode operation, type user/user on Username/Password and click Login to begin configuration.

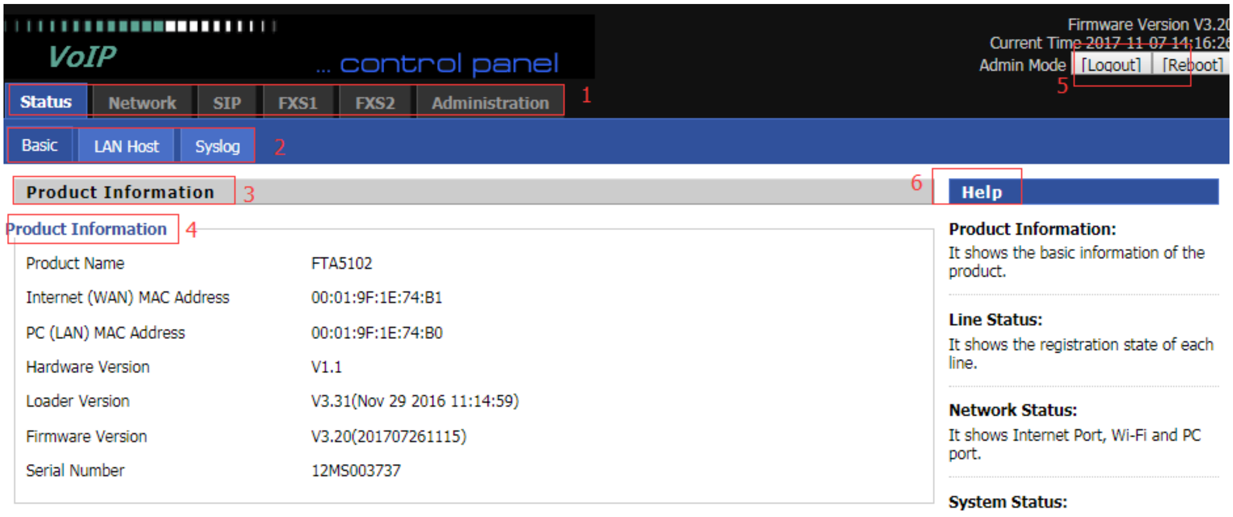
Note

If you fail to access to the web configuration, see Chapter 6: Troubleshooting Guide for more information.

6.The web management interface automatically logs out the user after 5 minutes of inactivity.

WEB Interface Introduction

Table 7 WEB Interface Introduction



Product Information

Product Name	FTA5102
Internet (WAN) MAC Address	00:01:9F:1E:74:B1
PC (LAN) MAC Address	00:01:9F:1E:74:B0
Hardware Version	V1.1
Loader Version	V3.31(Nov 29 2016 11:14:59)
Firmware Version	V3.20(201707261115)
Serial Number	12MS003737

Product Information:
It shows the basic information of the product.

Line Status:
It shows the registration state of each line.

Network Status:
It shows Internet Port, Wi-Fi and PC port.

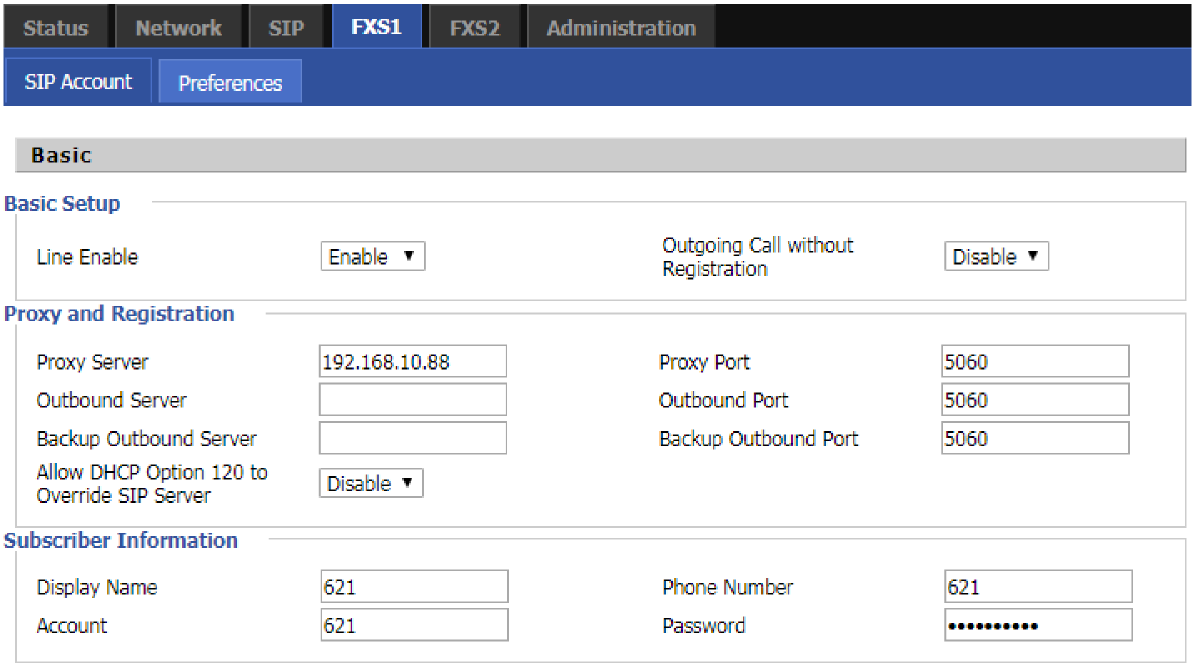
System Status:

Serial number	Name	Description
Postition 1	navigation bar	Click navigation bar, many sub-navigation bar will appear in the place 2
Postition 2	sub-navigation bar	Click sub-navigation bar to enter to configuration page
Postition 3	configuration title	The configuration title
Postition 4	configuration bars	The configuration bars
Postition 5	main information	Display the firmware version, DSP version, Current Time, and user can change login level (mode) to return to login page by press blue Switch button.
Postition 6	Help	Display the main information for configuration; user can get help from it directly.
	Save & Apply	Use this button,conifg will be saved and take effect.
	Save	After changing the parameters, you need to click this button to save. After you click Save, there is a need to restart the device.
	Cancel	Click to cancel the change
	Reboot	Click to restart
	Refresh	Refresh current page

SIP Account configuration

FTA5102E2/FTA5101 have 2/1 Line to make SIP (Session Initiation Protocol) calls. Before registering, the device user should have a SIP account configured by the system administrator or provider. See the section below for more information.

Table 8 Config SIP the Web Management Interface



Basic

Basic Setup

Line Enable	Enable ▼	Outgoing Call without Registration	Disable ▼

Proxy and Registration

Proxy Server	192.168.10.88	Proxy Port	5060
Outbound Server		Outbound Port	5060
Backup Outbound Server		Backup Outbound Port	5060
Allow DHCP Option 120 to Override SIP Server	Disable ▼		

Subscriber Information

Display Name	621	Phone Number	621
Account	621	Password	••••••••••

Steps:

Step 1. The account enable is set to "On" and the line can be used after opening.

Step 2. The registration server fills in the IP address of the SIP server.

Step 3. Display Name Fill in the content is the name of the number displayed on the LCD.

Step 4. The registration account is filled with the account provided by the SIP server.

Step 5. The name of the authentication is the SIP account provided by the SIP server.

Step 6. The password is filled with the password provided by the SIP server registration account.

Step 7. When you are finished, click the Save button at the bottom of the page to make the configuration take effect.

Step 8. Check the registration of the corresponding line on the display / web status page.

Notes

Step 3-9 is to fill in the required content, other parameters fill in the required

Procedure
To view the SIP account status of device, open the **Status** web page and view the value of registration status.

Basic Function

Calling phone or extension numbers

To make a phone or extension number call:

- Both ATA and the other VoIP device (i.e., another ATA or other SIP products) must have public IP addresses, or
- Both ATA and the other VoIP device (i.e., another ATA or other SIP products) are on the same LAN using private or public IP addresses,   or
- Both ATA and the other VoIP device (i.e., another ATA or other SIP products) can be connected through a router using a public or private IP addresses.

To make a call, first pick up the analog phone or turn on the speakerphone on the analog phone, input the IP address directly, end with #.

Direct IP calls

Direct IP calling allows two phones, that is, an ATA with an analog phone and another VoIP Device, to talk to each other without a SIP proxy. VoIP calls can be made between two phones if:

- Both ATA and the other VoIP device (i.e., another ATA or other SIP products) have public IP addresses, or
- Both ATA and the other VoIP device (i.e., another ATA or other SIP products) are on the same LAN using private or public IP addresses,   or
- Both ATA and the other VoIP device (i.e., another ATA or other SIP products) can be connected through a router using public or private IP addresses.

To make a direct IP call, first pick up the analog phone or turn on the speakerphone on the analog phone, Input the IP address directly, with the end “#”.

Call Hold

While in conversation, pressing the “*77” to put the remote end on hold, then you will hear the dial tone and the remote party will hear hold tone at the same time.

Pressing the “*77” again to release the previously hold state and resume the bi-directional media.

Call transfer

1.Blind Transfer

Assume that call party A and party B are in conversation. Party A wants to Blind Transfer B to C:

Party A dials “*78” to get a dial tone, then dials party C’s number, and then press immediately key # (or wait for 4 seconds) to dial out.A can hang up.

2.Attended Transfer

Assume that call party A and B are in a conversation. A wants to Attend Transfer B to C:

Party A dials “*77” to hold the party B, when hear the dial tone, A dials C’s number, then party A and party C are in conversation.

Party A dials “*78” to transfer to C, then B and C now in conversation.

If the transfer is not completed successfully, then A and B are in conversation again.

Conference

Assume that call party A and B are in a conversation. A wants to add C to the conference:

Party A dials “*77” to hold the party B, when hear the dial tone, A dial C’s number, then party A and party C are in conversation.

Party A dials “*88” to add C, then A and B, for conference.

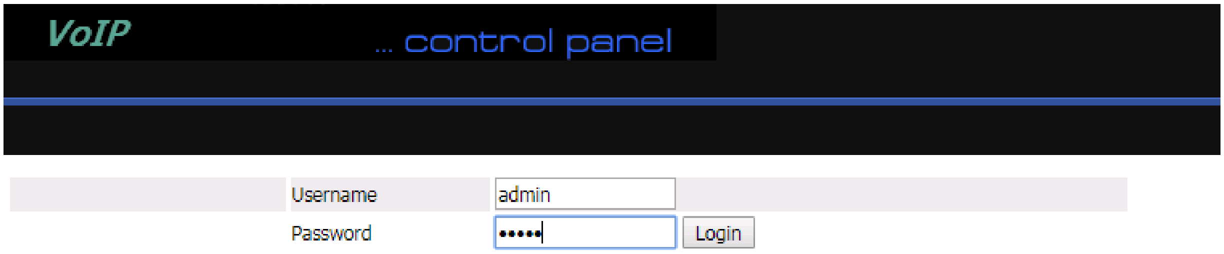
Chapter 4 Web Interface

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

- Login
- Status
- Network and Security
- Wireless
- SIP
- FXS1
- Security
- Application
- Administration
- Management
- System Log
- Logout
- Reboot

Login

Table 9 Login details



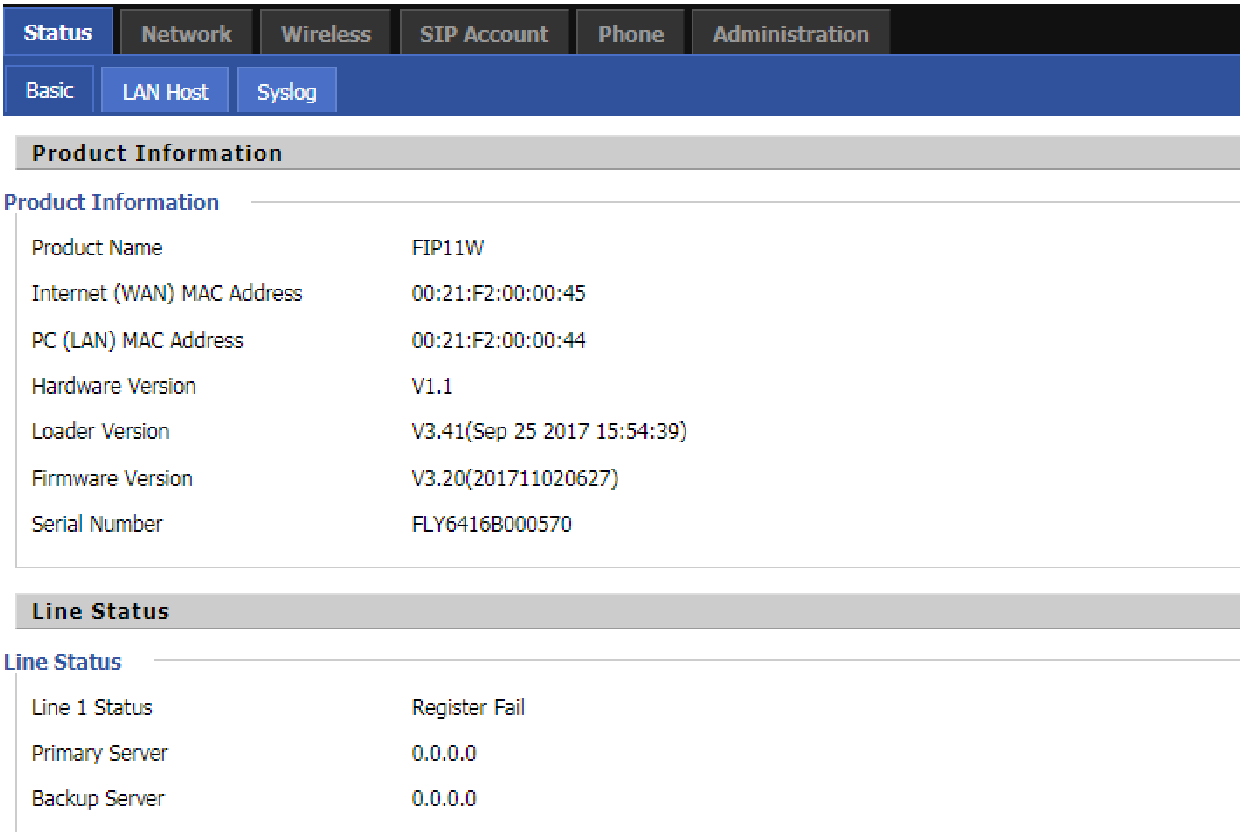
Username admin

Password •••••

Procedure
1. Connect the LAN port of the router 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, SIP Account Status, FXS Port Status, Network Status,Wireless Info and System Status



Product Information

Product Information

Product Name	FIP11W
Internet (WAN) MAC Address	00:21:F2:00:00:45
PC (LAN) MAC Address	00:21:F2:00:00:44
Hardware Version	V1.1
Loader Version	V3.41(Sep 25 2017 15:54:39)
Firmware Version	V3.20(201711020627)
Serial Number	FLY6416B000570

Line Status

Line Status

Line 1 Status	Register Fail
Primary Server	0.0.0.0
Backup Server	0.0.0.0

Network and Security

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

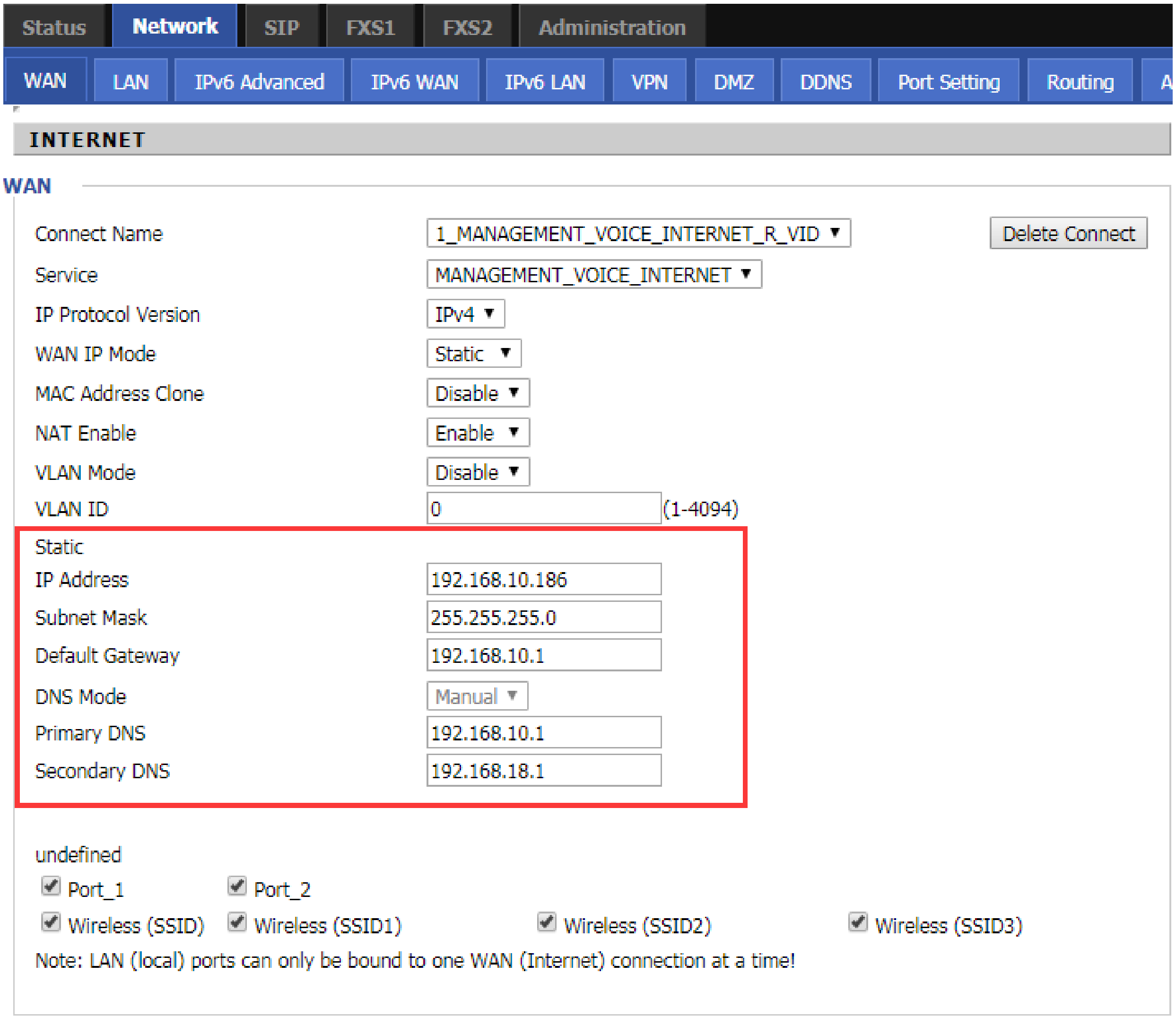
WAN

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.

1.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.

Table 10 Internet



Connect Name	1_MANAGEMENT_VOICE_INTERNET_R_VID ▼
Service	MANAGEMENT_VOICE_INTERNET ▼
IP Protocol Version	IPv4 ▼
WAN IP Mode	Static ▼
MAC Address Clone	Disable ▼
NAT Enable	Enable ▼
VLAN Mode	Disable ▼
VLAN ID	0 (1-4094)
Static	
IP Address	192.168.10.186
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.1
DNS Mode	Manual ▼
Primary DNS	192.168.10.1
Secondary DNS	192.168.18.1

undefined

☑ Port_1 ☑ Port_2

☑ Wireless (SSID) ☑ Wireless (SSID1) ☑ Wireless (SSID2) ☑ Wireless (SSID3)

Note: LAN (local) ports can only be bound to one WAN (Internet) connection at a time!

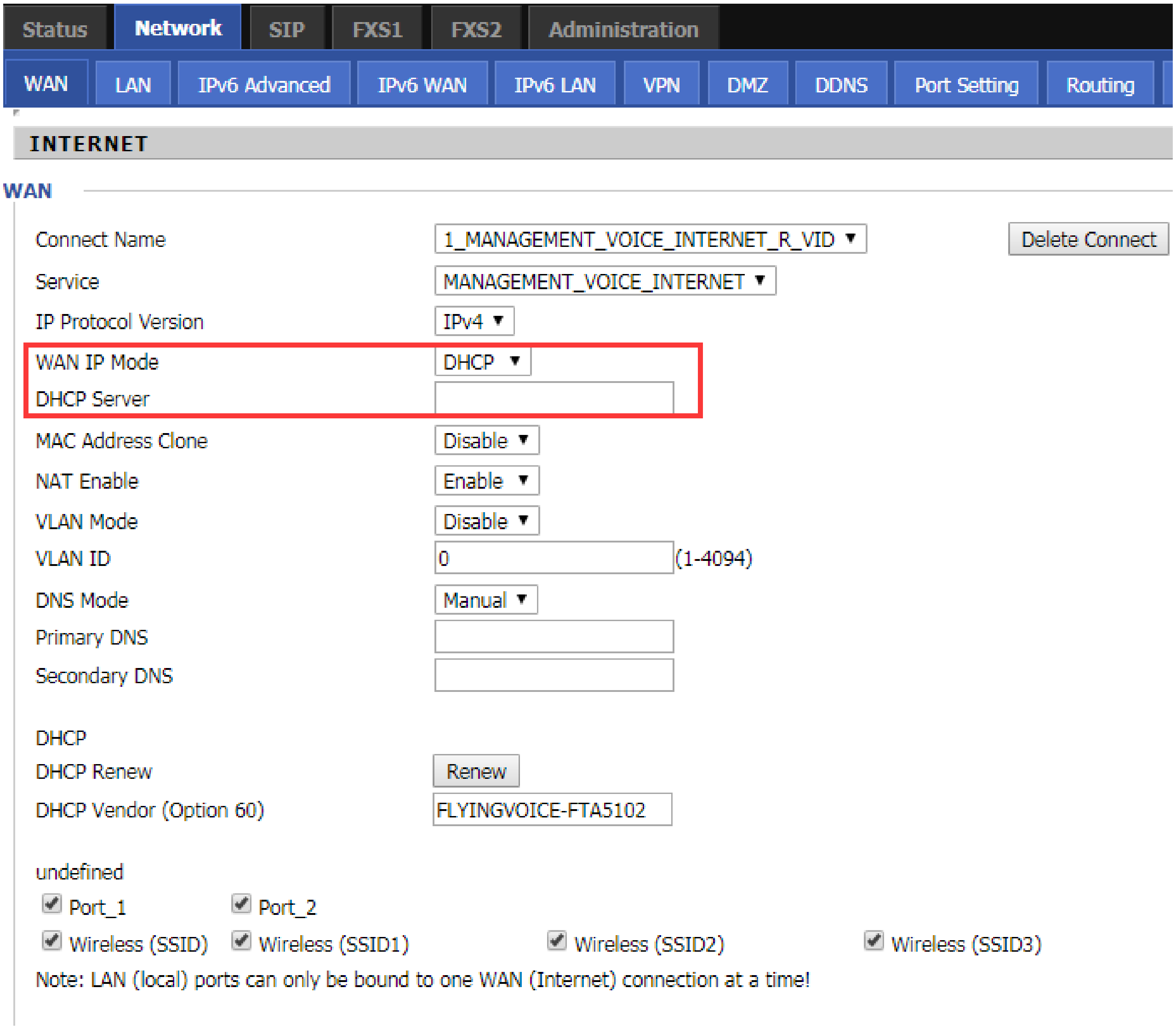
Field Name	Descriptio
IP Address	The IP address of Internet port
Subnet Mask	The subnet mask of Internet port
Default Gateway	The default gateway of Internet port
DNS Mode	Select DNS mode, options are Auto and Manual: 1. When DNS mode is Auto, the device under LAN port will automatically obtain the preferred 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

2.DHCP

The Router has a built-in DHCP server that assigns private IP address to each local client.

The DHCP feature allows to the router 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.

Table 11 DHCP



Connect Name	1_MANAGEMENT_VOICE_INTERNET_R_VID ▼
Service	MANAGEMENT_VOICE_INTERNET ▼
IP Protocol Version	IPv4 ▼
WAN IP Mode	DHCP ▼
DHCP Server	
MAC Address Clone	Disable ▼
NAT Enable	Enable ▼
VLAN Mode	Disable ▼
VLAN ID	0 (1-4094)
DNS Mode	Manual ▼
Primary DNS	
Secondary DNS	

DHCP

DHCP Renew	Renew
DHCP Vendor (Option 60)	FLYINGVOICE-FTA5102

undefined

☑ Port_1 ☑ Port_2

☑ Wireless (SSID) ☑ Wireless (SSID1) ☑ Wireless (SSID2) ☑ Wireless (SSID3)

Note: LAN (local) ports can only be bound to one WAN (Internet) connection at a time!

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
Primary DNS Address	Primary DNS of Internet port.
Secondary DNS Address	Secondary DNS of Internet port.

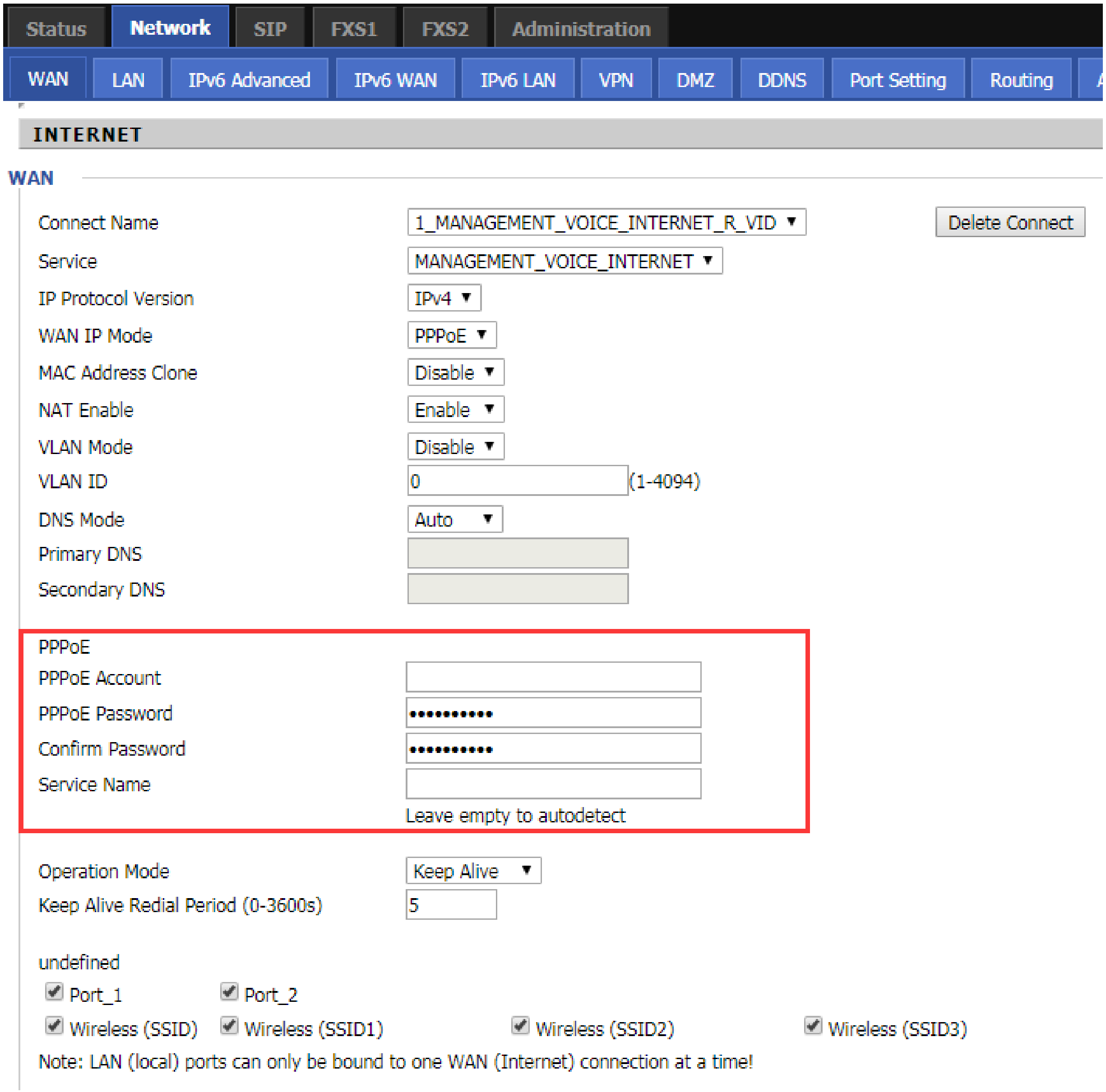
DHCP Renew	Refresh the DHCP IP address
DHCP Vendor (Option60)	Specify the DHCP Vendor field. Display the vendor and product name.

3.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.

Table 12 PPPoE



Connect Name	1_MANAGEMENT_VOICE_INTERNET_R_VID ▼
Service	MANAGEMENT_VOICE_INTERNET ▼
IP Protocol Version	IPv4 ▼
WAN IP Mode	PPPoE ▼
MAC Address Clone	Disable ▼
NAT Enable	Enable ▼
VLAN Mode	Disable ▼
VLAN ID	0 (1-4094)
DNS Mode	Auto ▼
Primary DNS	
Secondary DNS	

PPPoE

PPPoE Account	
PPPoE Password	•••••••••••
Confirm Password	•••••••••••
Service Name	Leave empty to autodetect

Operation Mode	Keep Alive ▼
Keep Alive Redial Period (0-3600s)	5

undefined

☑ Port_1 ☑ Port_2

☑ Wireless (SSID) ☑ Wireless (SSID1) ☑ Wireless (SSID2) ☑ Wireless (SSID3)

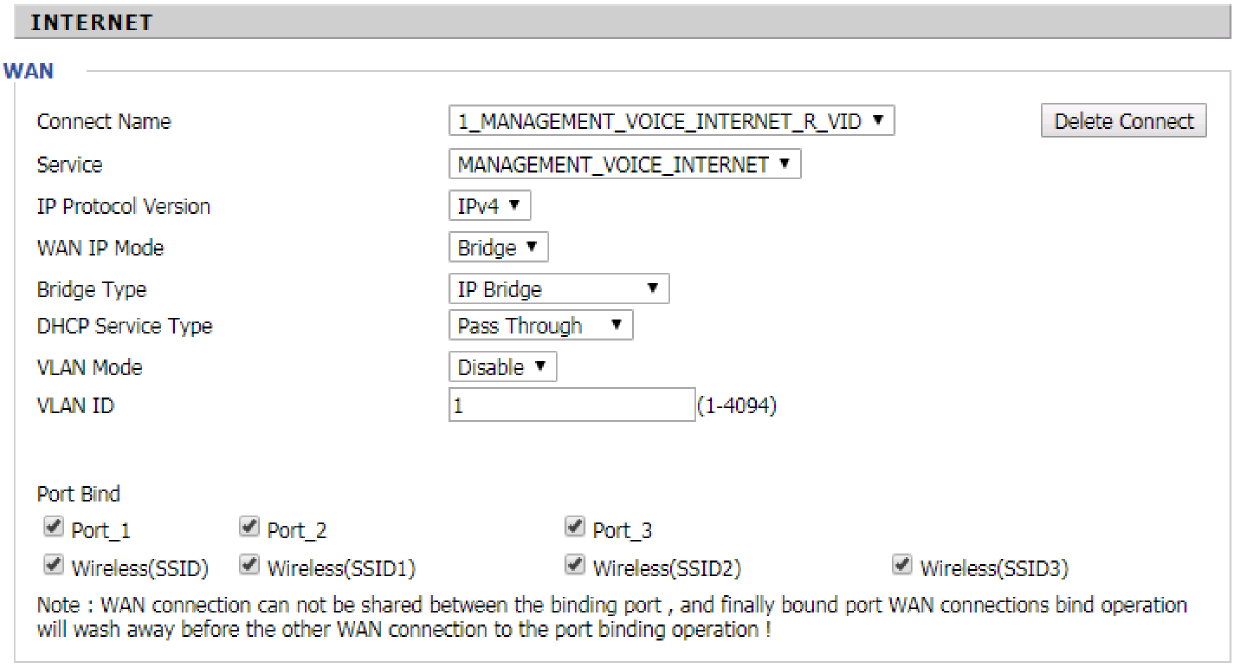
Note: LAN (local) ports can only be bound to one WAN (Internet) connection at a time!

Field Name	Descripti
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 emply, 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;
Keep Alive Redial Period	Set the interval to send Keep Alive messaging
PPPoE Account	Assign a valid user name provided by the ISP

4.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.

Table 13 Bridge Mode



INTERNET

WAN

Connect Name	1_MANAGEMENT_VOICE_INTERNET_R_VID ▼
Service	MANAGEMENT_VOICE_INTERNET ▼
IP Protocol Version	IPv4 ▼
WAN IP Mode	Bridge ▼
Bridge Type	IP Bridge ▼
DHCP Service Type	Pass Through ▼
VLAN Mode	Disable ▼
VLAN ID	1 (1-4094)

Port Bind

☑ Port_1 ☑ Port_2 ☑ Port_3

☑ Wireless(SSID) ☑ Wireless(SSID1) ☑ Wireless(SSID2) ☑ Wireless(SSID3)

Note : WAN connection can not be shared between the binding port , and finally bound port WAN connections bind operation will wash away before the other WAN connection to the port binding operation !

Field Name	Descripti
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.
802.1p	Set the priority of VLAN, Options are 0~7.

Note

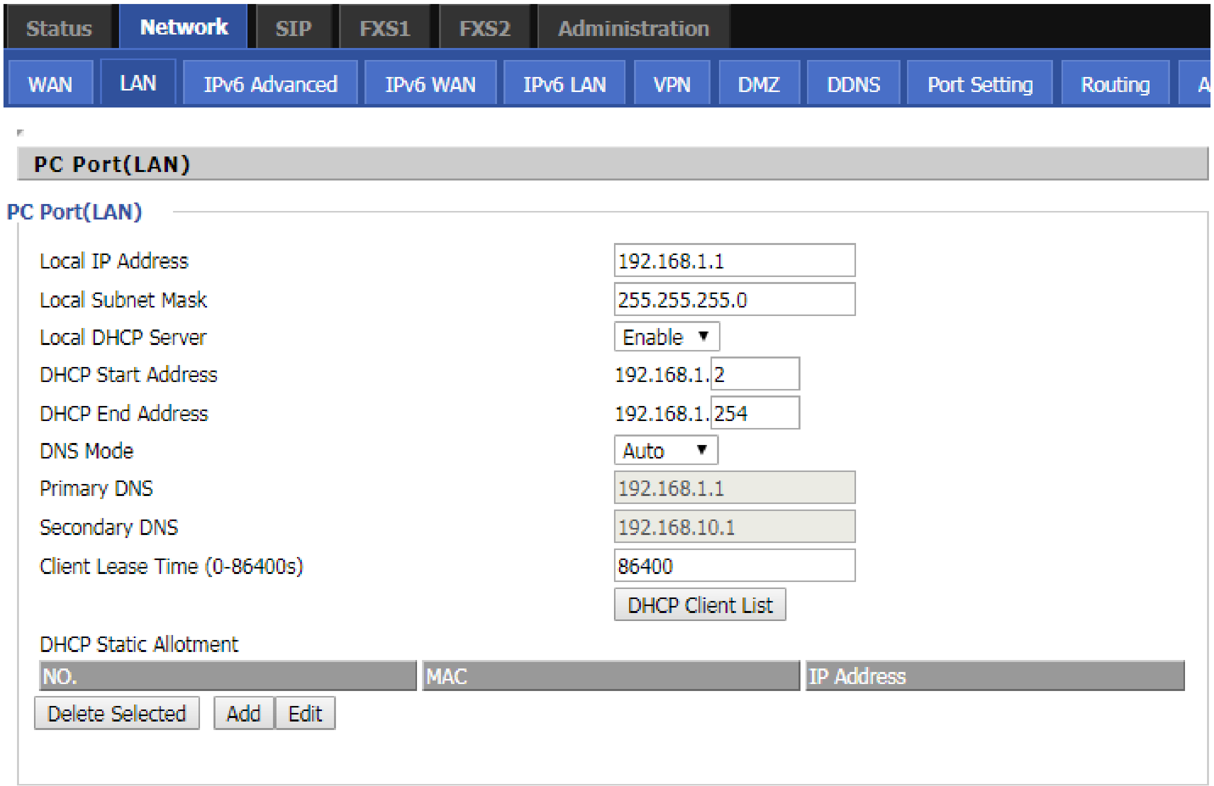
Multiple WAN connections may be created with the same VLAN ID

LAN

LAN Port

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

Table 14 LAN port



PC Port(LAN)

PC Port(LAN)

Local IP Address	192.168.1.1
Local Subnet Mask	255.255.255.0
Local DHCP Server	Enable ▼
DHCP Start Address	192.168.1. 2
DHCP End Address	192.168.1. 254
DNS Mode	Auto ▼
Primary DNS	192.168.1.1
Secondary DNS	192.168.10.1
Client Lease Time (0-86400s)	86400

DHCP Static Allotment

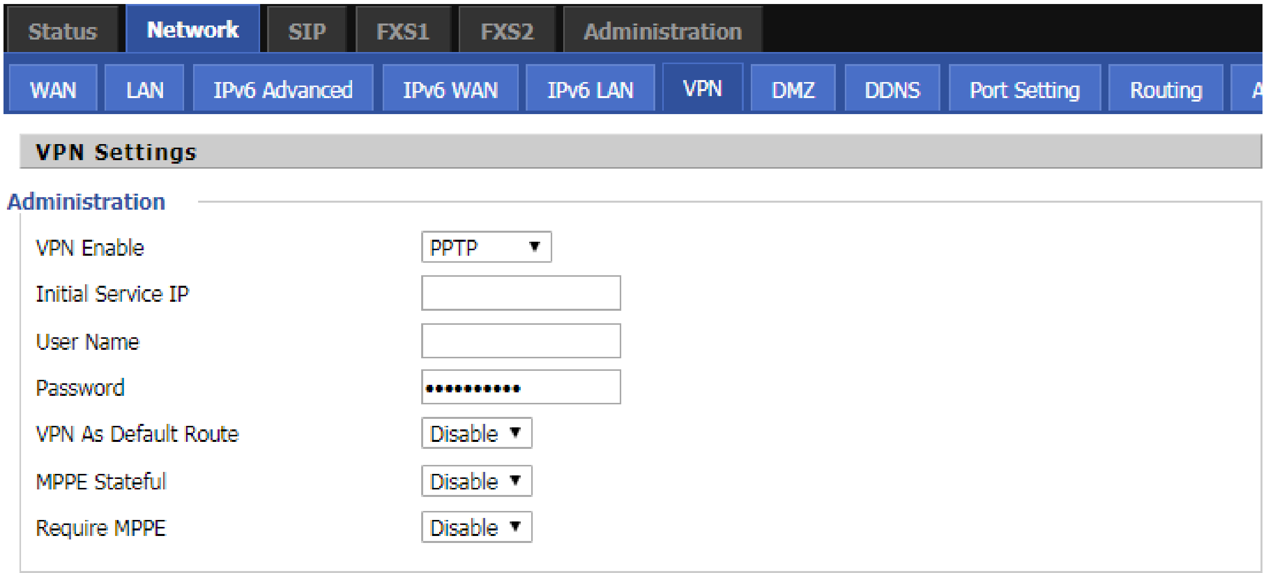
NO.	MAC	IP Address

Field Name	Description
IP Address	Enter the IP address of the router on the local area network. All the IP addresses of the computers which are in the router’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 router’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.

VPN

VPN is a technology that builds a private network on a public network. The connection between any two nodes of the VPN network does not have the end-to-end physical link required by the traditional private network, but rather the network platform provided by the public network service provider, and the user data is transmitted in the logical link. With VPN technology, you can establish private connections and transfer data between any two devices on the public network.

Table 15 PPTP



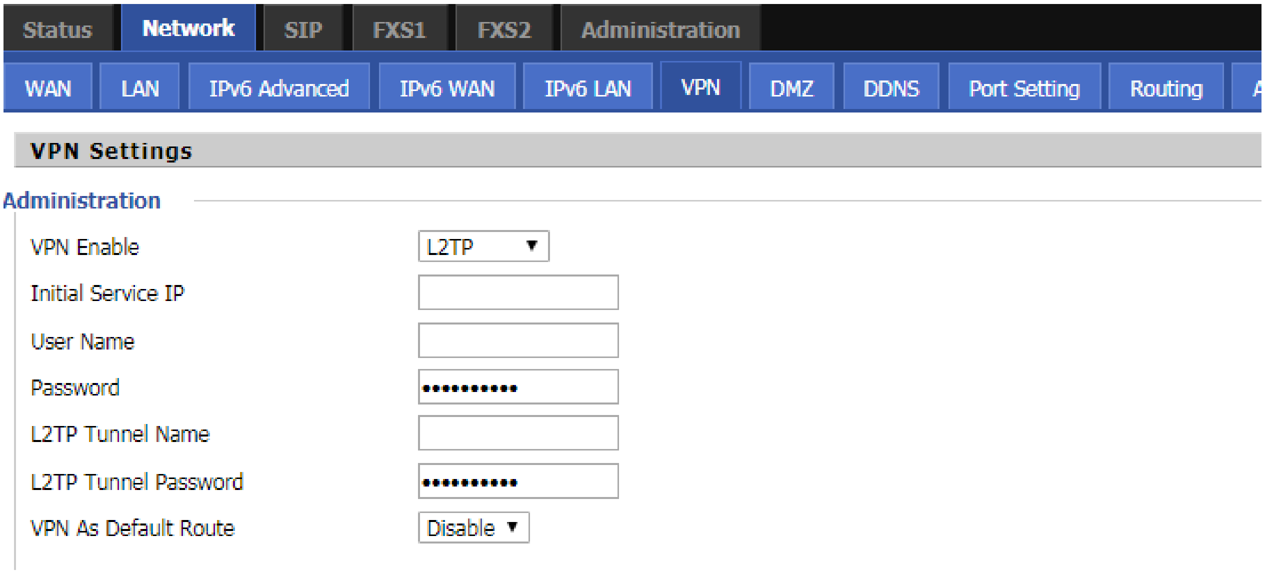
VPN Settings

Administration

VPN Enable	PPTP ▼
Initial Service IP	
User Name	
Password	•••••••••••
VPN As Default Route	Disable ▼
MPPE Stateful	Disable ▼
Require MPPE	Disable ▼

Parameters name	Description
VPN Enable	Whether to enable VPN. Select PPTP mode.
Initial Service IP	The IP address of the VPN server.
User Name	The user name required for authentication.
Password	The password required for authentication.
VPN As Default Route	Prohibited or open, the default is prohibited.
MPPE Stateful	Disable or enable MPPE Stateful.
Require MPPE	Disable or enable Require MPPE.

Table 16 L2TP



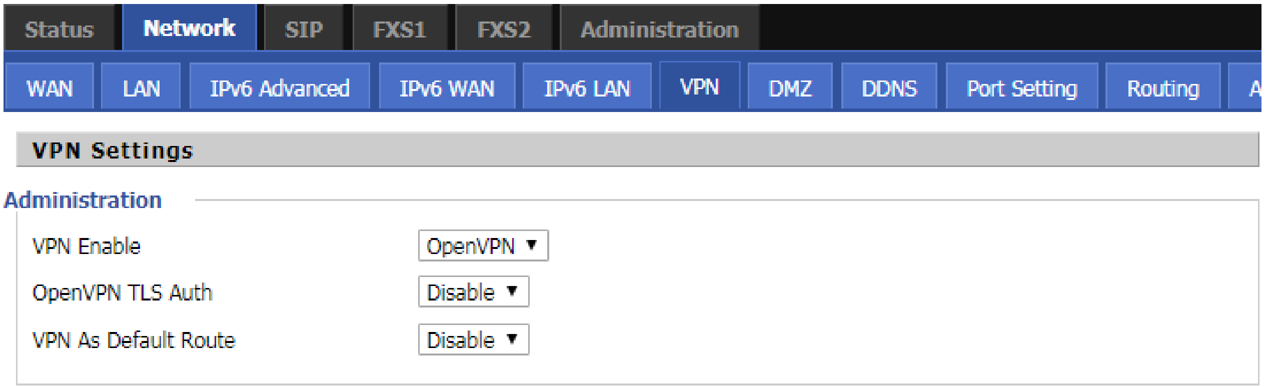
VPN Settings

Administration

VPN Enable	L2TP ▼
Initial Service IP	
User Name	
Password	••••••••••
L2TP Tunnel Name	
L2TP Tunnel Password	••••••••••
VPN As Default Route	Disable ▼

Parameters name	Description
VPN Enable	Whether to enable VPN. Select PPTP mode.
Initial Service IP	The IP address of the VPN server.
User Name	The user name required for authentication.
Password	The password required for authentication.
L2TP Tunnel Name	L2TP Tunnel Name
L2TP Tunnel Password	L2TP Tunnel Password
VPN As Default Route	Prohibited or open, the default is prohibited.

Table 17 OpenVPN



VPN Settings

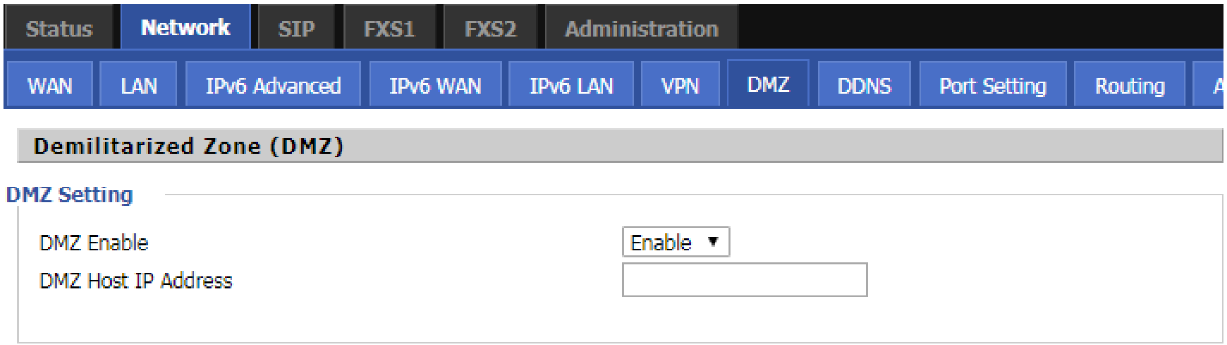
Administration

VPN Enable	OpenVPN ▼
OpenVPN TLS Auth	Disable ▼
VPN As Default Route	Disable ▼

Parameters name	Description
VPN Enable	Whether to enable VPN. Select OpenVPN mode.
OpenVPN TLS Auth	Whether OpenVPN TLS authentication is enabled
VPN As Default Route	Prohibited or open, the default is prohibited.

DMZ

Table 18 DMZ



Demilitarized Zone (DMZ)

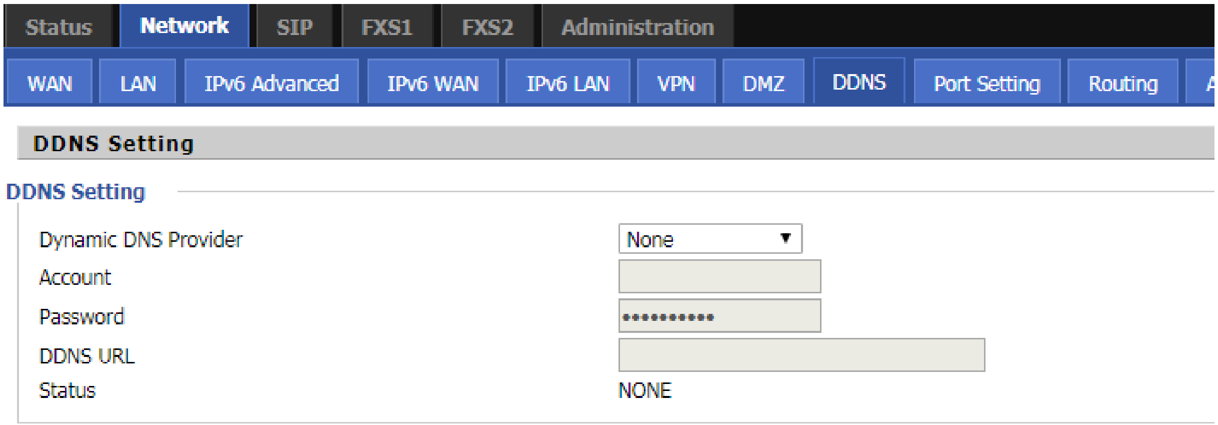
DMZ Setting

DMZ Enable	Enable ▼
DMZ Host IP Address	

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

DDNS

Table 19 DDNS



DDNS Setting

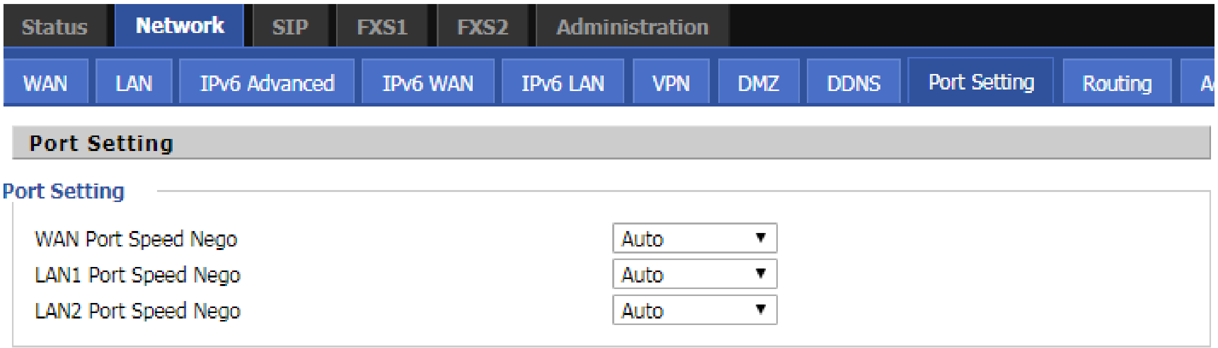
DDNS Setting

Dynamic DNS Provider	None ▼
Account	
Password	••••••••••
DDNS URL	
Status	NONE

Field Name	Description
Dynamic DNS Provider	DDNS is enabled and select a DDNS service provider.
Account	Enter the DDNS service account.
Password	Enter the DDNS service account password.
DDNS URL	Enter the DDNS domain name or IP address.
Status	See if DDNS is successfully upgraded.

Port Setting

Table 20 Port setting



Port Setting

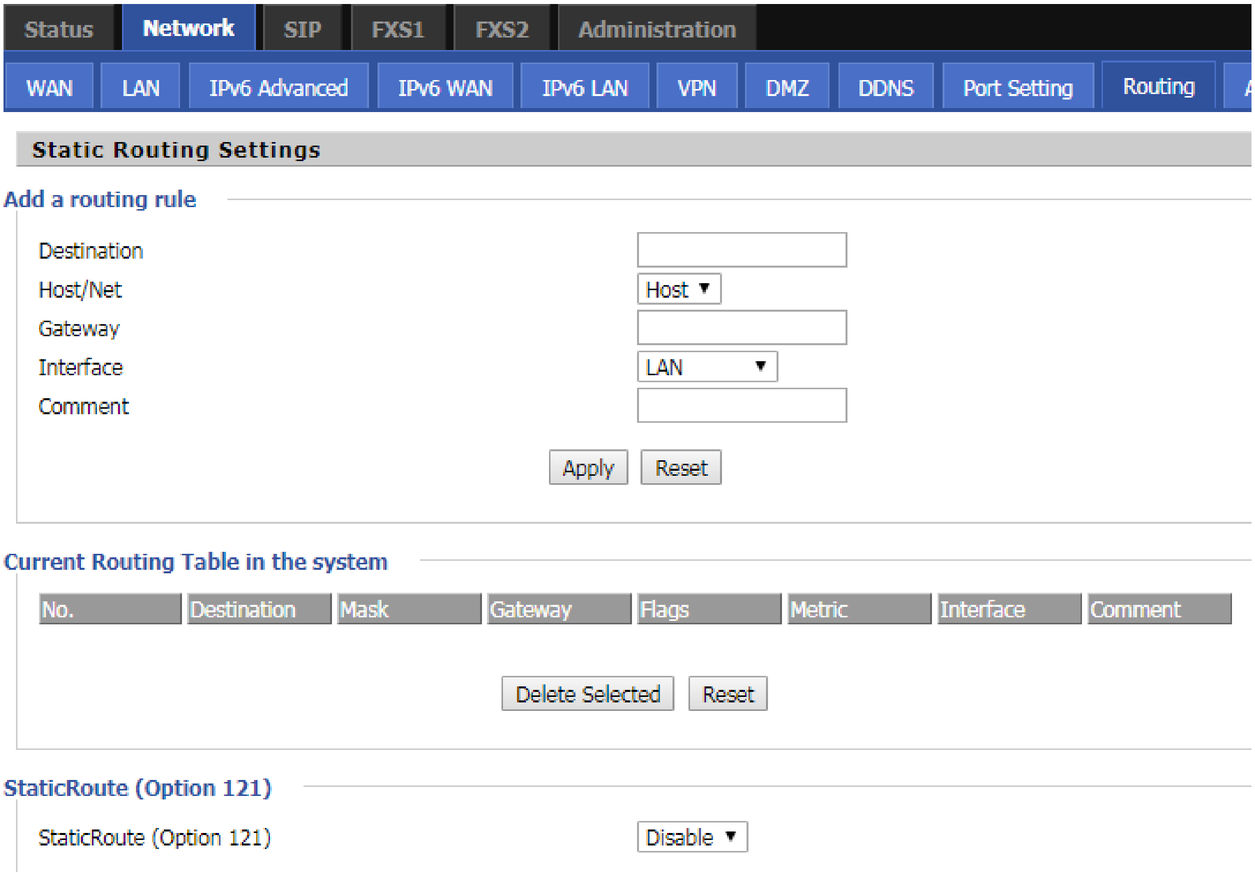
Port Setting

WAN Port Speed Nego	Auto ▾
LAN1 Port Speed Nego	Auto ▾
LAN2 Port Speed Nego	Auto ▾

Field Name	Description
WAN Port speed Nego	Auto-negotiation, options are Auto, 100M full, 100M half-duplex, 10M half and full.
LAN1~LAN3 Port Speed Nego	Auto-negotiation, options are Auto, 100M full, 100M half, 10M half and 10M full.

Routing

Table 21 Routing



Static Routing Settings

Add a routing rule

Destination	
Host/Net	Host ▾
Gateway	
Interface	LAN ▾
Comment	

Current Routing Table in the system

No.	Destination	Mask	Gateway	Flags	Metric	Interface	Comment

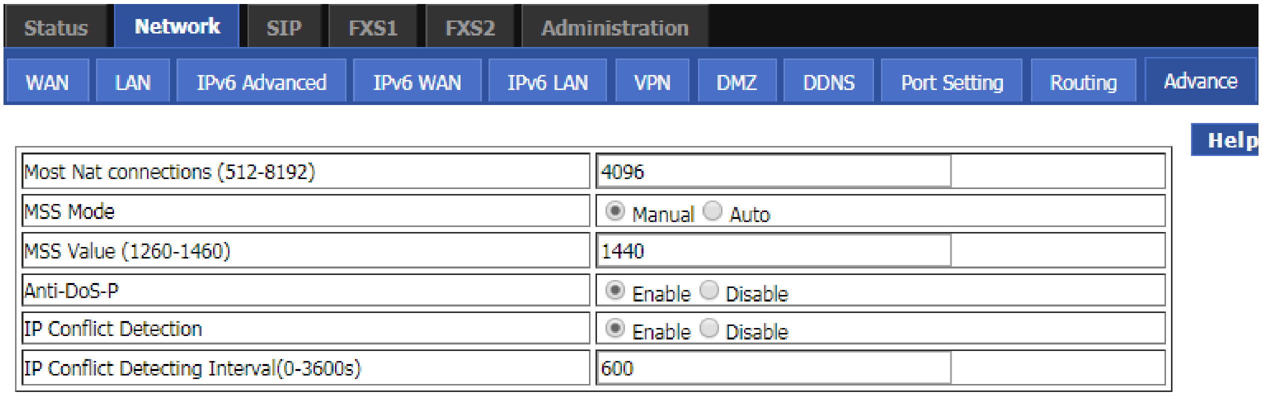
StaticRoute (Option 121)

StaticRoute (Option 121)	Disable ▾

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

Advance

Table 22 Advance



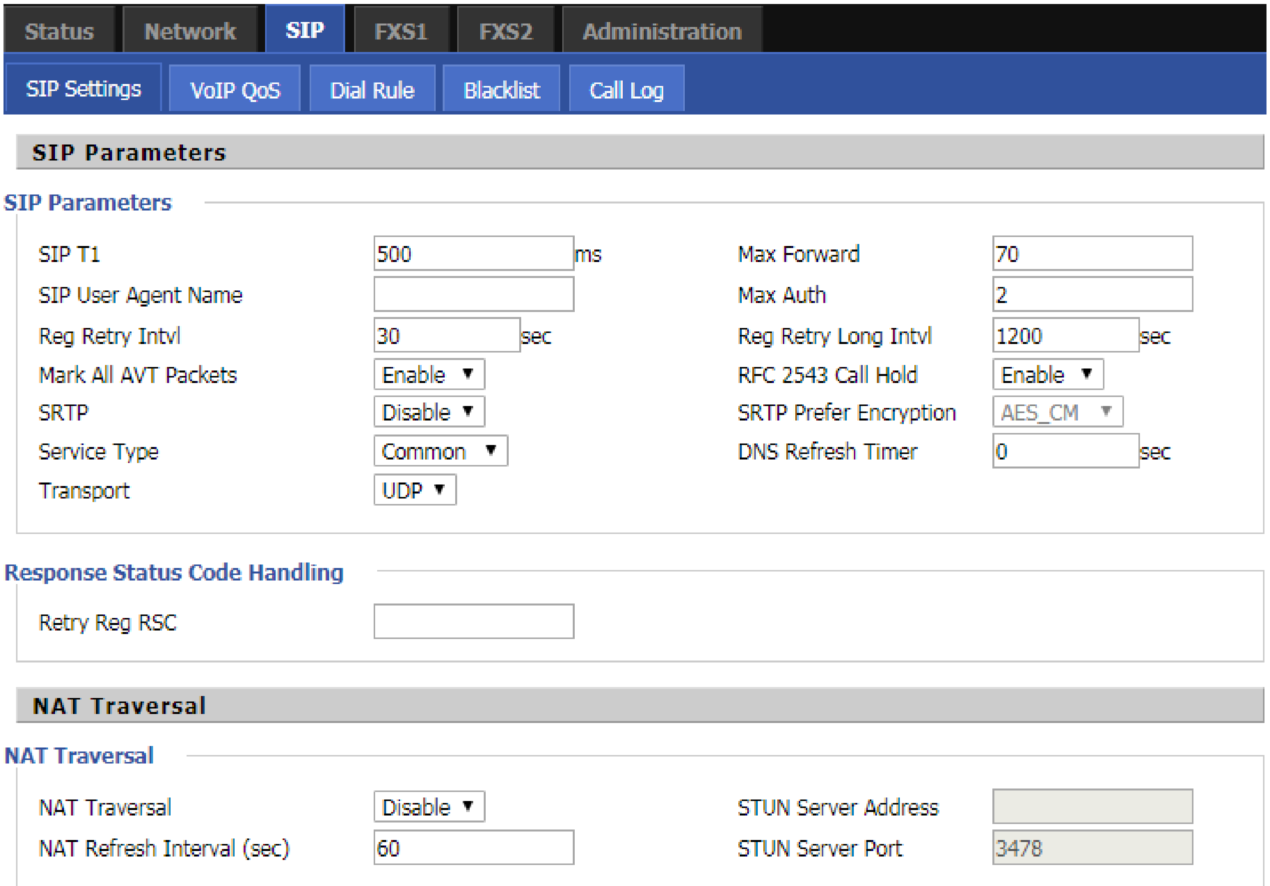
Most Nat connections (512-8192)	4096
MSS Mode	● Manual ○ Auto
MSS Value (1260-1460)	1440
Anti-DoS-P	● Enable ○ Disable
IP Conflict Detection	● Enable ○ Disable
IP Conflict Detecting Interval(0-3600s)	600

Field Name	Description
Most Nat connections	The largest value which the FWR8401 can provide
Mss Mode	Choose Mss Mode from Manual and Auto
Mss Value	Set the value of TCP
AntiDos-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

SIP

SIP Settings

Table 23 SIP Settings



SIP Parameters

SIP Parameters

SIP T1	500 ms	Max Forward	70
SIP User Agent Name		Max Auth	2
Reg Retry Intvl	30 sec	Reg Retry Long Intvl	1200 sec
Mark All AVT Packets	Enable ▼	RFC 2543 Call Hold	Enable ▼
SRTP	Disable ▼	SRTP Prefer Encryption	AES_CM ▼
Service Type	Common ▼	DNS Refresh Timer	0 sec
Transport	UDP ▼		

Response Status Code Handling

Retry Reg RSC	

NAT Traversal

NAT Traversal

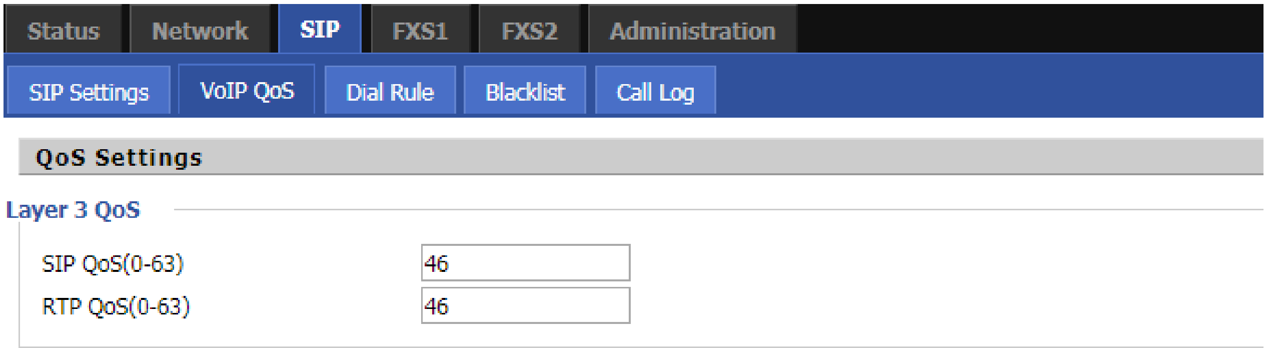
NAT Traversal	Disable ▼	STUN Server Address	
NAT Refresh Interval (sec)	60	STUN Server Port	3478

Parameters name	Description
SIP Parameters	
SIP T1	The default value is 500
SIP User Agent Name	Enter the SIP User Agent header field
Max Forward	Modify the maximum hop value, the default is 70
Max Auth	Change the number of authentication failures, the default value is 2
Reg Retry Intvl	Registration failed again registration interval, default is 30
Reg Retry Long Intvl	Registration failed Register again for the long interval Default 1200
Mark All AVT Packets	The default enable is on
RFC 2543 Call Hold	The default enable is on
SRTP	The default is disabled
SRTP Prefer Encryption	Support for AES_CM and ARIA_CM
Service Type	Default general

DNS Refresh Timer	Modify the DNS refresh time, the default value of 0
Transport	The transmission type defaults to UDP
NAT Traversal	
NAT Traversal	Whether to enable NAT mode, or select STUN to penetrate
STUN Server Address	STUN server IP address
NAT Refresh Interval(sec)	Refresh interval
STUN Server Port	STUN port, the default is 3478

VoIP QoS

Table 24 VoIP QoS



QoS Settings

Layer 3 QoS

SIP QoS(0-63) 46

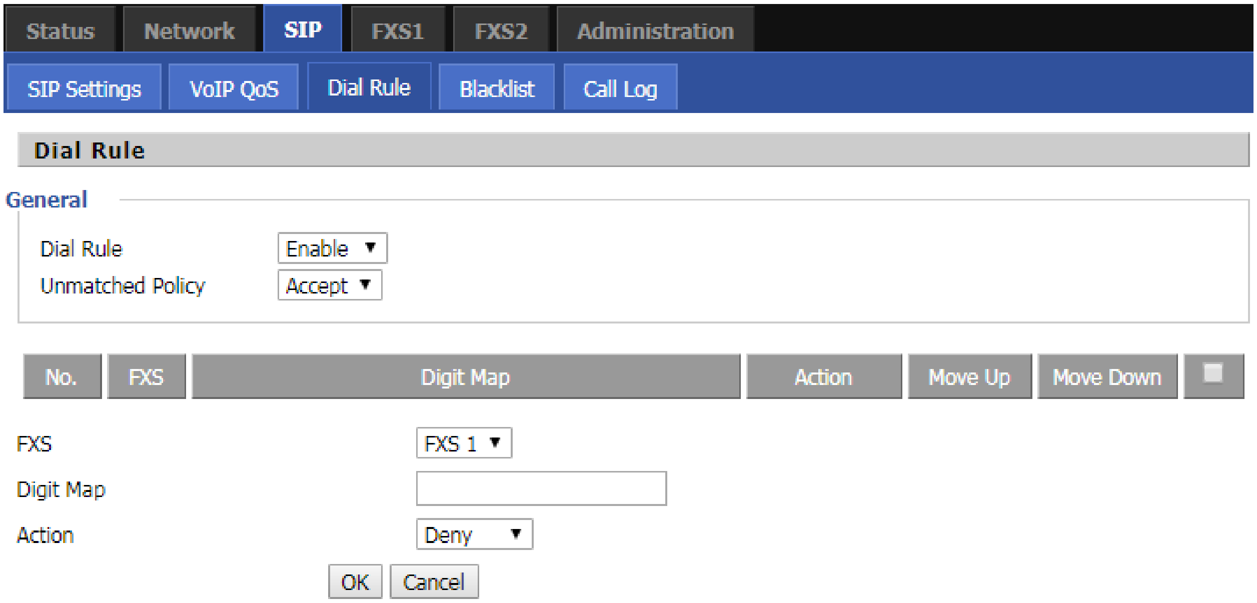
RTP QoS(0-63) 46

Parameters name	Description
SIP QoS(0-63)	Defaults to 46,you can set a range of values is 0~63
RTP QoS(0-63)	Defaults to 46,you can set a range of values is 0~63

Configuration can be based on the scene environment to modify the parameters

Dial Rule

Table 25 Dial Plan



Dial Rule: Enable

Unmatched Policy: Accept

FXS: FXS 1

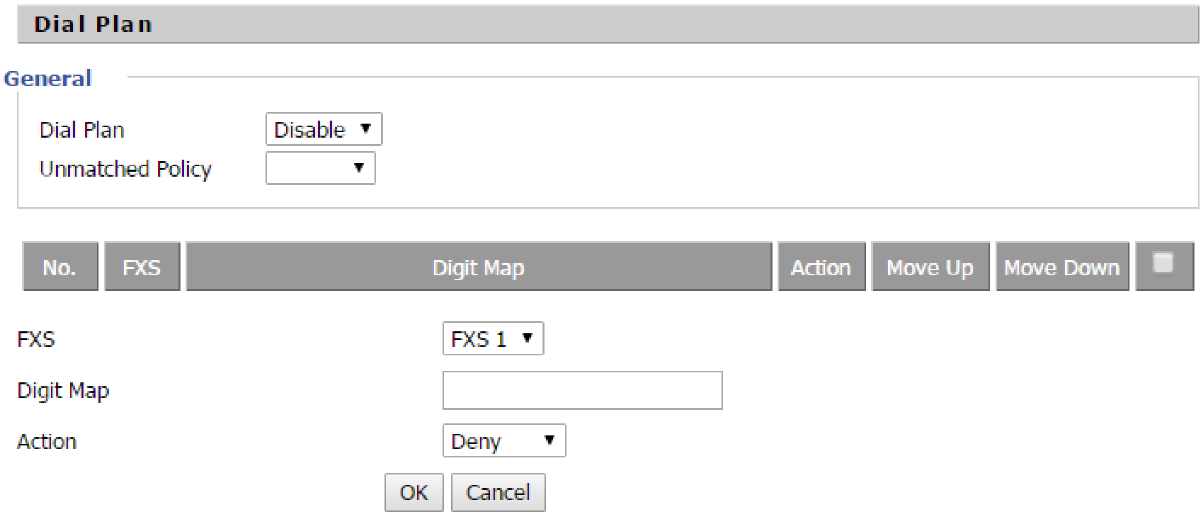
Digit Map:

Action: Deny

Field Name	Description
Dial Plan	Enable/Disable dial plan.
Line	Set the line.
Digit Map	Enter the sequence used to match input number The syntactic, please refer to the following Dial Plan Syntactic.
Action	Choose the dial plan mode from Deny and Dial Out. Deny means router will reject the matched number, while Dial Out means router will dial out the matched number.
Move Up	Move the dial plan up the list.
Move Down	Move the dial plan down the list.

Adding one Dial Plan

Table 26 Adding one dial plan



Dial Plan

General

Dial Plan: Disable ▼

Unmatched Policy: ▼

FXS: FXS 1 ▼

Digit Map:

Action: Deny ▼

Description
Step 1. Enable Dial Plan.
Step 2. Click Add button, and the configuration table.
Step 3. Fill in the value of parameters.
Step 4. Press OK button to end configuration.

Dial Plan Syntactic

Table 40 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 form sequence. For example: [0-9]: match one digit form 0 to 9 [23-5*]: match one character from 2 or 3 or 4 or 5 or * x^0 x^1 x^2 $x3$ x^n
4	x.	Match to , , , ···... For example: "01." :can match " 0" , "01" , "011" , " 0111" , ······.., " 01111···"

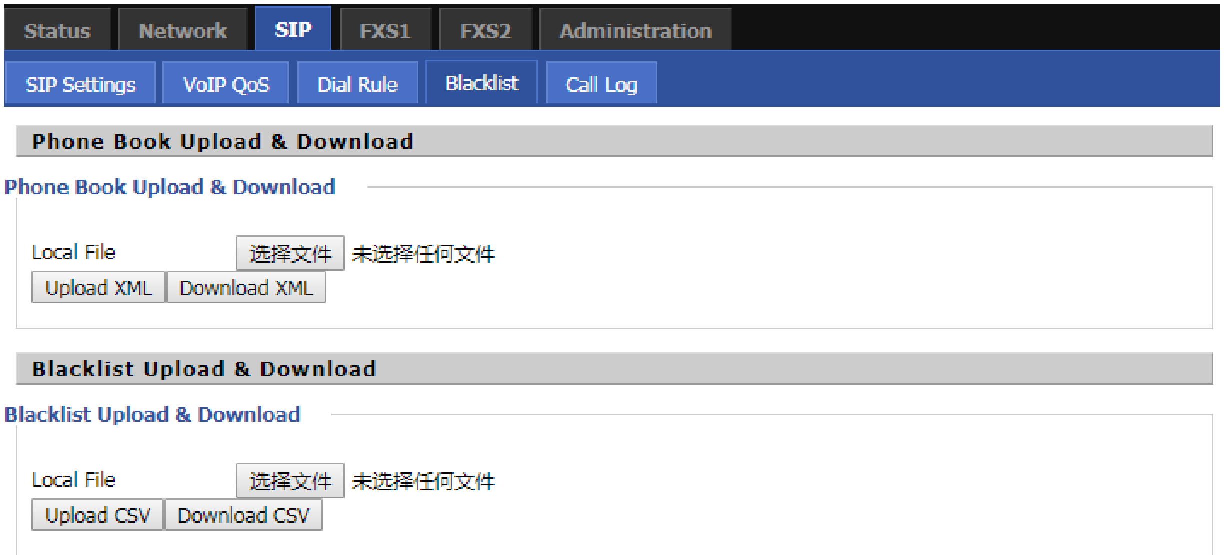
5	<dialed:substituted>	Replace dialed with substituted. For example： <8:1650>123456： input is “85551212”, output is “16505551212”
6	x,y	Make outside dial tone after dialing “x”, stop until dialing character “y” For example： “9,1xxxxxxxxxx” :the device reports dial tone after inputting
7	T	Set the delayed time. For example: “<9:111>T2” : The device will dial out the matched number “111” after 2 seconds.

Blacklist

In this page, user can upload or download Phonebook/blacklist file, or add or delete or edit blacklist one by one.

Upload or download Phonebook/blacklist file

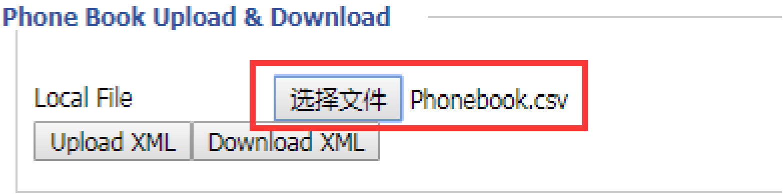
Table 28 Blacklist



Steps:

1.Click 选择文件 ,select a locally stored phonebook.

2.There will be a tips after select successfully.



3.Click Upload XML, begin upload.

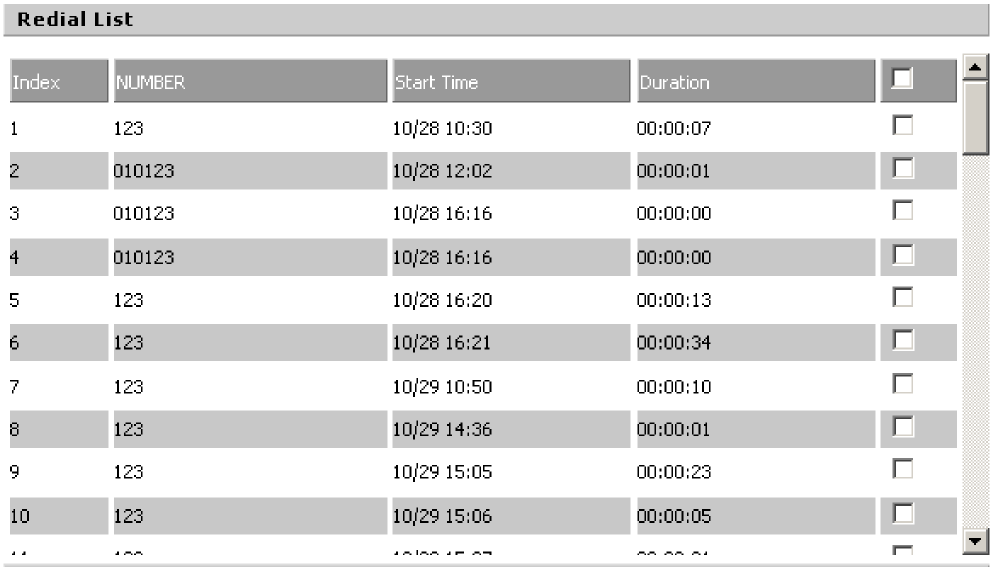
4.Click Download XML ,begin download

Call Log

To view the call log information such as redial list , answered call and missed call

Table 29 Call log

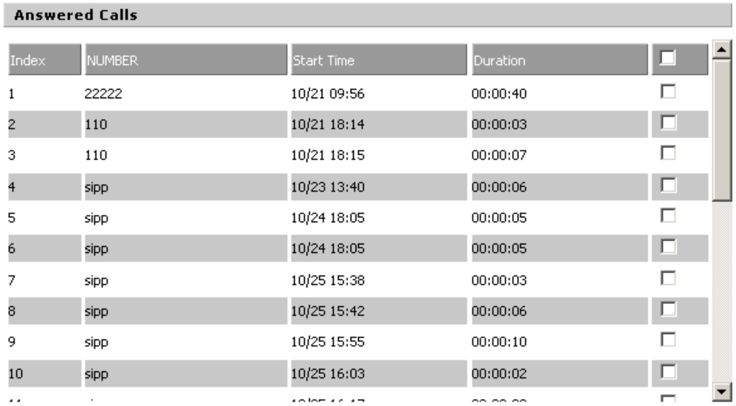
Redial Calls



Redial List

Index	NUMBER	Start Time	Duration	□
1	123	10/28 10:30	00:00:07	□
2	010123	10/28 12:02	00:00:01	□
3	010123	10/28 16:16	00:00:00	□
4	010123	10/28 16:16	00:00:00	□
5	123	10/28 16:20	00:00:13	□
6	123	10/28 16:21	00:00:34	□
7	123	10/29 10:50	00:00:10	□
8	123	10/29 14:36	00:00:01	□
9	123	10/29 15:05	00:00:23	□
10	123	10/29 15:06	00:00:05	□

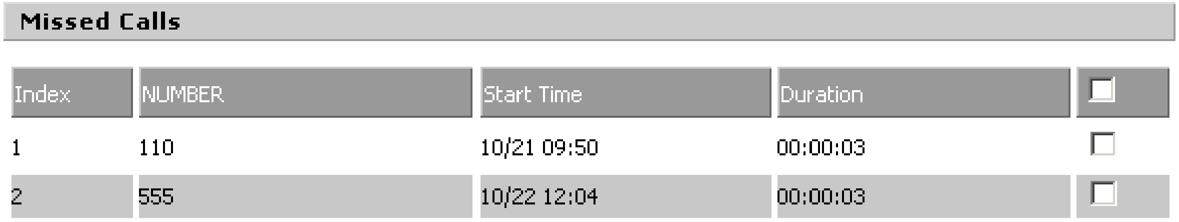
Answered Calls



Answered Calls

Index	NUMBER	Start Time	Duration	□
1	22222	10/21 09:56	00:00:40	□
2	110	10/21 18:14	00:00:03	□
3	110	10/21 18:15	00:00:07	□
4	sipp	10/23 13:40	00:00:06	□
5	sipp	10/24 18:05	00:00:05	□
6	sipp	10/24 18:05	00:00:05	□
7	sipp	10/25 15:38	00:00:03	□
8	sipp	10/25 15:42	00:00:06	□
9	sipp	10/25 15:55	00:00:10	□
10	sipp	10/25 16:03	00:00:02	□

Missed Calls



Missed Calls

Index	NUMBER	Start Time	Duration	□
1	110	10/21 09:50	00:00:03	□
2	555	10/22 12:04	00:00:03	□

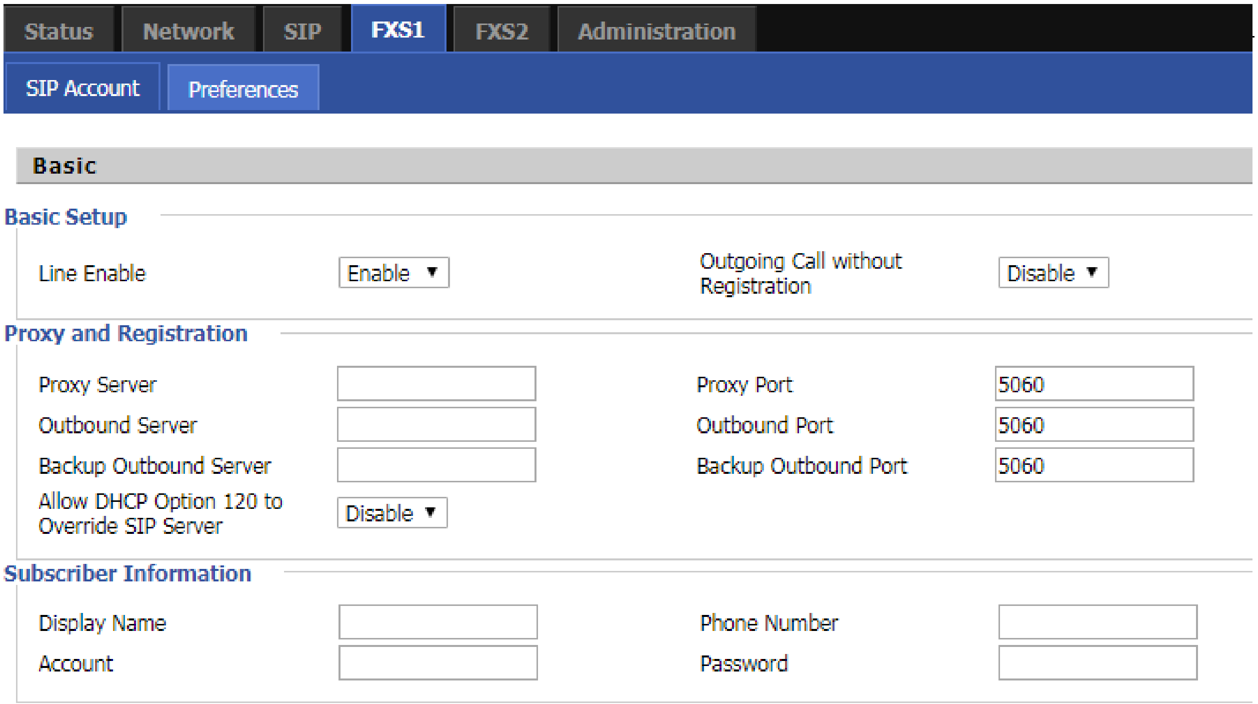
FXS1

SIP Account

Basic

Set the basic information provided by your VOIP Service Provider, such as Phone Number, Account, password, SIP Proxy and others.

Table 30 Line



Basic

Basic Setup

Line Enable	Enable ▼	Outgoing Call without Registration	Disable ▼

Proxy and Registration

Proxy Server		Proxy Port	5060
Outbound Server		Outbound Port	5060
Backup Outbound Server		Backup Outbound Port	5060
Allow DHCP Option 120 to Override SIP Server	Disable ▼		

Subscriber Information

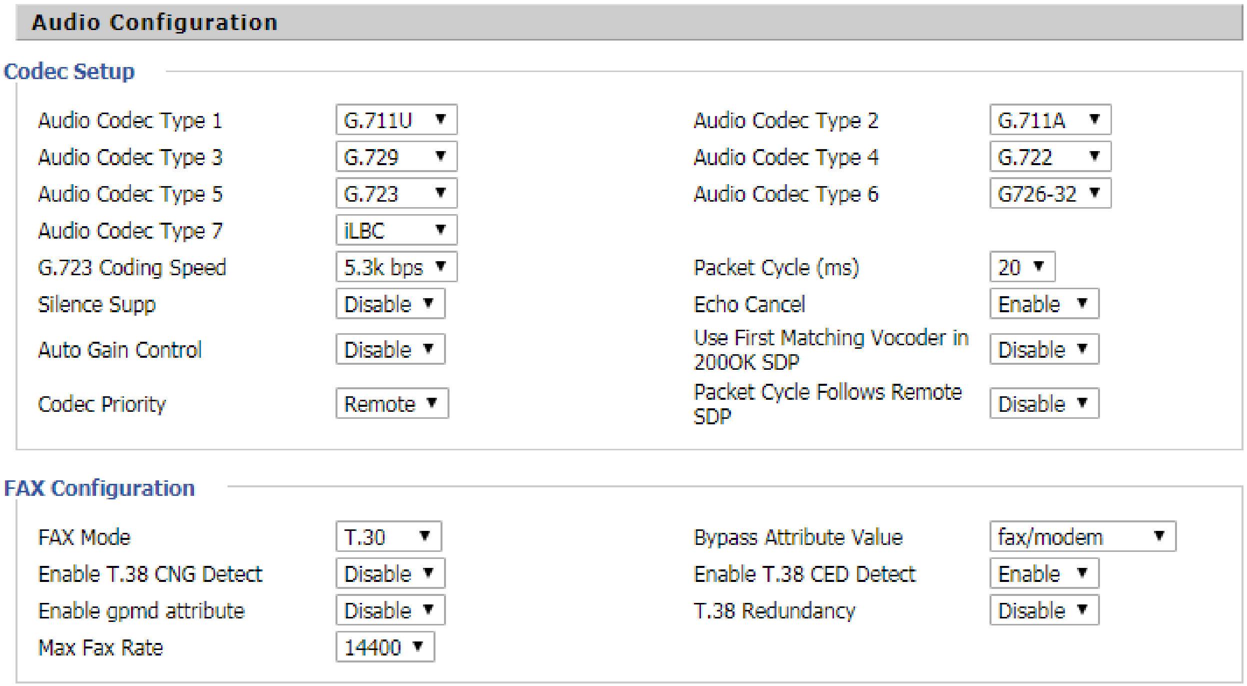
Display Name		Phone Number	
Account		Password	

Field Name	Description
Line Enable	Enable/Disable the line.
Outgoing Call without Registration	Enable/Disable Outgoing Call without Registration If enabled, SIP-1 will not send register request to SIP server; but in Status/ SIP Account Status webpage, Status is Registered; lines 1 can dial out, but the external line number cannot dialed line1.
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 Configuration

Table 31 Audio configuration



Audio Configuration

Codec Setup

Audio Codec Type 1	G.711U ▼	Audio Codec Type 2	G.711A ▼
Audio Codec Type 3	G.729 ▼	Audio Codec Type 4	G.722 ▼
Audio Codec Type 5	G.723 ▼	Audio Codec Type 6	G726-32 ▼
Audio Codec Type 7	iLBC ▼		
G.723 Coding Speed	5.3k bps ▼	Packet Cycle (ms)	20 ▼
Silence Supp	Disable ▼	Echo Cancel	Enable ▼
Auto Gain Control	Disable ▼	Use First Matching Vocoder in 200OK SDP	Disable ▼
Codec Priority	Remote ▼	Packet Cycle Follows Remote SDP	Disable ▼

FAX Configuration

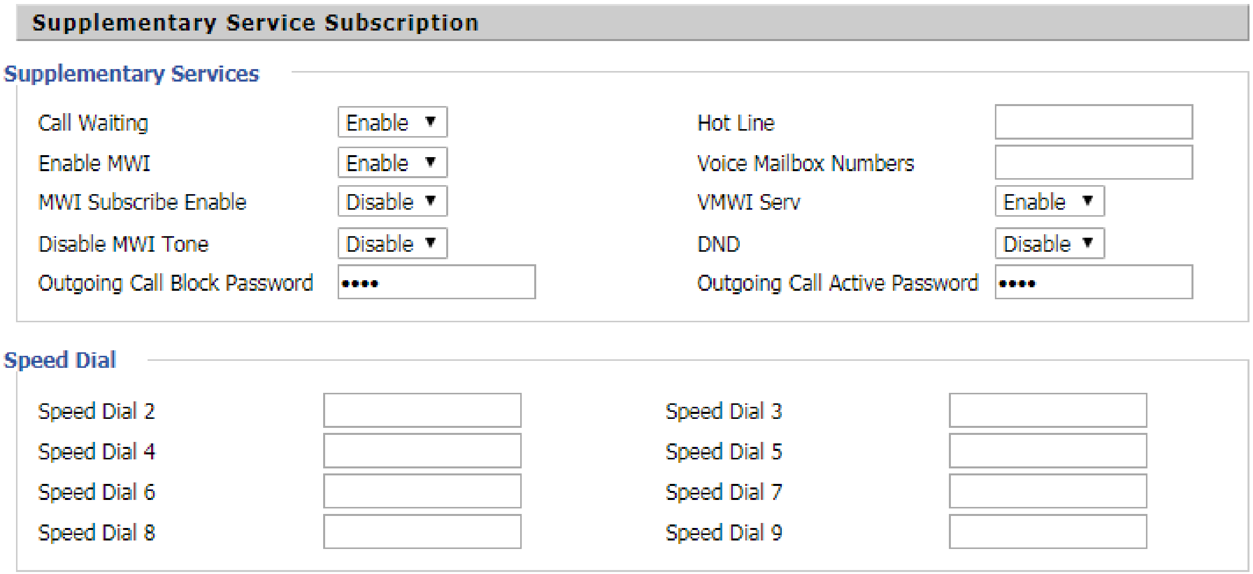
FAX Mode	T.30 ▼	Bypass Attribute Value	fax/modem ▼
Enable T.38 CNG Detect	Disable ▼	Enable T.38 CED Detect	Enable ▼
Enable gpmd attribute	Disable ▼	T.38 Redundancy	Disable ▼
Max Fax Rate	14400 ▼		

Field Name	Description
Audio Codec Type1	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
Audio Codec Type2	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
Audio Codec Type3	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
Audio Codec Type4	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
Audio Codec Type5	Choose the audio codec type from G.711U, G.711A, G.722, G.729, G.723
G.723 Coding Speed	Choose the speed of G.723 from 5.3kbps and 6.3kbps
Packet Cycle	The RTP packet cycle time, default is 20ms
Silence Supp	Enable/Disable silence support
Echo Cancel	Enable/Disable echo cancel. By default, it is enabled
Auto Gain Control	Enable/Disable auto gain
T.38 Enable	Enable/Disable T.38

T.38 Redundancy	Enable/Disable T.38 Redundancy
T.38 CNG Detect Enable	Enable/Disable T.38 CNG Detect
gpmd attribute Enable	Enable/Disable gpmd attribute

Supplementary Service Subscription

Table 32 Supplementary service



Supplementary Service Subscription

Supplementary Services

Call Waiting	Enable ▼	Hot Line	
Enable MWI	Enable ▼	Voice Mailbox Numbers	
MWI Subscribe Enable	Disable ▼	VMWI Serv	Enable ▼
Disable MWI Tone	Disable ▼	DND	Disable ▼
Outgoing Call Block Password	••••	Outgoing Call Active Password	••••

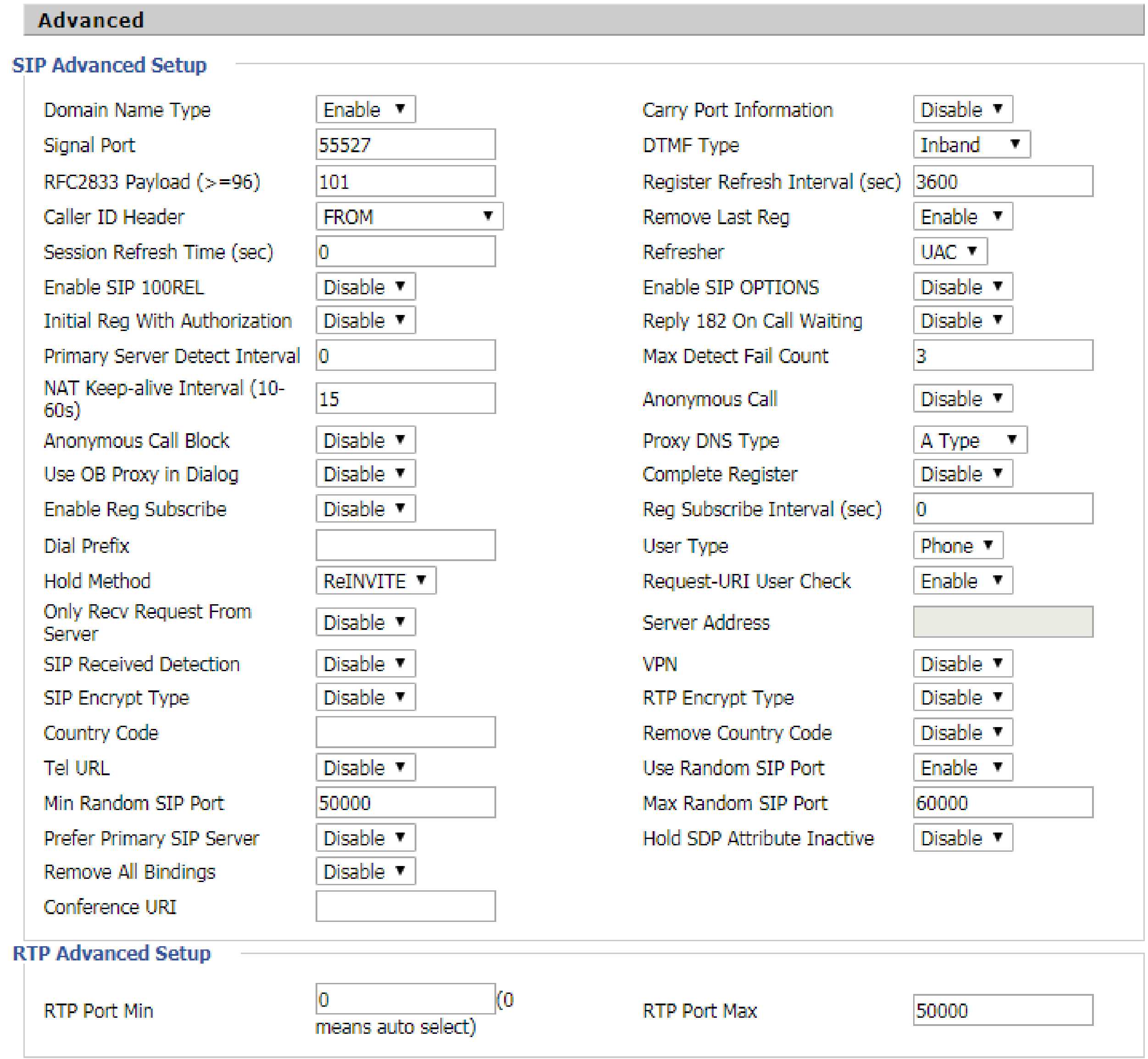
Speed Dial

Speed Dial 2		Speed Dial 3	
Speed Dial 4		Speed Dial 5	
Speed Dial 6		Speed Dial 7	
Speed Dial 8		Speed Dial 9	

Field Name	Description
Call Waiting	Enable/Disable Call Waiting
Hot Line	Fill in the hotline number,Pickup handset or press hands-free or headset button, the device will dial out the hotline number automatically
MWI Enable	Enable/Disable MWI (message waiting indicate). If the user needs to user voice mail, please enable this feature
MWI Subscribe Enable	Enable/Disable MWI Subscribe
Voice Mailbox Numbers	Fill in the voice mailbox phone number, Asterisk platform, for example, its default voice mail is *97
VMWI Serv	Enable/Disable VMWI service
DND	Enable/Disable DND (do not disturb)
Speed Dial	Enter the speed dial phone numbers. Dial *74 to active speed dial function Then press the speed dial numbers, for example, press 2, phone dials 075526099365 directly

Advanced

Table 33 Advanced



Advanced

SIP Advanced Setup

Domain Name Type	Enable ▼	Carry Port Information	Disable ▼
Signal Port	55527	DTMF Type	Inband ▼
RFC2833 Payload (>=96)	101	Register Refresh Interval (sec)	3600
Caller ID Header	FROM ▼	Remove Last Reg	Enable ▼
Session Refresh Time (sec)	0	Refresher	UAC ▼
Enable SIP 100REL	Disable ▼	Enable SIP OPTIONS	Disable ▼
Initial Reg With Authorization	Disable ▼	Reply 182 On Call Waiting	Disable ▼
Primary Server Detect Interval	0	Max Detect Fail Count	3
NAT Keep-alive Interval (10-60s)	15	Anonymous Call	Disable ▼
Anonymous Call Block	Disable ▼	Proxy DNS Type	A Type ▼
Use OB Proxy in Dialog	Disable ▼	Complete Register	Disable ▼
Enable Reg Subscribe	Disable ▼	Reg Subscribe Interval (sec)	0
Dial Prefix		User Type	Phone ▼
Hold Method	ReINVITE ▼	Request-URI User Check	Enable ▼
Only Recv Request From Server	Disable ▼	Server Address	
SIP Received Detection	Disable ▼	VPN	Disable ▼
SIP Encrypt Type	Disable ▼	RTP Encrypt Type	Disable ▼
Country Code		Remove Country Code	Disable ▼
Tel URL	Disable ▼	Use Random SIP Port	Enable ▼
Min Random SIP Port	50000	Max Random SIP Port	60000
Prefer Primary SIP Server	Disable ▼	Hold SDP Attribute Inactive	Disable ▼
Remove All Bindings	Disable ▼		
Conference URI			

RTP Advanced Setup

RTP Port Min	0 (0 means auto select)	RTP Port Max	50000

Parameter name	Description
Domain Name Type	Whether to enable domain name recognition in SIP URIs
Carry Port Information	Whether to carry the SIP URI port information
Signal Port	The local port number of the SIP protocol
DTMF Type	Select the second way of dialing, optional items are In-band, RFC2833 and SIP Info.
RFC2833 Payload(>=96)	The user can use the default settings
Register Refresh Interval(sec)	The time interval between two normal registration messages. The user can use the default settings.
Caller ID Header	When enabled, an unregistered message will be sent before the registration is disabled, and no unregistered messages will be sent before registration; should be set according to the different server requirements
Remove Last Reg	Whether to remove the last registration message

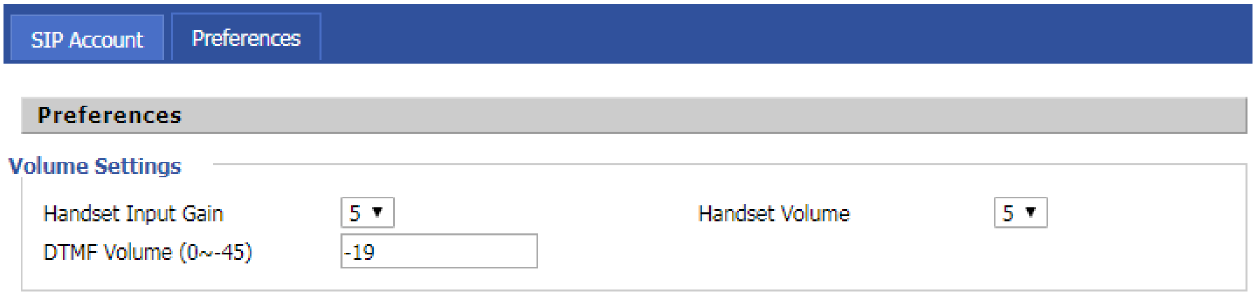
Session Refresh Time(sec)	The interval between two sessions, the user can use the default settings
Refresher	Select Refresh from UAC and UAS
SIP 100REL Enable	If this option is enabled, the IP phone will send SIP-OPTION to the server instead of sending Hello messages on a regular basis. The interval for sending is the parameter set for the "NAT Hold Interval" parameter.
SIP OPTIONS Enable	Whether to open the SIP OPTION function
Initial Reg With Authorization	Whether to carry the certification information when registering
Reply 182 On Call Waiting	Whether or not to send 182 when the call is waiting
NAT Keep-alive Interval(10-60s)	The time interval for sending empty packets
Anonymous Call	Whether anonymous calls are enabled
Anonymous Call Block	Whether to enable anonymous call blocking
Proxy DNS Type	Set the DNS server type, the optional items are Type A, DNS SRV, and Auto
Use OB Proxy In Dialog	Whether the OB agent is used in the conversation
Complete Register	Whether to enable full registration
Reg Subscribe Enable	When enabled, the subscription message is sent after the registration message; the subscription message is not sent when disabled
Reg Subscribe Interval(sec)	Enable or disable the Reg Subscribe Interval
Dial Prefix	Dial before prefix
User Type	Whether the end user is IP or Phone
Hold Method	Call hold is REINVITE or INFO
Request-URI User Check	Whether to allow the user to check
Only Recv Request From Server	If enabled, will only accept requests from the server, do not accept other requests
Server Address	SIP server address
SIP Received Detection	Whether to allow SIP receive detection
VPN	Whether to enable VPN
SIP Encrypt Type	Whether to allow SIP message encryption
RTP Encrypt Type	Whether to allow RTP message encryption
Country Code	Country code
Remove Country Code	Whether to allow the removal of national codes
Tel URL	Whether to open the Tel URL
Use Random SIP Port	Whether to use the minimum random port

Min Random SIP Port	SIP minimum random port
Max Random SIP Port	SIP maximum random port
Prefer Primary SIP Server	Whether to enable the preferred primary server
Hold SDP Attribute Inactive	Whether to enable the call to keep the inactive attribute
RTP Port Min	RTP minimum port
RTP Port Max	RTP's maximum port

Preferences

Preferences

Table 34 Preferences



Preferences

Volume Settings

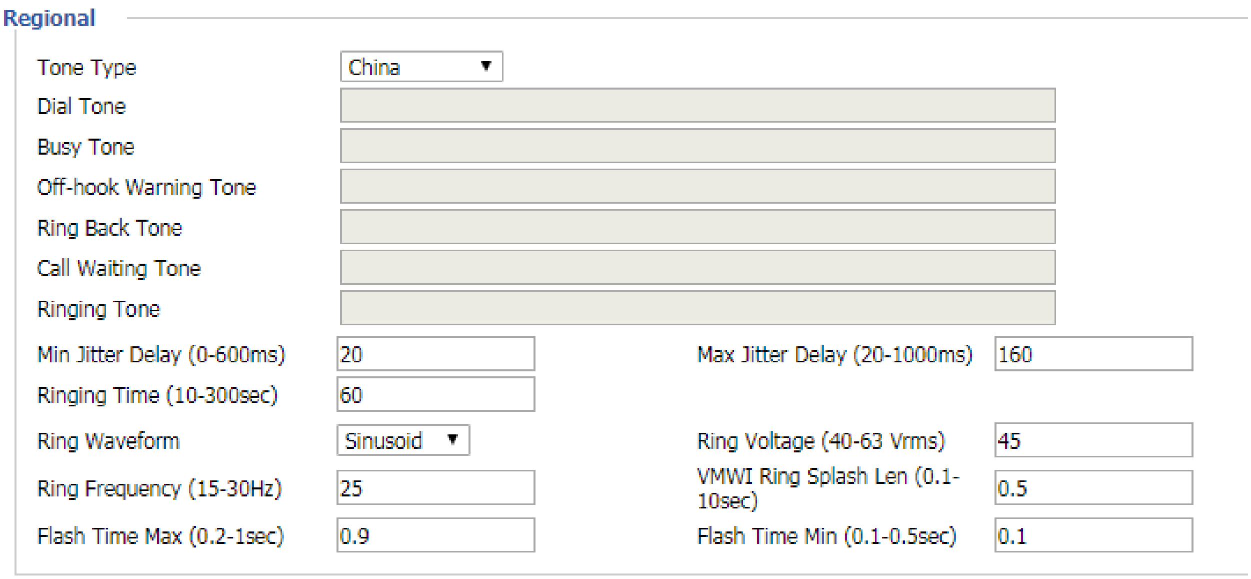
Handset Input Gain 5 ▼ Handset Volume 5 ▼

DTMF Volume (0~-45) -19

Field Name	Description
Handset Input Gain	Adjust the handset input gain from 0 to 7.
Handset Volume	Adjust the output gain from 0 to 7.
DTMF Volume (0~-45)	Default is -19, you can set a range of values is 0~ -45

Regional

Table 35 Regional



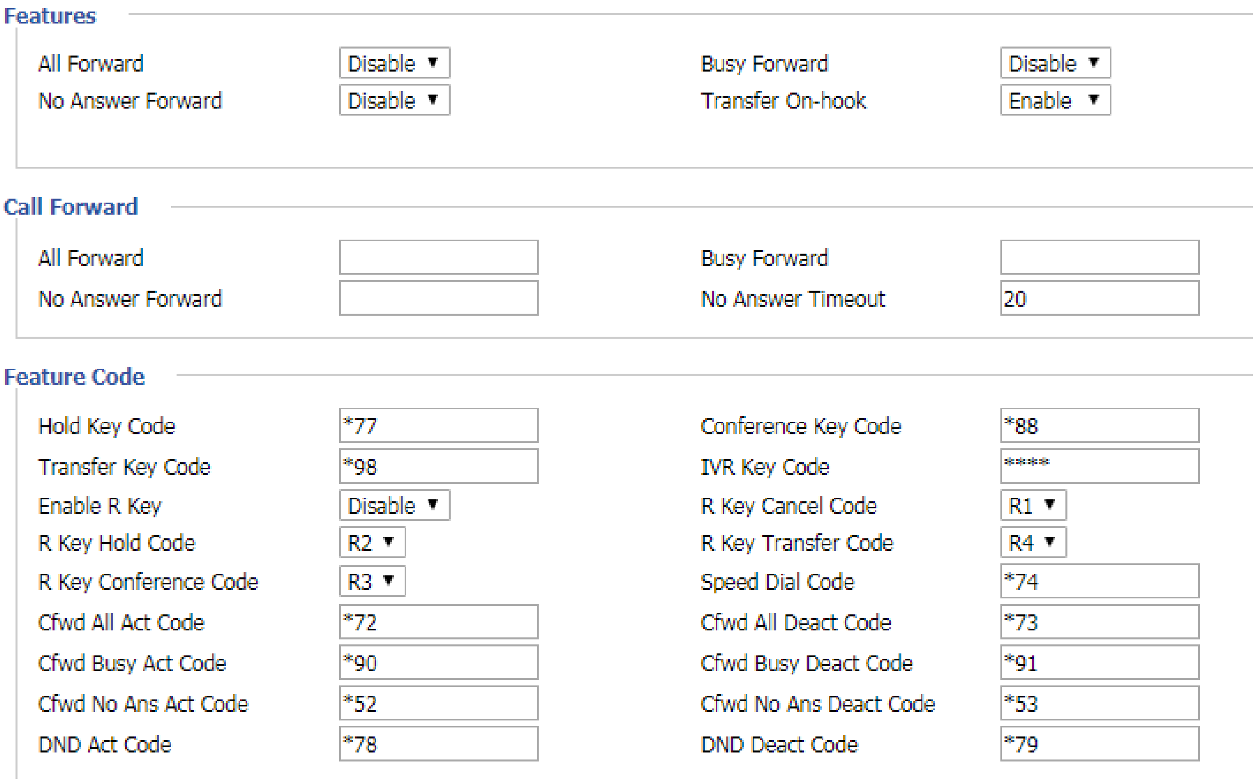
Regional

Tone Type	China ▼		
Dial Tone			
Busy Tone			
Off-hook Warning Tone			
Ring Back Tone			
Call Waiting Tone			
Ringing Tone			
Min Jitter Delay (0-600ms)	20	Max Jitter Delay (20-1000ms)	160
Ringing Time (10-300sec)	60		
Ring Waveform	Sinusoid ▼	Ring Voltage (40-63 Vrms)	45
Ring Frequency (15-30Hz)	25	VMWI Ring Splash Len (0.1-10sec)	0.5
Flash Time Max (0.2-1sec)	0.9	Flash Time Min (0.1-0.5sec)	0.1

Field Name	**Description**
Tone Type	Choose tone type form China, US, Hong Kong and so on.
Dial Tone	Dial Tone
Busy Tone	Busy Tone
Off Hook Warning	Off Hook warning tone
Ring Back Tone	Ring back tone
Call Waiting Tone	Call waiting tone
Min Jitter Delay	The Min value of home gateway’ s jitter delay, home gateway is an adaptive jitter mechanism.
Max Jitter Delay	The Max value of home gateway’ s jitter delay, home gateway is an adaptive jitter mechanism.
Ringing Time	How long FTA5102E2 will ring when there is an incoming call.
Ring Waveform	Select regional ring waveform, options are Sinusoid and Trapezoid, the default Sinusoid.
Ring Voltage	Set ringing voltage, the default value is 70
Ring Frequency	Set ring frequency, the default value is 25
VMWI Ring Splash Len(sec)	Set the VMWI ring splash length, default is 0.5s.
Flash Time Max(sec)	Set the Max value of the device’ s flash time, the default value is 0.9
Flash Time Min(sec)	Set the Min value of the device’ s flash time, the default value is 0.1

Features and Call Forward

Table 36 Features and call forward



Features

All Forward	Disable ▼	Busy Forward	Disable ▼
No Answer Forward	Disable ▼	Transfer On-hook	Enable ▼

Call Forward

All Forward		Busy Forward	
No Answer Forward		No Answer Timeout	20

Feature Code

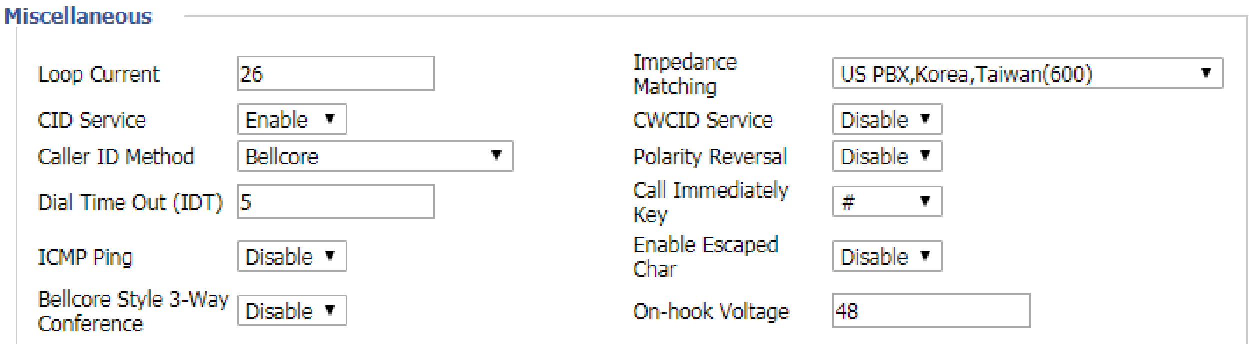
Hold Key Code	*77	Conference Key Code	*88
Transfer Key Code	*98	IVR Key Code	****
Enable R Key	Disable ▼	R Key Cancel Code	R1 ▼
R Key Hold Code	R2 ▼	R Key Transfer Code	R4 ▼
R Key Conference Code	R3 ▼	Speed Dial Code	*74
Cfwd All Act Code	*72	Cfwd All Deact Code	*73
Cfwd Busy Act Code	*90	Cfwd Busy Deact Code	*91
Cfwd No Ans Act Code	*52	Cfwd No Ans Deact Code	*53
DND Act Code	*78	DND Deact Code	*79

Field Name		Description
Features	All Forward	Enable/Disable forward all calls
	Busy Forward	Enable/Disable busy forward.
	No Answer Forward	Enable/Disable no answer forward.
Call Forward	All Forward	Set the target phone number for all forward. The device will forward all calls to the phone number immediately when there is an incoming call.
	Busy Forward	The phone number which the calls will be forwarded to when line is busy.
	No Answer Forward	The phone number which the call will be forwarded to when there's no answer.
	No Answer Timeout	The seconds to delay forwarding calls, if there is no answer at your phone.
Feature Code	Hold key code	Call hold signatures, default is *77.
	Conference key code	Signature of the tripartite session, default is *88.
	Transfer key code	Call forwarding signatures, default is *98.
	IVR key code	Signatures of the voice menu, default is ****.
	R key enable	Enable/Disable R key way call features.

	R key cancel code	Set the R key cancel code, option are ranged from R1 to R9, default value is R1.
	R key hold code	Set the R key hold code, options are ranged from R1 to R9, default value is R2.
	R key transfer code	Set the R key transfer code, options are ranged from R1 to R9, default value is R4.
	R key conference code	Set the R key conference code, options are ranged from R1 to R9, default value is R3.
	R Key Reject 2nd Call Code	Set the R key Reject 2nd Call code, options are ranged from R1 to R9, default value is R0.
	Speed Dial Code	Speed dial code, default is *74.

Miscellaneous

Table 37 Miscellaneous



Miscellaneous

Loop Current	26	Impedance Matching	US PBX,Korea,Taiwan(600) ▼
CID Service	Enable ▼	CWCID Service	Disable ▼
Caller ID Method	Bellcore ▼	Polarity Reversal	Disable ▼
Dial Time Out (IDT)	5	Call Immediately Key	# ▼
ICMP Ping	Disable ▼	Enable Escaped Char	Disable ▼
Bellcore Style 3-Way Conference	Disable ▼	On-hook Voltage	48

Field Name	Description
Codec Loop Current	Set off-hook loop current, default is 26
Impedance Maching	Set impedance matching, default is US PBX,Korea,Taiwan(600).
CID service	Enable/Disable displaying caller ID; If enable, caller ID is displayed when there is an incoming call or it won’t be displayed. Default is enable.
CWCID Service	Enable/Disable CWCID. If enable, the device will display the waiting call’s caller ID, or it won’t display. Default is disable.
Dial Time Out	How long device will sound dial out tone when device dials a number.
Call Immediately Key	Choose call immediately key form * or #.
ICMP Ping	Enable/Disable ICMP Ping. If enable this option, home gateway will ping the SIP Server every interval time, otherwise, It will send “hello” empty packet to the SIP Server.

Escaped char enable	Open special character translation function; if enable, when you press the # key, it will be translated to 23%, when disable, it is just #

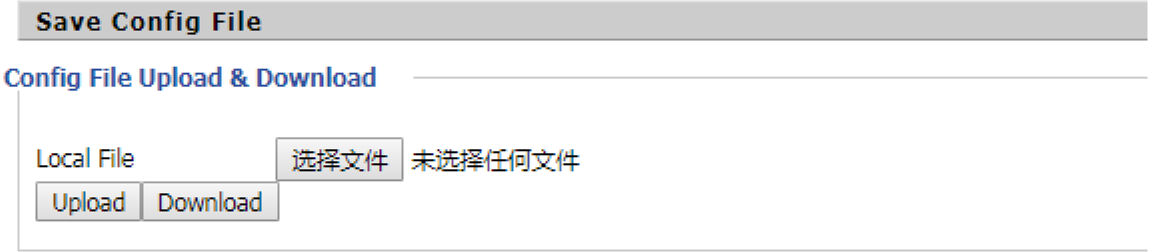
Administration

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

Management

Save config file

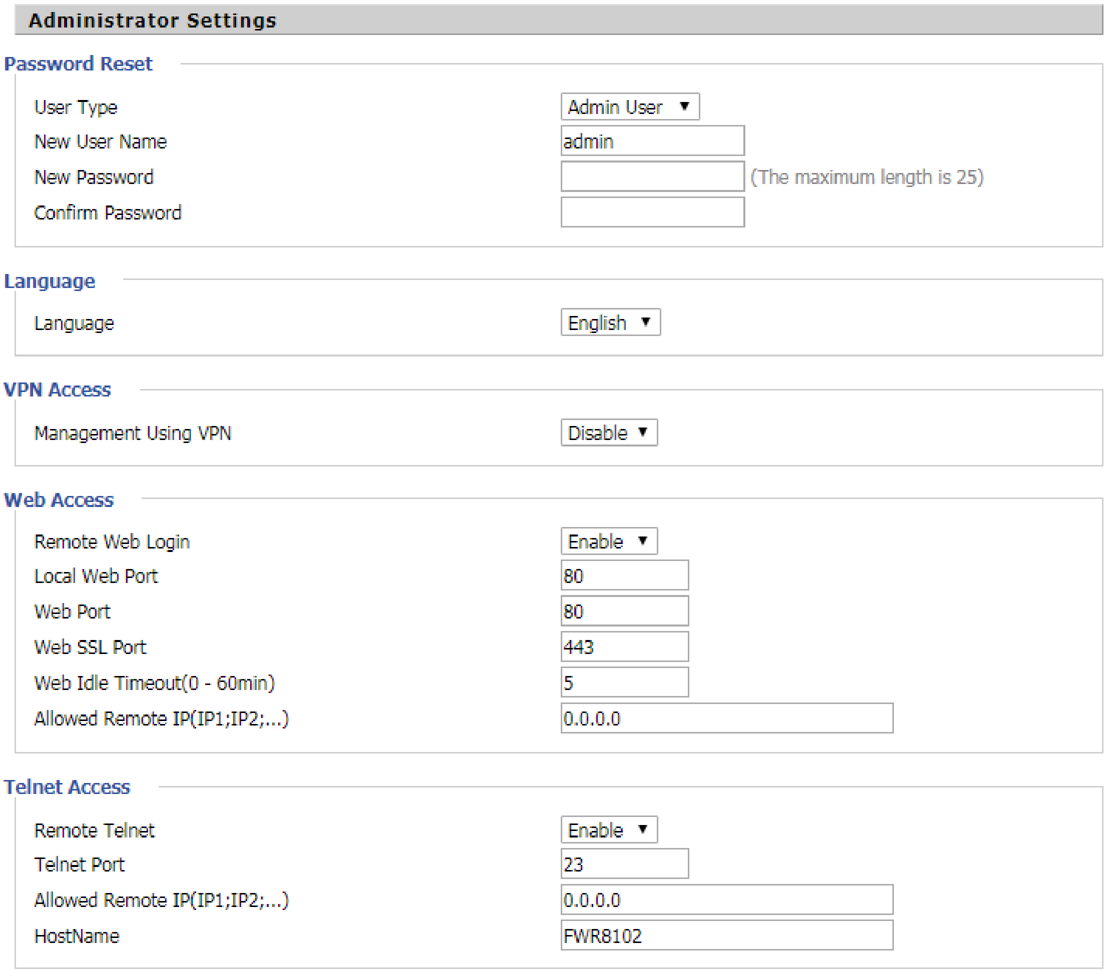
Table 38 Save Config File



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

Table 39 Administrator settings



Administrator Settings

Password Reset

User Type	Admin User ▼
New User Name	admin
New Password	(The maximum length is 25)
Confirm Password	

Language

Language	English ▼

VPN Access

Management Using VPN	Disable ▼

Web Access

Remote Web Login	Enable ▼
Local Web Port	80
Web Port	80
Web SSL Port	443
Web Idle Timeout(0 - 60min)	5
Allowed Remote IP(IP1;IP2;...)	0.0.0.0

Telnet Access

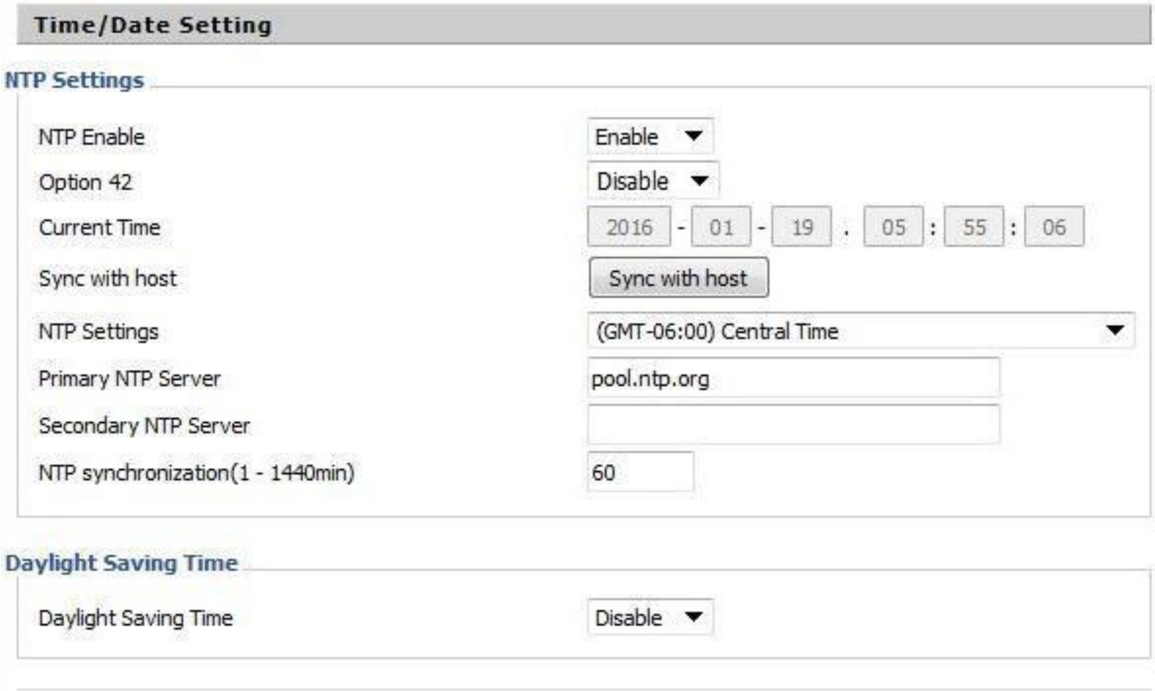
Remote Telnet	Enable ▼
Telnet Port	23
Allowed Remote IP(IP1;IP2;...)	0.0.0.0
HostName	FWR8102

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

Table 40 NTP settings



Time/Date Setting

NTP Settings

NTP Enable	Enable
Option 42	Disable
Current Time	2016 - 01 - 19 . 05 : 55 : 06
Sync with host	Sync with host
NTP Settings	(GMT-06:00) Central Time
Primary NTP Server	pool.ntp.org
Secondary NTP Server	
NTP synchronization(1 - 1440min)	60

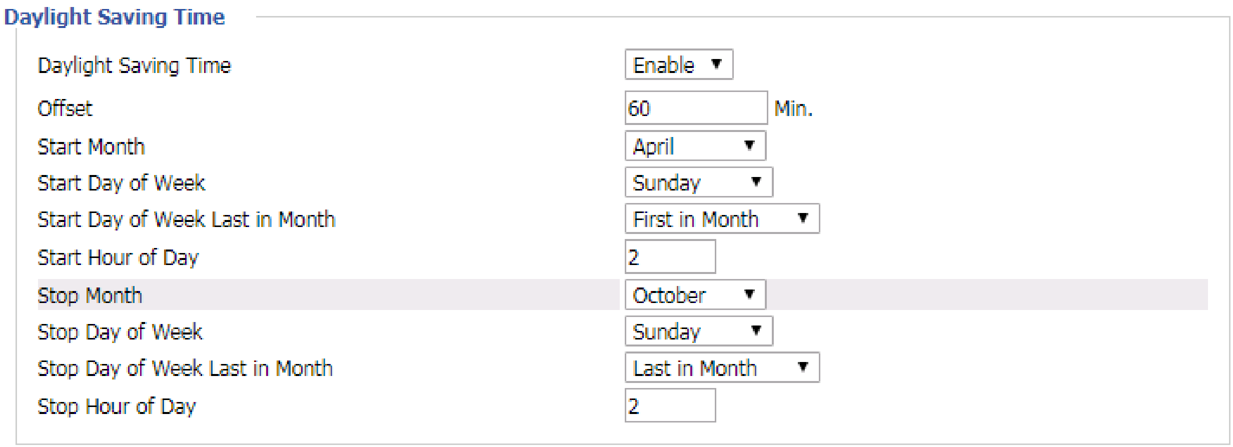
Daylight Saving Time

Daylight Saving Time	Disable

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

Daylight Saving Time

Table 41 Daylight Saving Time



Daylight Saving Time

Daylight Saving Time	Enable ▼
Offset	60 Min.
Start Month	April ▼
Start Day of Week	Sunday ▼
Start Day of Week Last in Month	First in Month ▼
Start Hour of Day	2
Stop Month	October ▼
Stop Day of Week	Sunday ▼
Stop Day of Week Last in Month	Last in Month ▼
Stop Hour of Day	2

Procedure

Step 1. Enable Daylight Savings Time.

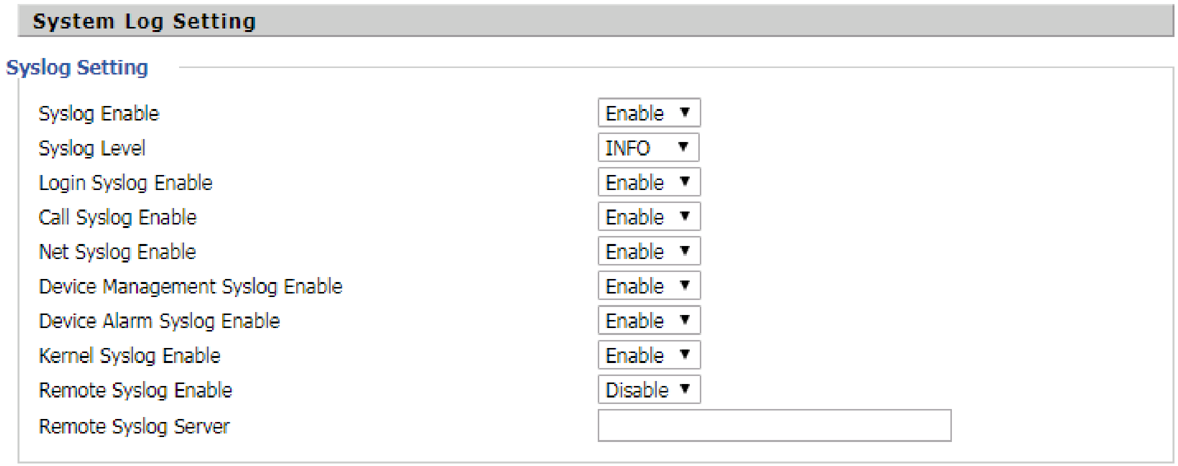
Step 2. Set value of offset for Daylight Savings Time

Step 3: Set starting Month/Week/Day/Hour in Start Month/Start Day of Week Last in Month/Start Day of Week/Start Hour of Day, analogously set stopping Month/Week/Day/Hour in Stop Month/Stop Day of Week Last in Month/Stop Day of Week/Stop Hour of Day.

Step 4.Press Saving button to save and press Reboot button to active changes.

System Log Setting

Table 60 System log Setting



System Log Setting

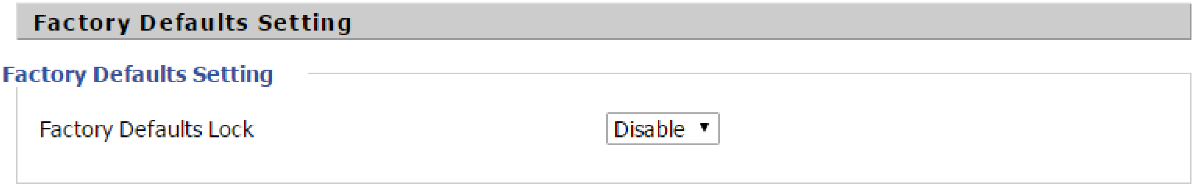
Syslog Setting

Syslog Enable	Enable ▼
Syslog Level	INFO ▼
Login Syslog Enable	Enable ▼
Call Syslog Enable	Enable ▼
Net Syslog Enable	Enable ▼
Device Management Syslog Enable	Enable ▼
Device Alarm Syslog Enable	Enable ▼
Kernel Syslog Enable	Enable ▼
Remote Syslog Enable	Disable ▼
Remote Syslog Server	

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	Enable/Disable remote syslog function
Remote Syslog server	Add a remote server IP address
Syslog Enable	Enable/Disable syslog function

Factory Defaults Setting

Table 43 Factory Defaults Setting

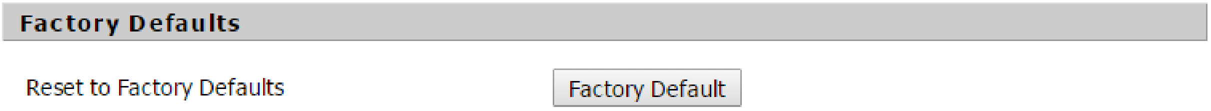


Factory Defaults Lock: Disable ▼

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

Factory Defaults

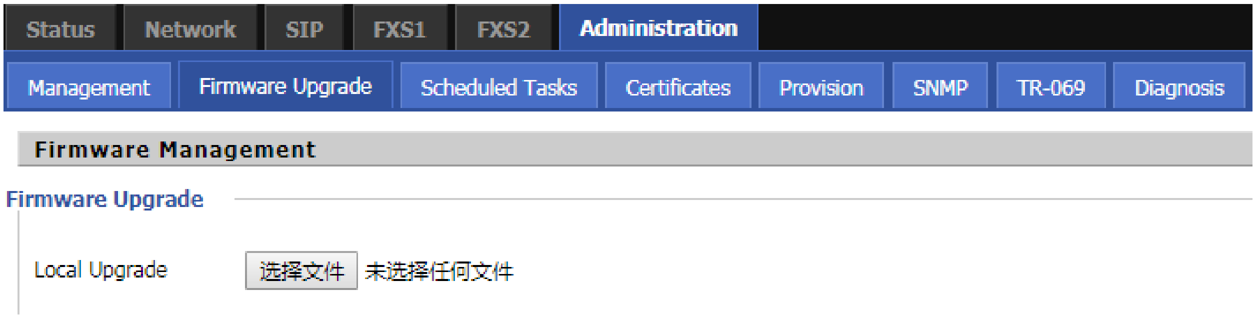
Table 44 Factory Defaults



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

Firmware Upgrade

Table 45 Firmware upgrade

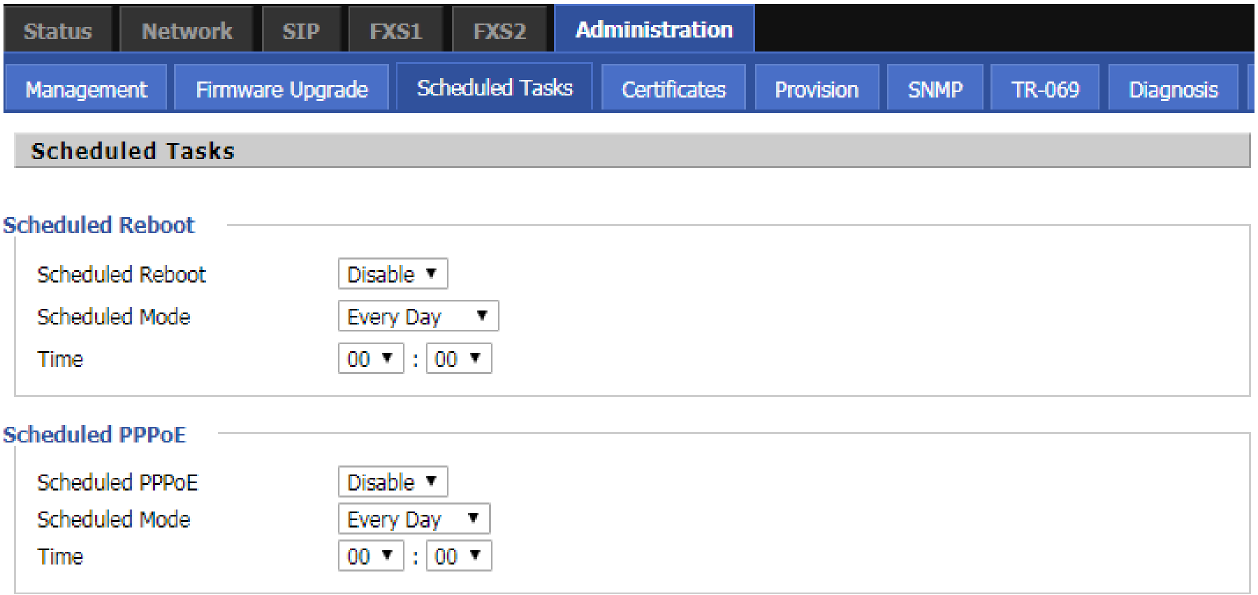


Local Upgrade 未选择任何文件

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

Table 46 Scheduled Tasks



Scheduled Reboot: Disable

Scheduled Mode: Every Day

Time: 00 : 00

Scheduled PPPoE: Disable

Scheduled Mode: Every Day

Time: 00 : 00

Field Name	Description
Scheduled Reboot	
Scheduled Reboot	Enable/Disable scheduled Reboot
Scheduled Mode	Select scheduled Mode
Time	Set the time to restart
Scheduled PPPoE	

Scheduled PPPoE	Enable/Disable scheduled PPPoE
Scheduled Mode	Select scheduled Mode
Time	Set the time to start PPPoE

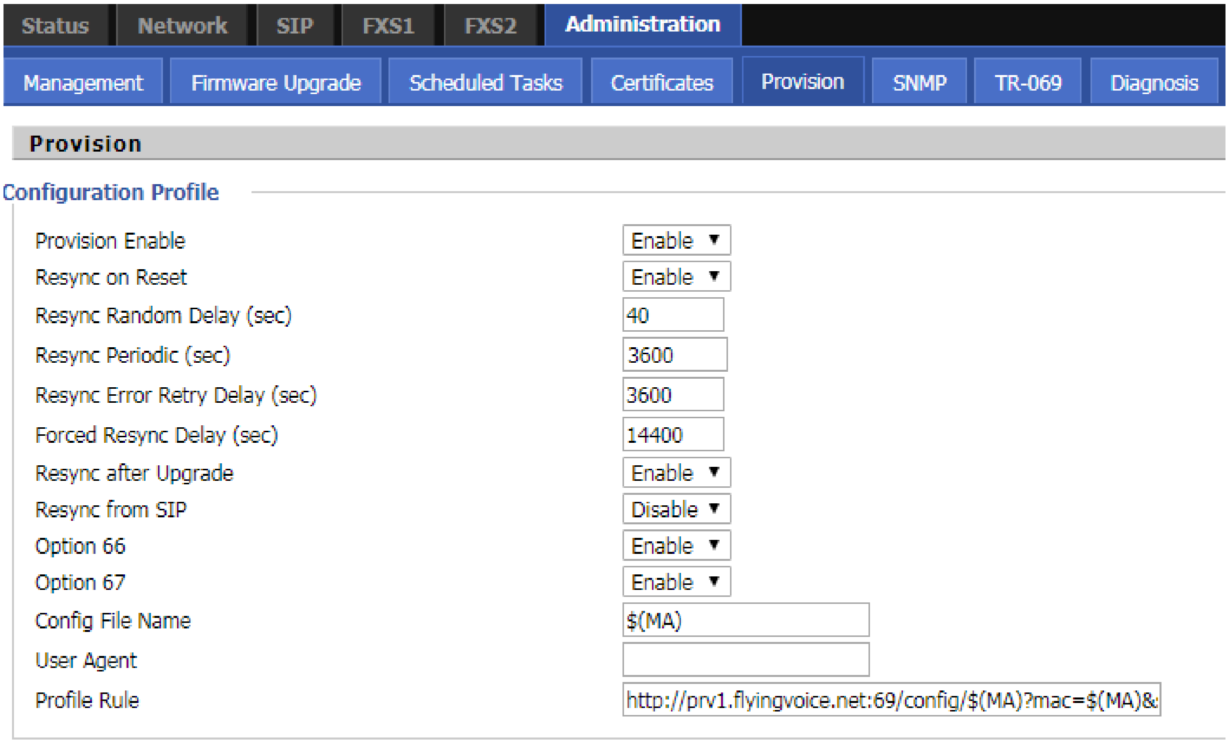
Provision

Provisioning allows the router 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.

Table 47 Provision



Provision

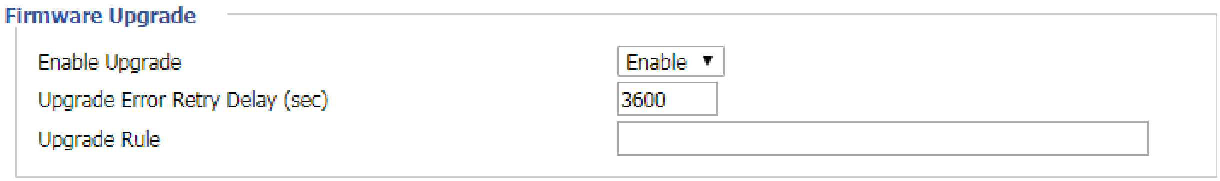
Configuration Profile

Provision Enable	Enable ▼
Resync on Reset	Enable ▼
Resync Random Delay (sec)	40
Resync Periodic (sec)	3600
Resync Error Retry Delay (sec)	3600
Forced Resync Delay (sec)	14400
Resync after Upgrade	Enable ▼
Resync from SIP	Disable ▼
Option 66	Enable ▼
Option 67	Enable ▼
Config File Name	$(MA)
User Agent	
Profile Rule	http://prv1.flyingvoice.net:69/config/$(MA)?mac=$(MA)&

Field Name	Description
Provision Enable	Enable provision or not.
Resync on Reset	Enable resync after restart or not
Resync Random	Set the maximum delay for the request of synchronization file. The default is 40
Resync Periodic(sec)	If the last resync was failure, The router will retry resync after the “Resync Error
Resync Error Retry	Set the periodic time for resync, default is 3600s

Forced Resync	If it’ s time to resync, but the device is busy now, in this case,the router will
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
Config File Name	It is used for In-house provision mode only. When use TFTP with option 66 to
Profile Rule	URL of profile provision file

Table 48 Firmware Upgrade



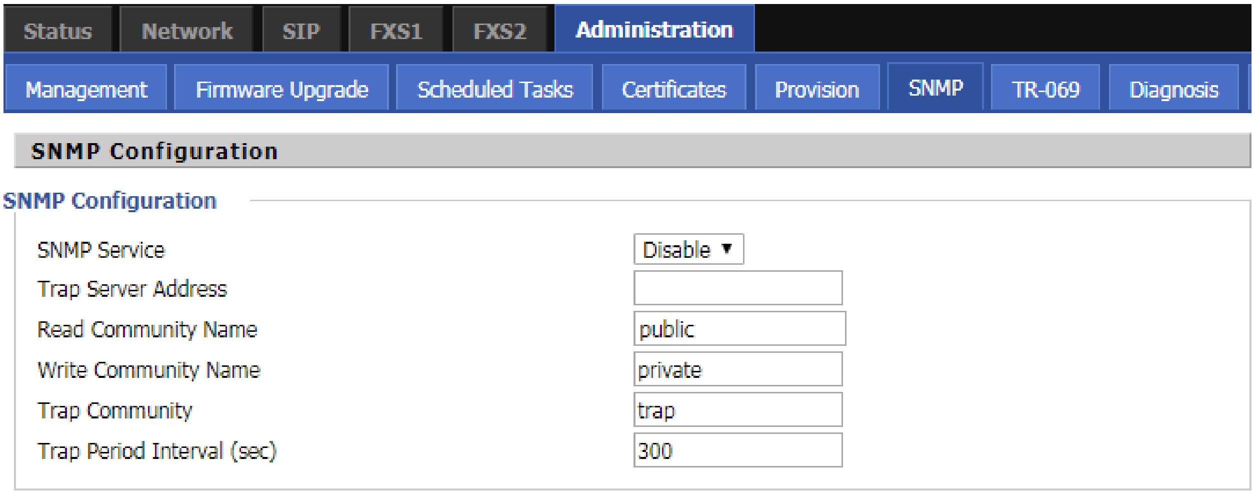
Firmware Upgrade

Enable Upgrade	Enable ▼
Upgrade Error Retry Delay (sec)	3600
Upgrade Rule	

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

SNMP

Table 49 SNMP



SNMP Configuration

SNMP Configuration

SNMP Service	Disable ▼
Trap Server Address	
Read Community Name	public
Write Community Name	private
Trap Community	trap
Trap Period Interval (sec)	300

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 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

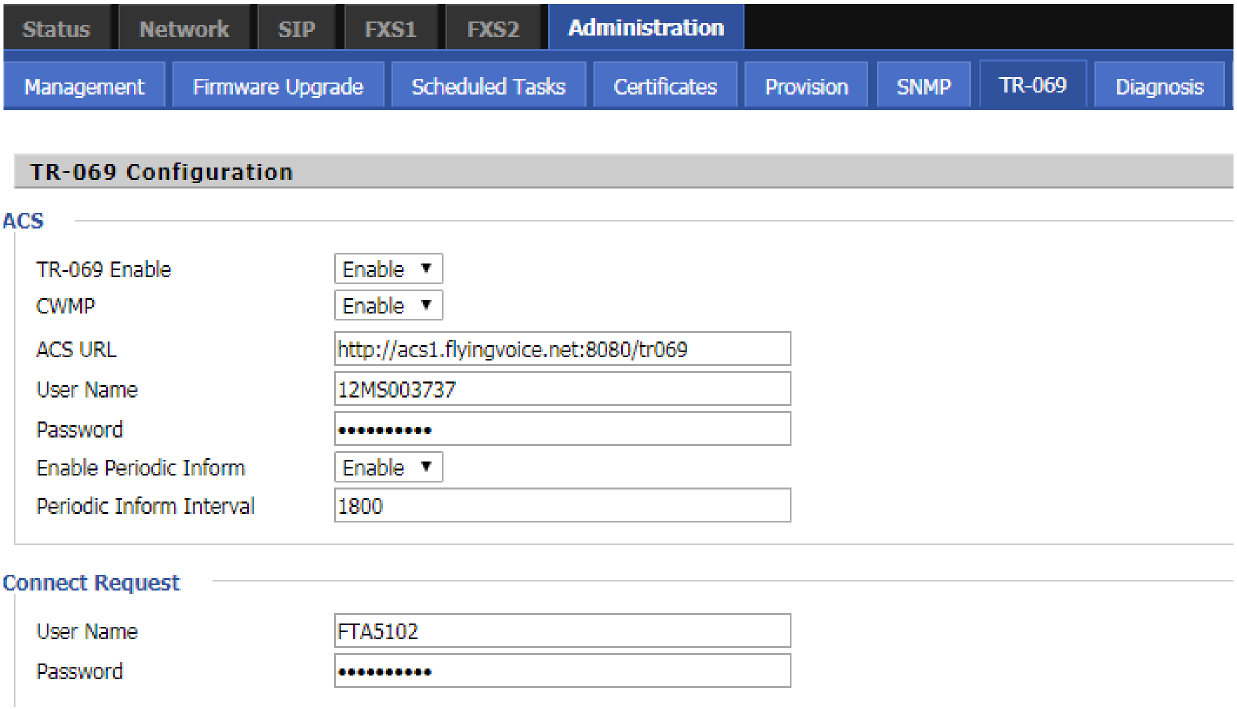
TR-069

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.

Table 67 TR069



TR-069 Configuration

ACS

TR-069 Enable	Enable ▼
CWMP	Enable ▼
ACS URL	http://acs1.flyingvoice.net:8080/tr069
User Name	12MS003737
Password	••••••••••
Enable Periodic Inform	Enable ▼
Periodic Inform Interval	1800

Connect Request

User Name	FTA5102
Password	••••••••••

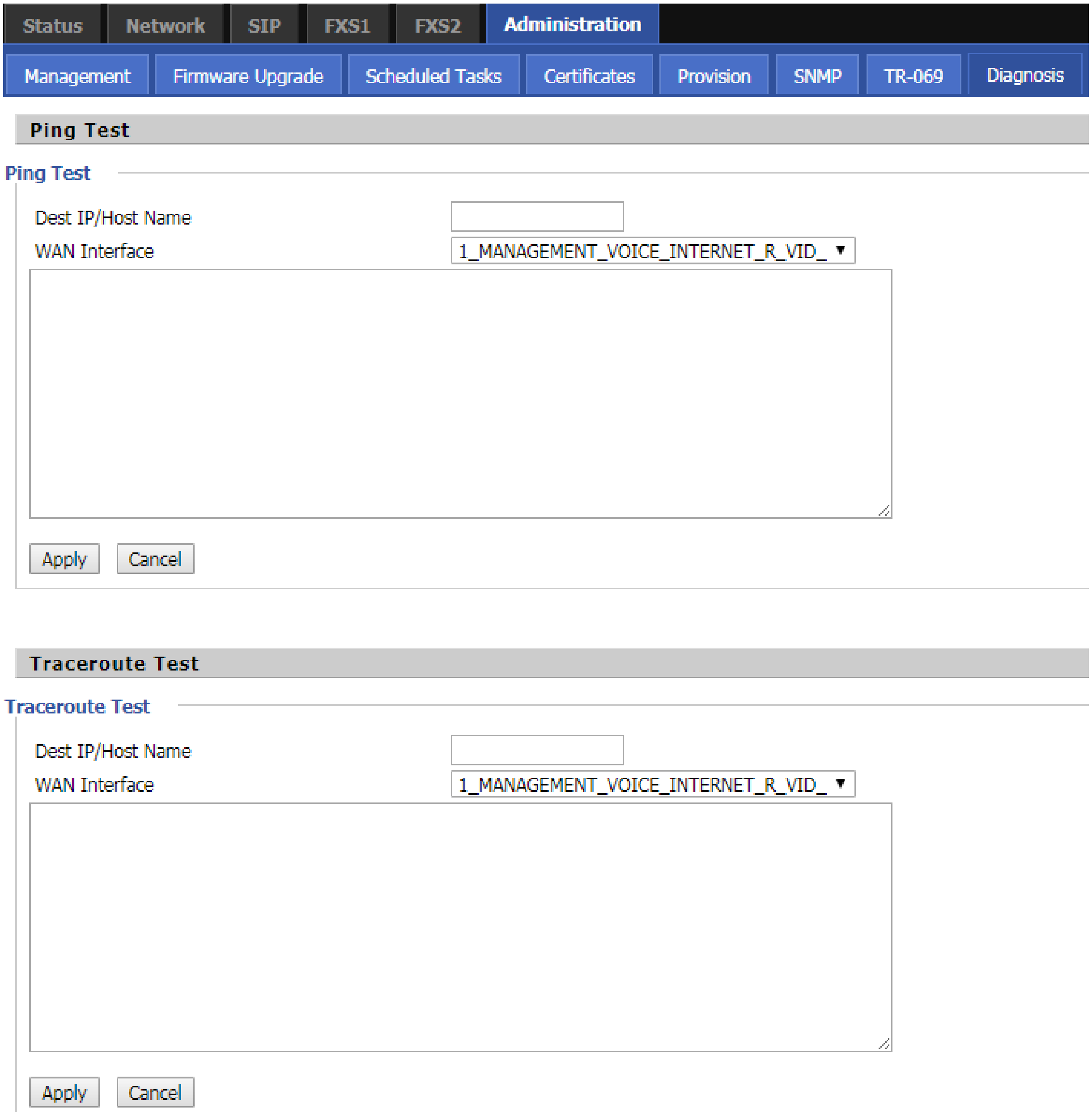
Field Name	Description
ACS parameters	
TR069 Enable	Enable or Disable TR069
CWMP	Enable or Disable CWMP
ACS URL	ACS URL address

User Name	ACS username
Password	ACS password
Periodic Inform	Enable the function of periodic inform or not. By default it is Enabled
Periodic Inform	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.

Table 51 Diagnosis



Ping Test

Ping Test

Dest IP/Host Name

WAN Interface 1_MANAGEMENT_VOICE_INTERNET_R_VID_

Traceroute Test

Traceroute Test

Dest IP/Host Name

WAN Interface 1_MANAGEMENT_VOICE_INTERNET_R_VID_

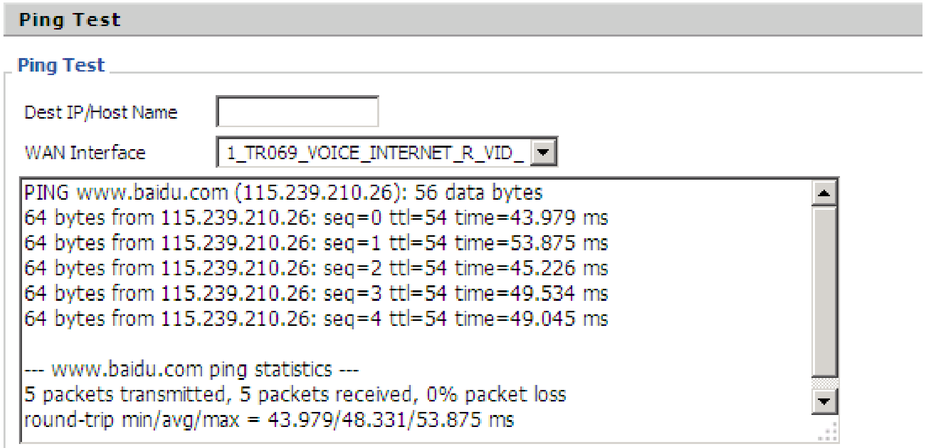
Description

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.



Ping Test

Ping Test

Dest IP/Host Name

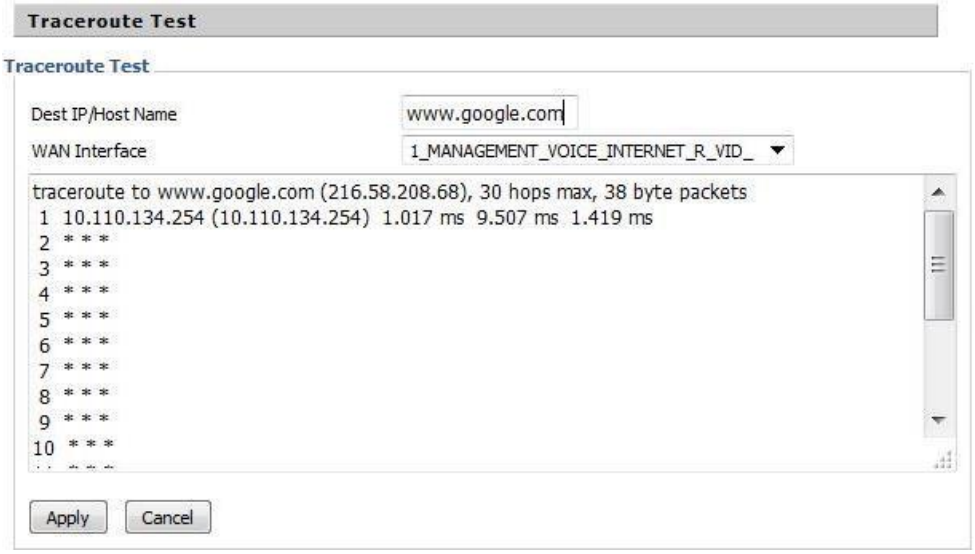
WAN Interface: 1_TR069_VOICE_INTERNET_R_VID_

```
PING www.baidu.com (115.239.210.26): 56 data bytes
64 bytes from 115.239.210.26: seq=0 ttl=54 time=43.979 ms
64 bytes from 115.239.210.26: seq=1 ttl=54 time=53.875 ms
64 bytes from 115.239.210.26: seq=2 ttl=54 time=45.226 ms
64 bytes from 115.239.210.26: seq=3 ttl=54 time=49.534 ms
64 bytes from 115.239.210.26: seq=4 ttl=54 time=49.045 ms

--- www.baidu.com ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 43.979/48.331/53.875 ms
```

3. Traceroute Test

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



Traceroute Test

Traceroute Test

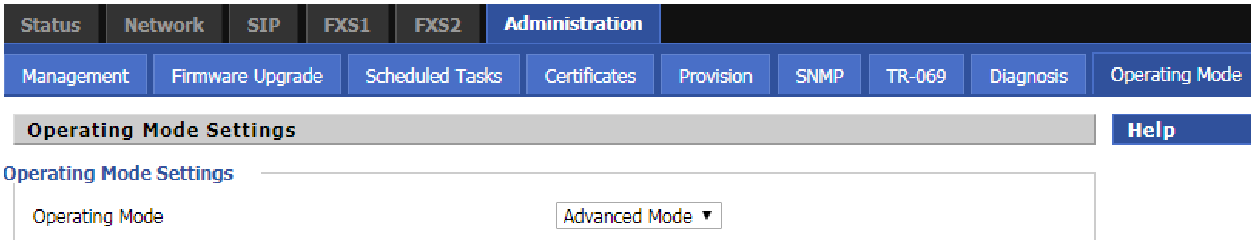
Dest IP/Host Name: www.google.com

WAN Interface: 1_MANAGEMENT_VOICE_INTERNET_R_VID_

```
traceroute to www.google.com (216.58.208.68), 30 hops max, 38 byte packets
 1  10.110.134.254 (10.110.134.254)  1.017 ms  9.507 ms  1.419 ms
 2  * * *
 3  * * *
 4  * * *
 5  * * *
 6  * * *
 7  * * *
 8  * * *
 9  * * *
10  * * *
```

Operating Mode

Table 52 Operating mode



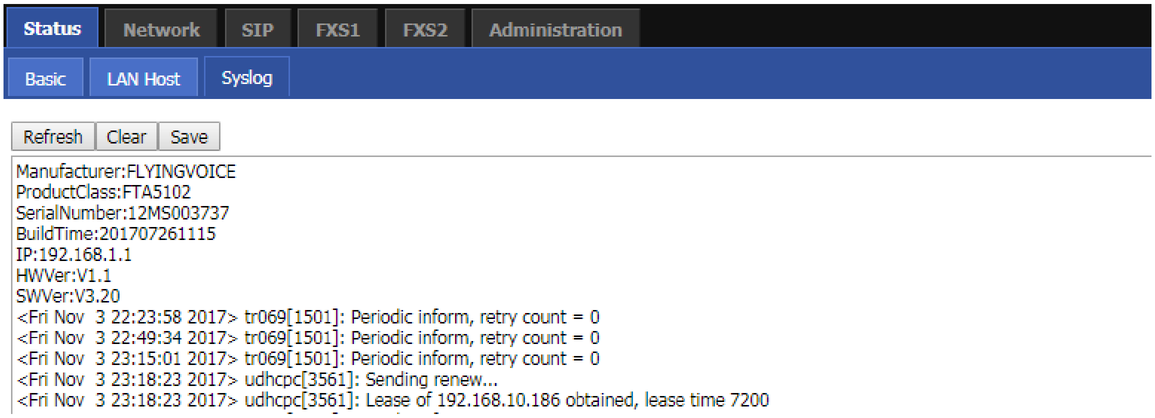
Operating Mode Settings

Operating Mode: Advanced Mode ▼

Description
Choose the Operation Mode as Basic Mode or Advanced Mode

System Log

Table 53 System log

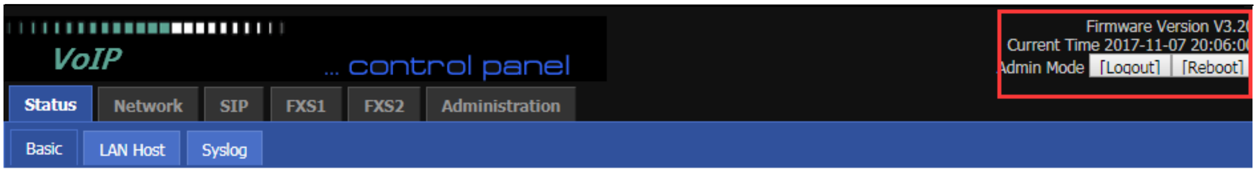


```
Manufacturer:FLYINGVOICE
ProductClass:FTA5102
SerialNumber:12MS003737
BuildTime:201707261115
IP:192.168.1.1
HWVer:V1.1
SWVer:V3.20
<Fri Nov  3 22:23:58 2017> tr069[1501]: Periodic inform, retry count = 0
<Fri Nov  3 22:49:34 2017> tr069[1501]: Periodic inform, retry count = 0
<Fri Nov  3 23:15:01 2017> tr069[1501]: Periodic inform, retry count = 0
<Fri Nov  3 23:18:23 2017> udhcpc[3561]: Sending renew...
<Fri Nov  3 23:18:23 2017> udhcpc[3561]: Lease of 192.168.10.186 obtained, lease time 7200
```

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

Logout

Table 54 Logout



Firmware Version V3.2
Current Time 2017-11-07 20:06:0
Admin Mode

Description
Press the logout button to logout, and then the login window will appear.

Reboot

Press the Reboot button to reboot the device.

Chapter 5 IPv6 address configuration

The router devices support IPv6 addressing.This chapter covers:

- Introduction
- IPv6 Advance
- Configuring IPv6
- Viewing WAN port status
- IPv6 DHCP configuration for LAN/WLAN clients
- LAN DHCPv6

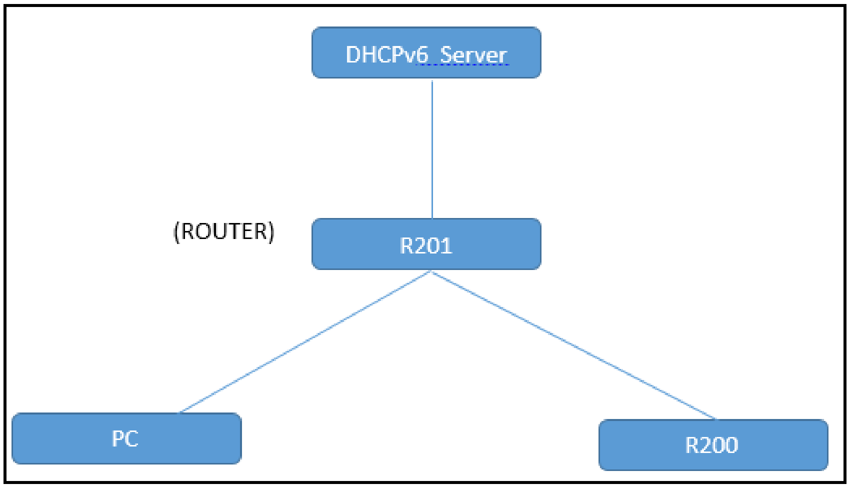
Introduction

DHCPv6 protocol is used to automatically provision/configure IPv6 capable end points in a local network. In addition to acquiring an IPv6 IP address for the WAN interface and its associated LAN/WLAN clients, the devices are also capable of prefix delegation.

The Routers devices support the following types of modes of IPv6 addresses:

- Stateless DHCPv6
- Statefull DHCPv6

Table 55 IPv6 Modes

Mode	Description
Stateless	In Stateless DHCPv6 mode, the Routers devices listen for ICMPv6 Router Advertisements messages which are periodically sent out by the routers on the local link or requested by the node using a Router Advertisements solicitation message. The device derives a unique IPv6 address using prefix receives from the router and its own MAC address.
	
Statefull	In Statefull DHCPv6 mode, the client works exactly as IPv4 DHCP, in which hosts receive both their IPv6 addresses and additional parameters from the DHCP server.

IPv6 Advance

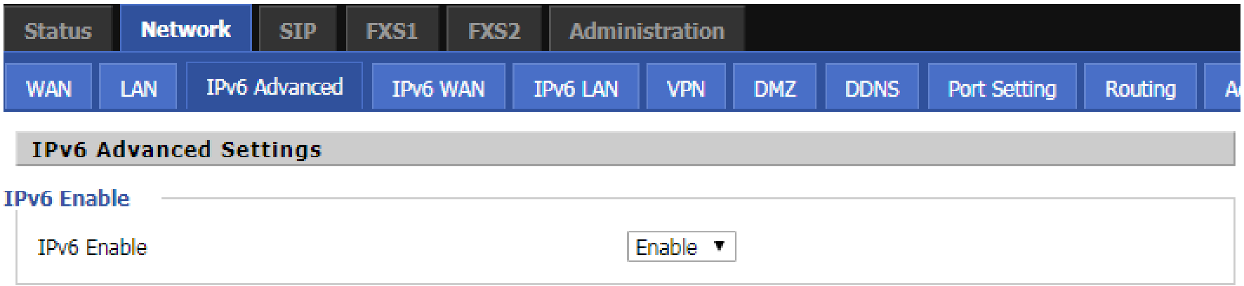
To enable IPv6 functionality:

Navigate to Network > IPv6 Advanced page.

Select Enable from the IPv6 Enable drop-down list.

Click Save.

Table 56 Enabling IPv6



IPv6 Advanced Settings

IPv6 Enable

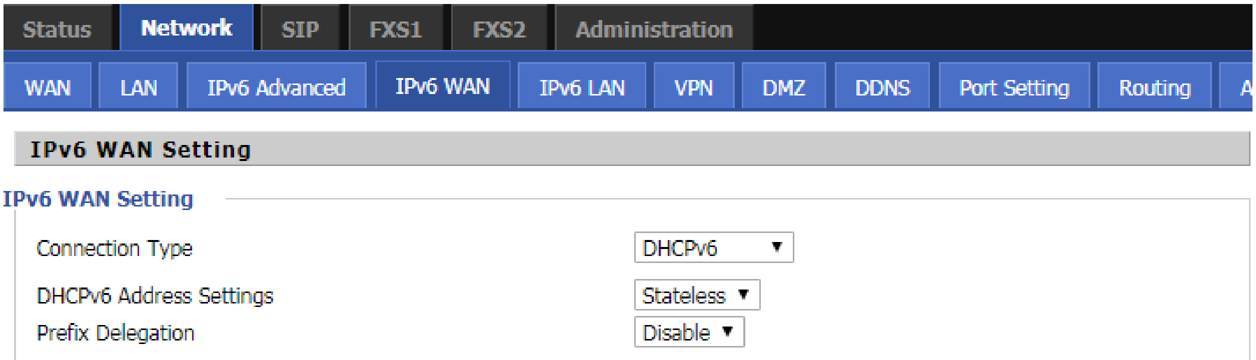
IPv6 Enable Enable ▼

Configuring IPv6

Configuring Statefull IPv6

1. Navigate to Network > IPv6WAN page. The following window is displayed:

Table 57 Configuring Statefull IPv6



IPv6 WAN Setting

IPv6 WAN Setting

Connection Type DHCPv6 ▼

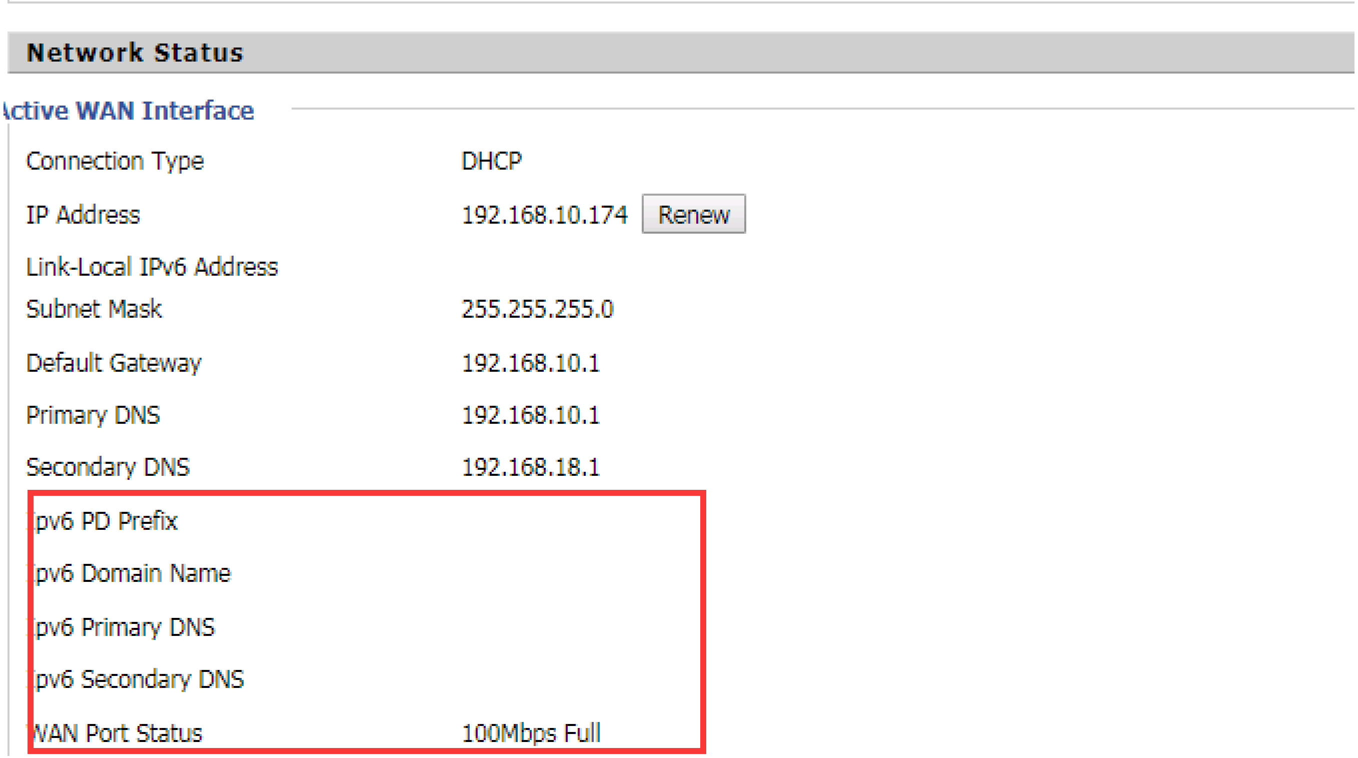
DHCPv6 Address Settings Stateless ▼

Prefix Delegation Disable ▼

Field Name	Description
Connection Type	Select connection type
DHCPv6 Address Settings	Set it to statefull mode.
Prefix Delegation	Select Enable.

Viewing WAN port status

To view the status of WAN port:
Navigate to Status page.



Network Status

Active WAN Interface

Connection Type	DHCP
IP Address	192.168.10.174 Renew
Link-Local IPv6 Address	
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.1
Primary DNS	192.168.10.1
Secondary DNS	192.168.18.1
Ipv6 PD Prefix	
Ipv6 Domain Name	
Ipv6 Primary DNS	
Ipv6 Secondary DNS	
WAN Port Status	100Mbps Full

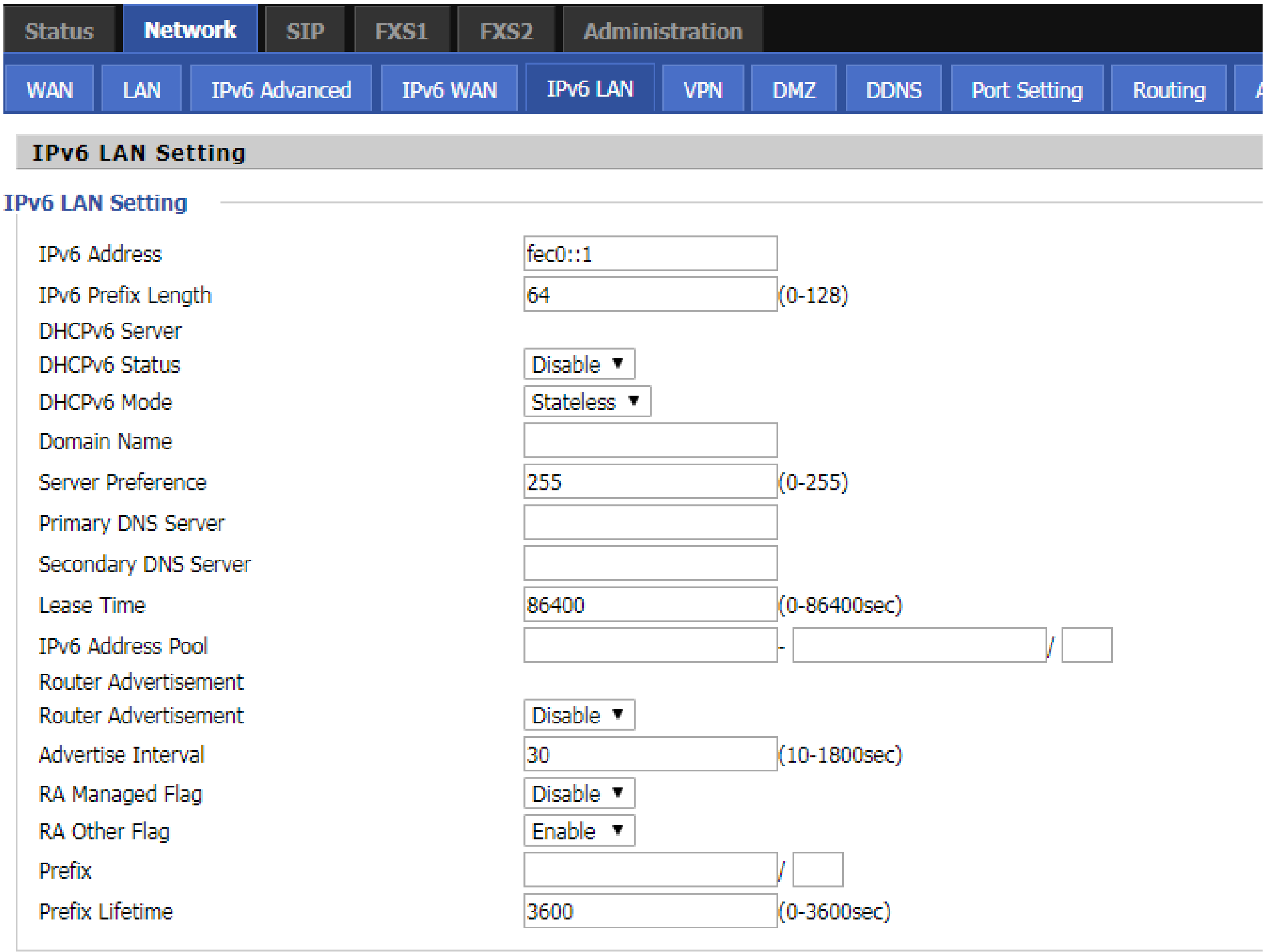
IPv6 DHCP configuration for LAN/WLAN clients

Wired and wireless clients connected to the Routers can obtain their IPv6 addresses based on how the LAN side DHCPv6 parameters are configured. The Routers can be either configured as a DHCPv6 server in which the LAN/WLAN clients get IPv6 addresses from the configured pool.If DHCP server is disabled on the Routers, the clients will get IPv6 addresses from the external DHCPv6 server configured in the network.

LAN DHCPv6

When IPv6 is enabled, the LAN/WLAN clients of Routers can be configured to receive IPv6 addresses from locally configured IPv6 pool or from an external DHCPv6 server.

To enable LAN DHCPv6 service:



IPv6 LAN Setting

IPv6 LAN Setting

IPv6 Address	fec0::1	
IPv6 Prefix Length	64	(0-128)
DHCPv6 Server		
DHCPv6 Status	Disable ▼	
DHCPv6 Mode	Stateless ▼	
Domain Name		
Server Preference	255	(0-255)
Primary DNS Server		
Secondary DNS Server		
Lease Time	86400	(0-86400sec)
IPv6 Address Pool	- /	
Router Advertisement		
Router Advertisement	Disable ▼	
Advertise Interval	30	(10-1800sec)
RA Managed Flag	Disable ▼	
RA Other Flag	Enable ▼	
Prefix	/	
Prefix Lifetime	3600	(0-3600sec)

Chapter 6 Troubleshooting Guide

This chapter covers:

- Configuring PC to get IP Address automatically
- Cannot connect to the Web GUI
- Forgotten Password

Configuring PC to get IP Address automatically

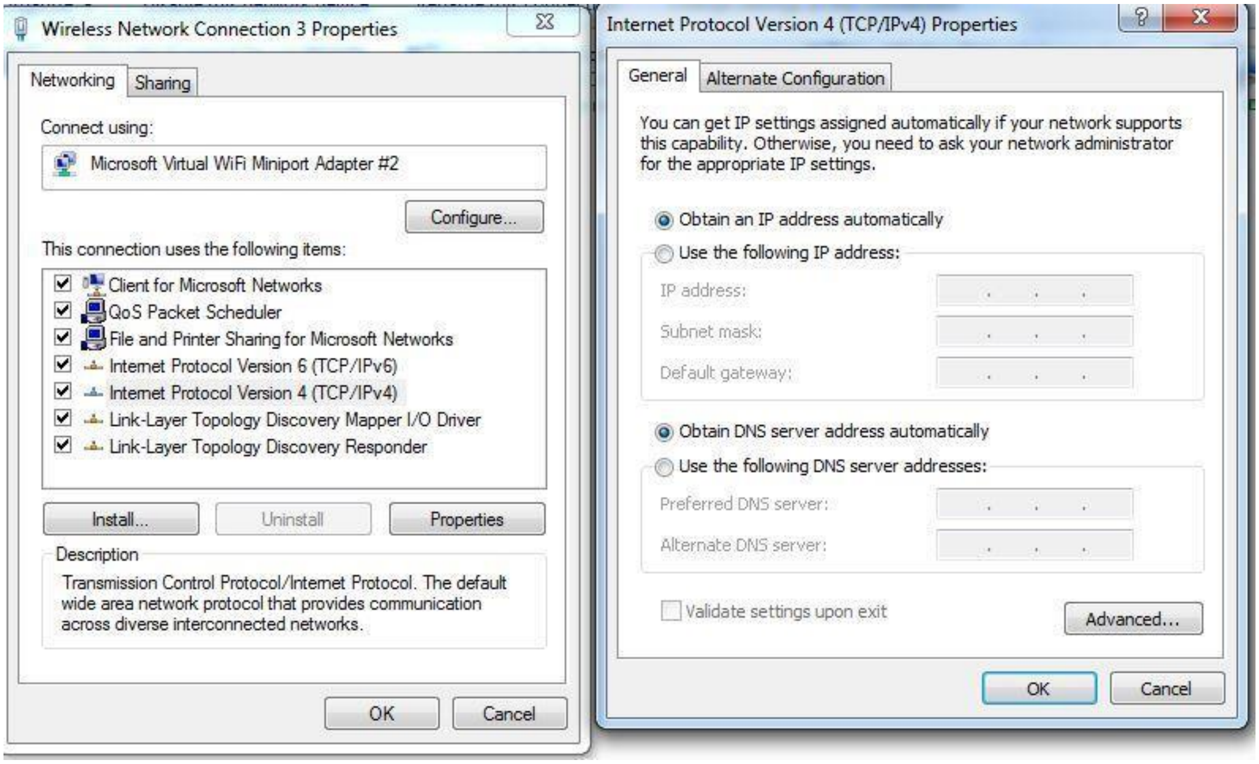
Follow the below process to set your PC to get an IP address automatically:

Step 1 : Click the “Start” button

Step 2 : Select “control panel”, then double click “network connections” in the “control panel”

Step 3 : Right click the “network connection” that your PC uses, select “attribute” and you can see the interface as shown in Figure 3.

Step 4.: Select “Internet Protocol (TCP/IP)”, click “attribute” button, then click the “Get IP address automatically”.



Connect using:

Microsoft Virtual WiFi Miniport Adapter #2

This connection uses the following items:

- ☑ Client for Microsoft Networks
- ☑ QoS Packet Scheduler
- ☑ File and Printer Sharing for Microsoft Networks
- ☑ Internet Protocol Version 6 (TCP/IPv6)
- ☑ Internet Protocol Version 4 (TCP/IPv4)
- ☑ Link-Layer Topology Discovery Mapper I/O Driver
- ☑ Link-Layer Topology Discovery Responder

Description

Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

● Obtain an IP address automatically

○ Use the following IP address:

IP address: . . .

Subnet mask: . . .

Default gateway: . . .

● Obtain DNS server address automatically

○ Use the following DNS server addresses:

Preferred DNS server: . . .

Alternate DNS server: . . .

□ Validate settings upon exit

Cannot connect to the Web

Solution:

- Check if the Ethernet cable is properly connected
- Check if the URL is correct. The format of URL is: http:// the IP address
- Check on any other browser apart from Internet explorer such Google
- Contact your administrator, supplier or ITSP for more information or assistance.

Forgotten Password

If you have forgotten the management password, you cannot access the configuration web GUI. Solution:

To factory default: press and hold reset button for 10 seconds.