ATA-171/172/ 171P/171M/ 171+/172+ User's Guide

V2.1

2011/02/25

Table of Contents

1. Introduction

This user's manual is for 1-port FXS and 1-port FXO (FXO only supported in ATA171M) VoIP terminal adapter (ATA). This user's manual will explain the IVR instruction, web configuration, and command line configuration for the ATA. Before using the ATA, some setup processes are required to make the ATA work properly. Please refer to the Setup Menu for further information.

Chapter 1.1 Hardware Overview

The ATA has the following interfaces for Networking, telephone interface, LED indication, and power connector.

1.1.1 Two RJ-45 Networking interface, these two interfaces support 10/100Mps Fast Ethernet. you can connect one RJ-45 Fast Ethernet port to the ADSL or Switch, and connect the other one to your computer.

1.2.1 One RJ-11 Type analog telephone jack and line interfaces. You can connect one analog telephone to the terminal adapter or one PSTN line.

1.3.1 LED Indication: There are three LED indicators in the ATA to show the Power, Register, and Off-Hook indication.

Chapter 2.1 Software Overview

Network Protocol	**Tone**
• SIP v1 (RFC2543), v2 (RFC3261) • IP/TCP/UDP/RTP/RTCP • IP/ICMP/ARP/RARP/SNTP • TFTP Client/DHCP Client/ PPPoE Client • Telnet/HTTP Server • DNS Client • NAT/DHCP Server	• Ring Tone • Ring Back Tone • Dial Tone • Busy Tone • Programming Tone
	Phone Function
Codec	• Volume Adjustment • Speed dial key • Phone book • Flash
• G.711: 64k bit/s (PCM) • G.726: 16k / 24k / 32k / 40k bit/s (ADPCM) • G.729A: 8k bit/s (CS-ACELP) • G.729B: adds VAD & CNG to G.729	**IP Assignment**
	• Static IP • DHCP • PPPoE
Voice Quality	**Security**
• VAD: Voice activity detection • CNG: Comfortable noise generator • LEC: Line echo canceller • Packet Loss Compensation • Adaptive Jitter Buffer	• HTTP 1.1 basic/digest authentication for Web setup • MD5 for SIP authentication (RFC2069/ RFC 2617)
	QoS
Call Function	• ToS field
• Call Hold • Call Waiting • Call Forward • Caller ID • 3-way conference	**NAT Traversal**
	• STUN
DTMF Function	**Configuration**
• In-Band DTMF • Out-of Band DTMF • SIP Info	• Web Browser • Console/Telnet • IVR/Keypad
SIP Server	**Firmware Upgrade**
• Registrar Server (three SIP account) • Outbound Proxy	• TFTP • Console • HTTP

Keypad Interface for The ATA

You can use the PSTN phone keypad to operate the ATA. Please follow the instruction to configure your terminal adapter.

Group	IVR Action	IVR Menu Choice	Parameter(s)	Notes:
Function	Dial out from PSTN Line	**0∗**	None	Press 0* can pass call to PSTN Line, user can dial out from PSTN Line. (For 171P and 171M)
Function	Unlock keypad setting	**#190#**	None	After you unlock keypad setting, then you may configure the ATA.
Function	Reboot	**#195#**	None	After you hear "Option Successful," hang-up. The system will reboot automatically.
Function	Factory Reset	**#198#**	None	System will automatically reboot. WARNING: ALL "User-Changeable" NONDEFAULT SETTINGS WILL BE LOST! This will include network and service provider data.
Function	Enable PPTP client	**#116#**	None	System will automatically reboot and PPTP client will be enabled
Function	Disable PPTP client	**#117#**	None	System will automatically reboot and PPTP client wll be disabled
Function	Enable VLAN	**#118#**	None	System will automatically reboot and VLAN will be enabled.
Function	Disable VLAN	**#119#**	None	System will automatically reboot and VLAN will be disabled
Function	Enable Call Waiting	**#138#**	None	System will automatically reboot and Call Waiting will be enabled.
Function	Disable Call Waiting	**#139#**	None	System will automatically reboot and Call Waiting will be disabled.
Function	Enable Anonymous	**#140#**	None	System will automatically reboot and Send Anonymous CID will be enabled.
Function	Disable Anonymous	**#141#**	None	System will automatically reboot and Send Anonymous CID will be disabled.
Function	Blind Transfer	**#510#**	None	Can only be performed in a phone call conversation. For 171M, this will transfer the current IP line to another IP line.
Function	Attendant Transfer	**#511#**	None	Can only be performed in a phone call conversation. For 171M, this will transfer the line to IP from PSTN (must be in IP mode to execute this command)
Function	3-way calling (IP Conference)	**#512#**	None	Can only be performed in a phone call conversation.
Function	Attendant Transfer	**#514#**	None	Can only be performed in a phone call conversation. For 171M, this will transfer the line to PSTN from IP (must be in PSTN mode to execute this command)
Info	Check WAN IP Address	**#126#**	None	IVR will announce the current WAN IP address of the ATA
Info	Check LAN IP Address	**#120#**	None	IVR will announce the current LAN IP address of the ATA
Info	Check IP Type	**#121#**	None	IVR will announce if DHCP in enabled or disabled.
Info	Check the Phone Number	**#122#**	None	IVR will announce current in use VoIP number
Info	Check Network	**#123#**	None	IVR will announce the current network

	Mask			mask of the ATA.
Info	Check Gateway IP Address	**#124#**	None	IVR will announce the current gateway IP address of the ATA.
Info	Check Primary DNS Server Setting	**#125#**	None	IVR will announce the current setting in the Primary DNS field.
Info	Check Firmware Version	**#128#**	None	IVR will announce the version of the firmware running on the ATA.
Setting	Set DHCP client	**#111#**	None	The system will change to DHCP Client type
Setting	Set Static IP Address	**#112xxx*xxx*xxx*xxx#**	Enter IP address using numbers on the telephone keypad. Use the * (star) key when entering a decimal point.	DHCP will be disabled and system will change to the Static IP type.
Setting	Set Network Mask	**#113xxx*xxx*xxx*xxx#**	Enter value-using numbers on the telephone keypad. Use the * (star) key when entering a decimal point.	Must set Static IP first.
Setting	Set Gateway IP Address	**#114xxx*xxx*xxx*xxx#**	Enter IP address using numbers on the telephone keypad. Use the * (star) key when entering a decimal point.	Must set Static IP first.
Setting	Set Primary DNS Server	**#115xxx*xxx*xxx*xxx#**	Enter IP address using numbers on the telephone keypad. Use the * (star) key when entering a decimal point.	Must set Static IP first.
Setting	Set Codec	**#130+[1-8]#**	1:G.711 u-Law, 2: G.711 a-Law, 4: G.729a, 5: G.726 16K, 6: G.726 24K, 7: G.726 32K, 8: G.726 40K,	You can set the codec you want to the first priority.
Setting	Set Handset Gain	**#131+[00~15]#**	Handset Gain from 0~15	You can set the Handset gain to proper value, default is 6
Setting	Set Handset Volume	**#132+[00~12]#**	Handset Volume from 0~12	You can set the Handset volume to proper value, default is 10
Setting	Set Auto Configuration Mode	**#137X#**	Select the auto configuration mode, in the X field, you can press the following; 0:OFF 1:TFTP 2:FTP	You can set the auto configuration method you want, default is off
Setting	Set Auto Configuration For TFTP Server	**#135xxx*xxx*xxx*xxx#**	Enter IP address using numbers on the telephone keypad. Use the * (star) key when entering a decimal point.	Must set auto configuration method to TFTP first
Setting	Set Auto Configuration For FTP Server	**#136xxx*xxx*xxx*xxx#**	Enter IP address using numbers on the telephone keypad. Use the * (star) key when entering a decimal point.	Must set auto configuration method to FTP first

Chapter 3.1 Instruction of the Web Environment

3.1.1 Pre-settings

3.1.1 Network settings

Network Mode: Default NAT Mode
WAN Port: DHCP Client Mode
LAN Port: DHCP Server, IP Address: 192.168.123.1

3.1.2 Web Page

VoIP Web Login page, http://192.168.123.1:9999

- Login Account:
  - Administrator's Right: Login Account: root, Password: test
  - Super use's Right: Login Account: system, Password: test
  - Normal Right: Login Account: user, Password: test

3.2.1 Login VoIP Web Page

Connect PC network line to LAN port, and set PC to auto receive IP mode (DHCP); default the IP address as of 192.168.123.150.

3.2.1 Function

Provide login system management page.

3.2.2 Instruction

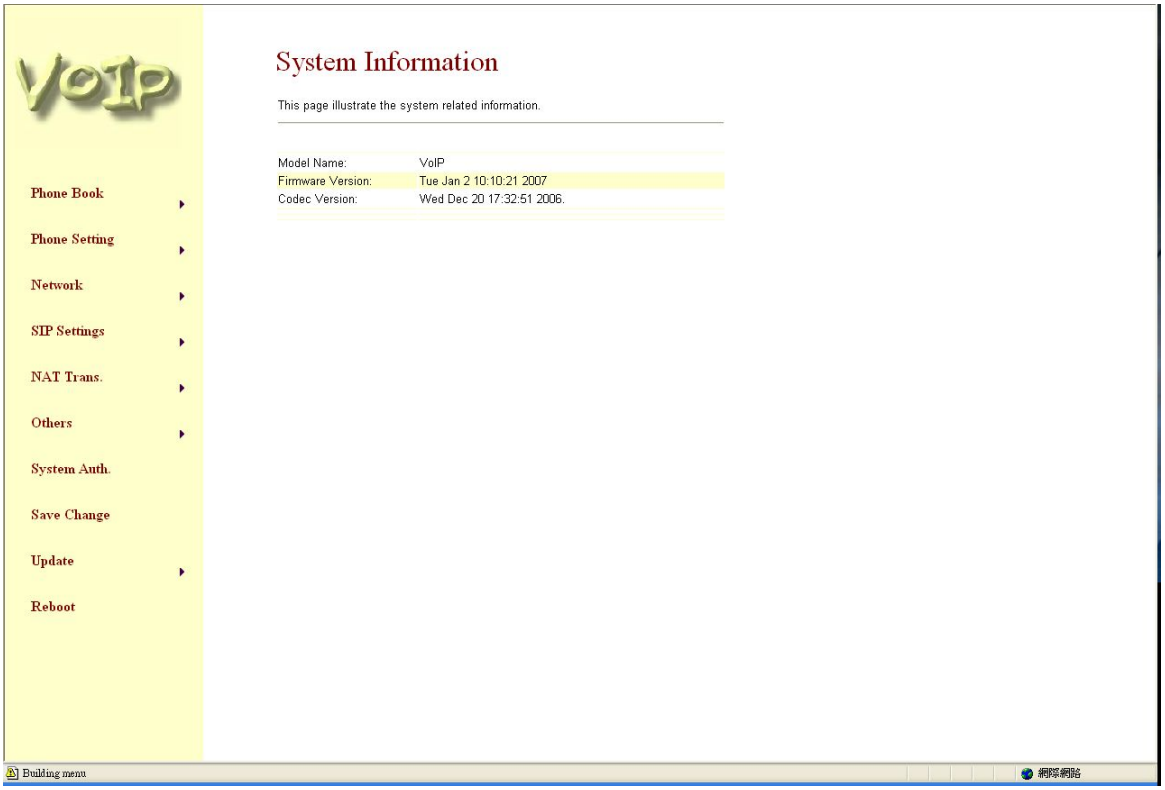
Username	Input user's name, can be numeral or letters.
Password	Input password, can be numeral or letters.
Login [Button]	Login the system
Clear [Button]	Clear all information.

3.2.3 Operate instruction

Step 1: Open IE, input [http://192.168.123.1:9999], and then enter.
Step 2: Login [Login VoIP] page, please input [Username & Password (e.g. Username: root, Password: test)], then press [Login]. Make sure that the Password is OK (See Figure 1).

(Figure 1)

Step 3: After login the system, the System Information will be seen (See Figure 2).



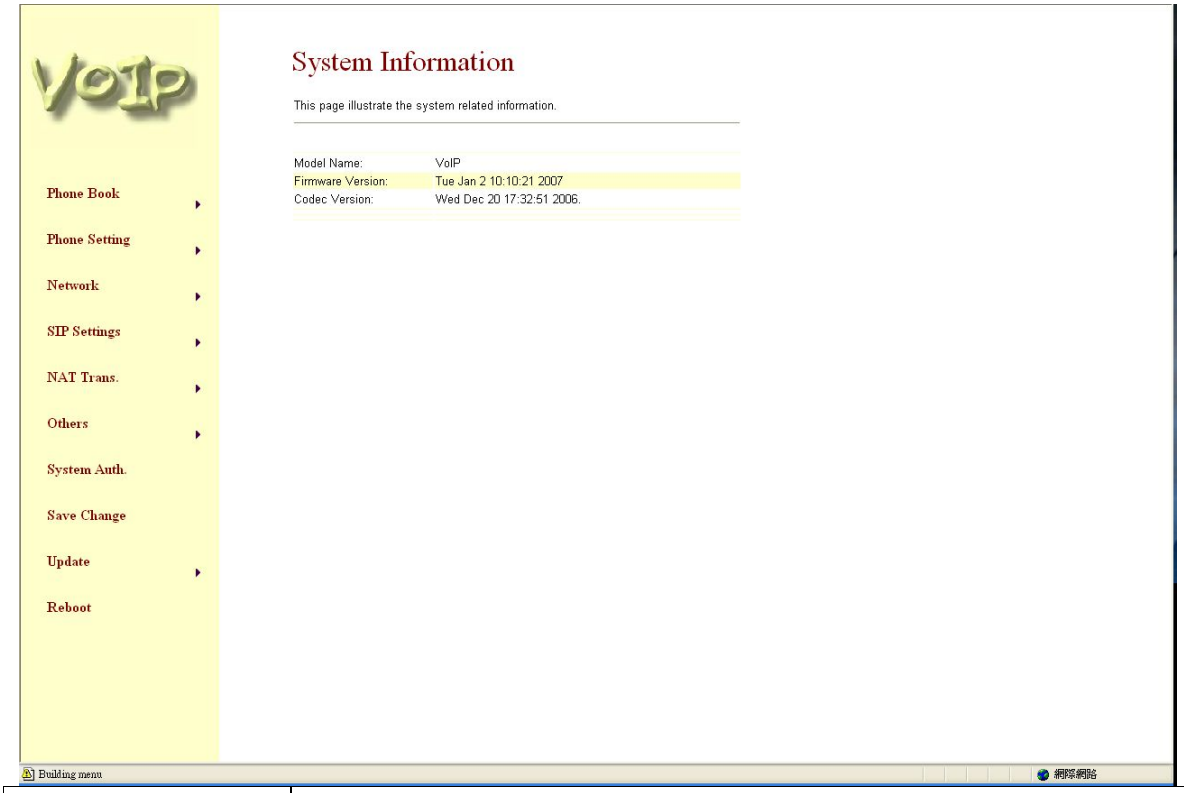
(Figure 2)

3.3.1 VoIP Setting Page

3.3.1 Function

Provide Phone Book, Phone Setting, Network Setting, SIP Setting, NAT, Other Settings, System Auth, Save, Reboot, Update, and Reboot.

3.3.2 Instruction



Phone Book	Phone Book item, provides Phone Book & Speed Dial(for Phone)【1】
Phone Setting	Phone Setting item, provides Forward Setting, SNTP Setting Volume Setting, DND Setting, Caller ID Setting【2】, Auto Answer【3】, Dial Plan Setting, Flash Time Setting【2】, Call Waiting Setting, Soft-Key Setting【1】, T.38 Setting (for FXS)【2】, Hotline Setting, Alarm Setting
Network Setting	Network Setting item, provides Network Status, WAN Setting, LAN Setting, DDNS Setting, VLAN Setting, DMZ Setting, Virtual Server, PPTP Setting.
SIP Setting	SIP Setting item, provide Service Domain, Port Settings, Code Settings, Codec ID Settings, DTMF Settings, RPort Settings, Other Settings
NAT Tran.	NAT Tran, provides STUN Settings.
System Auth	System Auth item, changes user's name or password.
Other Setting	Other Setting items provide Auto Config, FXS Port/FXO Port/FXS & FXO Port/Phone +FXO Port Setting, MAC Clone Setting, Tone Setting, Advanced Setting.
Save	Save the change.
Update	Update items, provides New Firmware, Auto Update, Default Setting
Reboot	Reboot, restarted the system.

Notes：

【1】: Phone equipment function。

【2】: FXS equipment function。

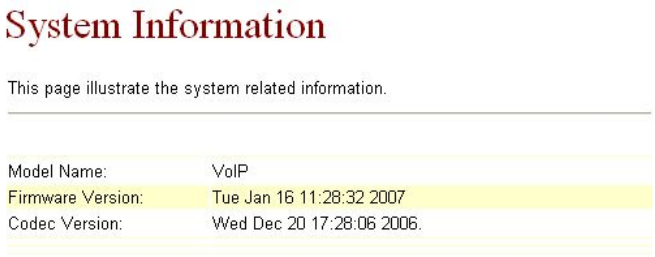
【3】: FXO equipment function。

3.4.1 System Information

3.4.1 Function

View Model Name, Firmware Version, Codec Version etc.

3.4.2 Instruction



Model Name	Show the name of the equipment
Firmware Version	Show the Risc version information, e.g. Tue Jan 16 11:28:32 2007.
Codec Version	Show the DSP version information, e.g. Wed Dec 20 17:28:06 2006.

Chapter 4.1 Phone Book

Provide Phone Book, Speed Dial function【1】.

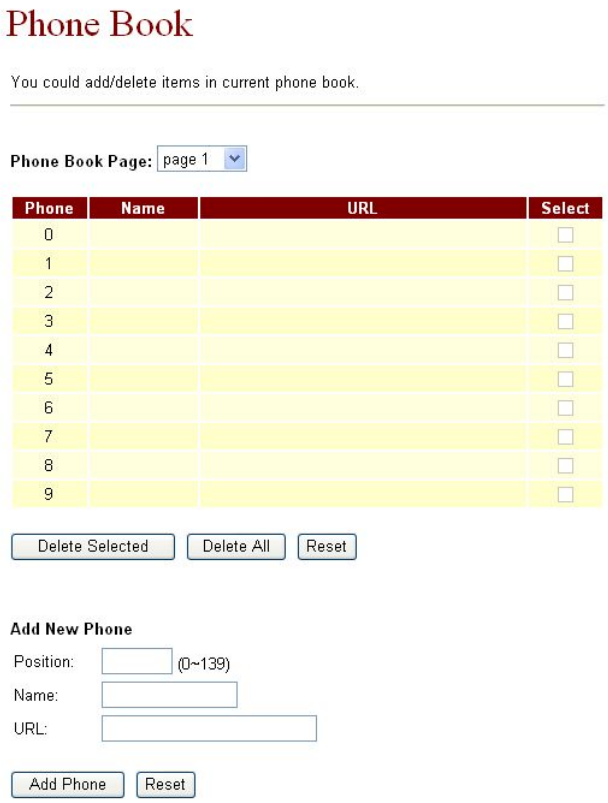
4.1.1 Phone Book

4.1.1 Function

Phone Book can provide 140 entries. When user A calls person B, if person B's name is in the phone book, then B's name will be shown on the phone. If not, B's phone number will be seen.

4.1.2 Instruction

Figure Phone Book

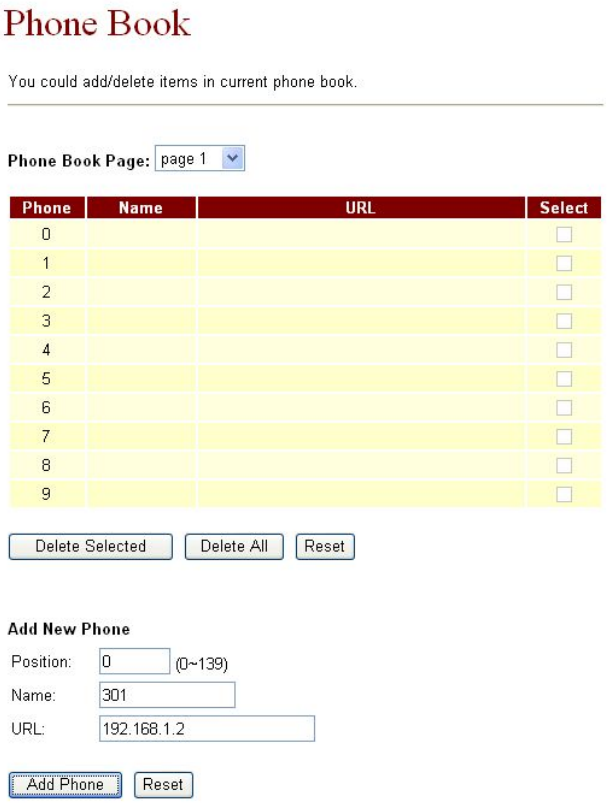


Please Book Page	Default: Page 1. Select the page, from Page1~Page14.
Phone	Show the serial number. 140 entries in total, from Phone 0~139
Name	Show the User's name.
URL	Show the URL information.
Select	Select this entry.
Delete Selected [Button]	Delete selected information.
Delete All [Button]	Delete all information.
Reset [Button]	Reset selected information.
Add New Phone	Add new phone book information.
Phone	Input serial number, from(0~139) . . Maximum length is 3 bytes.
Name	Input serial number, can be digits or names. Maximum length is

	31 bytes. **Suggest pick up digits, which can be used as speed dialing numbers.**
URL	Input Line Number or IP information. Maximum length is 63 bytes.
Add Phone [Button]	Add this new entry.
Reset [Button]	Delete selected information.

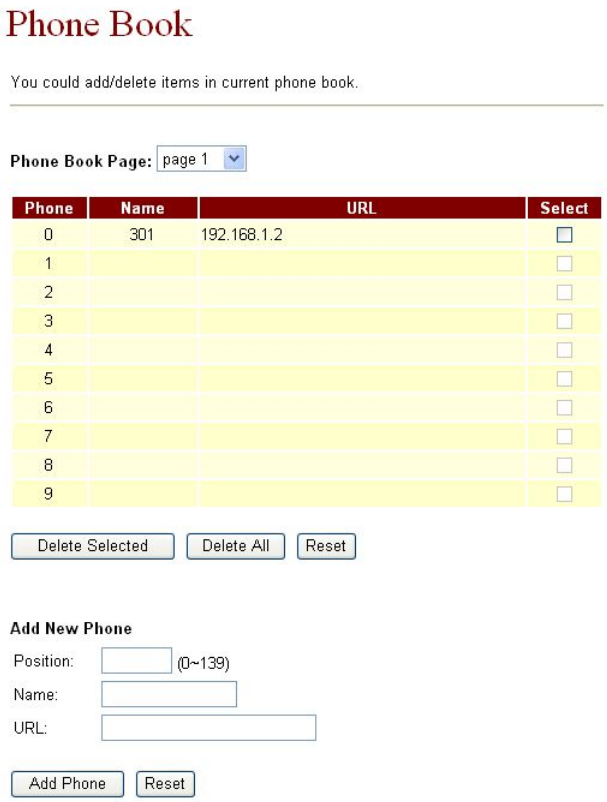
4.1.3 Operate Instruction

Step 1: On the main page, select [Phone Book→Phone Book], enter [Phone Book] page, revise the information (Phone: 0, Name: 301, URL: 301@192.168.1.2), then press the key [Add Phone] (See Figure 1).



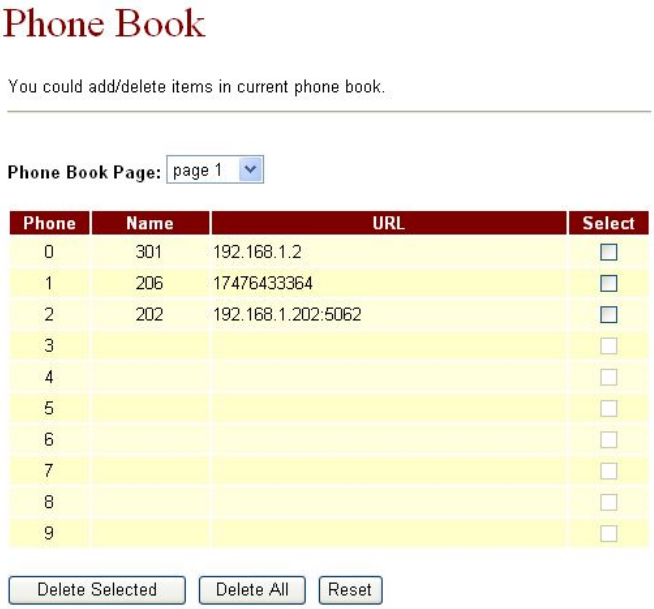
(Figure 1)

Step 2: After adding the new information (see the table as below), if no information is added, please save change (See Figure 2).



(Figure 2)

Step 3: After add all information, select [Save Change], enter [Save Changes] page, save the change. [Note Information] will be seen. Then the system will be restarted automatically, please wait for a second (See Figure 3).



(Figure 3)

Illustration 1: Name: 301, URL: 301@192.168.1.2.

Application 1: The user pick up the phone, input [301], which, in [Name] column is [192.168.1.2] that rings

Illustration 2: Name: 206, URL: 17476433364.

Application 1: The user pick up the phone, input [206], which, in [Name] column is [17476433364] that rings.

Illustration 3: Name: 202, URL: 192.168.1.202:5062.

Application 1: The user pick up the phone, input [202], which, in [Name] column is [192.168.1.2:5062] that IP: 192.168.1.2 and port 5062 ring.

Application 2: The user pick up the phone, input [0227458080], but no information is found in [Name] column, so the requirement will be sent directly.

4.2.1 Speed Dial (for Phone)

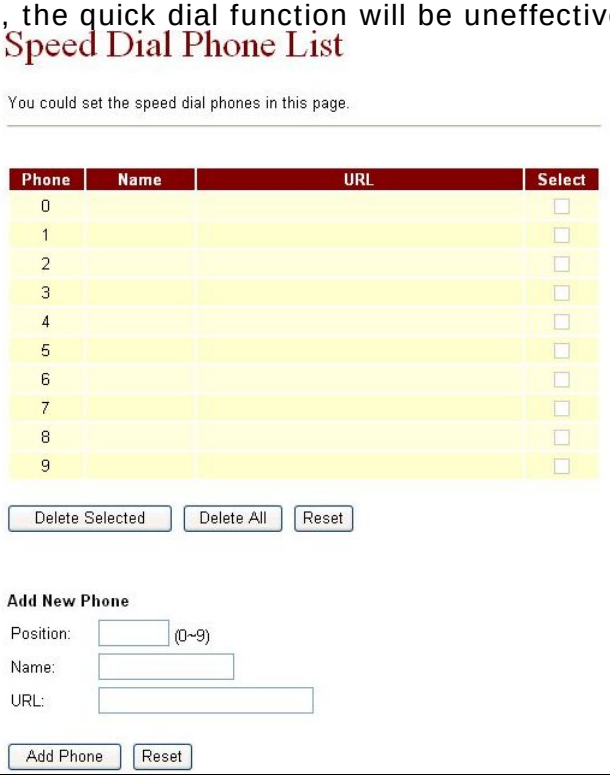
4.2.1 Function

Speed Dial Phone List can provide 10 entries in total and must be used with Function Key.

4.2.2 Instruction

Figure Speed Dial Setting 【1】

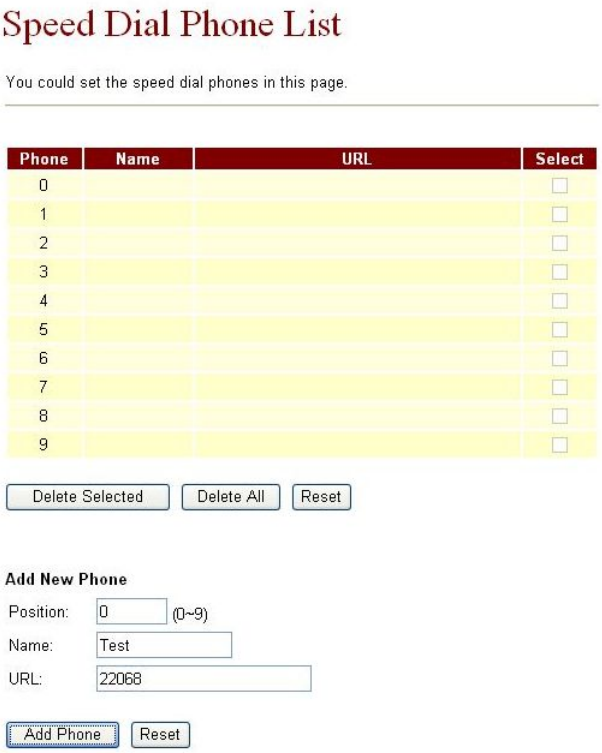
There must be corresponding M1 to M10 quick dial function button on the phone set; otherwise, the quick dial function will be uneffective.



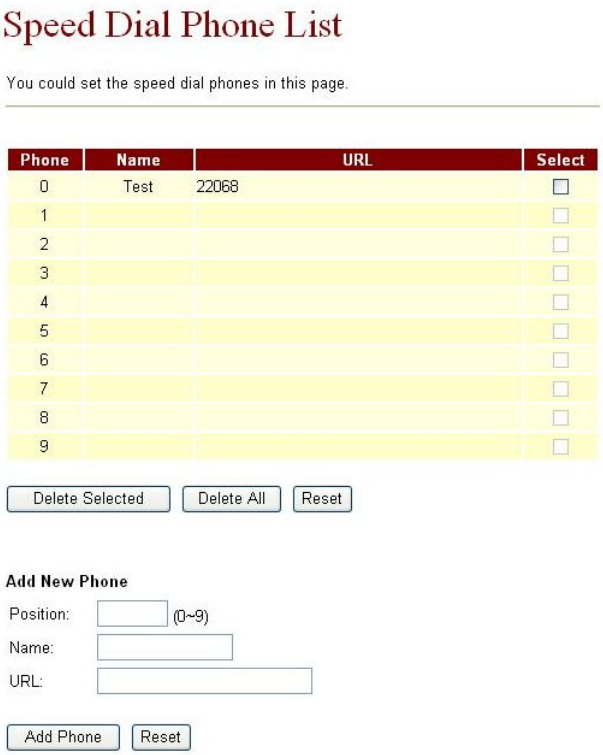
Phone	Show the serial number. 10 entries in total.
Name	Show the user's name.
URL	Show the URL information.
Select	Select the information.
Delete Selected [Button]	Delete all selected information.
Delete All [Button]	Delete all information.
Reset [Button]	Reset selected information.
Add New Phone	Add new speed dial phone book information.
Phone	Input serial number, from(0~9) . . Maximum length is 1 bytes.
Name	Input the code, numbers or names; maximum length is 31 bytes.
URL	Input Line Number or IP information; maximum length is 63 bytes.
Add Phone [Button]	Add this new entry.
Reset [Button]	Reset selected information.

4.2.3 Operate Instruction

Step 1: On the main page, select [Phone Book→Speed Dial], enter [Speed Dial Phone List] page, after revise the information (Phone: 0, Name: test, URL: 22068), (Figure 1), press the [Add Phone] (See Figure 1).



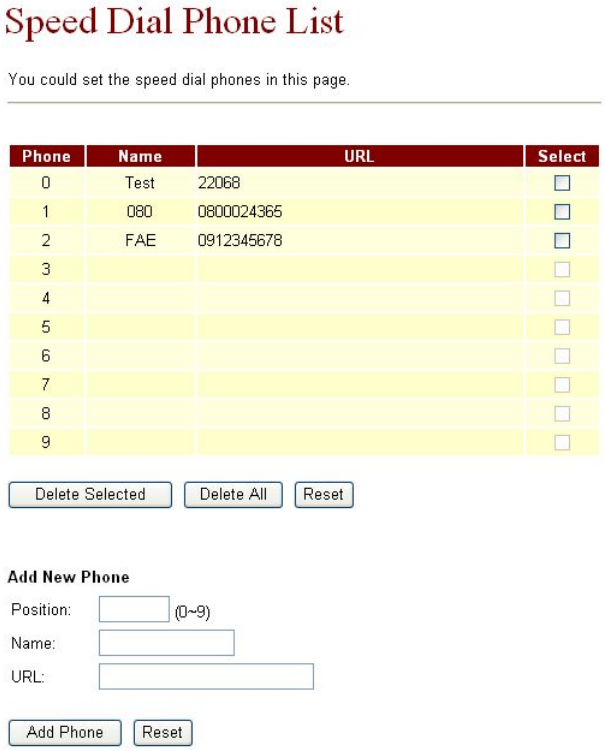
Step 2: After adding all the new information, please save change (See Figure 2).



(Figure 2)

Step 3: After adding all information (See Figure 3), on the main page, select [Save Change], enter [Save Changes] page, and enforce the command by pressing [Save]. [Note

Information] will be seen when saving successfully, then the system will be restarted automatically, please wait for a second.



(Figure 3)

Step 4: When using the speed dialing function, please choose the right key (like M2), then the requirement will be forwarded directly to Phone2: 09123456789.

Notes：

【1】: Phone equipment function。

Chapter 5.1 Phone Setting

Provides Forward Setting, SNTP Setting, Volume Setting, DND Setting, Caller ID Setting 【2】, Auto Answer【3】, Auto Dial Setting, Dial Plan, Flash Time Setting【2】, Call Waiting Setting, Soft-Key Setting【1】, Hotline Setting, Alarm Setting, T.38 Setting【2】.

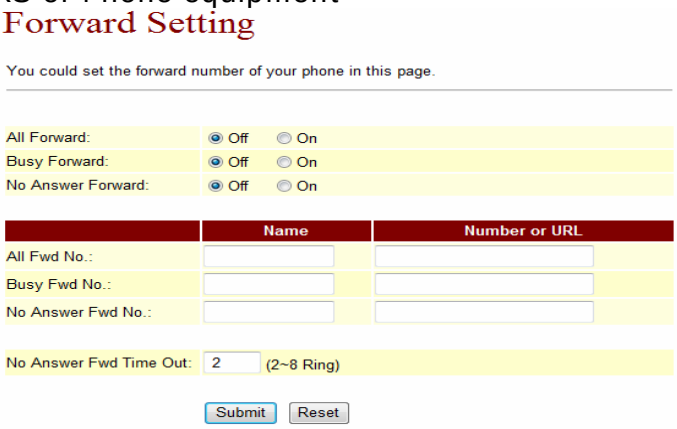
5.1.1 Forward Setting

5.1.1 Function

Forward the calling to dedicated phone number. Here provide All Forward, Busy Forward and No Answer Forward function. Before setting this forward function, please make sure service providor can support this function.

5.1.2 Instruction

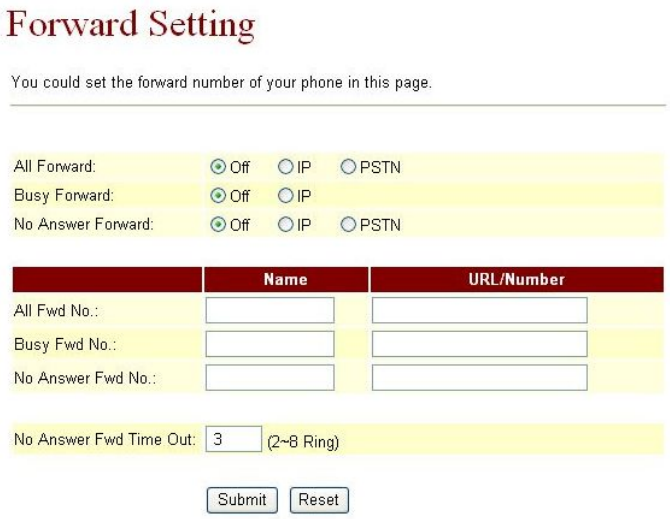
Figure 1: FXS or Phone equipment



All forward	Default: Off. When setting On, all incoming calls will be forwarded, in support of IP mode.
Busy Forward	Default: Off. When setting On, and the line is busy, it will run to support IP mode.
No Answer Forward	Default: off. When setting On and there is no body answer the phone, it will run to support IP mode.
All Fwd No.	All incoming calls will be forwarded.
Name	Show or Input the name.
URL Number	Show or input the dialing information, can be Login Account, IP Address or PSTN Numbers, maximum length is 63 bytes.
Busy Fwd No.	Forward the call when line is busy.
Name	Show or set the name.
URL Number	Show or input the dialing information, can be Login Account, IP Address or PSTN Numbers, maximum length is 63 bytes.
No Answer Fwd No.	Forward the call when nobody answers the phone.
Name	Show or set the name.
URL Number	Show or input the dialing information, can be Login Account, IP Address or PSTN Numbers, maximum length is 63 bytes.
No Answer Fwd Time Out	Default: 3(Ring), when ringing 3 times but no one answers, it is regarded as no one answers the call. Data Range: (2~8 Ring). . . Maximum length is 2 bytes.
Submit [Button]	Enforce the command of saving chance.

Reset [Button]	Delete selected information.

Figure 2: FXS and FXO or Phone and FXO equipment



All forward	Default: Off. When setting ON, all the incoming calls will be forwarded by IP mode or PSTN mode. **NOTICE: If the incoming call goes through FXO, the call could only be forwarded to IP mode.**
Busy Forward	Default: Off. When setting On, and the line is busy, the call will be forwarded only by IP mode.
No Answer Forward	Default: Off. When setting On, and nobody answers the phone, it will run by IP mode or PSTN mode. **NOTICE: If the incoming call goes through FXO, the call could only be forwarded to IP mode.**
All Fwd No.	All incoming calls will be forwarded.
Name	Show or input the name.
URL Number	Show or input the dialing information, can be Login Account, IP Address or PSTN Numbers, maximum length is 63 bytes.
Busy Fwd No.	Forward the call when line is busy.
Name	Show or set the name.
URL Number	Show or input the dialing information, can be Login Account, IP Address or PSTN Numbers, maximum length is 63 bytes.
No Answer Fwd No.	Forward the call when nobody answers the phone.
Name	Show or set the name.
URL Number	Show or input the dialing information, can be Login Account, IP Address or PSTN Numbers, maximum length is 63 bytes.
No Answer Fwd Time Out	Default: 3(Ring), when ringing 3 times but no one answers, it is regarded as no one answers the call. Data Range: (2~8 Ring) . . Maximum length is 2 bytes.
Submit [Button]	Enforce the command of saving chance.
Reset [Button]	Delete selected information.

5.1.3 Operate Instruction

Example 1: Forwarded under any condition

Step 1: On the main page, select [Phone Setting→Forward Setting], enter [Forward Setting] page, after revising all the information (All Forward: on, All fwd No Name: angel, URL: 22067), press [Submit] (See Figure 1).

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When receiving a new incoming call, and it will be forwarded to code [Register Number: 22067] automatically.

Example 2: Busy Forward or No Answer Forward

Step 1: On the main page, select [Phone Setting→Forward Setting], enter [Forward Setting] page, after revising all the information (Busy Forward: on, No Answer Forward: on, Busy fwd No Name: Mobil, URL: 0912345678, No Answer Fwd No Name: ext, URL: 22068) (See Figure 2), then click [Submit].

(Figure 2)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

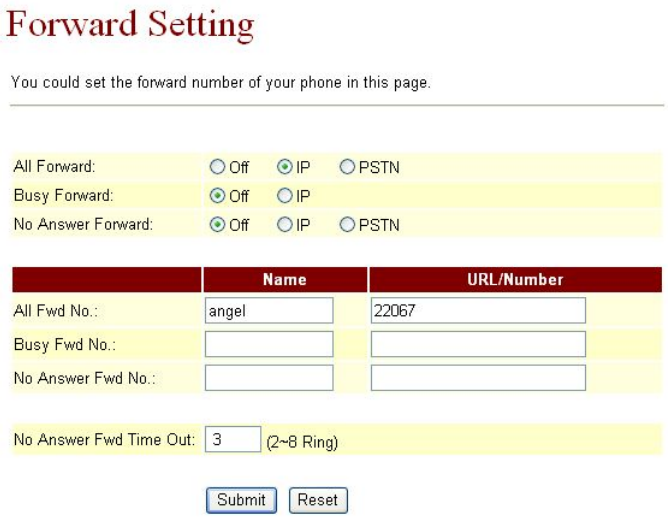
Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a second.

Step 4: When the line is busy, it will forward to Mobile [0912345678], and [0912345678] rings.

Step 5: When it rings 3 time, and nobody answer the phone, it will forward to [Register Number: 22068], and Register Account: 22068 rings.

Example 3: All incoming calls will be forwarded to IP

Step 1: On the main page, select [Phone Setting→Forward Setting], enter [Forward Setting] page, after revising all the information (All Forward: on, All fwd No Name: angel, URL: 0912345678) (See Figure 3), then click [Submit].



(Figure 3)

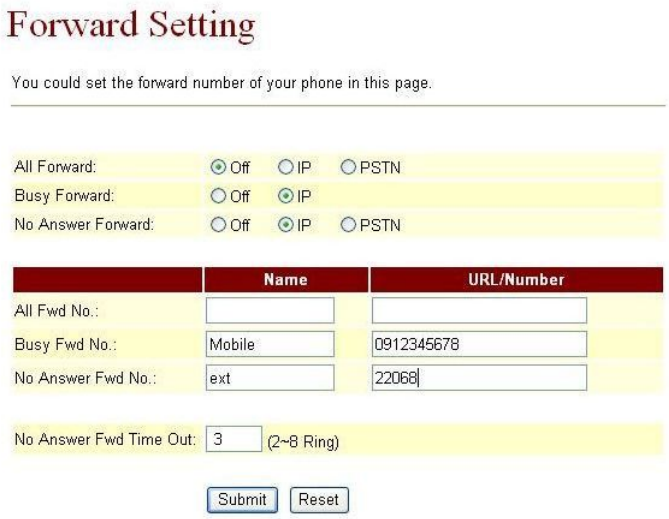
Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a second.

Step 4: When receiving a new call, it will forward to Register Number: 22067] automatically, and Register Account: 22067 rings.

Example 4: Busy forward to IP

Step 1: On the main page, select [Phone Setting→Forward Setting], enter [Forward Setting] page, after revising all the information (Busy Forward: on, No Answer Forward: on, Busy fwd No Name: Mobil, URL: 0912345678, No Answer Fwd No Name: ext, URL: 22068) (See Figure 4), then click [Submit].



(Figure 4)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

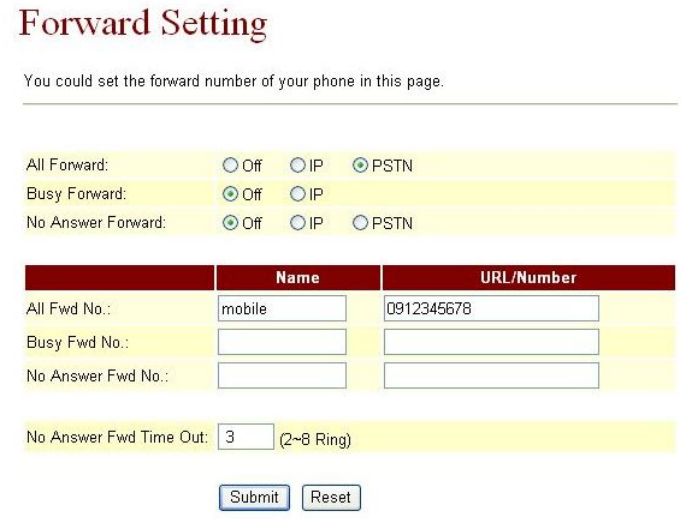
Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a second.

Step 4: When the line is busy, it will forward to [0912345678], and Mobile [0912345678] rings.

Step 5: When it rings 3 time, and nobody answer the phone, it will forward to [Register Number: 22068], and Register Account: 22068 rings.

Example 5: All incoming calls will be forwarded to PSTN

Step 1: On the main page, select [Phone Setting→Forward Setting], enter [Forward Setting] page, after revising all the information (All Forward: PSTN, All fwd No Name: angel, URL: 0912345678) (See Figure 5), then click [Submit].



(Figure 5)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When receiving a new call, it will run by PSTN Port automatically, and call Mobile [0912345678]

Example 6: Busy Forward or No Answer Forward to PSTN

Step 1: On the main page, select [Phone Setting→Forward Setting], enter [Forward Setting] page, after revising all the information (Busy Forward: PTSN, No Answer Forward: on, Busy fwd No Name: Mobile, URL: 0912345678, No Answer Fwd No Name: ext, URL: 22068) (See Figure 6), then click [Submit].

(Figure 6)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When the line is busy, it will forward to [0912345678], and Mobile 0912345678 rings.

Step 5: When rings 3 times and nobody answer the phone, it will run by PSTN Port, and call PSTN [031237788], and 031237788 rings.

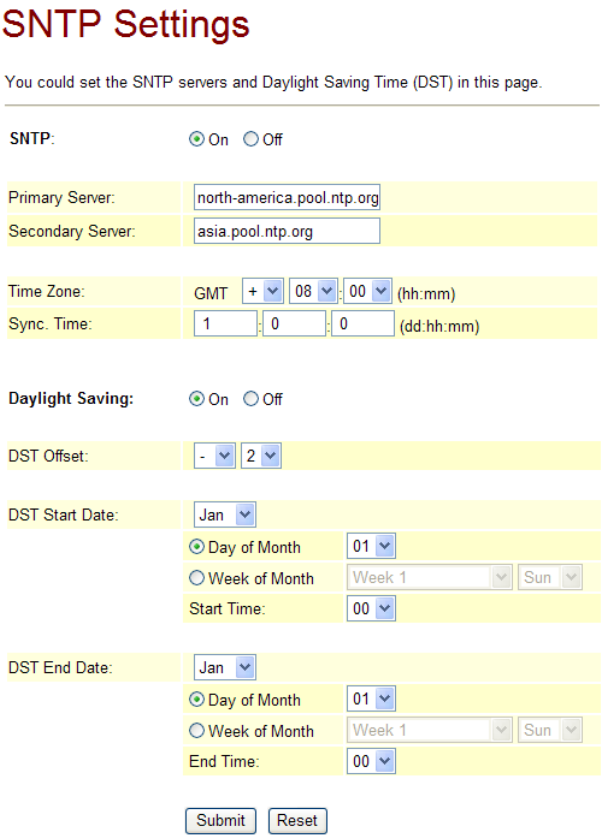
5.2.1 SNTP Setting

5.2.1 Function

SNTP Setting can provide the website of time setting for the server.

5.2.2 Instruction

Figure SNTP Setting



SNTP	When setting ON, the SNTP is on; and when setting OFF, the SNTP is off.
Primary Server	Default: time.windows.com; Can input IP or Domain Name, format is xxx.xxx.xxx.xxx; and the maximum length is 63 digits.
Secondary Server	Default: 208.184.49.9; can input IP or Domain Name, format is xxx.xxx.xxx.xxx; and the maximum length is 63 digits.
Time Zone	Default: GMT + 08:00 (hh:mm), and the format is (+/-, hh:mm). . . Maximum length is 2 bytes.
Sync. Time	Default: 1:00:00 (dd:hh:mm), it will check the time with the Server every other days, format: (dd:hh:mm) . . Maximum length is 2 bytes.
DST Satrt Date	Set up Daylight Saving Time。You can select the start date by day or week. Set up beginning month: Default setting is Jan. Here offer selection from Jan to Dec. Day of Month：Default setting is 01. Here provide selection from 1th to 31th. Week of Month：Select the effective week. Here provide options

	for Last Week, Last Second Week, Week1, Week2 and Week3。 Week：Provide options for Sun, Mon, Tue, Wed, Thu, Fri, Sat Start Time：00; set up effective time。
DST End Date	Stop Daylight Saving Time setting。You can select the stop date by day or week. Set up ending month: Default setting is Jan. Here offer selection from Jan to Dec. Day of Month：Default setting is 01. Here provide selection from 1th to 31th. Week of Month：Select the effective ending week. Here provide options for Last Week, Last Second Week, Week1, Week2 and Week3。 Week：Provide options for Sun, Mon, Tue, Wed, Thu, Fri, Sat End Time：00; set up effective ending time。

5.2.3 Operate Instruction

Example 1: Set up SNTP

Step 1: On the main page, select [Phone Setting→SNTP Setting], enter [SNTP Setting] page, after revising all information (e.g. SNTP: on, Primary Server: 208.184.49.9, Secondary Server: time.windows.com, Time Zone: GMT+08:00, Sync. Time: 00:12:00) (See Figure 1), then click [Submit].

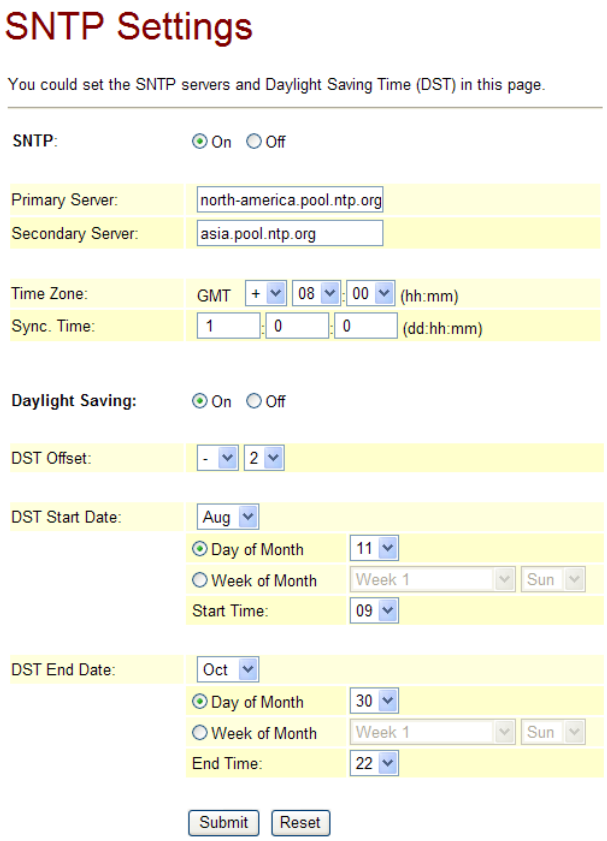
(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Example 2: Set up Daylight Saving Time (From Aug. 11 to Oct. 30 in each day at 09:00 to 22:00，2-hour delay each day)

Step1: On the main page，select [Phone Setting→SNTP Setting]，enter [SNTP Settings]，revise data (E.g.: Daylingth Saving: On，DST Offset: -/2，DST Start Date: Aug, Day of Month: 11，Start Time: 09，DST Start Date: Oct, Day of Month: 30，Start Time: 22)(See figure 2)，press [Submit] bottom。

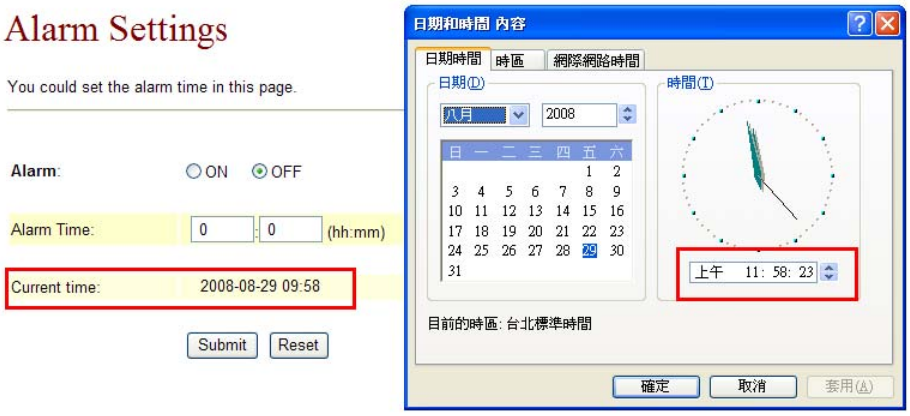


(圖 2)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute he saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a second.

Step 4: On the main page, select [Phone Setting→ Alarm Setting]，enter [Alarm Settings] page to check the time which equipment picked. (Example: Curren Time on equipment is 2008-08-29 09:58 but the time on PC is 11:58)。In figure 3, there are two hours delay in Alarm Setting.



(圖 3)

5.3.1 Volume Settings

5.3.1 Function

Volume setting controls the volume of the mic, speaker, and FXO.

5.3.2 Instruction

Figure 1: FXS equipment

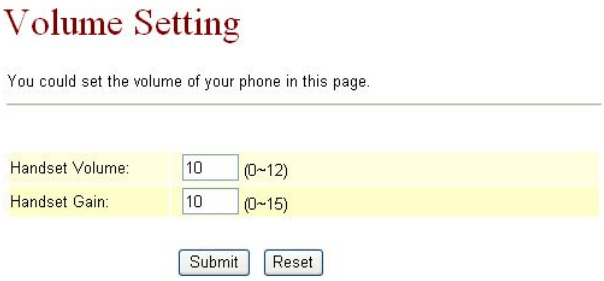
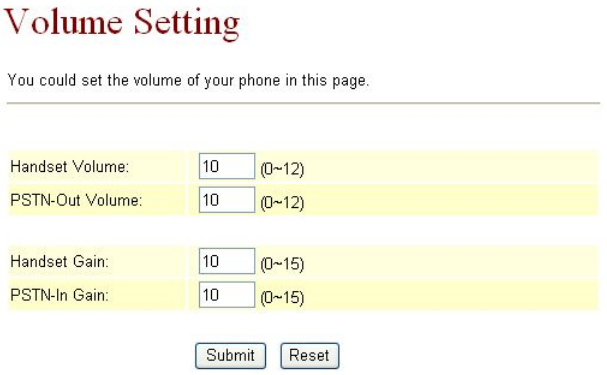


Figure 1

Handset Volume	Default 10. Control the volume of the Handset from (0~12). Maximum length is 2 bytes.
Handset Gain	Default 10. Control the handset gain from (0~15). Maximum length is 2 bytes.
Submit [Button]	Save the change.
Reset [Button]	Clear the change.

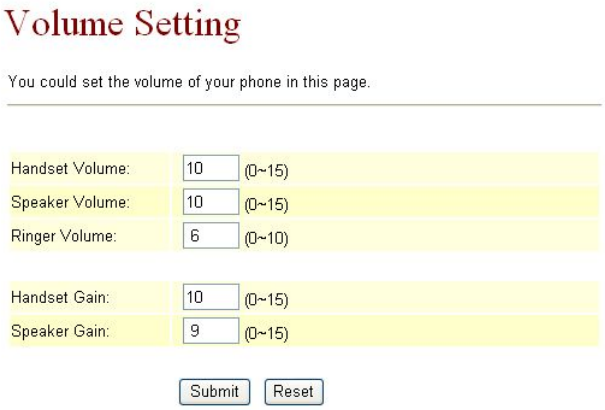
Figure 2: FXS+FXO equipment



(Figure 2)

Handset Volume	Default 10. Control the volume of the Handset from (0~12). Maximum length is 2 bytes.
PSTN-Out Volume	Default 10. Control the PSTN-Out (PSTN Port) Volume from (0 ~12). Maximum length is 2 bytes.
Handset Gain	Default 10. Control the Handset Gain from (0~15). Maximum length is 2 bytes.
PSTN-In Gain	Default 10. Control the PSTN-In (PSTN Port) Gain from (0~15). Maximum length is 2 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

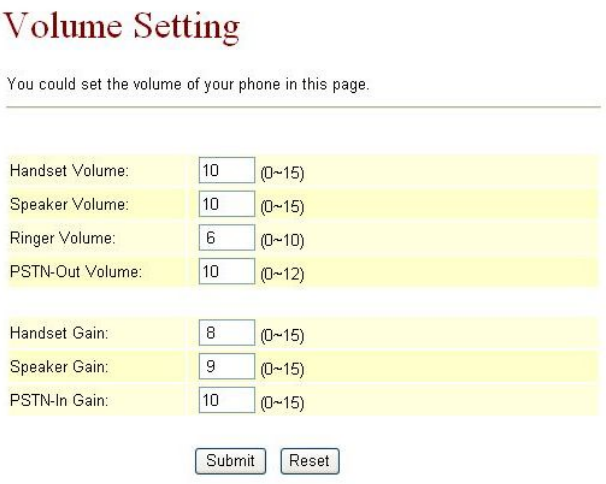
Figure 3: Phone equipment



(Figure 3)

Handset Volume	Default 10. Control the Handset Volume from (0~15). Maximum length is 2 bytes.
Speaker Volume	Default 10. Control the Speaker Volume from (0~15). Maximum length is 2 bytes.
Ringer Volume	Default 6. Control the Ringer Volume from (0~10). Maximum length is 2 bytes.
Handset Gain	Default 10. Control the Handset Gain from 0~15. Maximum length is 2 bytes.
Speaker Gain	Default 9. Control the Speaker Gain Volume from 0~15. Maximum length is 2 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 4: Phone equipment



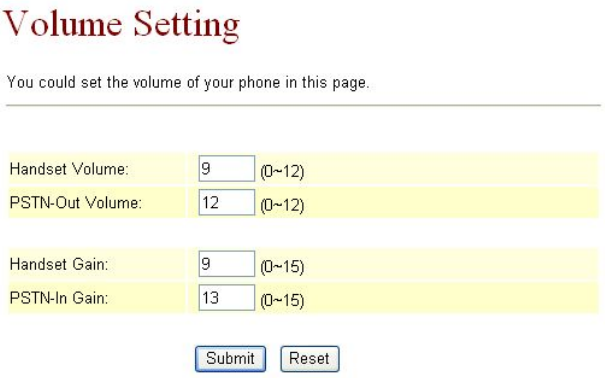
(Figure 4)

Handset Volume	Default 10. Control the Handset Volume from (0~15). Maximum length is 2 bytes.
Speaker Volume	Default 10. Control the Speaker Volume from (0~15). Maximum length is 2 bytes.
Ringer Volume	Default 6. Control the Ringer Volume from (0~10). Maximum length is 2 bytes.

PSTN-Out Volume	Default 10. Control the PSTN-Out (PSTN Port) Gain Volume from (0~12) . . Maximum length is 2 bytes.
Handset Gain	Default 8. Control the Handset Gain Volume from 0~15 . . Maximum length is 2 bytes.
Speaker Gain	Default 9. Control the Speaker Gain Volume from 0~15. . . Maximum length is 2 bytes.
PSTN-In Gain	Default 10. Control the PSTN-In (PSTN Port) Gain Volume from (0~15) . . Maximum length is 2 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.3.3 Operate Instruction

Step 1: On the main page, select [Phone Setting→ Volume Setting], enter [Volume Setting] page, after revising all information (e.g. Handset Volume: 9, PSTN-Out Volume: 12, Hand Set Gain: 9, PSTN-In Gain: 13) (See Figure 1), then click [Submit].



Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

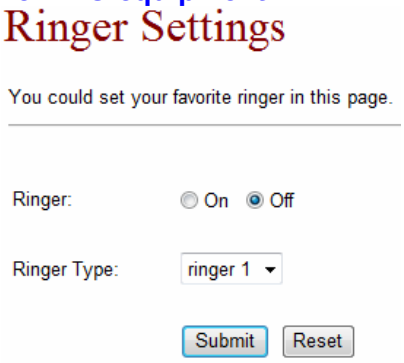
5.4.1 Melody (Melody Setting)

5.4.1 Function

Melody Setting, provide 4 kinds of melody for ring selection.

5.4.2 Instruction

Phone and Phone+FXO equipment



Ringer	Default: Off, using standard ring. When setting to On, the melody of ring can be changed to the melody you select.
Ringer Type	Scroll down the ring type.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

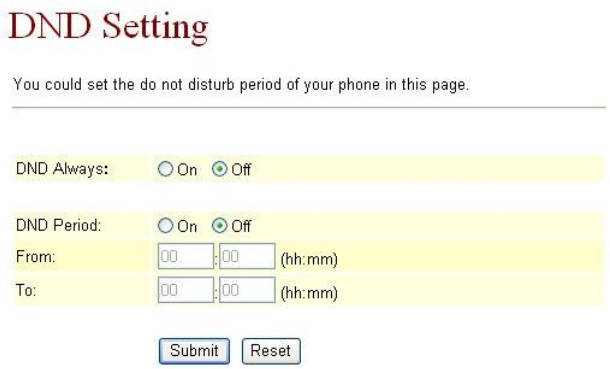
5.5.1 DND Setting

5.5.1 Function

DND Setting allows denying all incoming calls or denies all incoming calls in a certain time period.

5.5.2 Instruction

Figure DND Setting



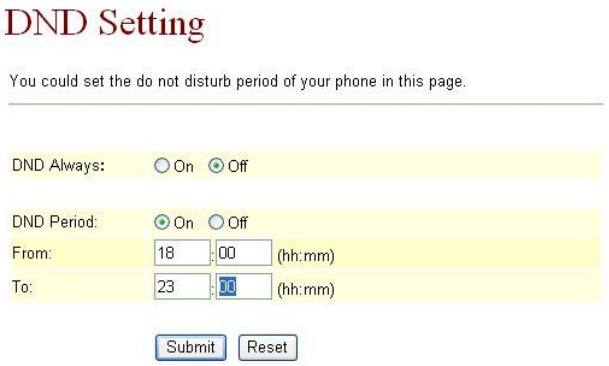
DND Always	Default: OFF. When setting ON, all incoming calls will be denied.
DNS Period	Default OFF. When setting ON, all incoming calls will be denied in pre-setting time period.
From	Default: 00:00 (hh:mm), please input the time point that begins the command. (24h in total, hh:mm) . . Maximum length is 2 bytes.
To	Default: 00:00(hh:mm), please input the time point that ends the command. (24h in total, hh:mm) . . Maximum length is 2

	bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.5.3 Operate Instruction

Example 1: Start the function that denies all incoming calls in a certain time period.

Step 1: On the main page, select [Phone Setting→ DND Setting], enter [DND Setting] page, after revising all information (e.g.DND Period: on, Form: 18:00, To: 23:00) (See Figure 1), then press [Submit].



(Figure 1)

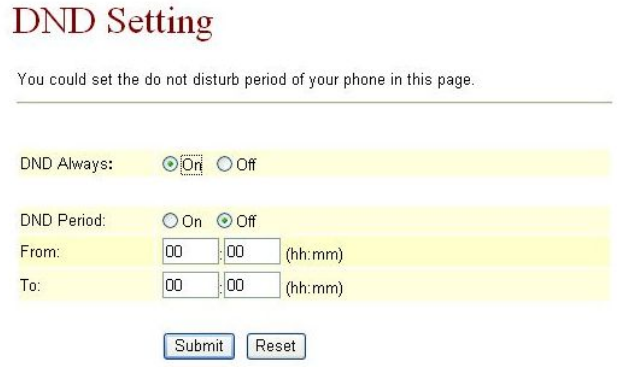
Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When receiving a new call during DND time period, "busy tone" will be heard.

Example 2: Start the function that denied all incoming calls

Step 1: On the main page, select [Phone Setting→ DND Setting], enter [DND Setting] page, after revising information (DND Always: on) (See Figure 2), then click [Submit].



(Figure 2)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When receiving a new call, "busy tone" will be heard.

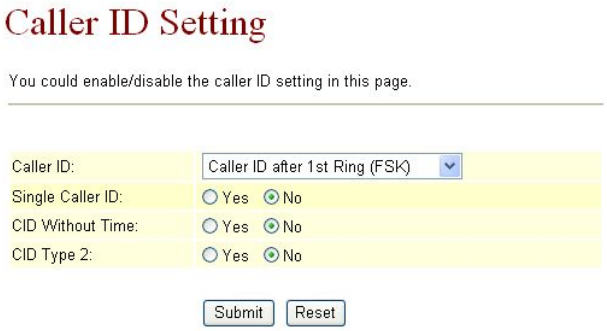
5.6.1 Caller ID (for FXS Port)

5.6.1 Function

Caller ID Setting provides Caller ID, Single Caller ID, CID without Time, CID Type 2

5.6.2 Instruction

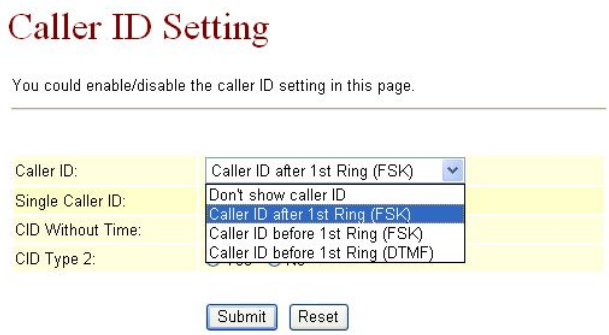
Figure Caller ID Setting (VoIP Gateway Only)



Caller ID	Default: Caller ID after 1st Ring (FSK). After 1st Ring, the Caller ID will be forwarded. Providing Don't show caller ID, Caller ID after 1st Ring (FSK), Caller ID before 1st Ring (FSK), Caller ID berofr 1st Ring (DTMF) Items for choosing.
Signal Caller ID	Default NO. When setting ON, Caller ID, Call Out No. and date will be shown on the LCD. Single Caller ID: only contain Caller ID (without Name and Date/Time). According to Telcordia specifications, CND signaling starts as early as 300 mS after the first ring burst and ends at least 475 mS before the second ring burst
CID Without Time	Default: NO. When setting Yes, only caller ID will be shown.
CID Type 2	Default: No. When setting ON, and during a call, a new call also comes; the new call's ID will be shown on the LCD. **Needs the HW's support.**
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.6.3 Operate Instruction

Step 1: On the main page, select [Phone Setting→Caller ID Setting], enter [Caller ID Setting] page, after revising information (e.g. Caller ID: Don't show caller id) (See Figure 1), then click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When receiving a new call, no CID will be found.

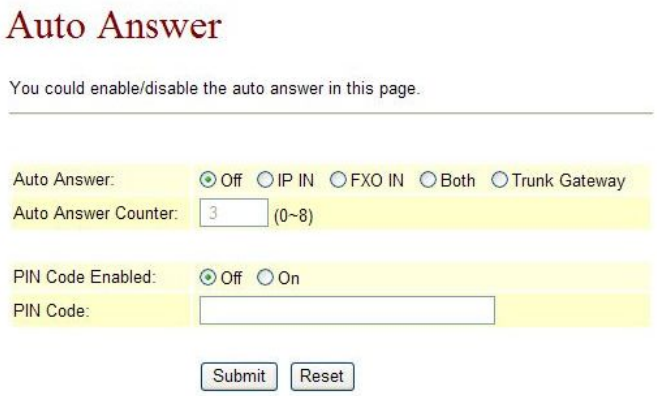
5.7.1 Auto Answer (For FXO)

5.7.1 Function

Auto Answer provides auto answer and switches to FXO or FXS.

5.7.2 Instruction

Figure Auto Answer Setting

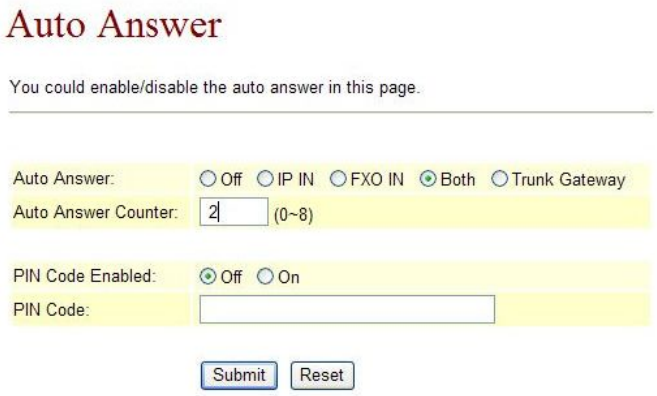


Auto Answer	Default OFF. When setting ON, auto answer will come into run.
Auto Answer Counter	Default 3rd Ring, when ringing after 3 times, auto answer will run. Counter zone (3~8) . . Maximum length is 2 bytes.
PIN Code Enabled	Default OFF. When setting ON, the right password is needed, and please presses"#" after the password.
PIN Code	The password. Maximum length is 31 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.7.3 Operate Instruction

Example 1: Start the Auto Answer Function

Step 1: On the main page, select [Phone Setting→Auto Answer], enter [Auto Answer] page, after revising information (e.g. Auto Answer: on, Auto Answer Counter: 1) (See Figure 1), then click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

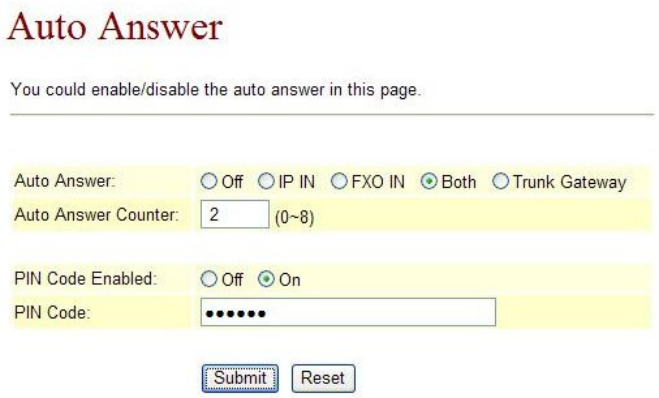
Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute

the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When an incoming call comes through FXO or FXO Port, please wait for a while till heard the 2nd Dial Tone, then please dial FXS or FXO Port phone number.

Example 2: Start Auto Answer+ PIN Code Function

Step 1: On the main page, select [Phone Setting→Auto Answer], enter [Auto Answer] page, after revising information (e.g. Auto Answer: on, Auto Answer Counter: 1, PIN Code Enabled: on, PIN Code: 123456) (See Figure 2), then press [Submit].



(Figure 2)

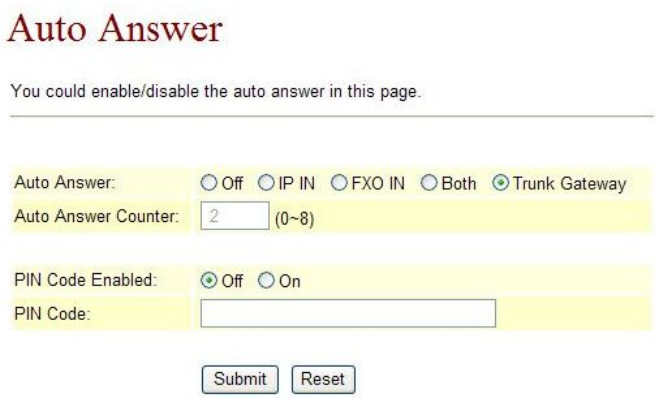
Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When dialing in through FXO or FXO Port, please wait for a while till hearing the dialing tone, then input the PIN Code (e.g. 123456) end with "#" till hearing the 2nd dialing tone, then input FXS or FXO Port phone number.

Exp. 3: Activate Auto Answer to Trunk Gateway function

Step 1: In the main screen, select [Phone SettingàAuto Answer] item, enter into [Auto Answer] screen, modify information (ex: Auto Answer: Trunk Gateway)(as of photo 3), and press [Submit] button.

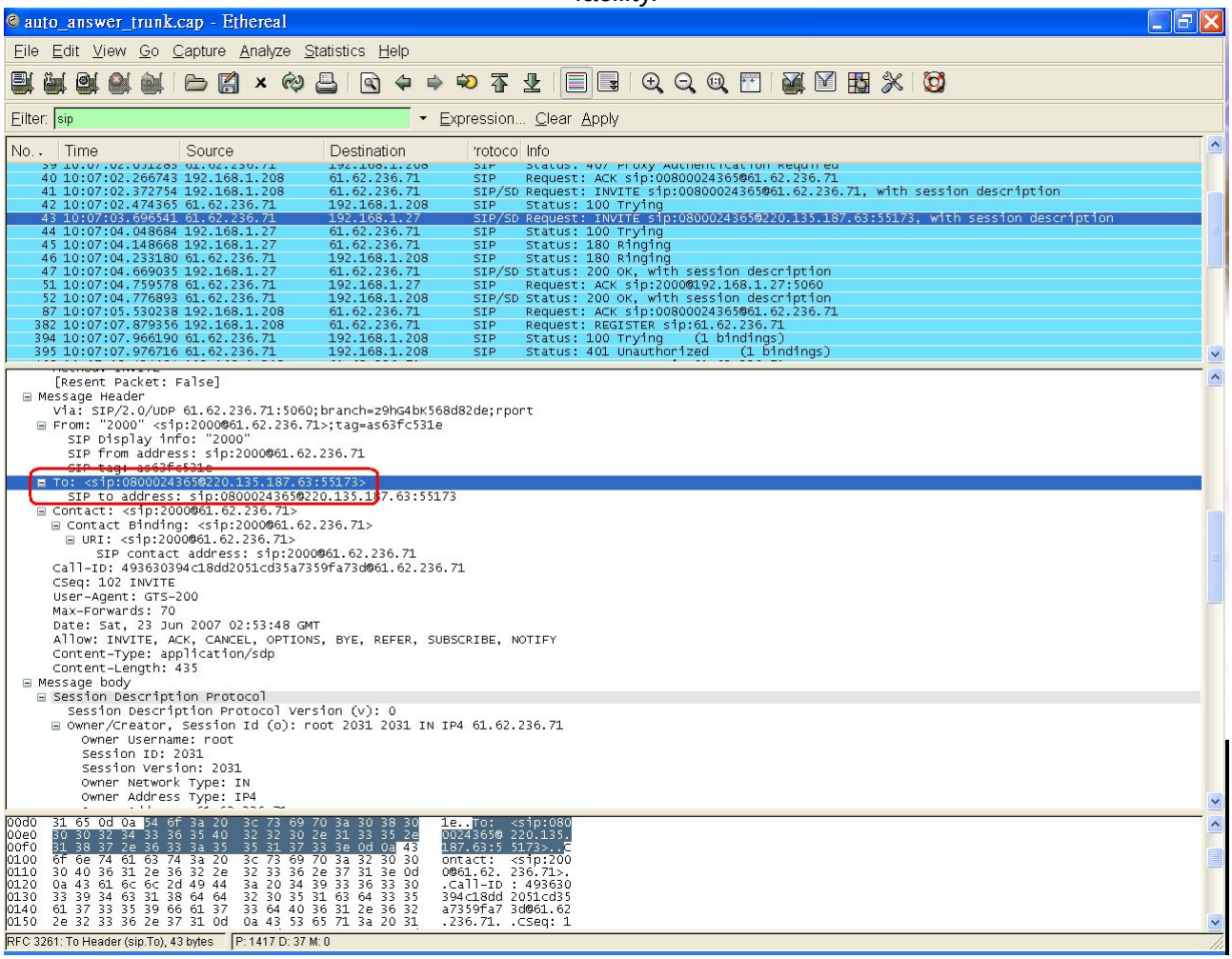


(Figure 3)

Step 2:After the saving setup function is saved, enter into [Note Information] screen, notify[must execute saving modification setup and reactivate the system], the modification setup will be

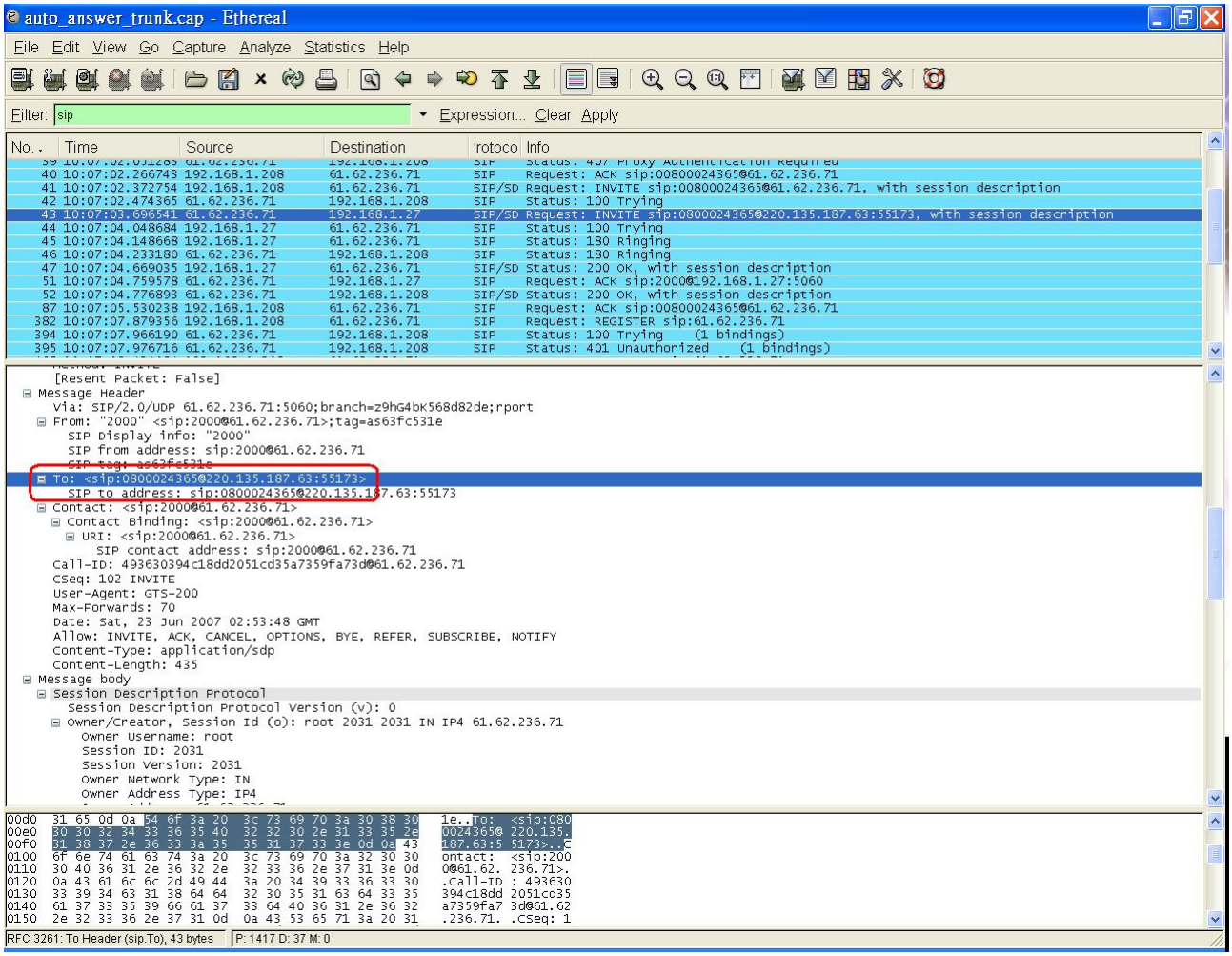
effective.Step3: Select [Save Change] item in the main manu, enter into [Save Changes]screen, execute saving modification setup, press[Save]button. When enter into [Note Information]screen,it means that the modification action is completed. It will take a while for the system to be reactivated automatically.

Step4: Dial the number (ex: 00800024635) (as of photo 4), SIP Proxy Server will send to activated Trunk Gateway
facility.



(Figure 4)

Step5: When the activated Trunk Gateway facility receive the call, it will switch to FXO port automatically. Please follow [To: <sip:0800024365@xxx.xxx.xxx>] column information, execute dialing to the number of [0800-024-365].


auto_answer_trunk.cap - Ethereal
File Edit View Go Capture Analyze Statistics Help
Filter: sip
Expression... Clear Apply
No. Time Source Destination 'rotoco Info
40 10:07:02.266743 192.168.1.208 61.62.236.71 SIP Request: ACK sip:00800024365@61.62.236.71
41 10:07:02.372754 192.168.1.208 61.62.236.71 SIP/SD Request: INVITE sip:00800024365@61.62.236.71, with session description
42 10:07:02.474365 61.62.236.71 192.168.1.208 SIP Status: 100 Trying
43 10:07:03.696541 61.62.236.71 192.168.1.27 SIP/SD Request: INVITE sip:08000024365@220.135.187.63:55173, with session description
44 10:07:04.048684 192.168.1.27 61.62.236.71 SIP Status: 100 Trying
45 10:07:04.148668 192.168.1.27 61.62.236.71 SIP Status: 180 Ringing
46 10:07:04.233180 61.62.236.71 192.168.1.208 SIP Status: 180 Ringing
47 10:07:04.669035 192.168.1.27 61.62.236.71 SIP/SD Status: 200 OK, with session description
51 10:07:04.759578 61.62.236.71 192.168.1.27 SIP Request: ACK sip:2000@192.168.1.27:5060
52 10:07:04.776893 61.62.236.71 192.168.1.208 SIP/SD Status: 200 OK, with session description
87 10:07:05.530238 192.168.1.208 61.62.236.71 SIP Request: ACK sip:00800024365@61.62.236.71
382 10:07:07.879356 192.168.1.208 61.62.236.71 SIP Request: REGISTER sip:61.62.236.71
394 10:07:07.966190 61.62.236.71 192.168.1.208 SIP Status: 100 Trying (1 bindings)
395 10:07:07.976716 61.62.236.71 192.168.1.208 SIP Status: 401 Unauthorized (1 bindings)
[Resent Packet: False]
Message Header
Via: SIP/2.0/UDP 61.62.236.71:5060;branch=z9hG4bK568d82de;rport
From: "2000" <sip:2000@61.62.236.71>;tag=as63fc531e
SIP Display info: "2000"
SIP from address: sip:2000@61.62.236.71
SIP tag: as63fc531e
To: <sip:08000024365@220.135.187.63:55173>
SIP to address: sip:08000024365@220.135.187.63:55173
Contact: <sip:2000@61.62.236.71>
Contact Binding: <sip:2000@61.62.236.71>
URI: <sip:2000@61.62.236.71>
SIP contact address: sip:2000@61.62.236.71
Call-ID: 493630394c18dd2051cd35a7359fa73d@61.62.236.71
CSeq: 102 INVITE
User-Agent: GTS-200
Max-Forwards: 70
Date: Sat, 23 Jun 2007 02:53:48 GMT
Allow: INVITE, ACK, CANCEL, OPTIONS, BYE, REFER, SUBSCRIBE, NOTIFY
Content-Type: application/sdp
Content-Length: 435
Message body
Session Description Protocol
Session Description Protocol Version (v): 0
Owner/Creator, Session Id (o): root 2031 2031 IN IP4 61.62.236.71
Owner Username: root
Session ID: 2031
Session Version: 2031
Owner Network Type: IN
Owner Address Type: IP4
00d0 31 65 0d 0a 54 6f 3a 20 3c 73 69 70 3a 30 38 30 1e..To: <sip:080
00e0 30 30 32 34 33 36 35 40 32 32 30 2e 31 33 35 2e 0024365@ 220.135.
00f0 31 38 37 2e 36 33 3a 35 35 31 37 33 3e 0d 0a 43 187.63:5 5173>..C
0100 6f 6e 74 61 63 74 3a 20 3c 73 69 70 3a 32 30 30 ontact: <sip:200
0110 30 40 36 31 2e 36 32 2e 32 33 36 2e 37 31 3e 0d 0@61.62. 236.71>.
0120 0a 43 61 6c 6c 2d 49 44 3a 20 34 39 33 36 33 30 .Call-ID : 493630
0130 33 39 34 63 31 38 64 64 32 30 35 31 63 64 33 35 394c18dd 2051cd35
0140 61 37 33 35 39 66 61 37 33 64 40 36 31 2e 36 32 a7359fa7 3d@61.62
0150 2e 32 33 36 2e 37 31 0d 0a 43 53 65 71 3a 20 31 .236.71. .CSeq: 1
RFC 3261: To Header (sip.To), 43 bytes
P: 1417 D: 37 M: 0

(Figure 5)

5.8.1 Dial Plan Settings

5.8.1 Function

Dial Plan provides Dial Now, Auto Dial Time, Use # as send Key, Use * for IP dialing function.

5.8.2 Instruction

Figure 1: FXS/Phone equipment

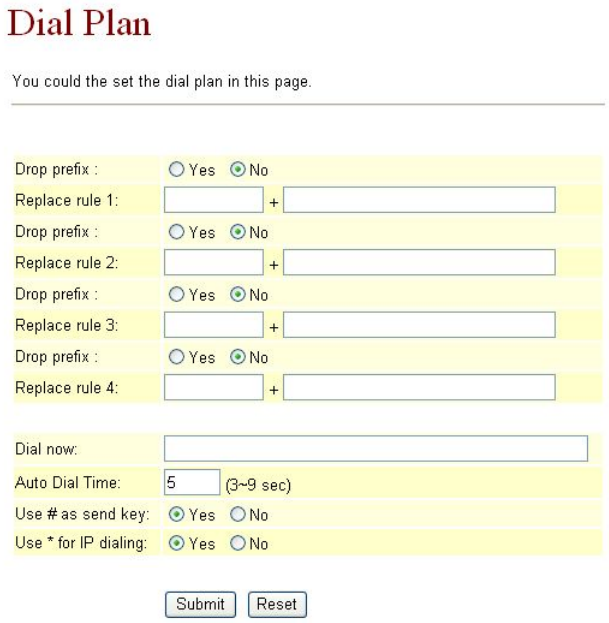
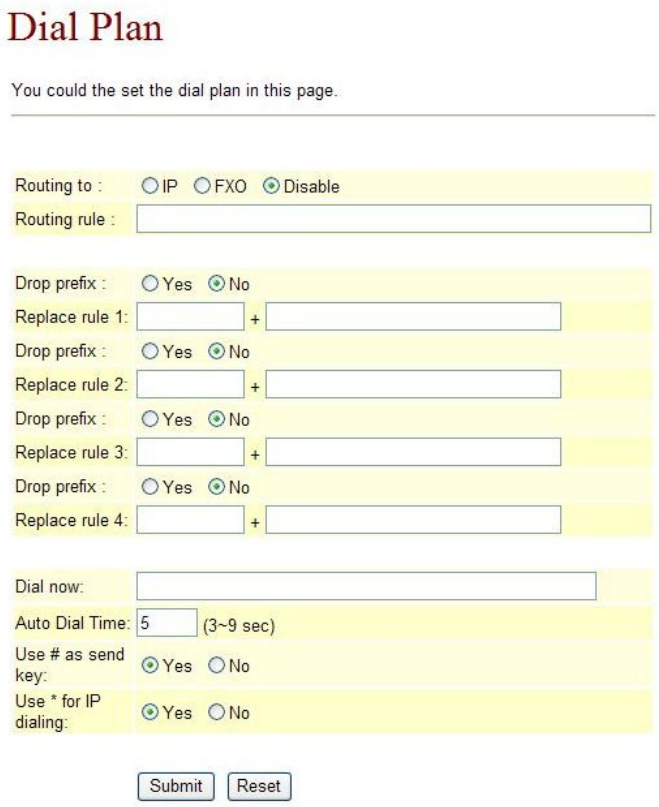


Figure 1

Drop Prefix	Default: No (Encode). When encountering the accordant rule, a new number will be added in front of the dialing number. When setting YES, and encountering the accordant rule, a new number will replace the dialing number.
Replace rule1	Providing the setting number information. 7 digits number is preferred, from (0~9999999) Can be numbers or strings. . Maximum length is 8 bytes.
+	Provides the rules for encode and decode. Maximum length is 31 digits number, can be numbers or signs (+, x). (+) means "Or"; (x) means any numbers that is from 0~9. E.g. 123+456+334+5xx, means 123 or 456 or 334 or 5xx(any numbers that begin with 5)
Drop Prefix	Default: No (Encode). When encountering the accordant rule, a new number will be added in front of the dialing number. When setting YES, and encountering the accordant rule, a new number will replace the dialing number.
+	Provides the rules for encode and decode. Maximum length is 31 digits number, can be numbers or signs (+, x). (+) means "Or"; (x) means any numbers that is from 0~9. . Maximum length is 40 bytes.
Replace rule2	Providing the setting number information. 7 digits number is preferred, from (0~9999999) . . Maximum length is 8 bytes.
+	Provides the rules for encode and decode. Maximum length is 31

	digits number, can be numbers or signs (+, x). (+) means "Or"; (x) means any numbers that is from 0~9.
Drop Prefix	Default: No (Encode). When encountering the accordant rule, a new number will be added in front of the dialing number. When setting YES, and encountering the accordant rule, a new number will replace the dialing number.
Replace rule3	Providing the setting number information. 7 digits number is preferred, from (0~9999999). . Maximum length is 8 bytes.
+	Provides the rules for encode and decode. Maximum length is 31 digits number, can be numbers or signs (+, x). (+) means "Or"; (x) means any numbers that is from 0~9. . Maximum length is 40 bytes.
Drop Prefix	Default: No (Encode). When encountering the accordant rule, a new number will be added in front of the dialing number. When setting YES, and encountering the accordant rule, a new number will replace the dialing number.
Replace rule4	Providing the setting number information. 7 digits number is preferred, from (0~9999999) . Maximum length is 8 bytes.
+	Provides the rules for encode and decode. Maximum length is 31 digits number, can be numbers or signs (+, x). (+) means "Or"; (x) means any numbers that is from 0~9. . Maximum length is 40 bytes.
Dial Now	Provides the rules for encode and decode. Maximum length is 31 digits number, can be numbers or signs (+, x). (+) means "Or"; (x) means any numbers that is from 0~9. **But the first digit cannot be "0". Because 0 cannot judge the rule. So if Dial Now begins with "0", the system cannot work.** . Maximum length is 124 bytes.
Auto Dial Time	Default: 5 second. After waiting for a while, but didn't input any number, Auto Dial will run automatically. Time zone: (3~9 sec). . Maximum length is 3 bytes.
Use # for send key	Default: YES. It ends with # when execute this action. When setting NO, it didn't end with # when execute this action, but according with Auto Dial Time, after waiting for a while, and didn't input any information, then execute this action.
Use * for IP dialing	Default YES. When input "*", it will used as ".". E.g. When input 192*168*1*100#, it execute"192.168.1.100#". When setting NO, while dialing, input (*) doesn't mean (.).
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 2: Phone / FXS + FXO equipment



(Figure 2)

欄　　位	說　　明
Routing To	Default to Disable (OFF); provide IP, FXO, Disable.提供 IP 或 FXOProvide IP or FXO "Routing To" function when dailing. The condition is based on Routing Rule. According to the routing rule, IP or FXO dail out function can be selected.
Routing Rule	Provide routing standard to do the drop prefix funtcion. "+" is used to deffericent the multiple routing standards setup, if necessary. Ex: Routing rule: D007+0091. 1. When the input number is started with 007, such as 00782280220, the condition is satified. The routing rule will first drop 007, change to 82280220, and then refer to the Routing To setup to select the dailing route. 2. When the input number is started with 009, such as 00982280220, the condition is satified. The routing rule will not drop any prefix, and then refer to the Routing To setup to select the dailing route.
Drop Prefix	Default to No (Add Prefix); add or drop standard. When changed to Yes (Drop Prefix), if the rule is satified, the prefix will be droped, new number will be added on. Provide No (Add Prefix) and Yes (Drop Prefix) mode. No: When the routing rule is satified, a new prefix will be added on directly. Yes: When the routing rule is satified, the satified prefix will be dropped and added a new prefix, then.
Replace rule1	Input add prefix or replace number. Only numbers can be

	inputted. The segment for number setup is 0~9999999; number length is 8 digits.
+	Input dailing rule data. Numbers or symbols can be inputted. number length is 40 digits. symbols: can only input [+,x]. +: represents "or". Ex: 123+456+334+5xx means 123 or 456 or 334 or 5xx. x: represents any number between 0~9. Ex: 5xx, means any 3-digit number starts with 5.
Drop Prefix	Default to No (Add Prefix); add or drop standard. When changed to Yes (Drop Prefix), if the rule is satified, the prefix will be droped, new number will be added on. Provide No (Add Prefix) and Yes (Drop Prefix) mode. No: When the routing rule is satified, a new prefix will be added on directly. Yes: When the routing rule is satified, the satified prefix will be dropped and added a new prefix, then.
Replace rule2	Input add prefix or replace number. Only numbers can be inputted. The segment for number setup is 0~9999999; number length is 8 digits.
+	Input dailing rule data. Numbers or symbols can be inputted. number length is 40 digits. symbols: can only input [+,x]. +: represents "or". Ex: 123+456+334+5xx means 123 or 456 or 334 or 5xx. x: represents any number between 0~9. Ex: 5xx, means any 3-digit number starts with 5.
Drop Prefix	Default to No (Add Prefix); add or drop standard. When changed to Yes (Drop Prefix), if the rule is satified, the prefix will be droped, new number will be added on. Provide No (Add Prefix) and Yes (Drop Prefix) mode. No: When the routing rule is satified, a new prefix will be added on directly. Yes: When the routing rule is satified, the satified prefix will be dropped and added a new prefix, then.
Replace rule3	Input add prefix or replace number. Only numbers can be inputted. The segment for number setup is 0~9999999; number length is 8 digits.
+	Input dailing rule data. Numbers or symbols can be inputted. number length is 40 digits. symbols: can only input [+,x]. +: represents "or". Ex: 123+456+334+5xx means 123 or 456 or 334 or 5xx. x: represents any number between 0~9. Ex: 5xx, means any 3-digit number starts with 5.
Drop Prefix	Default to No (Add Prefix); add or drop standard. When changed to Yes (Drop Prefix), if the rule is satified, the prefix will be droped, new number will be added on. Provide No (Add Prefix) and Yes (Drop Prefix) mode. No: When the routing rule is satified, a new prefix will be added on directly. Yes: When the routing rule is satified, the satified prefix will be dropped and added a new prefix, then.
Replace rule4	Input add prefix or replace number. Only numbers can be

	inputted. The segment for number setup is 0~9999999; number length is 8 digits.
+	Input dailing rule data. Numbers or symbols can be inputted. number length is 40 digits. symbols: can only input [+,x]. +: represents "or". Ex: 123+456+334+5xx means 123 or 456 or 334 or 5xx. x: represents any number between 0~9. Ex: 5xx, means any 3-digit number starts with 5.
Dial Now	Automatic dialing. When the dialing rule fits in this column, the automatic dialing function will be executed without waiting for "press #" to terminate the action. Numbers or symbols can be inputted; number length is 124 digits. bols: can only input [+,x]. +: represents "or". x: any number between 0~9. **Note: 1st number can not be set to "0", because "0" will not determine the Dial Now standard. If the Dial Now is set to 0xxxx, since it starts with "0", the system will not follow the dialing rule to dial out.**
Auto Dial Time	Default to 5(sec) to be the waiting length for the system to execute the auto dial action. Waiting for few seconds, without receiving any press button action, the system will execute the auto dial. Ony number button can be pressed. The segment for the auto dial time setup is 3~9 seconds. Time length is 1 digit.
Use # for send key	Default to Yes (On); [#] key is used to terminate the receiving signal and execute the auto dial function. Provide Yes(On) and No (Off) mode. Yes(On):[#] key is used to terminate the receiving signal or to determine the time for Auto Dial Time column. Without pressing any button within a certain seconds, the Auto Dial function will take action. No(Off): [#] key is not used for termination of the receiving signal, but only used to determine the time for Auto Dial Time column. Without pressing any button within a certain seconds, the Auto Dial function will take action.
Use * for IP dialing	Default to Yes (On); "*" key is used as of "." key. Provide Yes(On) and No (Off) mode. Yes(On): When [*] key is used as of [.] key, i.e.: input 192*168*1*100#, the system will execute the dial action as of "192.168.1.100#". No(Off): When [*] key is used as of [*] key, i.e.:input 700*#, the system will execute the dial action as of "700*#".
Submit [Button]	To execute the modification setup.
Reset [Button]	To erase the inputted information

5.8.3 Operate Instruction

Example 1: Dial Plan Function

Step 1: On the main page, select [Phone Setting→Dial Plan], enter [Dial Plan] page, after revising information (e.g. Drop prefixNo, Replace rule 1002, 8613+8662; Drop prefixYes, Replace rule 2006, 002+003+004+005+007+009; Drop prefixNo, Replace rule

3009, 12; Drop prefixNo, Replace rule 4007, 5xxx+35xx+21xx; Dial Now*xx+#xx+11x +xxxxxxxx) (See Figure 1), then press [Submit].

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Instruction 1: Drop prefixNo, Replace rule 1002, 8613+8662.

Application 1: When dialing 8613, all numbers that begin with 8613, will be added with 002, so actually the dialing number is [002+8613+xxx].

Application 2: When dialing 8662, all numbers that begin with 8662, will be added with 002, so actually the dialing number is [002+8662+xxx].

Instruction 2: Drop prefixYes, Replace rule 2006, 002+003+004+005+007+009.

Application 1: When input 002 and all numbers that begin with 002 will be replaced by 006; so actually the dialing number is [006+xxx]

Application 2: When input 003 and all numbers that begin with 003 will be replaced by 006; so actually the dialing number is [006+xxx].

Instruction 3: Drop prefixNo, Replace rule 3009, 12.

Application 1: When input 12, and all numbers that begin with 12, will be added with 009; so actually the dialing number is [009+12+xxx].

Instruction 4: Drop prefixNo, Replace rule 4007, 5xxx+35xx+21xx.

Application 1: When input 5xxx, all 4 digits numbers that begin with 5, will be added with 007; so actually the dialing number is [007+5xxx].

Application 2: When input 534, all 3 digits numbers that begin with 5, doesn't match the encode rule, so actually the dial out number is [534]

Application 3: When input 35xxx, all 5 digits numbers that begin with 35, will be added with 007; so actually the dialing number is [007+5xxx].

Application 4: When dial 358822, it begins with 35, but there are 4 digits after 35, so it doesn't match the encode rule, so actually the dial out number is [358822]

Instruction 5: Dial Now*xx+#xx+11x+xxxxxxxx.

Application 1: Any information that meet the condition"*xx" will be sent out immediately, like *00, *01, *02… *99. If input "*0#", send out number is"*0#"

Application 2: Any information that meet the condition" #xx" will be sent out immediately, like #00, #01, #02…#99.

Application 3: Any information that meet the condition"11x" will be sent out immediately, like 110, 111, 112 … 119. If dial number is"118", the send out number is 118.

Application 4: If input 8 digit numbers, the system will send out the number immediately. E.g.: 12345678

5.9.1 Flash Time Setting (for FXS & FXO)

5.9.1 Function

Flash Time Setting can transfer or hang off the phone.

5.9.2 Instruction

Figure 1: FXS equipment (included FXS，FXS+PSTN)

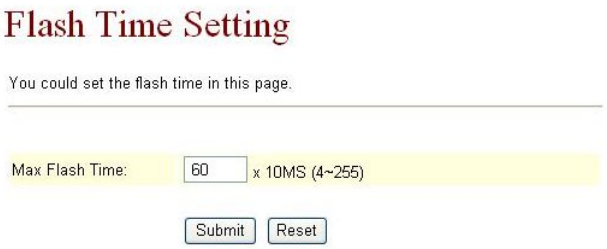


Figure 1

Max Flash Time	Default 60. Flash signal that is <(less than) 600ms, will be regarded as transfer; flash signal that is > (more than) 600ms will be regarded as On-Hook. From (4~255),Unit: 10MS. Maximum length is 3 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 2: FXS+FXO equipment

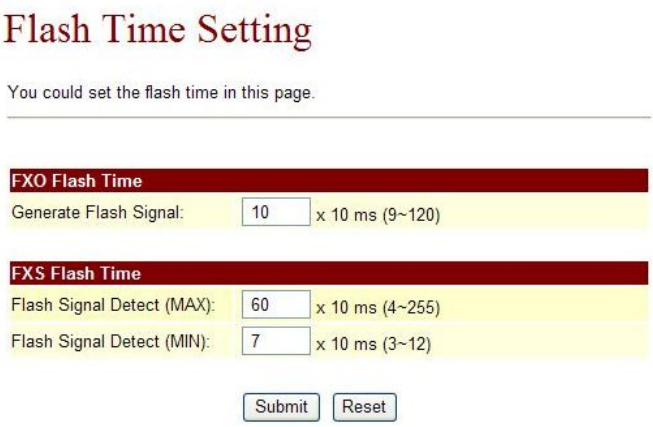
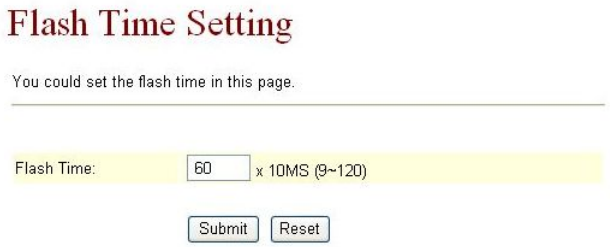


Figure 2

FXO Flash Time	FXO Port Flash Time
Flash Time	Default 60. Flash signal that is <(less than) 600ms, will be regarded as transfer; flash signal that is > (more than) 600ms will be regarded as On-Hook. From (4~255),Unit: 10MS. Maximum length is 3 bytes.
FXS Flash Time	FXO Port Flash Time
Max Flash Time	Default 60. Flash signal that is <(less than) 600ms, will be regarded as transfer; flash signal that is > (more than) 600ms will be regarded as On-Hook. From (4~255),Unit: 10MS. Maximum length is 3 bytes.
Min Flash Time	Default 7. Flash signal that is <(less than) 600ms, will be regarded as transfer; flash signal that is > (more than) 600ms

	will be regarded as On-Hook. From (3~12), Unit:10MS. Maximum length is 3 bytes.
Reset [Button]	Clear the change.

Figure 3: Phone+FXO equipment

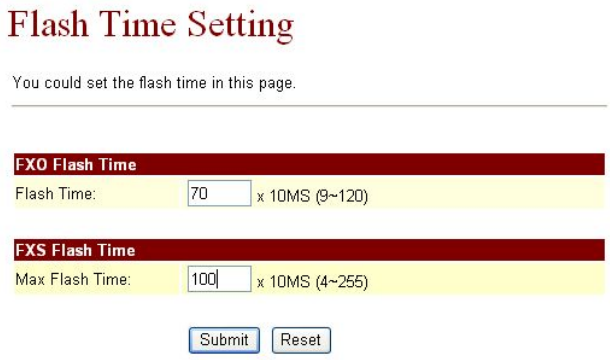


(Figure 3)

Flash Time	Default 60. Flash signal that is <(less than) 600ms, will be regarded as transfer; flash signal that is > (more than) 600ms will be regarded as On-Hook. From (4~255),Unit: 10MS. Maximum length is 3 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.9.3 Operate Instruction

Step 1: On the main page, select [Phone Setting→Flash Time Setting], enter [Flash Time Setting] page, after revising information (e.g. Flash Time: 70, Max Flash Time: 100) (See Figure 1), then click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

5.10.1 Call Waiting Setting

5.10.1 Function

Call Waiting Setting provides call waiting function.

5.10.2 Instruction

Figure Call Waiting Setting

Call Waiting	Default: ON, when setting OFF, call waiting function will be off.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.10.3 Operate Instruction

Example 1: Close call waiting function

Step 1: On the main page, select [Phone Setting→ Call Waiting Setting], enter [Call Waiting Setting] page, after revising information (e.g. Call Waiting: off) (See Figure 1), then click [Submit].

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When there is a new call during calling, busy tone will be heard.

Example 2: Start the call waiting function

Step 1: On the main page, select [Phone Setting→ Call Waiting Setting], enter [Call Waiting Setting] page, after revising information (e.g. Call Waiting: off) (See Figure 1), then click [Submit].

(Figure 2)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: While Person A is talking with Person B, but Person C calls A; so A will hear the reminding tone, if A would like to pick up C's call, A need to press the key [Hold] or [Flash] (B's call is maintaining at the same time); If A would like to talk with B again, A need to press the key [Hold] or [Flash] (C's call is maintaining at the same time)

5.11.1 Soft-Key Setting (for Phone)

5.11.1 Function

Soft-Key Setting provides Pick-up key and Voice mail key for the phone.

Phone is required to have those 2 keys. SIP Proxy server is required to have those function.

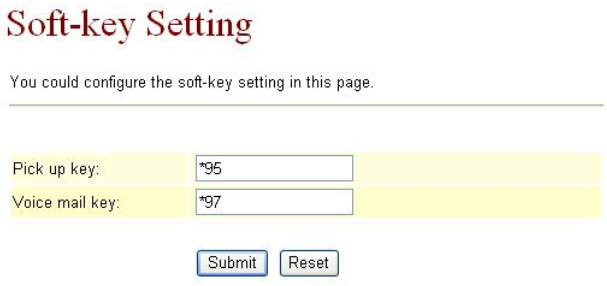
5.11.2 Instruction

Figure Soft-Key Setting (VoIP Phone Only)

Pick up Key	Input the name of the pick up key, can be numbers or signs. Maximum length is 15 bytes. **The phone is required to have related keys.**
Voice mail Key	Input the name of the voice mail key, can be numbers or signs. Maximum length is 15 bytes. **The phone is required to have related keys.**
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.11.3 Operate Instruction

Step 1: On the main page, select [Phone Setting→Soft-Key Setting], enter [Soft-Key Setting] page, after revising information (e.g. C Pick up kye: *95, Voice Mail Key: *98) (See Figure 1), then click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: When listening the voice mail, please press [Voice Mail]. When pick up the phone, please press [Pick UP]

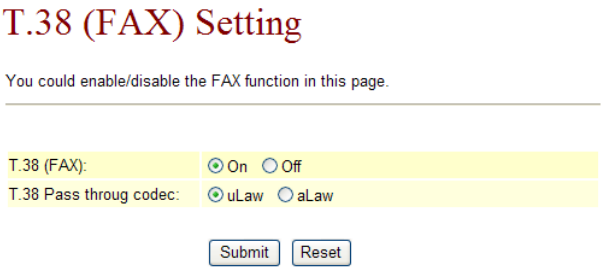
5.12.1 T.38 (FXS) Setting (T.38 Fax)

5.12.1 Function

T.38 Setting provides the setting related to fax T.38 **SIP Proxy server Or Trunk is required to have those function.**

5.12.2 Instruction

Figure 1: FXS /FXS+FXO equipment



(Figure 1)

T.38 (FAX)	Default ON. When setting OFF, T. 38 will be closed.
T.38 Port	Default 60000. To set the location of T.38. Data range: (1024~65535) . Maximum length is 5 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure T.38 (FXS) Setting (2FXS VoIP Gateway Only)

T.38 (FAX)	Default: ON. When setting OFF, T. 38 will be closed.
T.38 Port of Phone 1	Default 60000. To set the location of T.38. Data range: (1024~65535) **Support one port executes fax function.** . Maximum length is 5 bytes.
T.38 Port of Phone 2	Default 60100. To set the location of T.38. Data range: (1024~65535) **Support one port executes fax function.** Maximum length is 5 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.12.3 Operate Instruction

Step 1: On the main page, select [Phone Setting→T.38 Setting], enter [T.38 Setting] page, after revising information (e.g. T.38 Port of Phone1: 60100, T.38 Port of Phone 2: 60000) (See Figure 1), then click [Submit].

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by press [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

5.13.1 Hotline Settings

5.13.1 Function

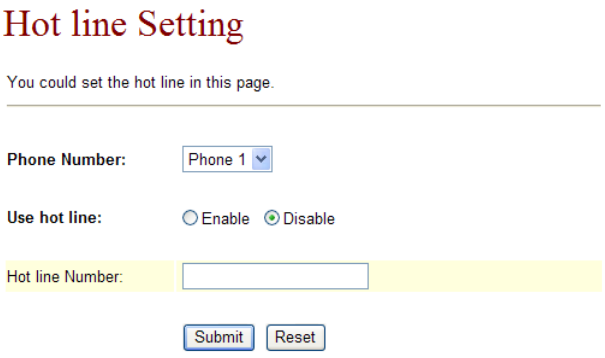
Hot Line Setting allows dialing to a pre-setted number automatically as long as pick up the phone. **2FXS provides Hot Line**

5.13.2 Instruction

Figure 1: FXS or Phone equipment

Use Hot Line	Default: Disable. When setting Enable, as long as pick up the phone, it will dial to the pre-setted phone number automatically.
Hot line Number	Input hot line number, can be IP Address or Phone Numbers, numerals or signs are both acceptable. Maximum length is 63 bytes. E.g. IP Address: 192.168.1.23 or Phone Number: 0800024365. Maximum length is 63 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 2: 2FXS equipment



(圖 2)

欄　　位	說　　明
Phone Number	Default is Phone1(Line 1)；Switch the line。Provide options for Phone 1 and Phone 2.
Use Hot Line	Default: Disable. When setting Enable, as long as pick up the phone, it will dial to the pre-setted phone number automatically.
Hot line Number	Input hot line number, can be IP Address or Phone Numbers, numerals or signs are both acceptable. Maximum length is 63 bytes. E.g. IP Address: 192.168.1.23 or Phone Number: 0800024365. Maximum length is 63 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.13.3 Operate Instruction

Example 1: Register Account or Input Hot Line Number.

Step 1: On the main page, select [Phone Setting→ HotLine Setting], enter [HotLine Setting] page, after revising information (e.g. User Hot Line: Enable, Hot Line number: 22062) (See Figure 1), then click [Submit].

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: After restarted the system and pick up the phone, it will dial to [22062] automatically.

Example 2: Dial to another IP Address directly.

Step 1: On the main page, select [Phone Setting→ Hotline Setting], enter [Hotline Setting] page, after revising information (e.g. User Hot Line: Enable, Hot Line number: 22062) (See Figure 2), then click [Submit].

(Figure 2)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: After restarted the system and pick up the phone, it will dial to IP Address [192.168.1.206] automatically.

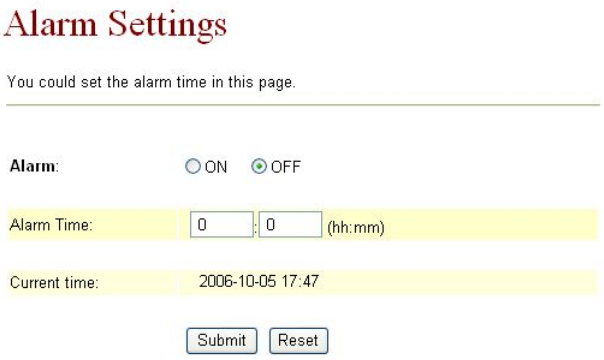
5.14.1 Alarm Settings

5.14.1 Function

Alarm Settings provides the alarm function.

5.14.2 Instruction

Figure Alarm Setting



Alarm	Default: OFF. When setting ON, alarm function will execute. Duration is 1 minute. Stop the alarm by pick up the handset.
Alarm Time	Default: 0:0. (O hour: 0 Minute). Time format: 24 Hours.(hh:mm)
Current time	Show the alarm time of the next time. Format 2006-10-05 17:47
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

5.14.3 Operate Instruction

Step 1: On the main page, select [Phone Setting→ Alarm Setting], enter [Alarm Setting] page, after revising information (e.g. Alarm: On, Alarm Time: 12:59) (See Figure 1), then click [Submit].

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: At 12:59, the alarm will start to work, and last 1min. After 1 min, the alarm will stop. During ringing, pick up the phone, the alarm will stop automatically.

Chapter 6.1 Network Setting

Provides Network Status, WAN Setting, LAN Setting, DDNS Setting, VLAN Setting, DMZ Setting, Virtual Server, PPTP Setting.

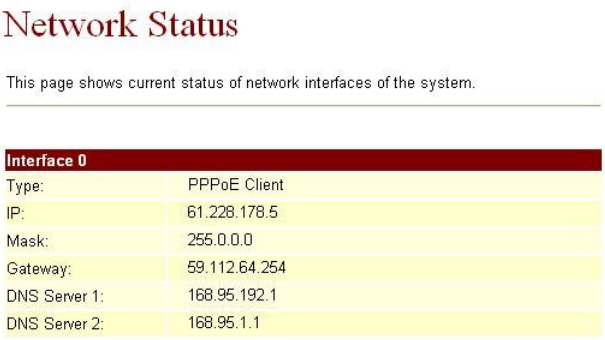
6.1.1 Status

6.1.1 Function

Network Status shows the current network status.

6.1.2 Instruction

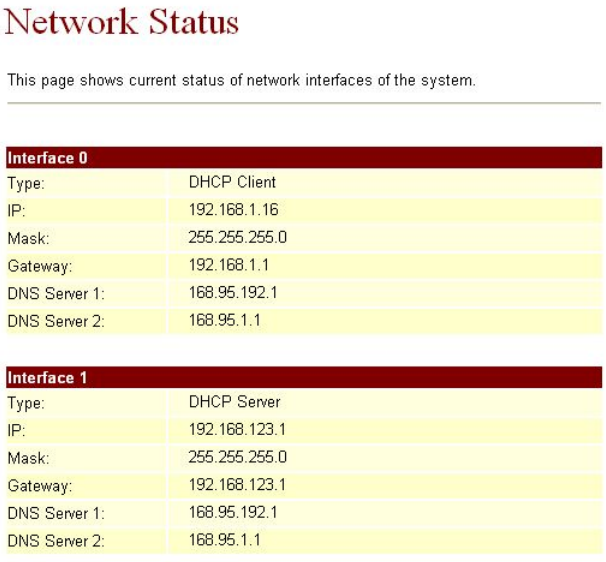
Example 1: LAN Mode: Bridge (Bridge Mode)



(Figure 1)

Interface 0	Show the current status of Interface 0(WAN Port)
Type	Show the current Type.
IP	Show the current IP Address.
Mask	Show the current Subnet Mask IP Address.
Gateway	Show current Default Gateway IP Address.
DNS Server1	Show current DNS Server 1 IP Address.
DNS Server2	Show current DNS Server 2 IP Address.

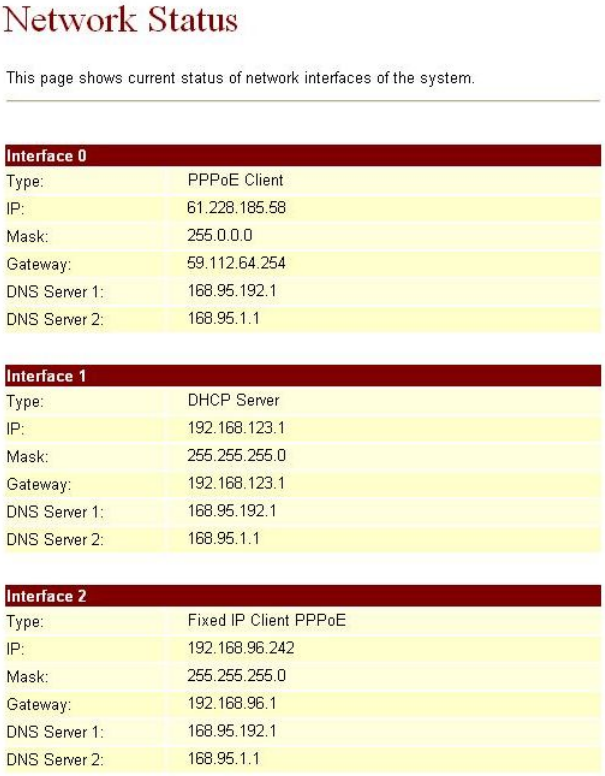
Example 2: LAN Mode: NAT (NAT Mode)



(Figure 2)

Interface 0	Show the current status of Interface 0(WAN Port)
Type	Show the current Type.
IP	Show the current IP Address.
Mask	Show the current Subnet Mask IP Address.
Gateway	Show current Default Gateway IP Address.
DNS Server1	Show current DNS Server 1 IP Address.
DNS Server2	Show current DNS Server 2 IP Address.
Interface 1	Show the current status of Interface 1(LAN Port)
Type	Show the current Type.
IP	Show the current IP Address.
Mask	Show the current Subnet Mask IP Address.
Gateway	Show current Default Gateway IP Address.
DNS Server1	Show current DNS Server 1 IP Address.
DNS Server2	Show current DNS Server 2 IP Address.

Example 3: LAN Mode: NAT + PPTP (NAT + PPTP Mode)



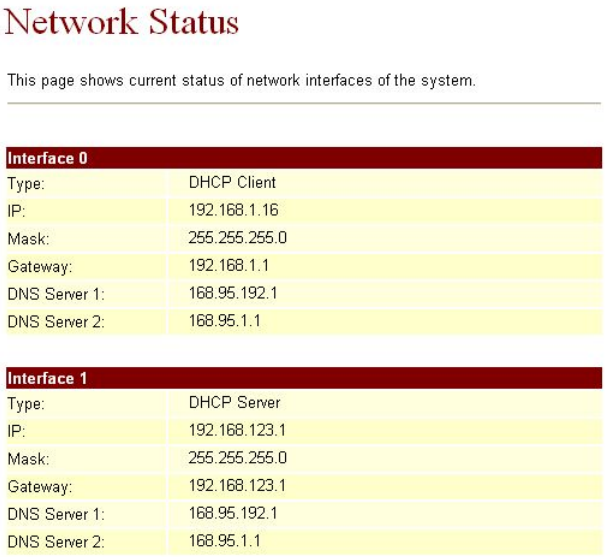
(Figure 3)

Interface 0	Show the current status of Interface 0(WAN Port)
Type	Show the current Type.
IP	Show the current IP Address.
Mask	Show the current Subnet Mask IP Address.
Gateway	Show current Default Gateway IP Address.
DNS Server1	Show current DNS Server 1 IP Address.
DNS Server2	Show current DNS Server 2 IP Address.
Interface 1	Show the current status of Interface 1(LAN Port)
Type	Show the current Type.
IP	Show the current IP Address.
Mask	Show the current Subnet Mask IP Address.

Gateway	Show current Default Gateway IP Address.
DNS Server1	Show current DNS Server 1 IP Address.
DNS Server2	Show current DNS Server 2 IP Address.
Interface 1	Show the current status of Interface 2(WAN Port)
Type	Show the current Type.
IP	Show the current IP Address.
Mask	Show the current Subnet Mask IP Address.
Gateway	Show current Default Gateway IP Address.
DNS Server1	Show current DNS Server 1 IP Address.
DNS Server2	Show current DNS Server 2 IP Address.

6.1.3 Operate Instruction

Step 1: On the main page, select [Network Setting→Network Status], enter [Network Status] page, Network Status will be seen (Figure 1).



(Figure 1)

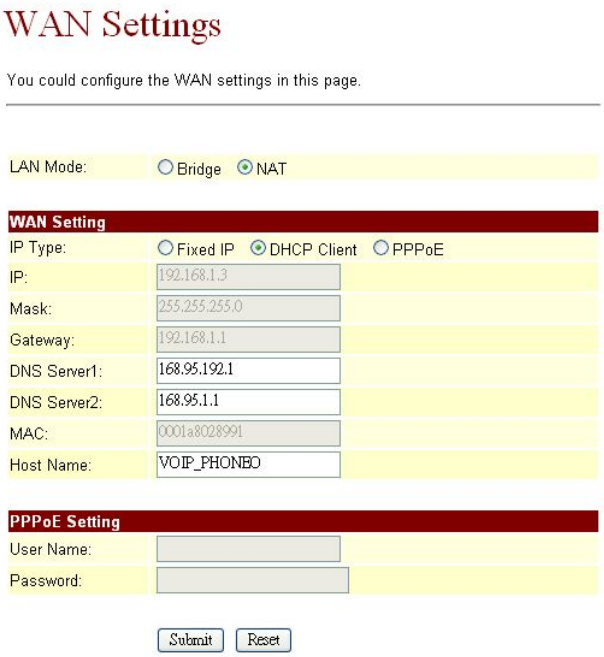
6.2.1 WAN Settings

6.2.1 Function

WAN Settings provide WAN Setting.

6.2.2 Instruction

Figure WAN Setting



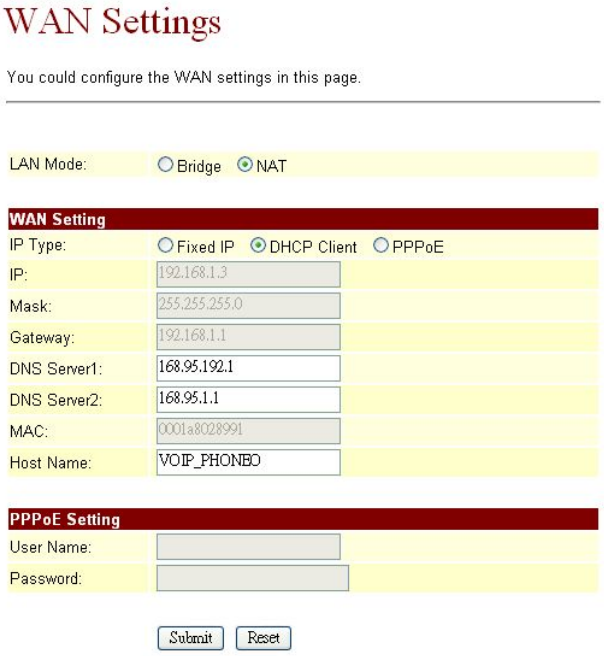
LAN Mode	Default: NAT. NAT is different from WAN; LAN will dispatch IP to DHCP Server automatically. When Bridge is on, WAN & LAN can be at the same subnet.
WAN Setting	Provide the WAN setting
IP Type	Default: DHCP Client, provides Fixed IP, gains IP Address automatically. PPPoE: ADSL Dialing number.
IP	Default: current IP Address; or any IP Address that is xxx.xxx.xxx.xxx. If would like to change IP Address, please set IP Type as "Fixed IP". . Maximum length is 15 bytes.
Mask	Default: current Subnet Mask IP Address. Format: xxx.xxx.xxx.xxx. Or change Sunbet Mask IP. Maximum length is 15 bytes.
Gateway	Default: current gateway IP address; or change Gateway IP. . Maximum length is 15 bytes.
DNS Server1	Default: 168.95.192.1. Can input IP or Domain Name, format: xxx.xxx.xxx.xxx. If would like to gain DHCP or PPPoE Server automatically, please fill this blank as "0.0.0.0". Maximum length is 15 bytes.
DNS Server2	Default: 168.95.1.1. Can input IP or Domain Name, format: xxx.xxx.xxx.xxx. If would like to gain DHCP or PPPoE Server automatically, please fill this blank as "0.0.0.0". . Maximum length is 15 bytes.
MAC	Show MAC ID Address. . Maximum length is 12 bytes.
Host Name	Default: product name. Numbers or strings are both acceptable. Length: 15 bytes.

PPPoE Setting	Provides PPPoE Setting.
User Name	Provides user's name of PPPoE Server, can be numbers or strings. Length: 63 bytes.
Password	Provides password of PPPoE Server, can be numbers or strings. Length: 63 bytes.
Service Name	. Maximum length is 63 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

6.2.3 Operate Instruction

Example: Check Host Name

Step 1: On the main page, select [Network Setting→WAN Setting], enter [WAN Settings] page, after revising information (e.g. IP Type: DHCP Client) (See Figure 1), then click [Submit].

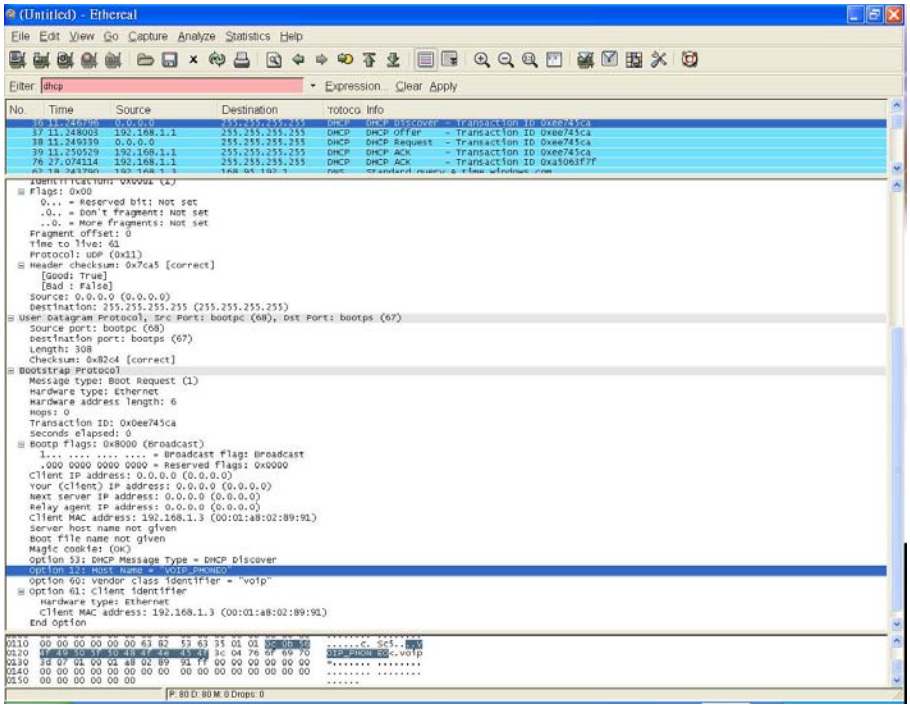


(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: To view [Host Name] by Ethereal. Please refer [Option 12Host Name= "VOIP Phone"] as follows (See Figure 2)


(Untitled) - Ethereal
File Edit View Go Capture Analyze Statistics Help
Filter: dhcp
Expression... Clear Apply
No. Time Source Destination Protocol Info
36 11.247705 0.0.0.0 255.255.255.255 DHCP DHCP Discover - Transaction ID 0xee745ca
37 11.248003 192.168.1.1 255.255.255.255 DHCP DHCP Offer - Transaction ID 0xee745ca
38 11.249339 0.0.0.0 255.255.255.255 DHCP DHCP Request - Transaction ID 0xee745ca
39 11.250529 192.168.1.1 255.255.255.255 DHCP DHCP ACK - Transaction ID 0xee745ca
76 27.074114 192.168.1.1 255.255.255.255 DHCP DHCP ACK - Transaction ID 0xa5063f7f
Flags: 0x00
0... = Reserved bit: Not set
.0.. = Don't fragment: Not set
..0. = More fragments: Not set
Fragment offset: 0
Time to live: 61
Protocol: UDP (0x11)
Header checksum: 0x7ca5 [correct]
[Good: True]
[Bad : False]
Source: 0.0.0.0 (0.0.0.0)
Destination: 255.255.255.255 (255.255.255.255)
User Datagram Protocol, Src Port: bootpc (68), Dst Port: bootps (67)
Source port: bootpc (68)
Destination port: bootps (67)
Length: 308
Checksum: 0x82c4 [correct]
Bootstrap Protocol
Message type: Boot Request (1)
Hardware type: Ethernet
Hardware address length: 6
Hops: 0
Transaction ID: 0x0ee745ca
Seconds elapsed: 0
Bootp flags: 0x8000 (Broadcast)
1... .... = Broadcast flag: Broadcast
.000 0000 0000 0000 = Reserved flags: 0x0000
Client IP address: 0.0.0.0 (0.0.0.0)
Your (client) IP address: 0.0.0.0 (0.0.0.0)
Next server IP address: 0.0.0.0 (0.0.0.0)
Relay agent IP address: 0.0.0.0 (0.0.0.0)
Client MAC address: 192.168.1.3 (00:01:a8:02:89:91)
Server host name not given
Boot file name not given
Magic cookie: (OK)
Option 53: DHCP Message Type = DHCP Discover
Option 12: Host Name = "VOIP_ENCHED"
Option 60: vendor class identifier = "voip"
Option 61: Client identifier
Hardware type: Ethernet
Client MAC address: 192.168.1.3 (00:01:a8:02:89:91)
End Option
P: 80 D: 80 M: 0 Drops: 0

(Figure 2)

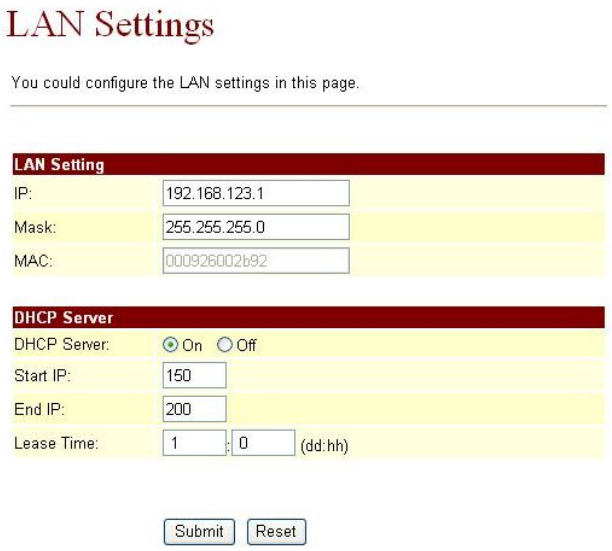
6.3.1 LAN Settings

6.3.1 Function

LAN Settings provide LAN setting, including DHCP Server function.

6.3.2 Instruction

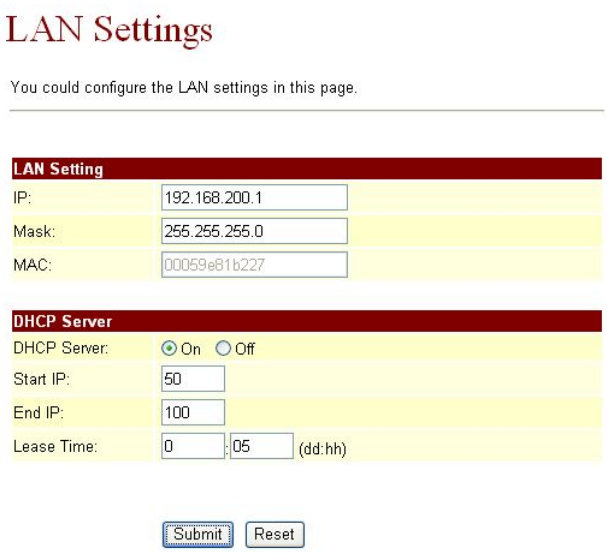
Figure LAN Setting



LAN Setting	Provides LAN Setting.
IP	Default: 192.168.123.1. Format: xxx.xxx.xxx.xxx. Maximum length is 15 bytes.
Mask	Default: 255.255.255.0 provides Subnet Mask IP Address. Format: xxx.xxx.xxx.xxx. Maximum length is 15 bytes.
MAC	Show MAD ID information. Maximum length is 12 bytes.
DHCP Server	Provides DHCP Server information.
DHCP Server	Default: OFF. When setting ON, DHCP Server will run automatically.
Start IP	Default: 150, to set Start IP information. From (1~254). Maximum length is 3 bytes.
End IP	Default: 200, to set End IP information. From (1~254). Maximum length is 3 bytes.
Lease Time	Default: 1:0 (dd: hh), to set lease time for dispatching IP information. From (00:00~99:23). Maximum length is 2 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

6.3.3 Operate Instruction

Step 1: On the main page, select [Network Setting→ LAN Setting], enter [LAN Settings] page, after revising information (e.g. IP: 192.168.200.1, Start IP: 50, End IP: 100, Lease Time: 00:05) (See Figure 1), then click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

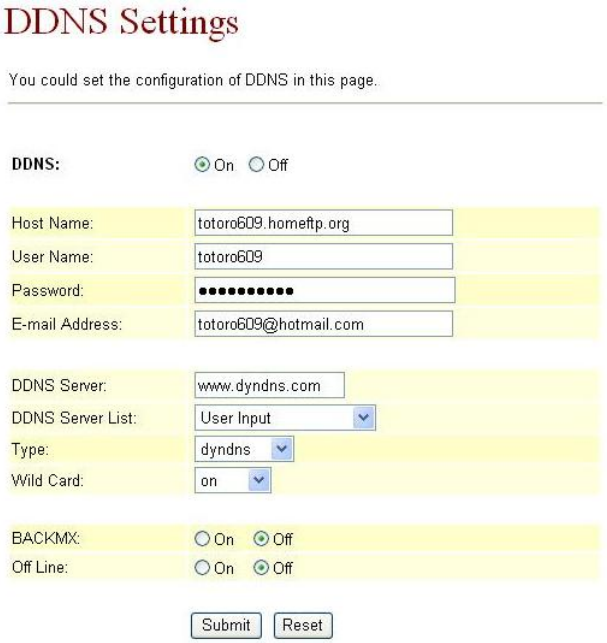
6.4.1 DDNS settings

6.4.1 Function

DDNS Settings provide the floating IP information. 3 DDNS Servers information will be found.

6.4.2 Instruction

Figure DDNS Setting



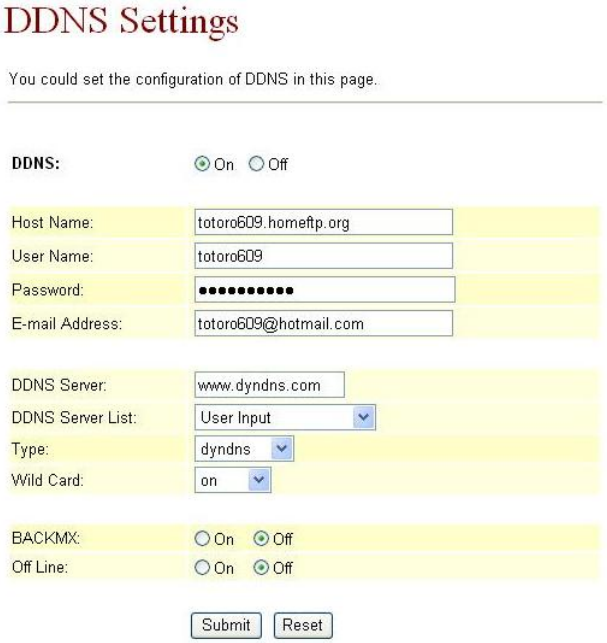
DDNS	Default: OFF. When setting ON, DDNS will come into run. Maximum length is 63 bytes.
Host name	Maximum length is 63 bytes. Input Host name, can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx. Length: 63 bytes
User Name	Input user's name for registering DDNS Server.
Password	Input the password. Maximum length is 63 bytes.
E-mail address	Input E-mail address. Maximum length is 63 bytes.
DDNS Server	Maximum length is 60 bytes. Input DDNS Server, can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx. Maximum length is 63 bytes.
DDNS Server List	Default: OFF. Display DDNS server's name list information. Provide user input, members.dyndns.rog, www.dtdns.com, ddns.com.cn
Type	Default: dyndns. Provides dyndns, statdns, customer, 3 items. If you choose customer, you can change the type information.
Wild Card	Default: on. Provides On, Off, Nochg 3 items. Not all DNS provider can provide Wild Card, so any issue about this, please contact with your provider.
BACKMX	Default: OFF. When setting ON, BACKMAX will come into run. Not all DNS provider can provide this service, so any issue about this, please contact with your provider. MX records serve a specific purpose: they let you specify the host (server) to which mail for a specific domain should

	be sent.
OFF Line	Default: OFF. When setting ON, OFF Line will come into run. Redirection of HTTP requests to hosts which are marked offline is available to users who have purchased some type of upgrade credit only. As a credited user, you will see an "Offline URL" range and a "Set Offline" checkbox. Simply enter the URL you wish to redirect to in the text range (or leave it blank to get a generic page), and check the "Set Offline" box. Users accessing http://yourhost.dyndns.org/ will be redirected to this page until you update normally, or manually uncheck the box in the web form.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

6.4.3 Operate Instruction

Example 1: Using WWW.DYNDNS.COM

Step 1: On the main page, select [Network Setting→ DDNS Setting], enter [DDNS Settings] page, after revising information (e.g. DDNS: On, Host Name: totoro609.hotmeftp.org, User Name: totoro609, Password: totoro609, E-mail Address: totoro609@hotmail.com, DDNS Server: www.dyndns.com, DDNS Server List: User Input, Type: dyndns, Wild Card: on, BACKMX: off, Off Line: off) (See Figure 1), then click [Submit].

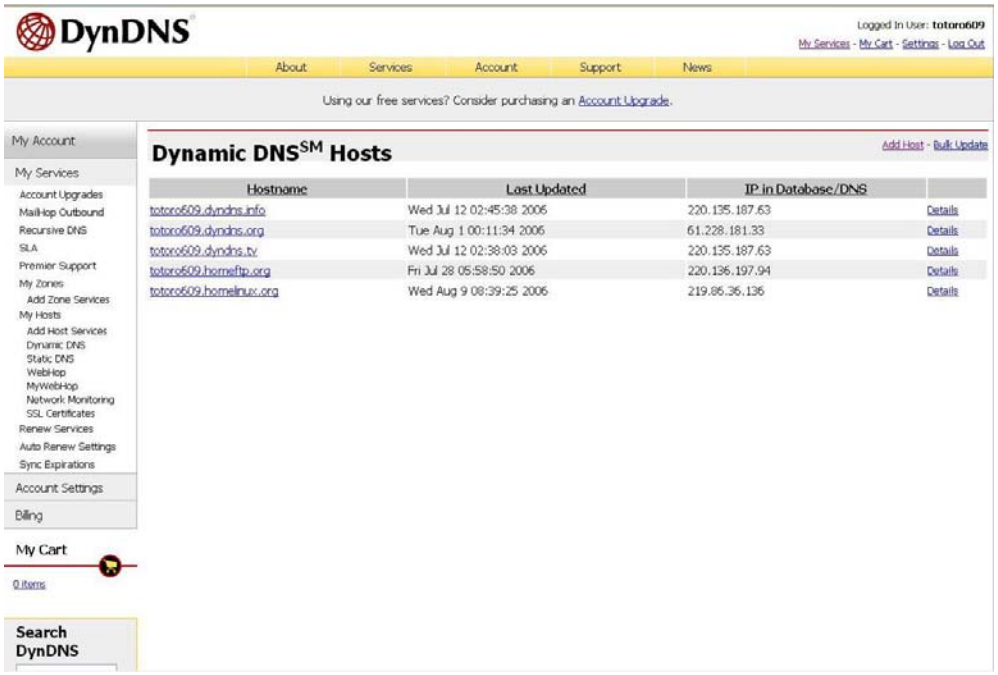


(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

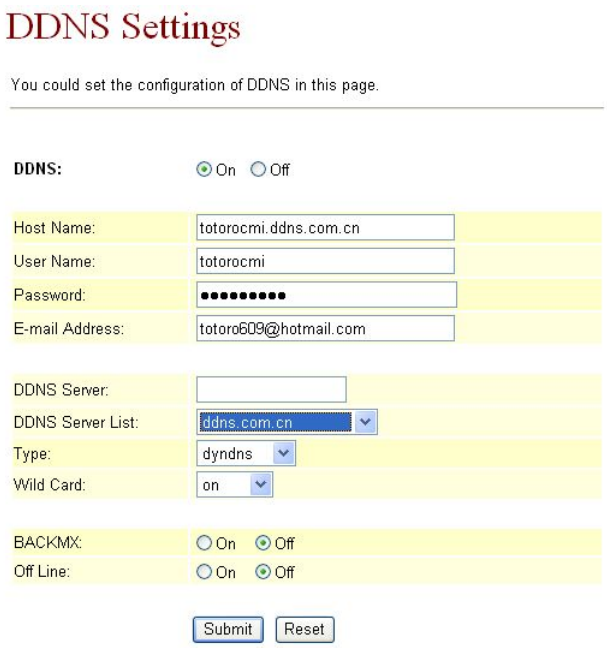
Step 4: Open DynDNS to view new IP Address of DDNS: totoro609.hotmeftp.org. e.g.: 220.136.197.74 (Figure 2)



(Figure 2)

Example 2: Using WWW.DDNS.CN

Step 1: On the main page, select [Network Setting→ DDNS Setting], enter [DDNS Settings] page, after revising information (e.g. DDNS: On, Host Name: totorocmi.ddns.com.cn, User Name: totorocmi, Password: totoro609, E-mail Address: totoro609@hotmail.com, DDNS Server List: ddns.com.cn, Type: dyndns, Wild Card: on, BACKMX: off, Off Line: off) (See Figure 1), then click [Submit].



(Figure 3)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

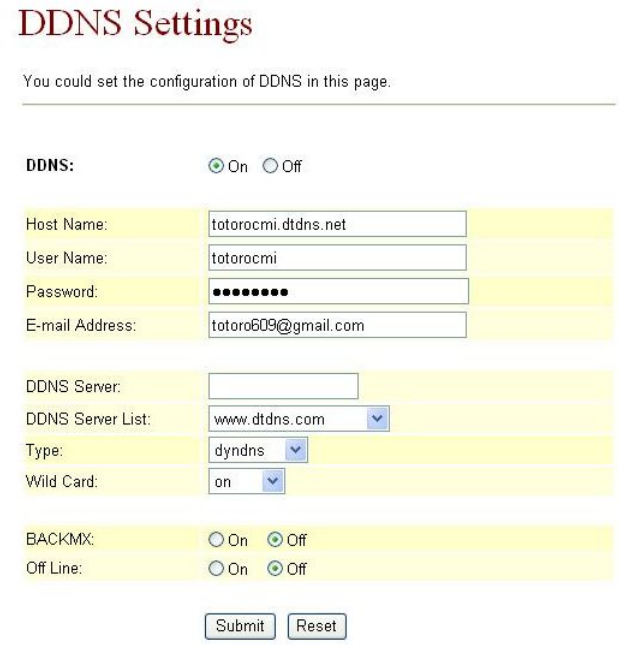
Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: Open DtDNS page to view Host Name: totorocmi, and renew IP Address (Figure 4).

(Figure 4)

Example 3: Using WWW.DtDNS.CN

Step 1: On the main page, select [Network Setting→ DDNS Setting], enter [DDNS Settings] page, after revising information (e.g. DDNS: On, Host Name: totorocmi.dtdns.com.cn, User Name: totorocmi, Password: totoro609, E-mail Address: totoro609@hotmail.com, DDNS Server List: dtdns.com.cn, Type: dyndns, Wild Card: on, BACKMX: off, Off Line: off) (See Figure 5), then click [Submit].



(Figure 5)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: Open DtDNS page to view the new IP Address of Hostname: totorocm. E.g.: 61.228.184.142 (Figure 6)

(Figure 6)

6.4.4 How to apply DDNS

Please refer file: APN_DDNS

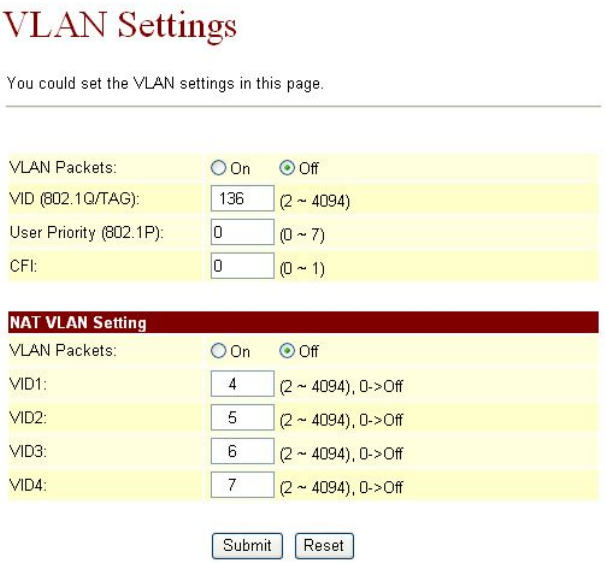
6.5.1 VLAN Settings

6.5.1 Function

VLAN Settings provide Clinet information of WAN and VLAN information of LAN. Need to work with VLAN Router.

6.5.2 Instruction

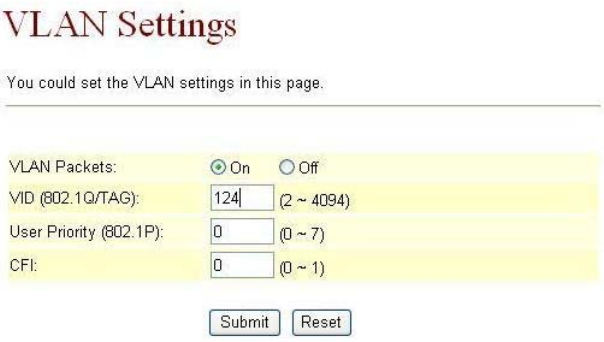
Figure VLAN Setting



VLAN Packets	Default: OFF. When setting ON, receiving VALN Packets function will be started.
VID	Default: 136. Provide Virtual LAN ID (VLAN or VID) for VLAN Server. Data range: 2~4097. Maximum length is 4 bytes.
User Priority	Default: 0. Set the user's priority. Data range: (0~7). Maximum length is 1 bytes.
CFI	Default: 1. To set Canonical Format Indicator (CFI) for one byte. Data Range (0~1) The CFI bit is used to indicate that all MAC addresses present in the MAC data field are in canonical format. This field is interpreted differently depending on whether it is an ethernet-encoded tag header or a SNAP-encoded tag header. In SNAP-encoded TPID the field indicates the presence or absence of the canonical format of addresses. In Ethernet-encoded TPID, it indicates the presence of the Source-Routing Information (RIF) field after the length field. The RIF field indicates routing on ethernet frames.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

6.5.3 Operate Instruction

Step 1: On the main page, select [Network Setting→VLAN Setting], enter [VLAN Setting] page, after revising information (e.g. VLAN Packets: on, VID (802.1Q/TAG): 124, User Priority (802.1P):0, CFGI: 0) (See Figure 1), then click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

6.6.1 DMZ Setting

6.6.1 Function

DMZ Setting provides DMZ data.

6.6.2 Instruction

Figure DMZ Setting

DMZ	Default: OFF. When setting ON, all ethereal logs will be sent to the IP. (Except SIP related logs.)
DMZ Host IP	Input IP Address information, can be IP or Domain Name. Format: xxx.xxx.xxx.xxx. Length: 15 bytes.
Submit [Button]	Submit the change.

6.6.3 Instruction

Step 1: On the main page, select [Network Setting→DMZ Setting], enter [DMZ Setting] page, after revising tone information (Figure 1), then click [Submit].

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

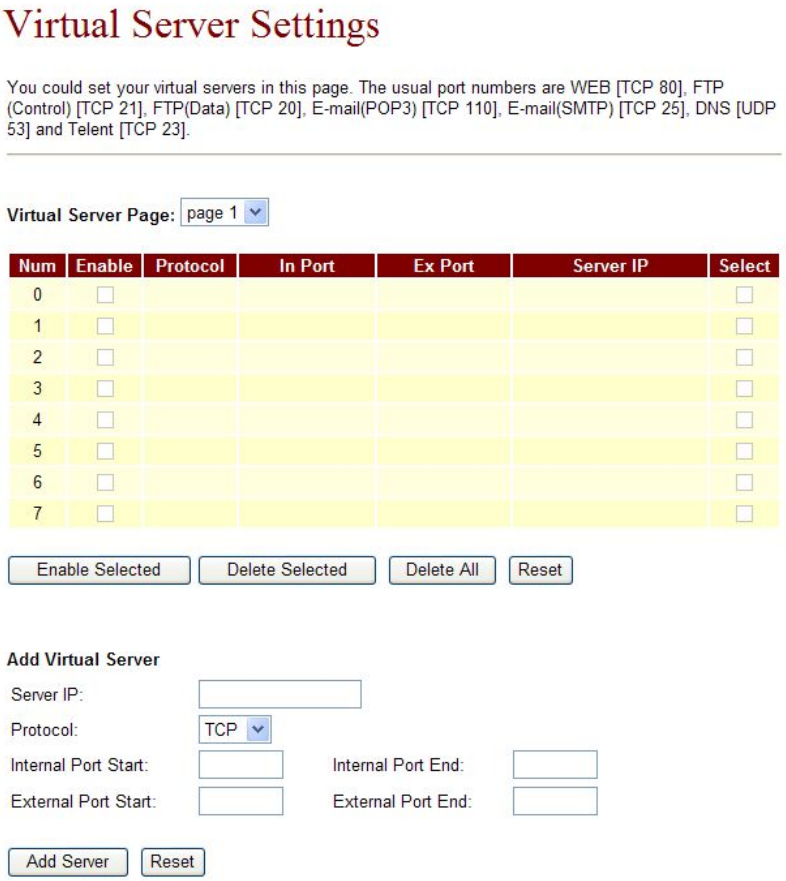
6.7.1 Virtual Server

6.7.1 Function

Virtual Server Settings provides 24 sets of Virtual Server information.

6.7.2 Instruction

Figure Virtual Server Setting

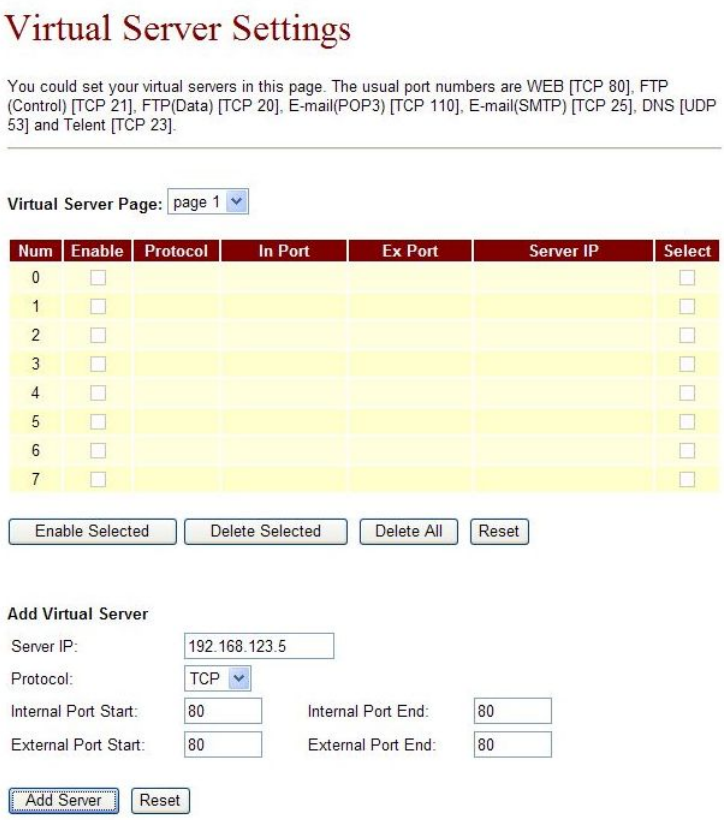


Virtual Server Page	Default: Page 1. Page 1~Page 3 is available.
Num	Show the Number. Setting Rage: (0~23). 24 entries in total.
Enable	Show the status. Default: Disable. When setting Enable, this function will be started.
Protocol	Protocol: use tcp or udp
In Port	Show the address of In Port.
Ex Port	Show the address of Ex Port.
Server IP	Show the Server IP Address.
Select	Default: Disable.
Enable Selected [Button]	Start Enable Selected information.
Delete Selected [Button]	Execute delete selected information.
Delete All [Button]	Delete all information.
Reset [Button]	Clear selected information.
Add Virtual	Add new Virtual Server Information.

Server	
Num	Input serial number. Data range: (0~23). Maximum length is 2 bytes.
Server IP	Input IP information, can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx. Maximum length is 15 bytes.
Protocol	Default: TCP, use tcp or udp
Internal Port Start	Defind internal Star port address. Data range: (1~65533). Maximum length is 5 bytes.
Internal Port End	Defind internal End port address. Data range: (1~65533). Maximum length is 5 bytes.
External Port Start	Defind internal Star port address. Data range: (1~65533). Maximum length is 5 bytes.
External Port End	Defind internal End port address. Data range: (1~65533). Maximum length is 5 bytes.
Add Server [Button]	Add new Add Server information.
Reset [Button]	Clear selected information.

6.7.3 Operate Instruction

Step 1: On the main page, select [Network Setting→Virtual Setting], enter [Virtual Setting] page, after revising information (Num: 0, Server IP: 192.168.123.5, Protocol: TCP, Internal Port: 80, External Port: 80) (See Figure 1), then click [Submit].

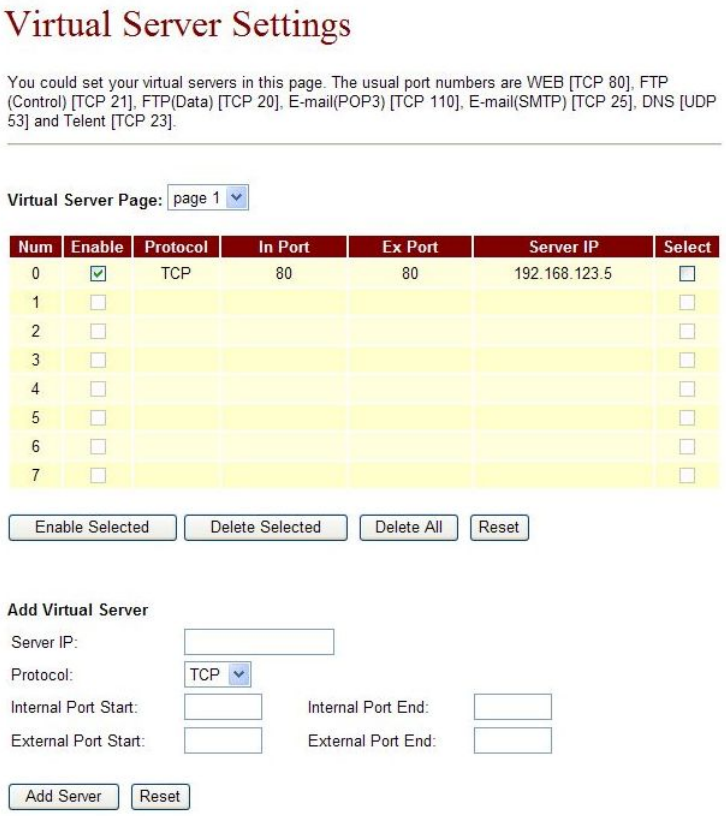


(Figure 1)

Step 2: You have to save and reboot the system or effect the virutal server (Figure 2)

(Figure 2)

Step 3: After adding all information, please save changing (Figure 3).



(Figure 3)

Step 4: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

6.8.1 PPTP Settings

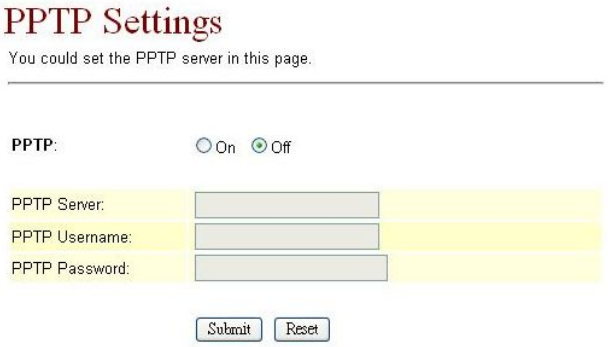
6.8.1 Function

PPTP Settings provide PPTP Server information.

Please use LAN to enter PPTP.

6.8.2 Instruction

Figure PPTP Setting



PPTP	Default: OFF. When setting ON, start PPTP function.
PPTP Server	Input PPTP Server information, can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx. Maximum length is 63 bytes.
PPTP Username	Input PPTP Server user's name, can be numerals or strings. Maximum length is 63 bytes.
PPTP Password	Input PPTP password, can be numerals or strings. Maximum length is 63 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

6.8.3 Operate Instruction

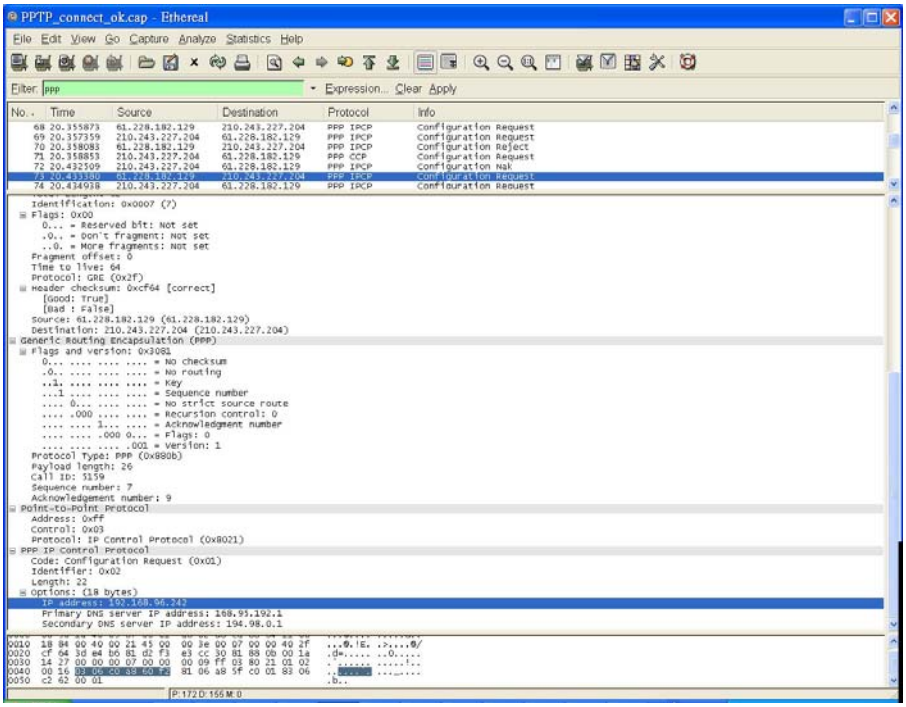
Step 1: On the main page, select [Network Setting→ Network Setting→PPTP Setting], enter [PPTP Setting] page, after revising tone information (Figure 1), then click [Submit].

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

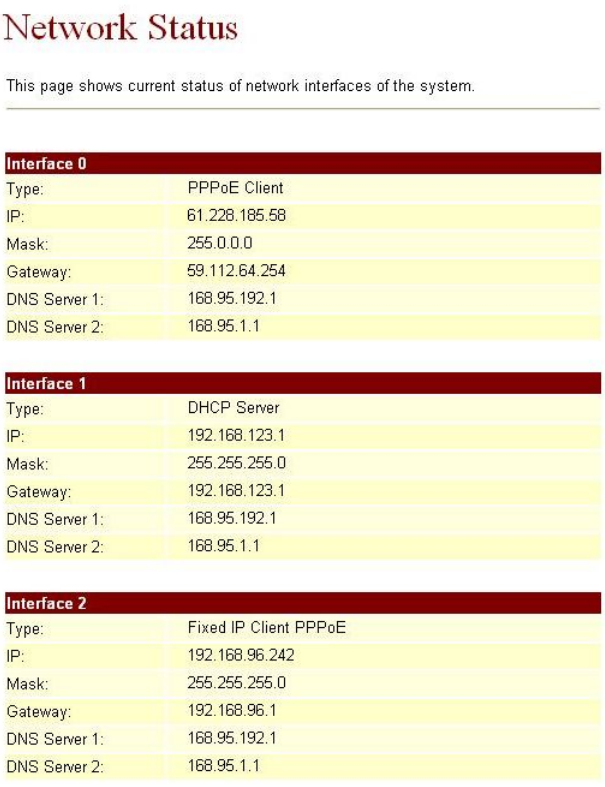
Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: To view [PPTP Server] information though Ethereal (See Figure 2)



(Figure 2)

Step 5: After getting PPTP Server information, and would like to view data information though WEB, LAN Port [http://192.168.123.1:9999] is needed (Figure 3).



(Figure 3)

Chapter 7.1 SIP Settings

Provides Service Domain、Port Settings、Code Settings、Codec ID Settings, DTMF Settings、RPort Settings、Other Settings.

7.1.1 Service Domain

7.1.1 Function

Service Domain provides 3 entries information and status.

7.1.2 Instruction

Figure 1: FXS/Phone equipment

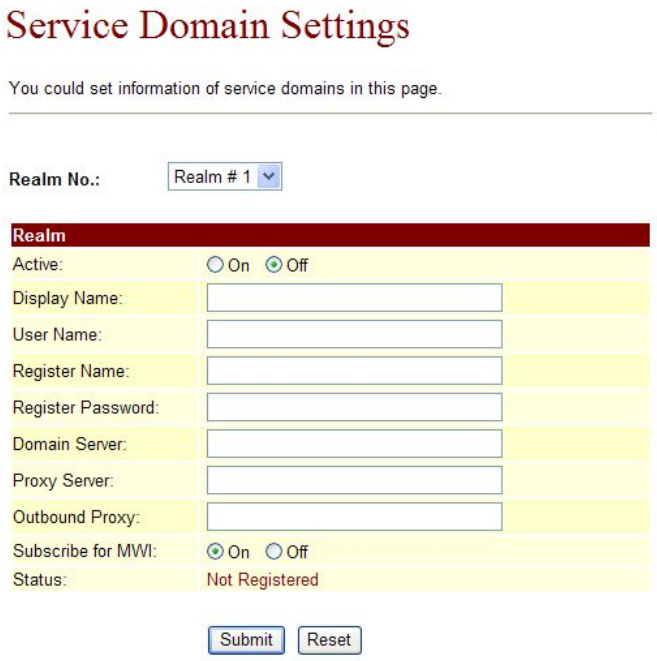


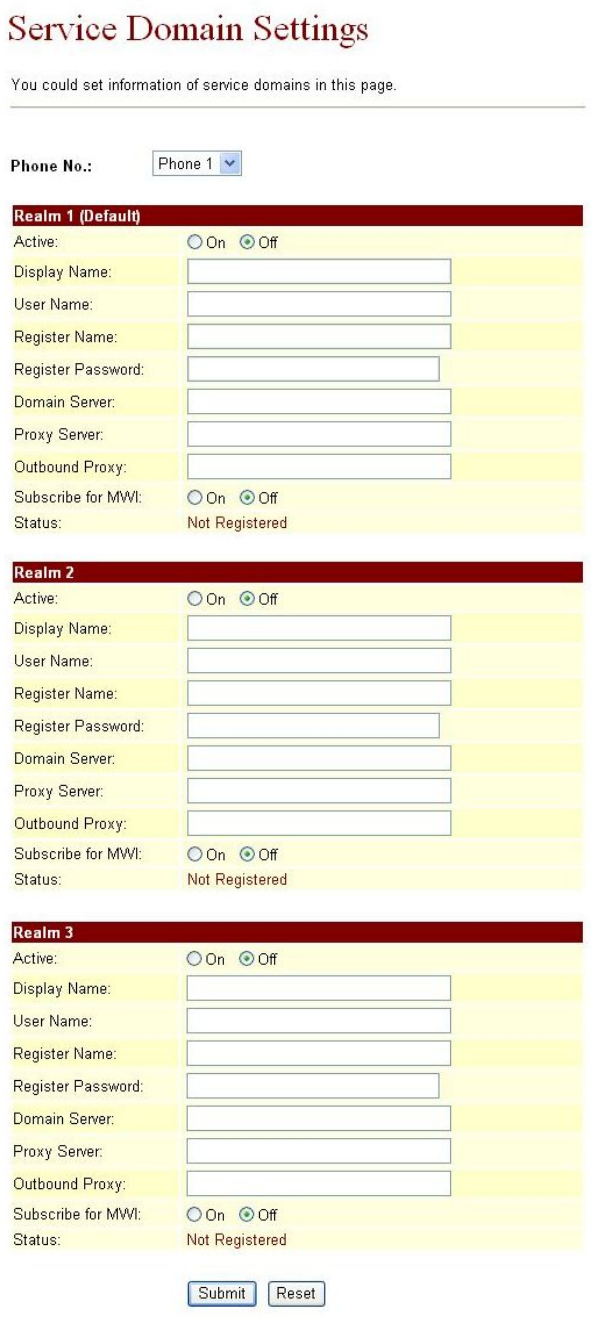
Figure 1

Realm 1 (Default)	Default: Realm1. Please press "1*" and hang up the phone when transfer to the 1st register number.
Active	Default: OFF. When setting ON, register account will be active.
Display Name	Display name. Can be numerals or strings. Maximum length: 31 bytes.
User Name	Display user's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Name	Display Register's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Password	Please input register password, can be numerals or strings. Maximum length: 31 bytes.
Domain Server	Input Domain Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Proxy Server	Input Proxy Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.:

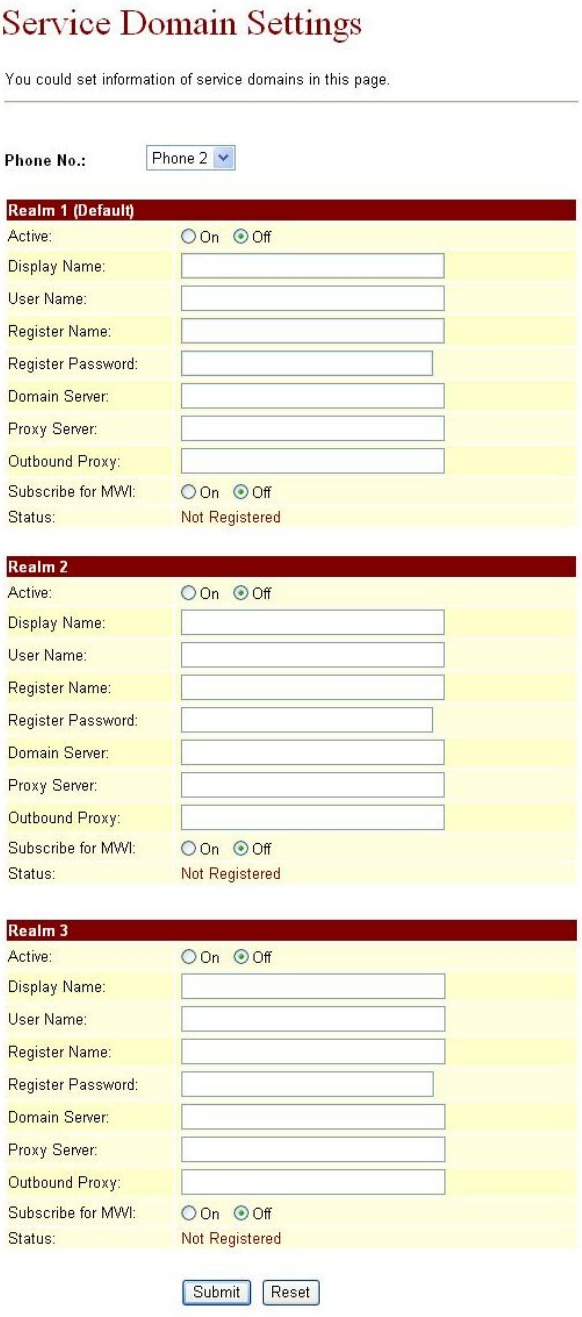
	nat.voiptalk.org:5065
Outbound Proxy	Input Outbound Proxy information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx ; Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Subscribe of MWI	Subscribe for MWI function Your Register SIP Proxy server must support this function.
Status	Not Register (failed.) Register (Successfully.)
Realm 2	The 2nd register account. Please press "2*" and hang up the phone when transfer to the 2nd register number.
Active	Default: OFF. When setting ON, register account will be active.
Display Name	Display name. Can be numerals or strings. Maximum length: 31 bytes.
User Name	Display user's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Name	Display Register's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Password	Please input register password, can be numerals or strings. Maximum length: 31 bytes.
Domain Server	Input Domain Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx ; Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Proxy Server	Input Proxy Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx ; Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Outbound Proxy	Input Outbound Proxy information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx ; Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Subscribe of MWI	Subscribe for MWI function Your Register SIP Proxy server must support this function.
Status	Not Register (failed.) Register (Successfully.)
Realm 3	The 3rd register account. Please press "3*" and hang up the phone when transfer to the 3rd register number.
Active	Default: OFF. When setting ON, register account will be active.
Display Name	Display name. Can be numerals or strings. Maximum length: 31 bytes.
User Name	Display user's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Name	Display Register's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Password	Please input register password, can be numerals or strings. Maximum length: 31 bytes.
Domain Server	Input Domain Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx ; Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065

Proxy Server	Input Proxy Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Outbound Proxy	Input Outbound Proxy information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Subscribe of MWI	Subscribe for MWI function Your Register SIP Proxy server must support this function.
Status	Not Register (failed.) Register (Successfully.)

Figure 2 & 3: 2-FXS equipment



(Figure 2)



(Figure 3)

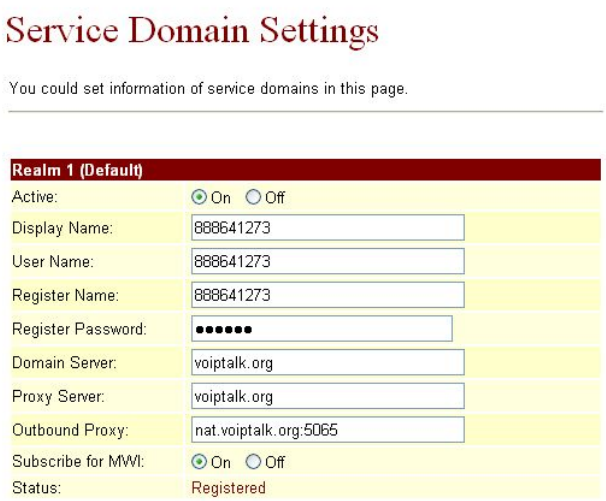
Phone No	Default: Phone 1. Please choose mode: Phone 1 or Phone 2.
Realm 1 (Default)	The 1st register account. Please press "1*" and hang up the phone when transfer to the 1st register number.
Active	Default: OFF. When setting ON, register account will be active.
Display Name	Display name. Can be numerals or strings. Maximum length: 31 bytes.
User Name	Display user's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Name	Display Register's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Password	Please input register password, can be numerals or strings. Maximum length: 31 bytes.
Domain Server	Input Domain Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Proxy Server	Input Proxy Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Outbound Proxy	Input Outbound Proxy information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx ; Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Subscribe of MWI	Subscribe for MWI function Your Register SIP Proxy server must support this function.
Status	Not Register (failed.) Register (Successfully.)
Realm 2	The 2nd register account. Please press "2*" and hang up the phone when transfer to the 2nd register number.
Active	Default: OFF. When setting ON, register account will be active.
Display Name	Display name. Can be numerals or strings. Maximum length: 31 bytes.
User Name	Display user's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Name	Display Register's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Password	Please input register password, can be numerals or strings. Maximum length: 31 bytes.
Domain Server	Input Domain Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Proxy Server	Input Proxy Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Outbound Proxy	Input Outbound Proxy information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx ; Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065

Subscribe of MWI	Subscribe for MWI function Your Register SIP Proxy server must support this function.
Status	Not Register (failed.) Register (Successfully.)
Realm 3	The 3rd register account. Please press "3*" and hang up the phone when transfer to the 3rd register number.
Active	Default: OFF. When setting ON, register account will be active.
Display Name	Display name. Can be numerals or strings. Maximum length: 31 bytes.
User Name	Display user's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Name	Display Register's name. Can be numerals or strings. Maximum length: 31 bytes.
Register Password	Please input register password, can be numerals or strings. Maximum length: 31 bytes.
Domain Server	Input Domain Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Proxy Server	Input Proxy Server information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Outbound Proxy	Input Outbound Proxy information. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length is 63 bytes. If special Port Address is needed, please add it, e.g.: nat.voiptalk.org:5065
Subscribe of MWI	Subscribe for MWI function Your Register SIP Proxy server must support this function.
Status	Not Register (failed.) Register (Successfully.)

7.1.3 Instruction

Example 1: Register SIP Proxy Port number: 5065

Step 1: On the main page, select [SIP Settings→ Service Domain], enter [Service Domain Settings] page, after revising the information (e.g.: Active: On，Display Name: 888641273，User Name: 888641273，Register Name: 888641273，Register Password: 1234，Domain Server: voiptalk.org，Proxy Server: voiptalk.org，Outbound Proxy: nat.voiptalk.org:5065，Subscribe of MWI: off) (See Figure 1), then click [Submit].

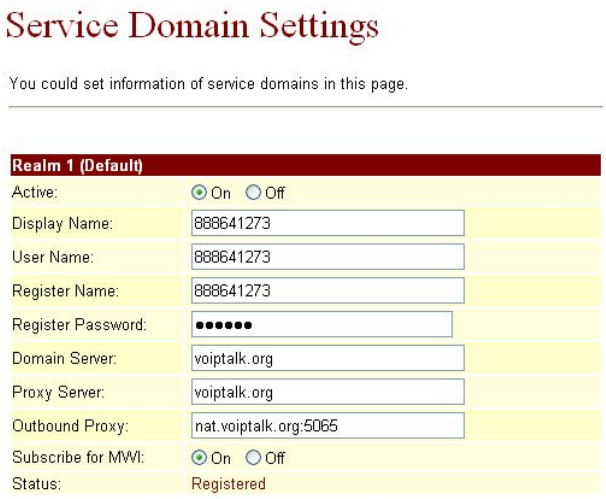


(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

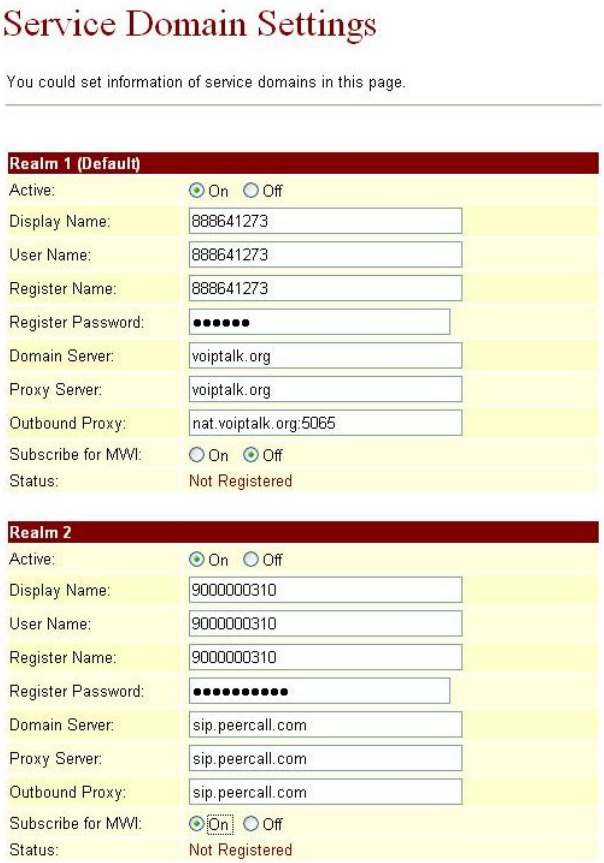
Step: 4: Back page [Service Domain Settings], and notice the register name (Figure 2), then click [Submit]



(Figure 2)

Example 2: Start Subscribe for MWI

Step 1: On the main page, select [SIP Settings→ Service Domain], enter [Service Domain Settings] page, start Subscribe for MWI, (e.g.: Subscribe for MWI: on), then click [Submit] (Figure 3).

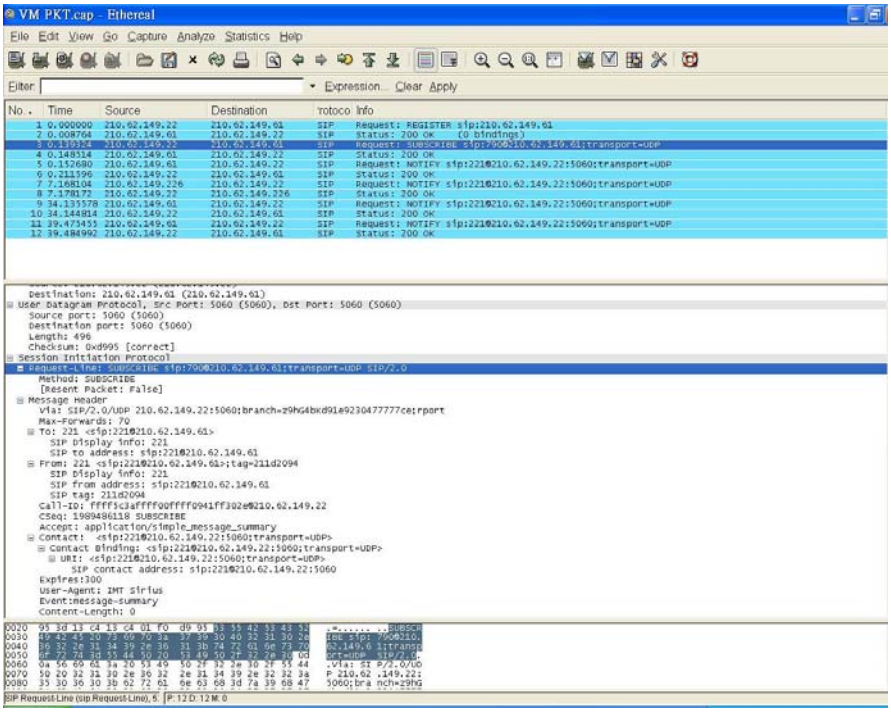


(Figure 3)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step: 4. After rebooting the system, and call to another equipment, please check the [Ethereal] and [Request: Subscribe] information (Figure 4).


VM PKT.cap - Ethereal
File Edit View Go Capture Analyze Statistics Help
Filter:
Expression... Clear Apply
No. Time Source Destination rotoco Info
1 0.000000 210.62.149.22 210.62.149.61 SIP Request: REGISTER sip:210.62.149.61
2 0.008764 210.62.149.61 210.62.149.22 SIP Status: 200 OK (0 bindings)
3 0.133934 210.62.149.22 210.62.149.61 SIP Request: SUBSCRIBE sip:790@210.62.149.61;transport=UDP
4 0.148514 210.62.149.61 210.62.149.22 SIP Status: 200 OK
5 0.152680 210.62.149.61 210.62.149.22 SIP Request: NOTIFY sip:221@210.62.149.22:5060;transport=UDP
6 0.211596 210.62.149.22 210.62.149.61 SIP Status: 200 OK
7 7.168104 210.62.149.226 210.62.149.22 SIP Request: NOTIFY sip:221@210.62.149.22:5060;transport=UDP
8 7.178172 210.62.149.22 210.62.149.226 SIP Status: 200 OK
9 34.135578 210.62.149.61 210.62.149.22 SIP Request: NOTIFY sip:221@210.62.149.22:5060;transport=UDP
10 34.144814 210.62.149.22 210.62.149.61 SIP Status: 200 OK
11 39.473451 210.62.149.61 210.62.149.22 SIP Request: NOTIFY sip:221@210.62.149.22:5060;transport=UDP
12 39.484992 210.62.149.22 210.62.149.61 SIP Status: 200 OK
Destination: 210.62.149.61 (210.62.149.61)
User Datagram Protocol, Src Port: 5060 (5060), Dst Port: 5060 (5060)
Source port: 5060 (5060)
Destination port: 5060 (5060)
Length: 496
Checksum: 0xd995 [correct]
Session Initiation Protocol
Request-Line: SUBSCRIBE sip:790@210.62.149.61;transport=UDP SIP/2.0
Method: SUBSCRIBE
[Resent Packet: False]
Message Header
Via: SIP/2.0/UDP 210.62.149.22:5060;branch=z9hG4bkd91e9230477777ce;rport
Max-Forwards: 70
To: 221 <sip:221@210.62.149.61>
SIP Display info: 221
SIP to address: sip:221@210.62.149.61
From: 221 <sip:221@210.62.149.61>;tag=211d2094
SIP Display info: 221
SIP from address: sip:221@210.62.149.61
SIP tag: 211d2094
Call-ID: ffff3c3afffff00ffff0941ff302e@210.62.149.22
CSeq: 1909496118 SUBSCRIBE
Accept: application/simple_message_summary
Contact: <sip:221@210.62.149.22:5060;transport=UDP>
Contact Binding: <sip:221@210.62.149.22:5060;transport=UDP>
URI: <sip:221@210.62.149.22:5060;transport=UDP>
SIP contact address: sip:221@210.62.149.22:5060
Expires:300
User-Agent: IMT Sirius
Event:message-summary
Content-Length: 0
SIP Request Line (sip.Request-Line), 5

(Figure 4)

7.2.1 Port Settings (SIP and RTP Setting)

7.2.1 Function

Port Settings provide SIP and RTP port number information.

7.2.2 Instruction

Figure 1: FXS (included FXS+FXO) or Phone (included FXS+FXO)

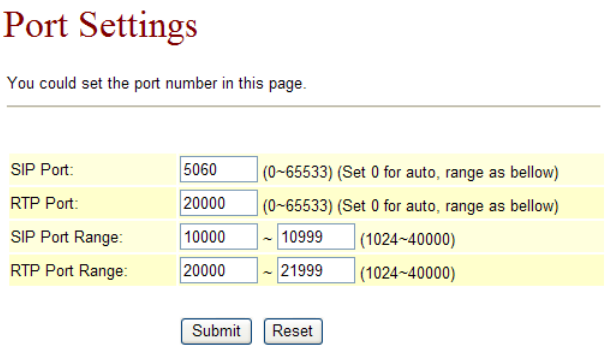


Figure 1

SIP Port	Default: 5060; display the SIP number information. Only numerals are accepted. Data range: (10~65533). Maximum length: 5 bytes.
RTP Port	Default: 60000; display the RTP number information. Only numerals are accepted. Data range: (10~65533). Maximum length: 5 bytes.
SIP Port Range	Default:10000 ~ 10999；Setting the range of SIP Port。Only numerals are accepted. Data range: (1024~40000). Maximum length: 5 bytes.
RTP Port Range	Default:20000 ~ 21999；Setting the range of RTP Port。Only numerals are accepted. Data range: (1024~40000). Maximum length: 5 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figire 2: 2FXS

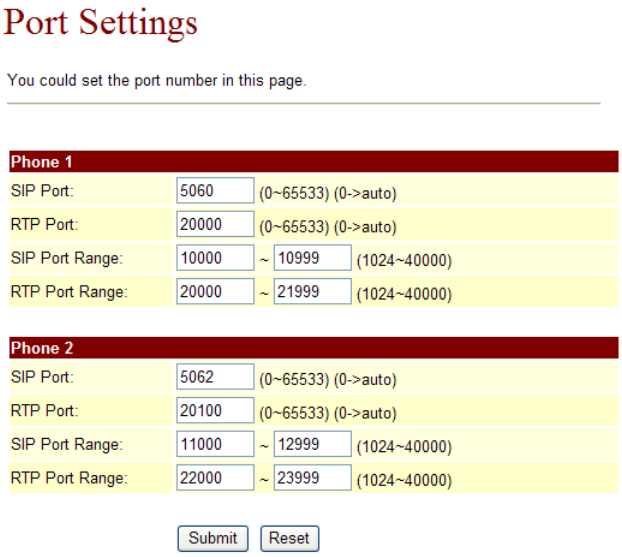
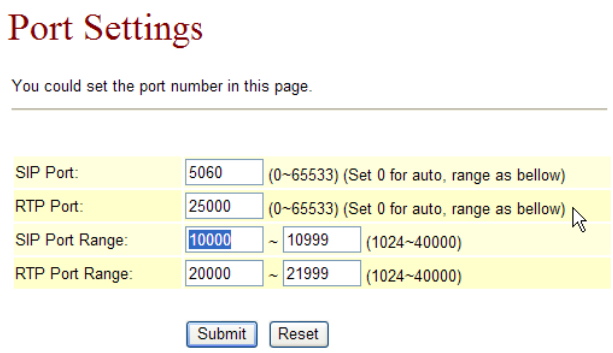


Figure 2

SIP Port of Phone1	Default: 5060; Display the SIP Port of Phone 1. Only numerals are accepted, data range (10~65533). Maximum length: 5 bytes.
RTP Port of Phone1	Default: 60000; Display the RTP Port of Phone 1. Only numerals are accepted, data range (10~65533). Maximum length: 5 bytes.
SIP Port Range of Phone 1	Default:10000 ~ 10999；Setting the range of SIP Port of Phone 1。Only numerals are accepted. Data range: (1024~40000). Maximum length: 5 bytes.
RTP Port Range of Phone 1	Default:20000 ~ 21999；Setting the range of RTP Port of Phone 1。Only numerals are accepted. Data range: (1024~40000). Maximum length: 5 bytes.
SIP Port of Phon2	Default: 5062; Display the SIP Port of Phone 2. Only numerals are accepted, data range (10~65533). Maximum length: 5 bytes.
RTP Port of Phon2	Default: 60100; Display the RTP Port of Phone 2. Only numerals are accepted, data range (10~65533). Maximum length: 5 bytes.
SIP Port Range of Phone 2	Default:11000 ~ 12999；Setting the range of SIP Port of Phone 2。Only numerals are accepted. Data range: (1024~40000). Maximum length: 5 bytes.
RTP Port Range of Phone 2	Default:22000 ~ 23999；Setting the range of RTP Port of Phone 2。Only numerals are accepted. Data range: (1024~40000). Maximum length: 5 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

7.2.3 Operate Instruction

Step 1: On the main page, select [SIP Settings→ Port Settings], enter [Port Settings] page, after revising the information (e.g.: SIP Port: 5060，RTP Port: 6000) (See Figure 1) then click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

7.3.1 Codec Settings

7.3.1 Function

Code Settings provide Codec priority, RTP Packet Length, Voice VAD function..**iLBC and G.723 cannot exist at the same time. iLBC only can support Phone equipment now.**

7.3.2 Instruction

Figure 1: Without iLBC function

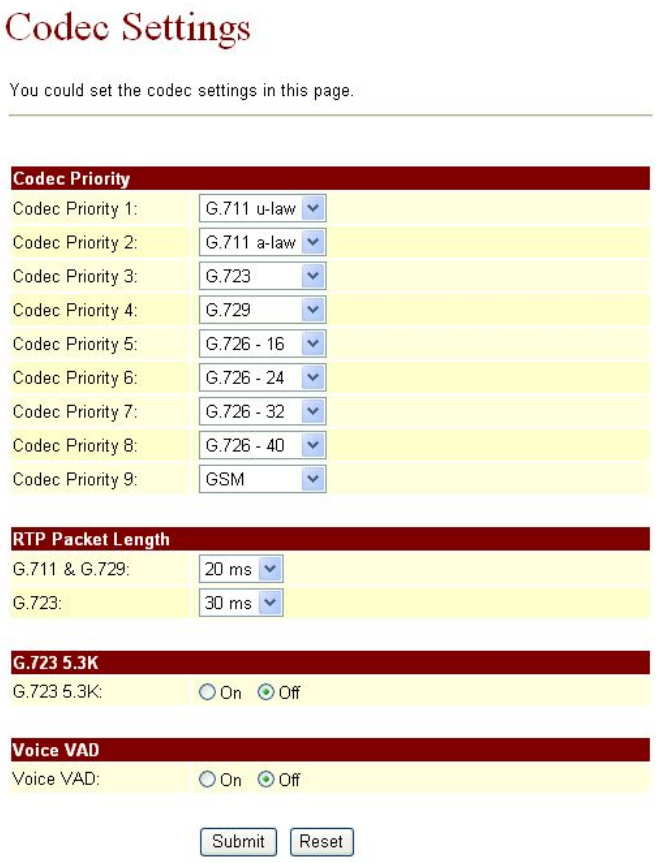


Figure 1

Codec Priority	Set the Codec Priority.
Codec Priority 1	Default: G.711 u-law; Codec Priority 1. Provides No used, G.711u-law，G.711a-law，G.723，G.279，G.726–16，G.726–24，G.726–32，G.726–40，GSM mode.
Codec Priority 2	Default: G.711a-law; Codec Priority 2.
Codec Priority 3	Default: GSM；Codec Priority 3.
Codec Priority 4	Default: G.729；Codec Priority 4.
Codec Priority 5	Default: G.726-16；Codec Priority 5.
Codec Priority 6	Default: G.726-24；Codec Priority 6.
Codec Priority 7	Default: G.726-32；Codec Priority 7.
Codec Priority 8	Default: G.726-40；Codec Priority 8.
Codec Priority 9	Default: GSM；Codec Priority 9.
RTP Packet Length	Provides RTP Packet Length information.

G.711 & G.729	Default: 20 ms ; G.711 & G.729 Packet length. Provides 10ms , 20ms , 30ms , 40ms , 50ms , 60ms , 70ms , 80ms , 90ms mode.
G.723	Default: 30 ms ; G.723 Packet Length. Provides 30ms , 60ms , 90ms mode.
G.723 5.3K	Provide G.723 5.3K information.
Voice VAD	Default: Off ; G.723 5.3K function. When setting ON, 5.3K function will be active. Provides ON and OFF mode.
Voice VAD	Provide Voice VAD information.
Voice VAD	Default: OFF. When setting ON, (Voice Active Detection. VAD) will be active, provides ON and OFF mode.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 2: With iLBC function

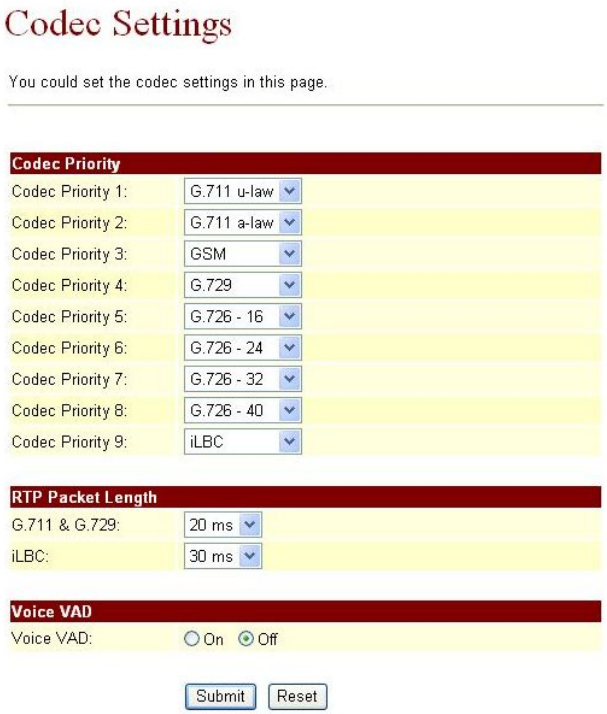


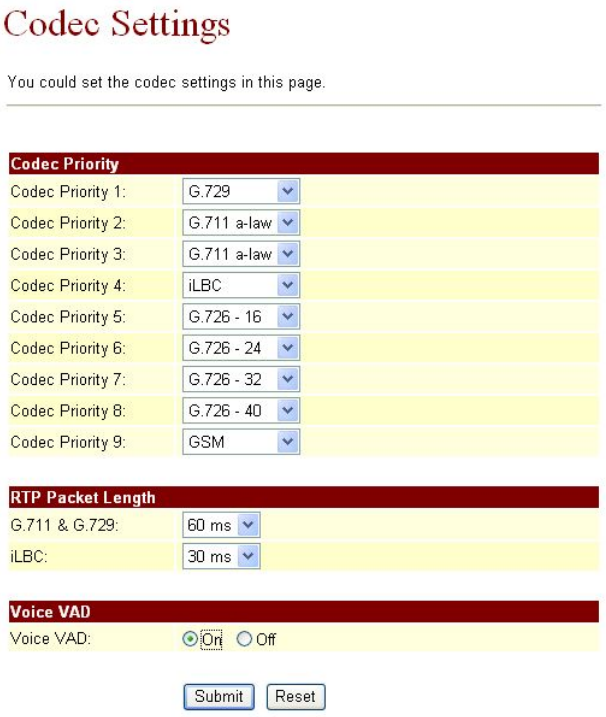
Figure 2

Codec Priority	Provide the Codec Priority.
Codec Priority 1	Default: G.711 u-law ; Codec Priority 1. Provides No used , G.711u-law , G.711a-law , G.279 , G.726–16 , G.726–24 , G.726–32 , G.726–40 , iLBC mode.
Codec Priority 2	Default: G.711a-law ; Codec Priority 2.
Codec Priority 3	Default: G.729 ; Codec Priority 4.
Codec Priority 4	Default: G.726-16 ; Codec Priority 5.
Codec Priority 5	Default: G.726-24 ; Codec Priority 6.
Codec Priority 6	Default: G.726-32 ; Codec Priority 7.
Codec Priority 7	Default: G.726-40 ; Codec Priority 8.
Codec Priority 8	Default: iLBC ; Codec Priority 9.
RTP Packet Length	Provides RTP Packet Length information.

G.711 & G.729	Default: 20 ms ; G.711 & G.729 Packet Length .Provides 10ms , 20ms , 30ms , 40ms , 50ms , 60ms , 70ms , 80ms , 90ms mode.
iLBC	Default: 30 ms ; iLBC Packet Length; provides 20ms and 30ms mode.
Voice VAD	Provide Voice VAD information.
Voice VAD	Default: OFF. When setting ON, (Voice Active Detection. VAD) will be active, provides ON and OFF mode.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

7.3.3 Operate Instruction

Step 1: On the main page, select [SIP Settings→ Code Settings], enter [Code Settings] page, after revising the information (e.g.: Codec Priority 1: G.729 , Priority2: G.711a-law , Priority 3: G.711ulaw , Priority 4: iLBC , Priority 5: G.726-16 , Priority 6: G.726-24 , Priority 7: G.726 32 , Priority 8: G.726 40 , Priority 9:G.711 & G.279: 60ms , iLBC: 30ms , Voice VAD: on) (See Figure 1), click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: After rebooting, and call to equipment, the new Codec mode will be adopted.

7.4.1 Codec ID Settings

7.4.1 Function

Codec ID Setting provides G726，RFC2833，iLBC etc. Type ID information.

7.4.2 Instruction

Figure 1: Without iLBC function

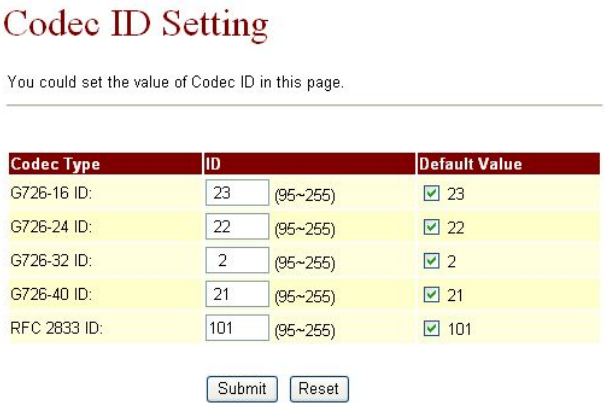


Figure 1

Codec Type	Display the value of Codec ID information. Provides G726-16，G726-24，G726-32，G726-40，RFC2833，iLBC information.
G726-16 ID	Display G726-16 ID information.
ID	Display the current ID: 23. When changing the ID, please close (Defaul Value) column. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	23.
G726-24 ID	Display G726-24 information.
ID	Default: 22. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	97.
G726-32 ID	Display G726-32 information.
ID	Default: 2. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	23.
G726-40 ID	Display G726-40 information.
ID	Default: 21. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	21.
RFC 2833 ID	Display RFC 2833 information.
ID	Default: 101. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	101.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 2: With iLBC function

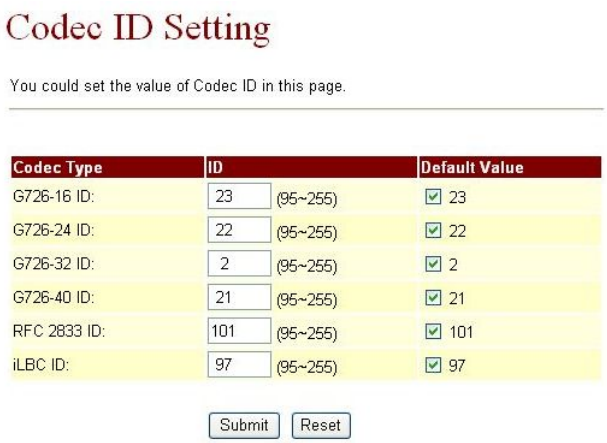
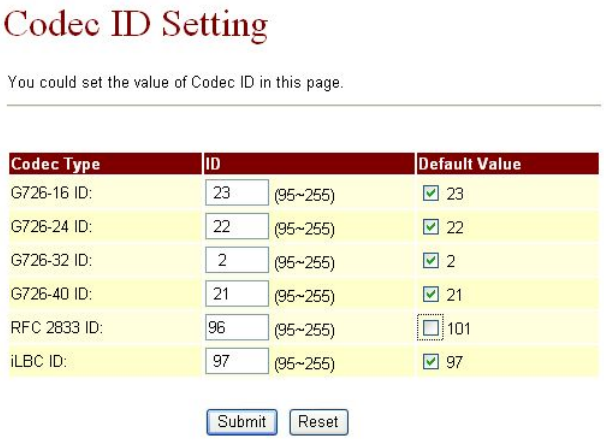


Figure 2

Codec Type	Display the value of Codec ID information. Provides G726-16，G726-24，G726-32，G726-40，RFC2833，iLBC information.
G726-16 ID	Display G726-16 ID information.
ID	Display the current ID: 23. When changing the ID, please close (Defaul Value) column. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	23.
G726-24 ID	Display G726-24 information.
ID	Default: 22. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	97.
G726-32 ID	Display G726-32 information.
ID	Default: 2. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	23.
G726-40 ID	Display G726-40 information.
ID	Default: 21. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	21.
RFC 2833 ID	Display RFC 2833 information.
ID	Default: 101. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	101.
iLBC ID	Display iLBC information.
ID	Default: 97. Only numerals are accepted. Data range (95~255). Maximum length: 3 bytes.
Default Value	97.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

7.4.3 Operate Instruction

Step 1: On the main page, select [SIP Settings→Codec ID Settings], enter [Codec ID Settings] page, after revising the information (e.g.: RFC 2833 ID Default Value: Disable，ID: 96) (See Figure 1) click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

7.5.1 DTMF Settings

7.5.1 Function

DTMF Setting provides three kinds of DTMF modes: RFC2833，In Band DTFM，Send DTMF SIP Info.

7.5.2 Instruction

Figure DTMF Setting

RFC2833	Default: RFC 2833；Transfer DTMF mode information. Provides RFC2833.
In band DTMF	Transfer DTMF mode information. Provides In Band.
Send DTMF SIP Info	Transfer DTMF mode information. Provides SIP Info.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

7.5.3 Operate Instruction

Example1: RFC2833

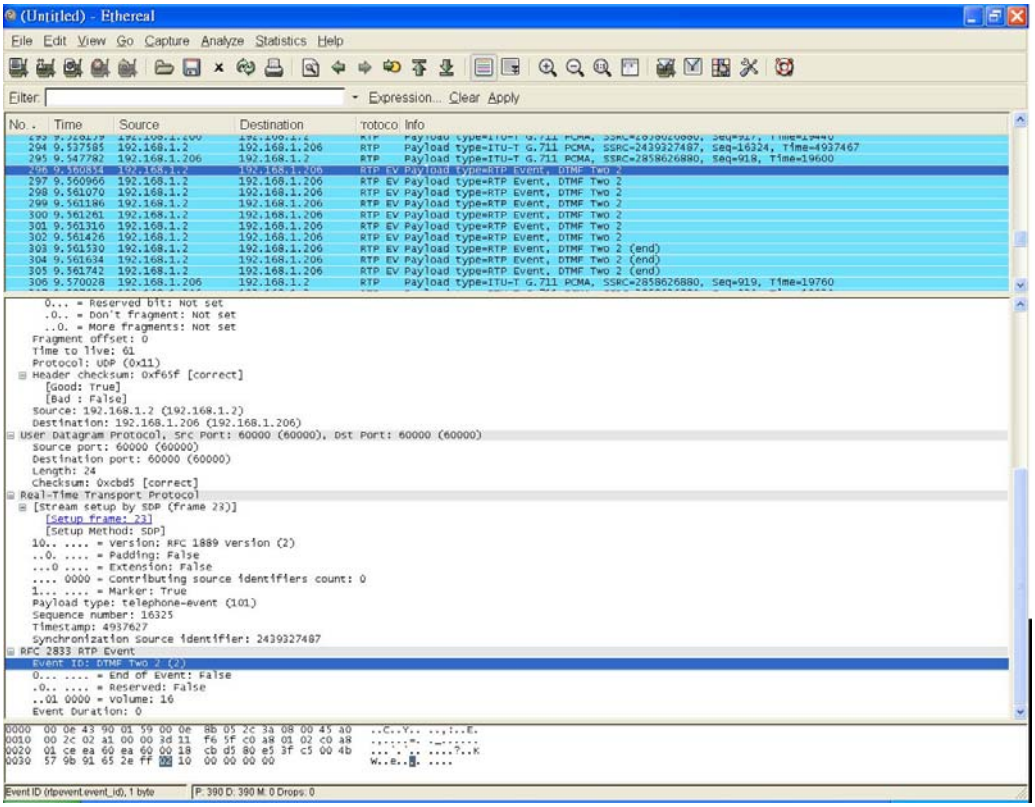
Step 1: On the main page, select [SIP Settings→DTMF Settings], enter [DTMF Setting] page, after revising the information (e.g.: RFC2833) (See Figure 1), click [Submit].

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step: 4 After rebooting, call to another equipment, and press DTMF (e.g.:222); please check [Ethereal] Packet and [RTP EV，Payload Type=RTP Event，DTMF xx] column (See Figure 2)



(Figure 2)

Example2: InBand DTMF

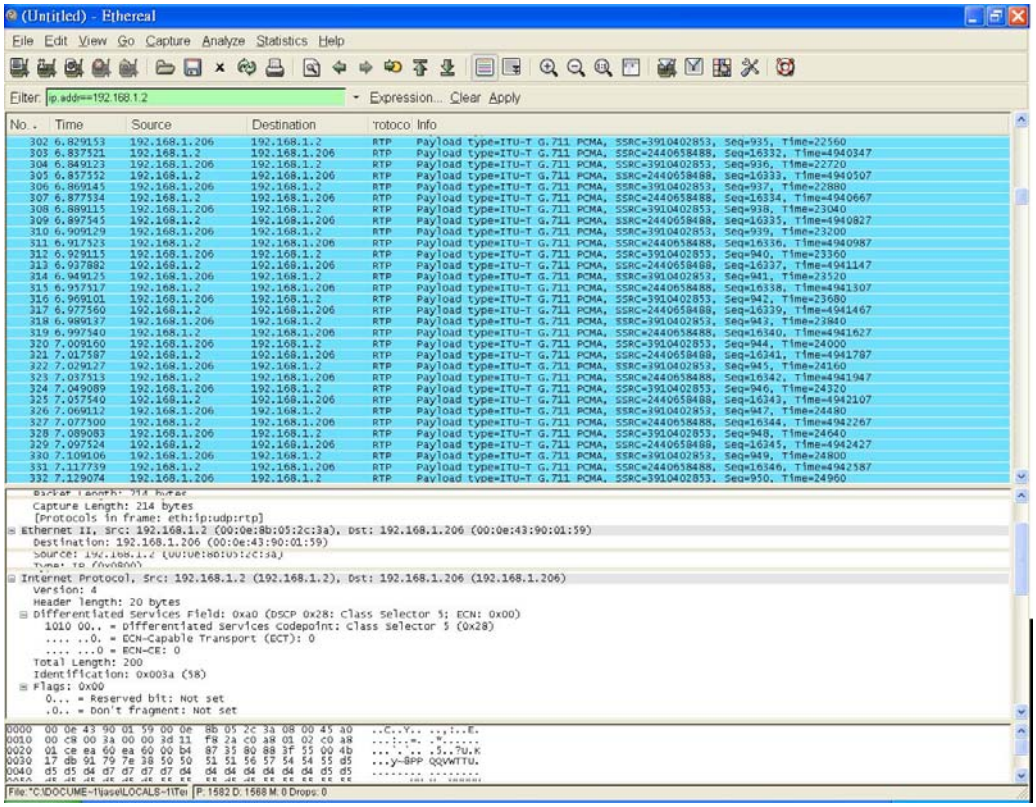
Step 1: On the main page, select [SIP Settings→DTMF Settings], enter [DTMF Setting] page, after revising the information (e.g.: InBand DTMF) (See Figure 3), click [Submit].

(Figure 3)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

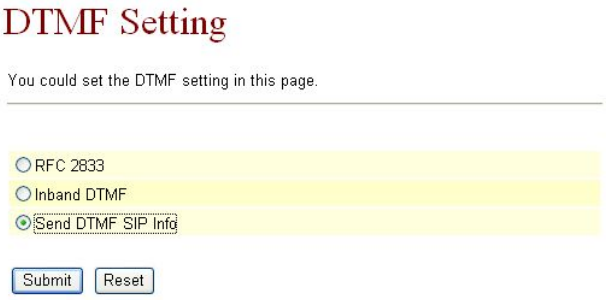
Step 4: After rebooting, call to another equipment, press DTMF (e.g.: 222); please check [Ethereal] Packet; because of [In-Band] mode, nothing will be found in the Packet (Figure 4).



(Figure 4)

Example3: Send DTMF SIP Info

Step 1: On the main page, select [SIP Settings→DTMF Settings], enter [DTMF Setting] page, after revising the information (e.g.: Send DTMF SIP info) (See Figure 5), click [Submit].

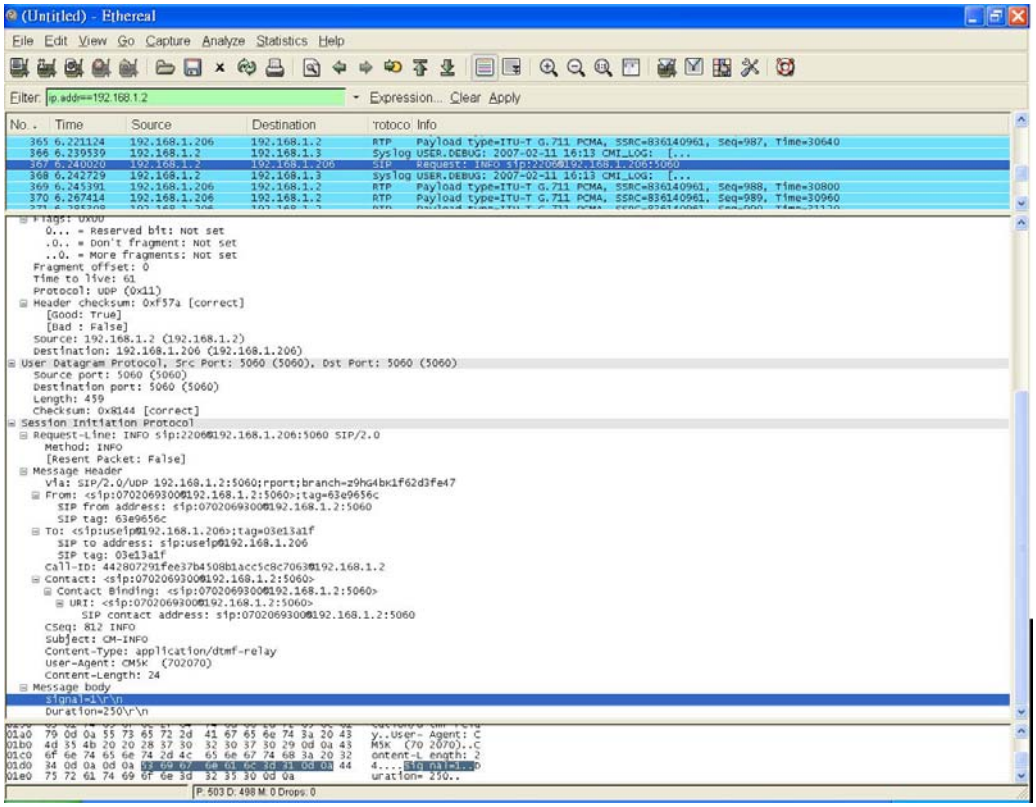


(Figure 5)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step 4: After rebooting, call to another equipment, and press DTMF (e.g.:111); please check [Ethereal] Packet and [SIP，Request: INFO SIP: xxxx] column (See Figure 6)


(Untitled) - Ethereal
File Edit View Go Capture Analyze Statistics Help
Filter: ip.addr==192.168.1.2
Expression... Clear Apply
No. Time Source Destination Protocol Info
365 6.221124 192.168.1.206 192.168.1.2 RTP Payload type=ITU-T G.711 PCMA, SSRC=836140961, Seq=987, Time=30640
366 6.239539 192.168.1.2 192.168.1.3 Syslog USER.DEBUG: 2007-02-11 16:13 CMI_LOG: [...
367 6.241020 192.168.1.2 192.168.1.206 SIP Request: INFO sip:2206@192.168.1.206:5060
368 6.242729 192.168.1.2 192.168.1.3 Syslog USER.DEBUG: 2007-02-11 16:13 CMI_LOG: [...
369 6.245391 192.168.1.206 192.168.1.2 RTP Payload type=ITU-T G.711 PCMA, SSRC=836140961, Seq=988, Time=30800
370 6.267414 192.168.1.206 192.168.1.2 RTP Payload type=ITU-T G.711 PCMA, SSRC=836140961, Seq=989, Time=30960
Flags: 0x00
0... = Reserved bit: Not set
.0.. = Don't fragment: Not set
..0. = More fragments: Not set
Fragment offset: 0
Time to live: 61
Protocol: UDP (0x11)
Header checksum: 0xf57a [correct]
[Good: True]
[Bad : False]
Source: 192.168.1.2 (192.168.1.2)
Destination: 192.168.1.206 (192.168.1.206)
User Datagram Protocol, Src Port: 5060 (5060), Dst Port: 5060 (5060)
Source port: 5060 (5060)
Destination port: 5060 (5060)
Length: 459
Checksum: 0x8144 [correct]
Session Initiation Protocol
Request-Line: INFO sip:2206@192.168.1.206:5060 SIP/2.0
Method: INFO
[Resent Packet: False]
Message Header
Via: SIP/2.0/UDP 192.168.1.2:5060;rport;branch=z9hG4bk1f62d3fe47
From: <sip:070206930060192.168.1.2:5060>;tag=63e9656c
SIP from address: sip:070206930060192.168.1.2:5060
SIP tag: 63e9656c
To: <sip:use1p@192.168.1.206>;tag=03e13a1f
SIP to address: sip:use1p@192.168.1.206
SIP tag: 03e13a1f
Call-ID: 442807291fee37b4508b1acc5c8c70630192.168.1.2
Contact: <sip:070206930060192.168.1.2:5060>
Contact Binding: <sip:070206930060192.168.1.2:5060>
URI: <sip:070206930060192.168.1.2:5060>
SIP contact address: sip:070206930060192.168.1.2:5060
CSeq: 812 INFO
Subject: CM-INFO
Content-Type: application/dtmf-relay
User-Agent: CM5K (702070)
Content-Length: 24
Message body
Signal=1\r\n
Duration=250\r\n
01a0 79 0d 0a 55 73 65 72 2d 41 67 65 6e 74 3a 20 43 y..User- Agent: C
01b0 4d 35 4b 20 20 28 37 30 32 30 37 30 29 0d 0a 43 M5K (70 2070)..C
01c0 6f 6e 74 65 6e 74 2d 4c 65 6e 67 74 68 3a 20 32 ontent-L ength: 2
01d0 34 0d 0a 0d 0a 53 69 67 6e 61 6c 3d 31 0d 0a 44 4....Sig nal=1..D
01e0 75 72 61 74 69 6f 6e 3d 32 35 30 0d 0a uration= 250..
P: 503 D: 498 M: 0 Drops: 0

(Figure 6)

7.6.1 RPort Settings

7.6.1 Function

RPort Setting provides RPort Setting.

7.6.2 Instruction

Figure 1: FXS or Phone equipment

Figure 1

RPort	Default: O. When setting ON, RPort settings will be active. Provides ON and OFF modes
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 2: 2FXS equipment

Figure 2

RPort of Phone 1	Default: On. When setting ON, RPort settings will be active. Provides ON and OFF modes
RPort of Phone 2	Default: On. When setting ON, RPort settings will be active. Provides ON and OFF modes
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

7.6.3 Operate Instruction

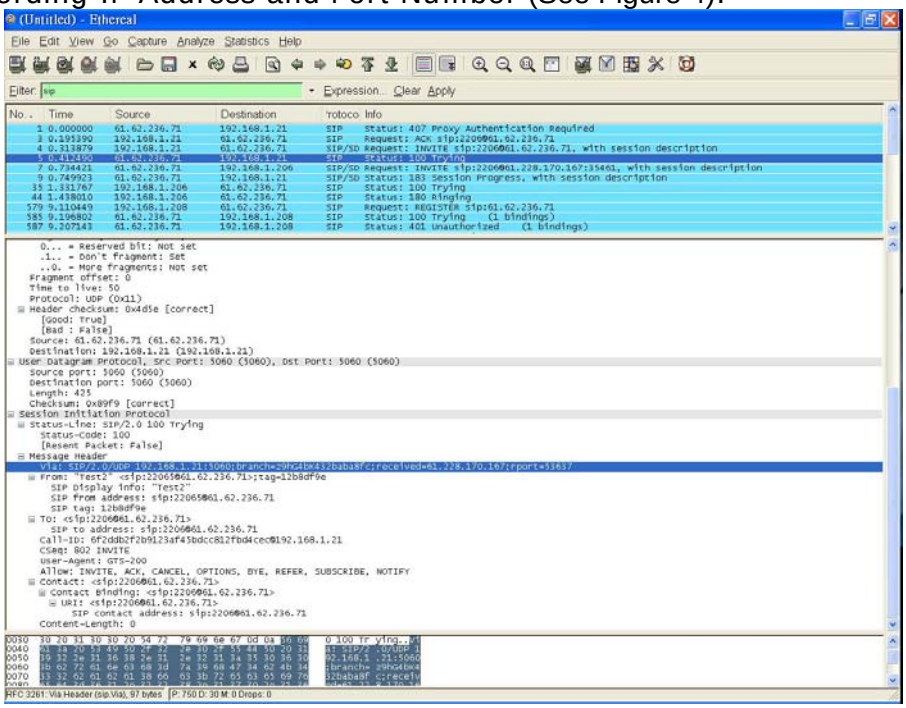
Step 1: On the main page, select [SIP Settings→RPort Settings], enter [RPort Setting] page, after revising the information (e.g.: RPort: on) (See Figure 3), click [Submit].

(Figure 3)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step: 4 After rebooting, and call to another equipment, please check [Ethereal] Packet and [Message Hearer] which tag with "received" and "rport" in "Via" column, that is used for recording IP Address and Port Number (See Figure 4).



(Figure 4)

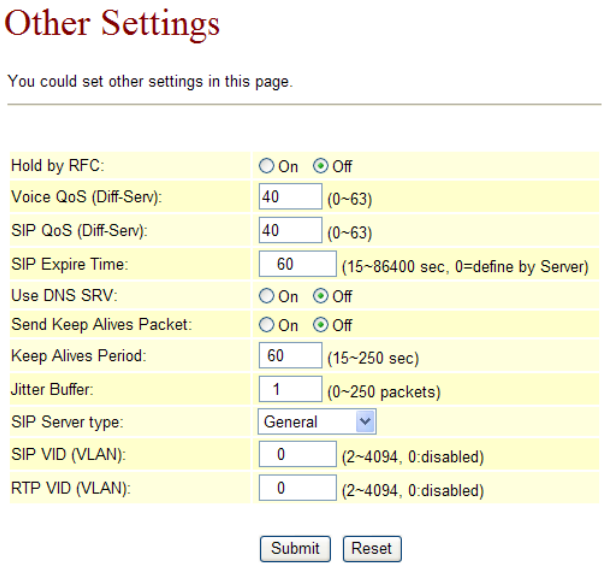
7.7.1 Other Settings

7.7.1 Function

Other Settings provide the application that is related with SIP, including Hold by RFC，QoS，SIP Expire Time，Use DNS SRV etc..

7.7.2 Instruction

Figure 1: FXS or Phone equipment

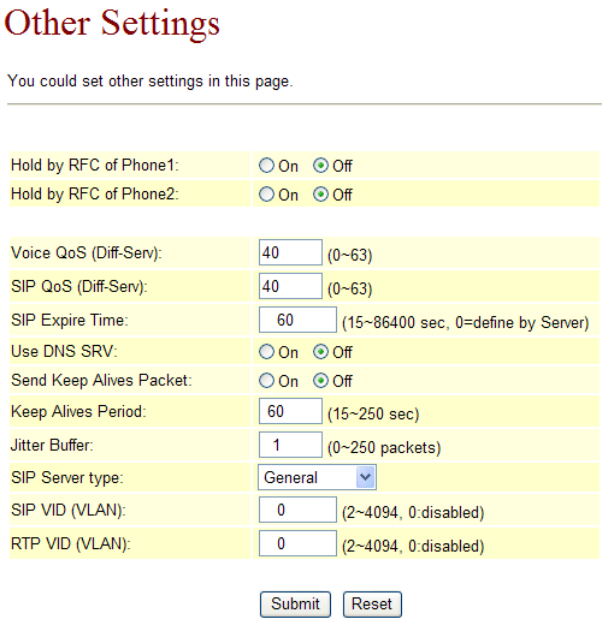


(Figure 1)

Hold by RFC	Default: Off. When setting ON, Hold by RFC function will be active. Provides ON and OFF mode.
Voice QoS (Diff-Serv)	Default: 40; Only numerals are accepted. Data range: (0~63). Maximum length is 2 bytes.
SIP QoS (Diff-Serv)	Default: 40；Only numerals are accepted. Data range: (0~63). Maximum length is 2 bytes.
SIP Expire Time	Default: 60 ; Only numerals are accepted. Data range: (30~86400 sec). Maximum length is 5 bytes.
Use DNS SRV	When setting ON, DNS SRV will be used to search host information. Provides ON and OFF mode.
Keep Alives Period	????
Jitter Buffer	????
SIP Server Type	Default to General (normal); setup registred SIP server type. General (normal), Asterisk, BroadWorks, Nortel,Xener, Vodtel.
SIP VID (VLAN)	Default to 0; SIP VLAN ID function. To setup SIP VLAN ID function; Only numbers can be inputted. The segment for information setup is (0~4094), number length is 2 digits. 0: default to Off/inactivated.
RTP VID (VLAN)	Default to 0; RTP VLAN ID function. To setup SIP VLAN ID function; only numbers can be inputted. The segment for information setup is (0~4094), number length is 2 digits. 0: default to Off/inactivated.
Submit [Button]	Submit the change.

Reset [Button]	Clear the change.

Figure 2: 2FXS equipment



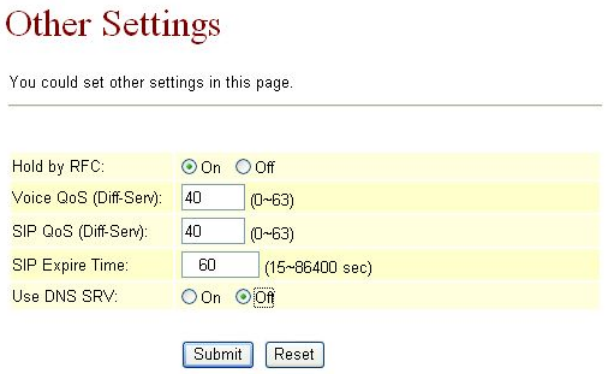
(Figure 2)

Hold by RFC of Phone1	Default: Off. When setting ON, Hold by RFC of phone 1 will be active. Provides ON and OFF modes.
Hold by RFC of Phone2	Default: Off. When setting ON, Hold by RFC of phone 2 will be active. Provides ON and OFF modes.
Voice QoS (Diff-Serv)	Default: 40；Only numerals are accepted. Data range: (0~63). Maximum length is 2 bytes.
SIP QoS (Diff-Serv)	Default: 40；Only numerals are accepted. Data range: (0~63). Maximum length is 2 bytes.
SIP Expire Time	Default: 60 ; Only numerals are accepted. Data range: (30~86400 sec). Maximum length is 5 bytes.
Use DNS SRV	When setting ON, DNS SRV will be used to search host information. Provides ON and OFF mode.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

7.7.3 Operate Instruction

Example1: Start Hold by RFC

Step 1: On the main page, select [SIP Settings→Other Settings], enter [Other Settings] page, after revising the information (e.g.: Hold by RFC: on) (See Figure 1), click [Submit].

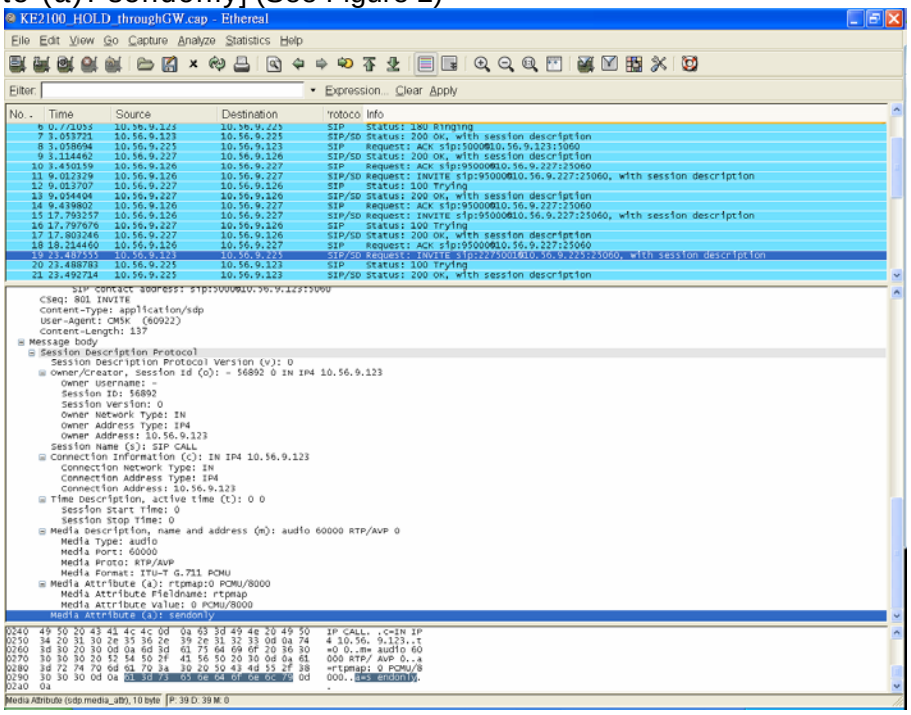


(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

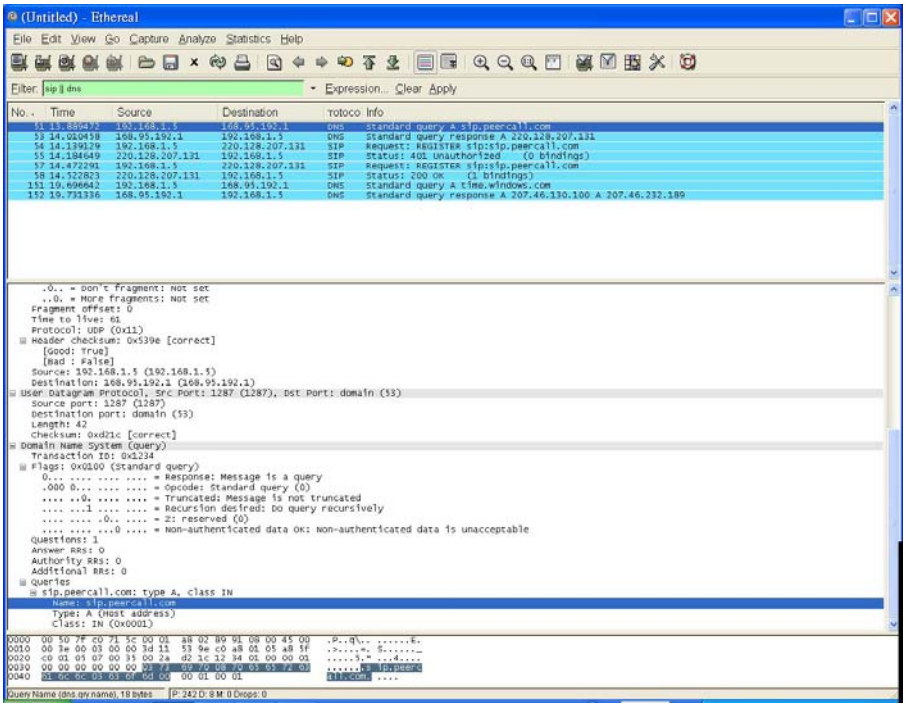
Step 4: After rebooting, and call to another equipment, press [Flash], hold this call. Hold function change to "sendonly" even. Please refer to the following picture, column [[Media Attribute (a): sendonly] (See Figure 2)



(Figure 2)

Example2: Without Use DNS SRV

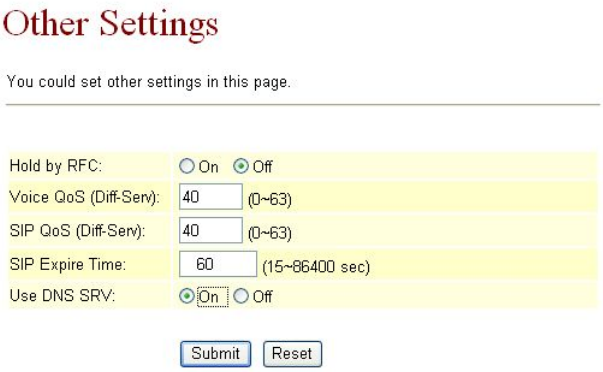
Step 1: Please check [Ethereal] Packet and [Standard query response A 220.128.207.131] Packet information (See Figure 3)



(Figure 3)

Example3: Using User DNS SRV

Step 1: On the main page, select [SIP Settings→Other Settings], enter [Other Settings] page, after revising the information (e.g.: Used DNS SRV: on) (See Figure 4), click [Submit].

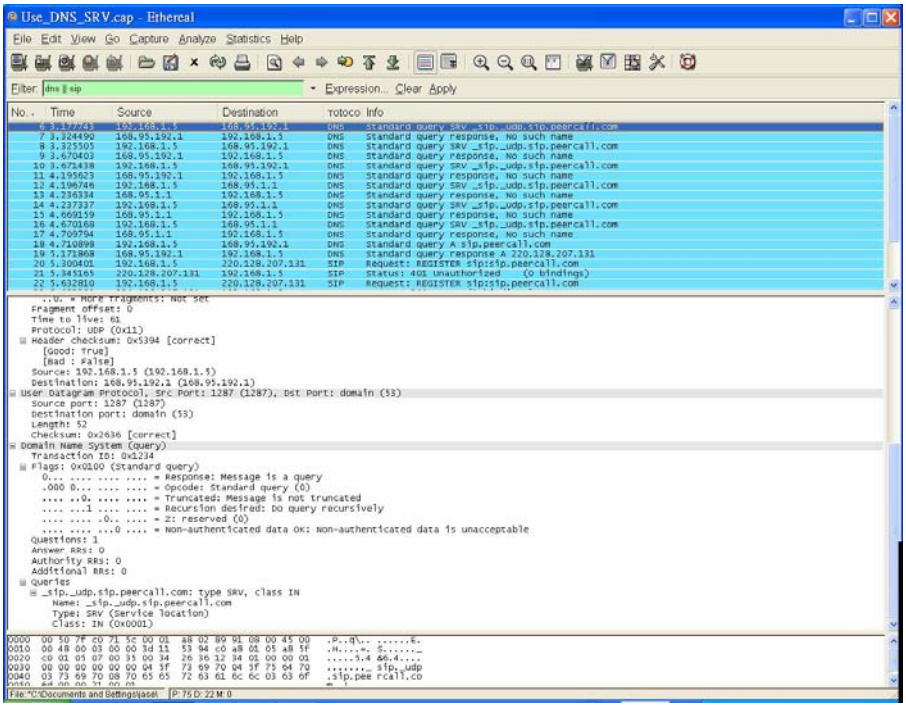


(Figure 4)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step 4: Please check [Ethereal] and [Standard query] column, [Standard query SRV_sip_upd.sip.peercall.com] information will be found (See Figure 5)


Use_DNS_SRV.cap - Ethereal
File Edit View Go Capture Analyze Statistics Help
Filter: dns || sip
Expression... Clear Apply
No. Time Source Destination Protocol Info
1 0.000000 192.168.1.5 168.95.192.1 DNS Standard query SRV _sip._udp.sip.peercall.com
2 0.124490 168.95.192.1 192.168.1.5 DNS Standard query response, No such name
3 0.325505 192.168.1.5 168.95.192.1 DNS Standard query SRV _sip._udp.sip.peercall.com
4 0.670403 168.95.192.1 192.168.1.5 DNS Standard query response, No such name
5 3.671438 192.168.1.5 168.95.192.1 DNS Standard query SRV _sip._udp.sip.peercall.com
6 4.195623 168.95.192.1 192.168.1.5 DNS Standard query response, No such name
7 4.196746 192.168.1.5 168.95.1.1 DNS Standard query SRV _sip._udp.sip.peercall.com
8 4.236334 168.95.1.1 192.168.1.5 DNS Standard query response, No such name
9 4.237337 192.168.1.5 168.95.1.1 DNS Standard query SRV _sip._udp.sip.peercall.com
10 4.669159 168.95.1.1 192.168.1.5 DNS Standard query response, No such name
11 4.670168 192.168.1.5 168.95.1.1 DNS Standard query SRV _sip._udp.sip.peercall.com
12 4.709794 168.95.1.1 192.168.1.5 DNS Standard query response, No such name
13 4.710898 192.168.1.5 168.95.192.1 DNS Standard query A sip.peercall.com
14 5.171868 168.95.192.1 192.168.1.5 DNS Standard query response A 220.128.207.131
15 5.300401 192.168.1.5 220.128.207.131 SIP Request: REGISTER sip:sip.peercall.com
16 5.345165 220.128.207.131 192.168.1.5 SIP Status: 401 Unauthorized (0 bindings)
17 5.632810 192.168.1.5 220.128.207.131 SIP Request: REGISTER sip:sip.peercall.com
...0. = More fragments: Not set
Fragment offset: 0
Time to live: 61
Protocol: UDP (0x11)
Header checksum: 0x5394 [correct]
[Good: True]
[Bad : False]
Source: 192.168.1.5 (192.168.1.5)
Destination: 168.95.192.1 (168.95.192.1)
User Datagram Protocol, Src Port: 1287 (1287), Dst Port: domain (53)
Source port: 1287 (1287)
Destination port: domain (53)
Length: 52
Checksum: 0x2636 [correct]
Domain Name System (query)
Transaction ID: 0x1234
Flags: 0x0100 (Standard query)
0... .... = Response: Message is a query
.000 0... .... = Opcode: Standard query (0)
.... ..0. .... = Truncated: Message is not truncated
....1 .... = Recursion desired: Do query recursively
.... .0.. .... = Z: reserved (0)
....0 .... = Non-authenticated data OK: Non-authenticated data is unacceptable
Questions: 1
Answer RRs: 0
Authority RRs: 0
Additional RRs: 0
Queries
_sip._udp.sip.peercall.com: type SRV, class IN
Name: _sip._udp.sip.peercall.com
Type: SRV (Service location)
Class: IN (0x0001)
0000 00 50 7f c0 71 5c 00 01 a8 02 89 91 08 00 45 00 .P..q\.. ......E.
0010 00 48 00 03 00 00 3d 11 53 94 c0 a8 01 05 a8 5f .H....=. S......_
0020 c0 01 05 07 00 35 00 34 26 36 12 34 01 00 00 01 .....5.4 &6.4....
0030 00 00 00 00 00 00 04 5f 73 69 70 04 5f 75 64 70 ...._ sip._udp
0040 03 73 69 70 08 70 65 65 72 63 61 6c 6c 03 63 6f .sip.pee rcall.co

(Figure 5)

Chapter 8.1 NAT Transfer

Provides STUN Settings.

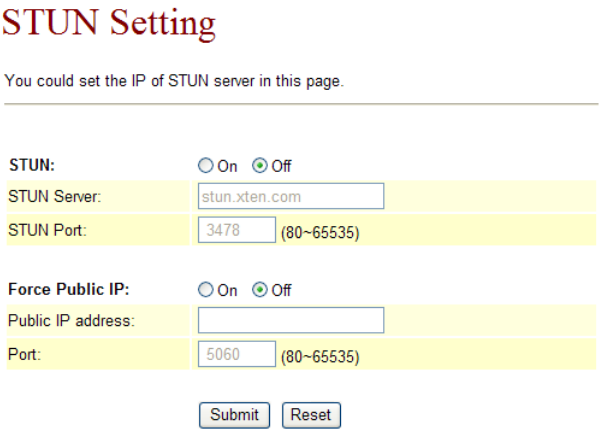
8.1.1 STUN Settings

8.1.1 Function

STUN Settings could set the IP of STUN Server information.

8.1.2 Instruction

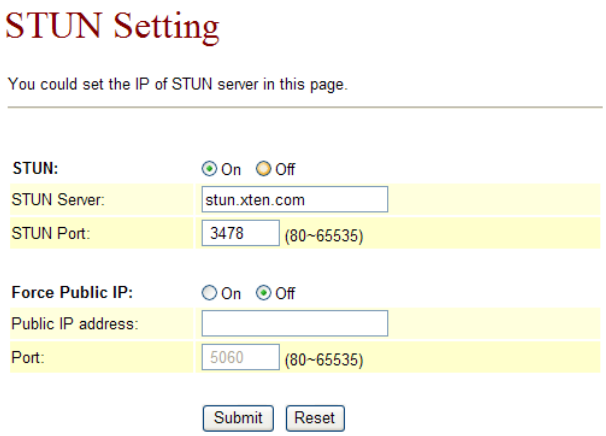
Figure STUN Setting



STUN	Default: Off. When setting ON, STUN will be active.
STUN Server	Default: stun.xten.com； Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx；Maximum length: 63 bytes.
STUN Port	Default: 3478；Data range: (1024~65535)；Maximum length: 5 bytes.
Force Public IP	Default to Off (inactivated); activate Force Public IP function. When the setup is On(activated), Force Public IP function can be implemented. Provide On(activate) and Off(inactivated) mode.
Public IP address	Setup Public IP address. Data input format is xxx.xxx.xxx.xxx; data length is 63 digits.
Port	Default Port number 5060. Setup public port number. The segment for data setup is (80~65535); data length is 5 digits.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

8.1.3 Operate Instruction

Step 1: On the main page, select [NAT Trans.→ STUN Settings], enter [STUN Setting] page, after revising the information (e.g.: STUN: On，STUN Server: stun.xten.com，SUTN Port: 3478) (See Figure 1), click [Submit].

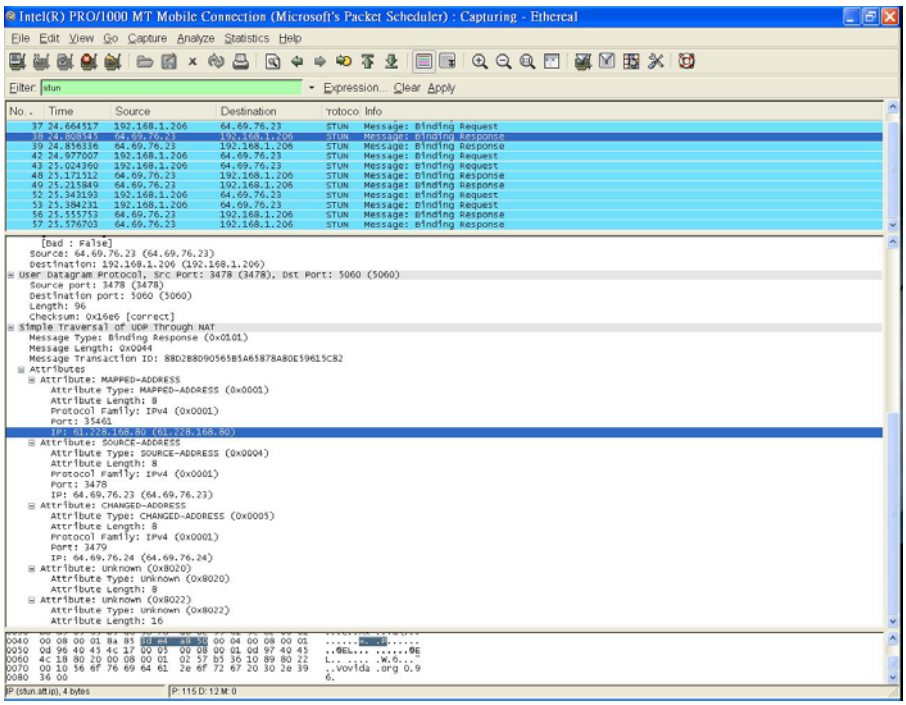


(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step 4: Please check [Ethereal] Packet, information that sent to STUN Server will be seen (See Figure 2)



(Figure 2)

Chapter 9.1 Others

Provide Auto Config.，FXS/ FXO/ FXS & FXO Port Setting，MAC Clone Setting，Tones Settings，Advanced Settings information.

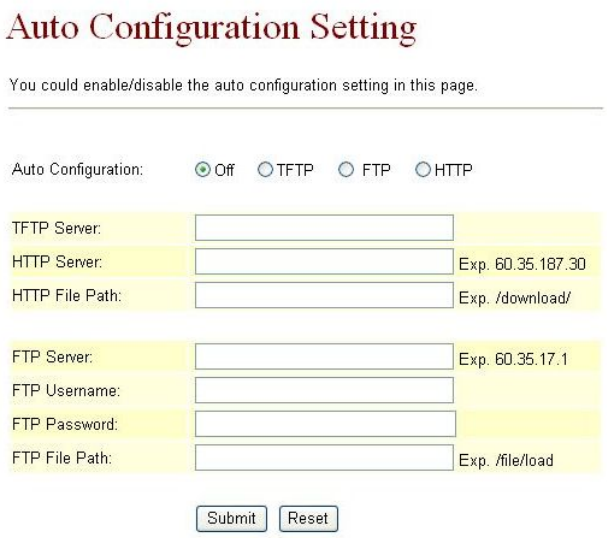
9.1.1 Auto Config

9.1.1 Function

Auto Configuration Setting allows connecting with the host computer and down loading related information and renew the information by TFTP, FTP or HTTP modes.

9.1.2 Instruction

Figure Auto Configuration Setting

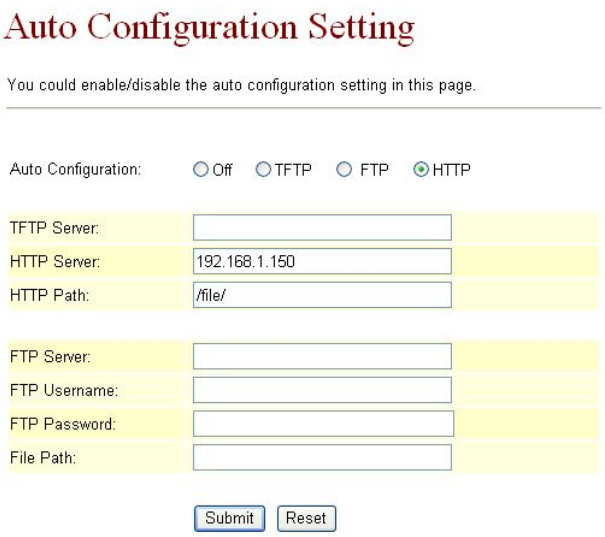


Auto Configuration	Default: Off ; When TFTP is setting ON, the version will be renewed automatically by using TFTP, FTP pr HTTP modes.
TFTP Server	Input TFTP Address. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx; Maximum length: 63 bytes.
HTTP Server	Input HTTP Address. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx; Maximum length: 63 bytes.
HTTP Path	Input HTTP Path E.g.: 123/; can be numerals or strings. Maximum length: 63 bytes.
FTP Server	Input FTP Address. Can be IP Address or Domain Name. Format: xxx.xxx.xxx.xxx; Maximum length: 63 bytes.
FTP Username	Input FTP Username. Can be numerals or strings. Maximum length: 63 bytes.
FTP Password	Input FTP Password. Can be numerals or strings. Maximum length: 63 bytes.
File Path	Input File Path. E.g.: 123/; can be numerals or strings. Maximum length: 63 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

9.1.3 Operate Instruction

Example1: Adopt HTTP to renew. (Please build up Auto Configuration file.)

Step 1: On the main page, select [Others→Auto Config], enter [Auto Configuration Setting] page, after revising the information (e.g.: Auto Configuration: HTTP，HTTP Server: 192.168.1.50，HTTP Path: /file/) (See Figure 1), click [Submit] and save change.

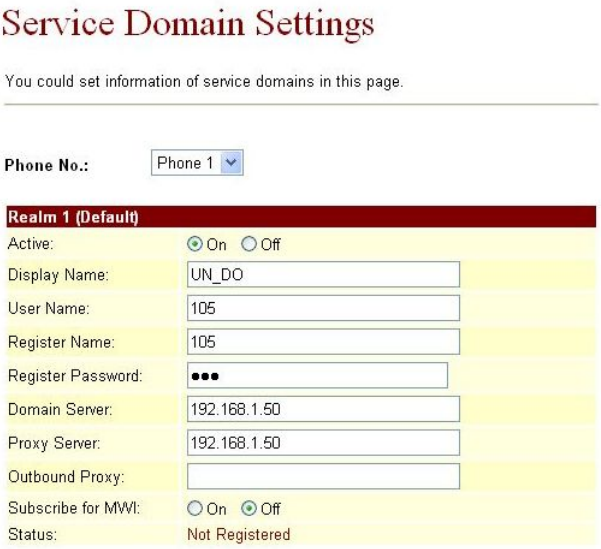


(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

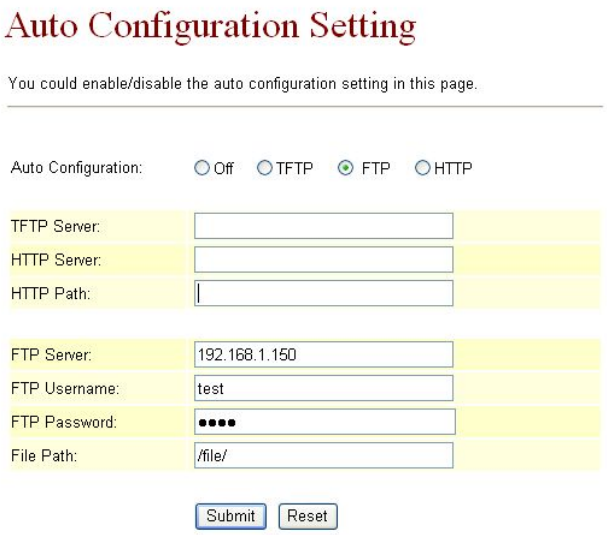
Step 4: After rebooting, it will connect to the file in HTTP Server, and searching the fit information. After renew all information, the system will be rebooting again. Then please login to check it (See Figure 2).



(Figure 2)

Example2: Using FTP to renew. **(Please build up Auto Configuration file.)**

Step 1: On the main page, select [Others→Auto Config], enter [Auto Configuration Setting] page, after revising the information (e.g.: Auto Configuration: FTP，FTP Server192.168.1.150，FTP Username: test，FTP Password: test，File Path: /file/) (See Figure 3), click [Submit] and save change.

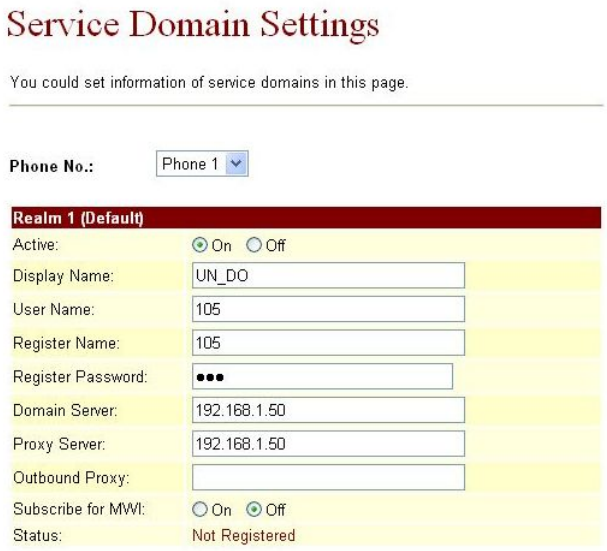


(Figure 3)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step 4: After rebooting, it will connect to the file in FTP Server, and searching the fit information. After renew all information, the system will be rebooting again. Then please login to check it (See Figure 4)



(Figure 4)

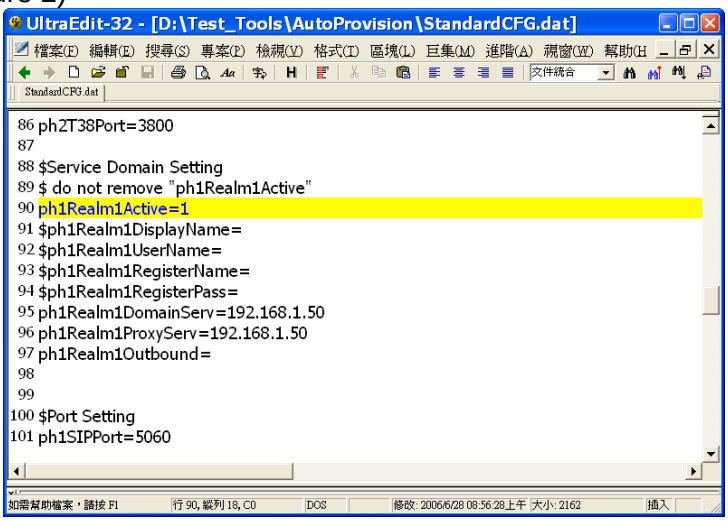
9.1.4 Build Auto Configuration file

Example1: Build one entry encode formation

Step 1: Open file [MACList.txt], input [MAC Address，Display Name，User Name，Register Name，Register Pass] one by one. (E.g.: 00059e812118，UN_DO，105，105，105), then save (See Figure 1)

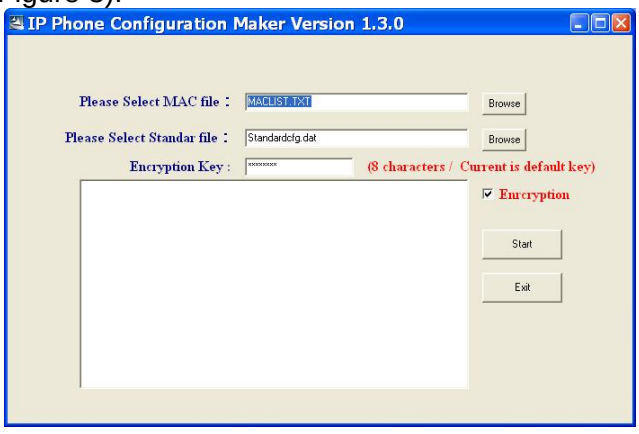
(Figure 1)

Step 2: Open file [StandardCFG.dat], after revising the information, (e.g. ph1Realm1DomainServer= 192.168.1.50，ph1Realm1DomainServer=192.168.1.50), then save (See Figure 2)



(Figure 2)

Step3: Start file [MakeMACF.exe], select [Please Select MAC File: MACList.txt，Please Select Standard File: StandardCFG.dat，Encryption Key: Hello123 (default)，choose: Encryption] press [Start] (See Figure 3).

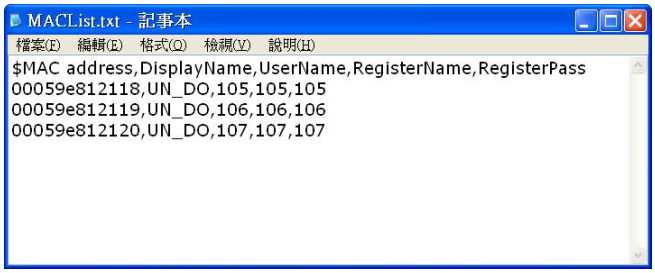


(Figure 3)

Step 4: The encoded file: [00059e812118.dat] will be found, please place it to the appointed path in [HTTP or FTP or TFTP Host Computer]

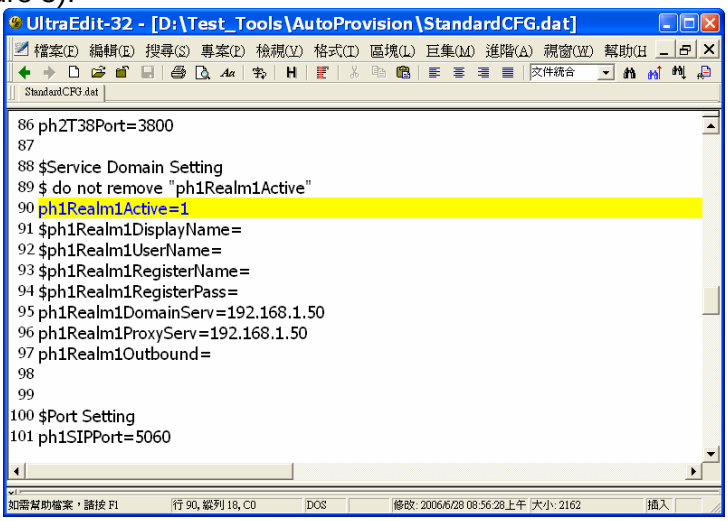
Example2: Build lots entries encode formation

Step1: Open file [MACList.txt], input [MAC Address，Display Name，User Name，Register Name，Register Pass](e.g.: 00059e812118，UN_DO，105，105，105，00059e812119，UN_DO，106，106，106，00059e812120，UN_DO，107，107，107) one by one (See Figure 4).



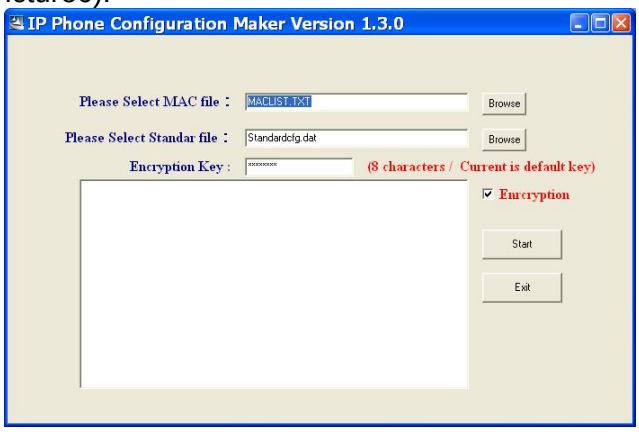
(Figure 4)

Step2: Open file [StandardCFG.dat], after revising the information (E.g.: ph1Realm1DomainServer=192.168.1.50，ph1Realm1DomainServer=192.168.1.50), then save (See Figure 5).



(Figure 5)

Step3: Start file [MakeMACF.exe], select [Please Select MAC File: MACList.txt，Please Select Standard File: StandardCFG.dat，Encryption Key: Hello123 (default)，select Encryption], press Start. (e.g.:Picture6).



(Figure 6)

Step4: [00059e812118.dat，00059e812119.dat，00059e812120.dat] will be found, please place it to the appointed path in [HTTP or FTP or TFTP Host Computer].

9.2.1 FXS/ FXO & FXS/FXO Port Settings

9.2.1 Function

FXS/ FXO & FXS/ FXO Impedance Setting display the FXS & FXO Impedance of the analog telephone by different countries.

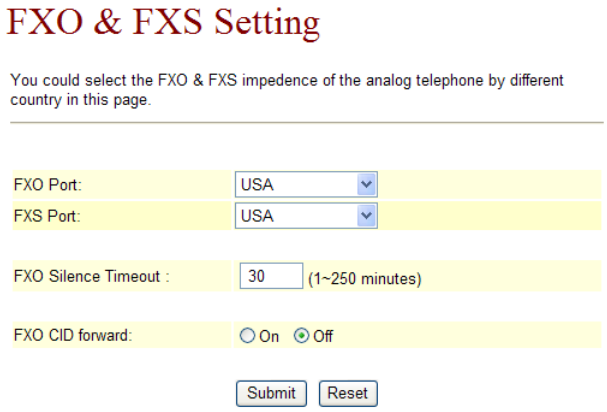
9.2.2 Instruction

Figure 1: FXS equipment

(Figure 1)

FXS Port	Default: USA. To select FXS & FXO Port impedance of the analog telephone by different.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 2: FXO+FXS equipment



(Figure 2)

FXS Port	Default: USA. To select FXS & FXO Port impedance of the analog telephone by different.
FXO Port	Default: USA. To select FXS & FXO Port impedance of the analog telephone by different.
FXO Silence Timeout	Default to 30 minutes; FXO mute time setting. Provide setting for FXO mute time for auto drop off.
FXO CID forward	Default to Off; FXO in coming number switch. When setting is On, the system will be activated from the FXO port to receive the in coming number, and goes to next procedure; Provide On and Off mode. Note: This function must be co-operated with SIP Proxy Server.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

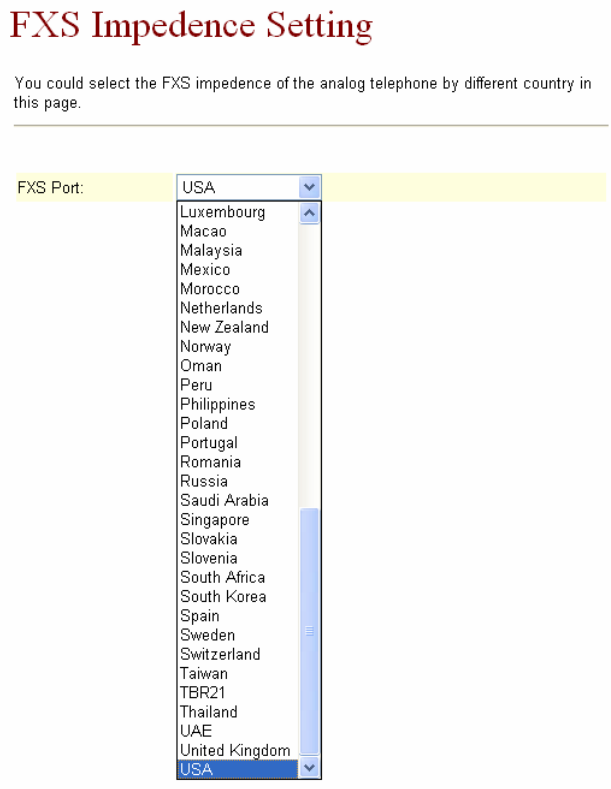
Figure 3: Phone+FXO equipment

(Figure 3)

FXO Port	Default: USA. To select FXS & FXO Port impedance of the analog telephone by different.
FXO Silence Timeout	Default to 30 minutes; FXO mute time setting. Provide setting for FXO mute time for auto drop off.
FXO CID forward	Default to Off; FXO in coming number switch. When setting is On, the system will be activated from the FXO port to receive the in coming number, and goes to next procedure; Provide On and Off mode. Note: This function must be co-operated with SIP Proxy Server.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

9.2.3 Operate Instruction

Step 1: On the main page, select [Others→FXO Settings], enter [FXO Impendence Setting] page, after revising the information (e.g.: FXO Port: Thailand) (Figure 1), click [Submit].



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

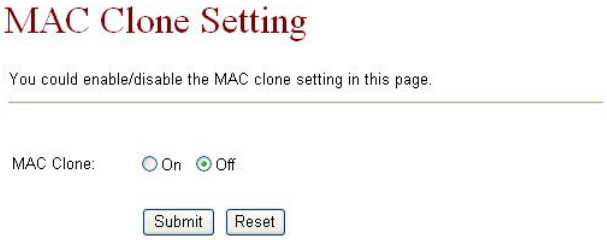
9.3.1 MAC Clone Setting

9.3.1 Function

You could enable / disable the MAC Clone setting.

9.3.2 Instruction

Figure MAC Clone Setting (VoIP Gateway only)

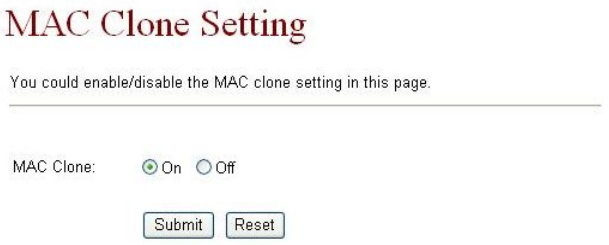


MAC Clone	Default: OFF. When setting ON, Mac Clone function will be active.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

9.3.3 Operate Instruction

Step 1: Please make sure that LAN Mode is NAT Mode, and your PC is connected to LAN Port, and using LAN to enter page: (http://192.168.123.1:9999)

Step 2: On the main page, select [Others→MAC Clone Setting], enter [MAC Clone Setting] page, after revising the information (e.g.: MAC Clone: on) (See Figure 1), click [Submit].



(Figure 1)

Step 3: The following information will be found (See Figure 2) Please click [Submit].

(Figure 2)

Step4: The following information will be found (See Figure 2) Please click [Submit].

(Figure 3)

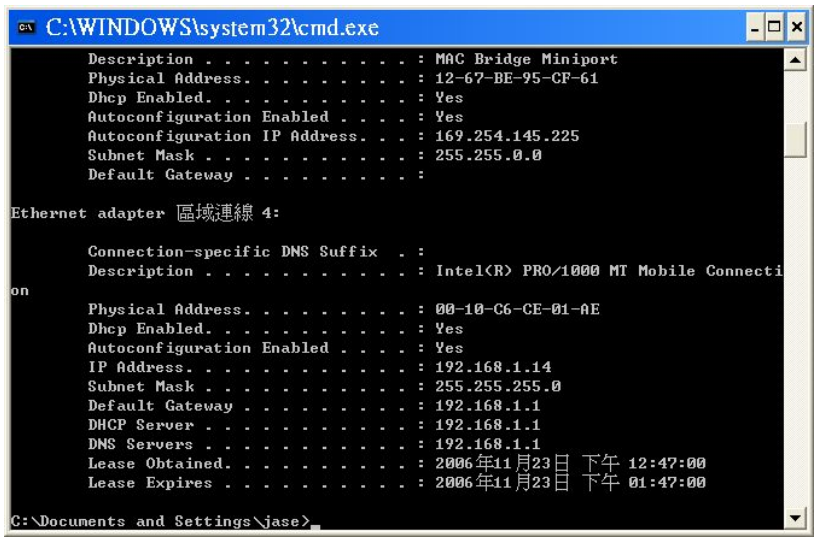
Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the

saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Example7: Enter the main page, select [Network→WAN Settings], please copy your PC's [MAC] Address to WAN Port.

Example8: Your PC's MAC Address is: Physical Address: 00-10-C6-CE-01-AE (See Figure 4).



(Figure 4)

9.3.4 NOTE!

When setting MAC Clone function, make sure that: LAN Mode: NAT Mode. If Bridge Mode is ON, it cannot work.

If you would like to restore, please act (Restore Default Setting).

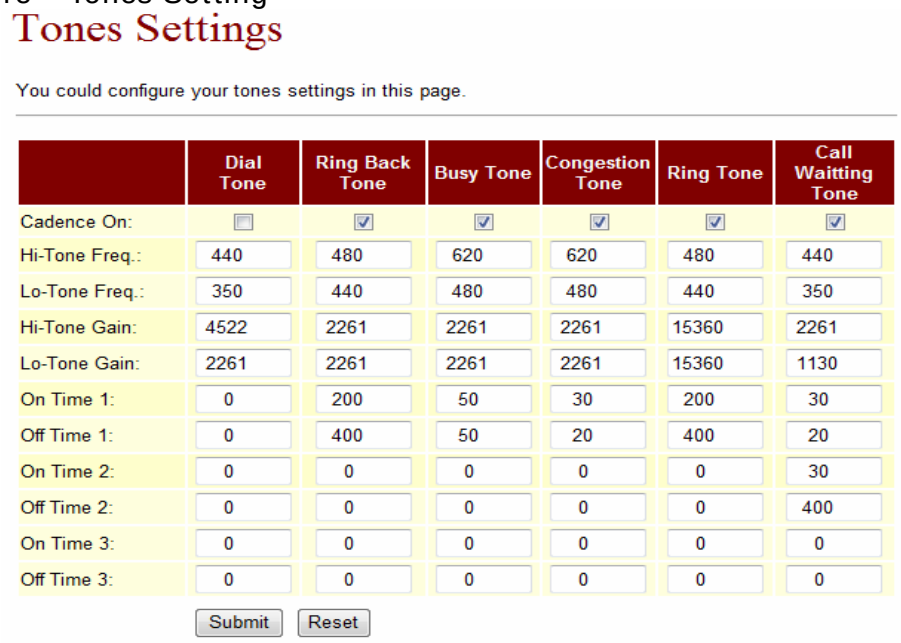
9.4.1 Tones Settings

9.4.1 Function

Tones Settings provide Dial Tone，Ring Back Tone，Busy Tone，Congestion Tone，Ring Tone，Inser Tone information. High Tone and Low Tone are available.

9.4.2 Instruction

Figure Tones Setting



Dial Tone	Setting the Dial Tone information.
Cadence On	Default: Disable.
Hi-Tone Freq	Default: 440; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Freq	Default: 350 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Hi-Tone Gain	Default: 4522 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Gain	Default: 2261 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 1	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 1	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Ring Back Tone	Setting the Ring Back Tone information.
Cadence On	Default: Enable.

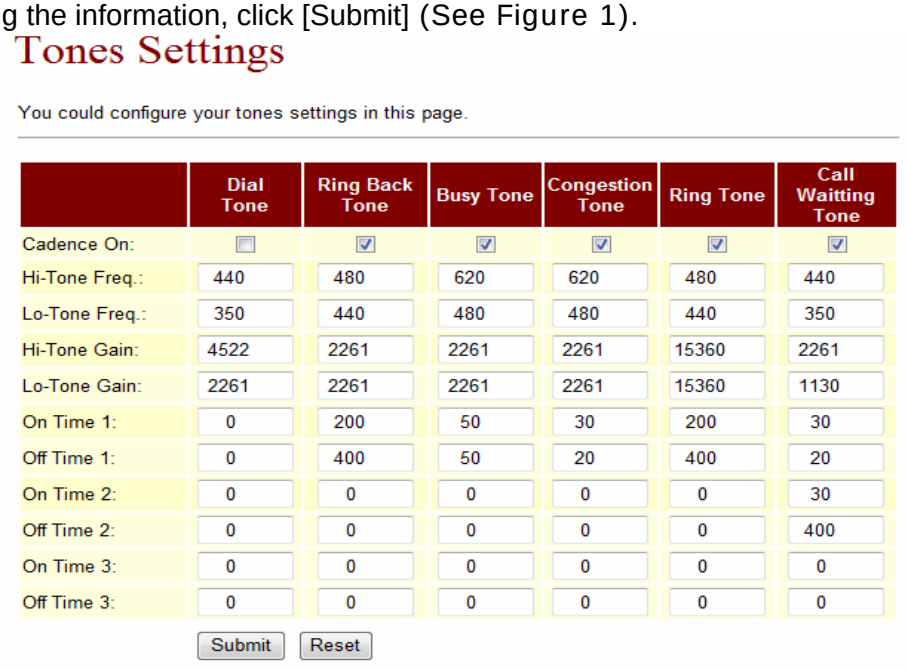
Hi-Tone Freq	Default: 480 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Freq	Default: 440 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Hi-Tone Gain	Default: 2261 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Gain	Default: 2261 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 1	Default: 200; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 1	Default: 400; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Busy Tone	Setting the Busy Tone information.
Cadence On	Default: Enable.
Hi-Tone Freq	Default: 620 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Freq	Default: 480 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Hi-Tone Gain	Default: 2261 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Gain	Default: 2261 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 1	Default: 50; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 1	Default: 50; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
CCongestion Tone	Setting the Congestion Tone information.
Cadence On	Default: Enable.
Hi-Tone Freq	Default: 620 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Freq	Default: 480 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.

Hi-Tone Gain	Default: 2261 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Gain	Default: 2261 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 1	Default: 30; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 1	Default: 20; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Ring Tone	Setting the Ring Tone information.
Cadence On	Default: Enable.
Hi-Tone Freq	Default: 480 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Freq	Default: 440 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Hi-Tone Gain	Default: 15360 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Gain	Default: 15360 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 1	Default: 200; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 1	Default: 400; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes..
On Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 2	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes..
On Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Call Waiting Tone	Setting the Call Waiting Tone information.
Cadence On	Default: Enable.
Hi-Tone Freq	Default: 440 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Freq	Default: 350 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Hi-Tone Gain	Default: 2261 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Lo-Tone Gain	Default: 1130 ; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 1	Default: 30; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.

Off Time 1	Default: 20; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 2	Default: 3; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 2	Default: 400; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
On Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Off Time 3	Default: 0; Only numerals are acceptable. Data range: (0~99999). Maximum length: 5 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

9.4.3 Operate Instruction

Step 1: On the main page, select [Others→Tones Settings], enter [Tones Settings] page, after revising the information, click [Submit] (See Figure 1).



(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step 4: Call to another equipment, the frequency of Ring Back Tone changes.

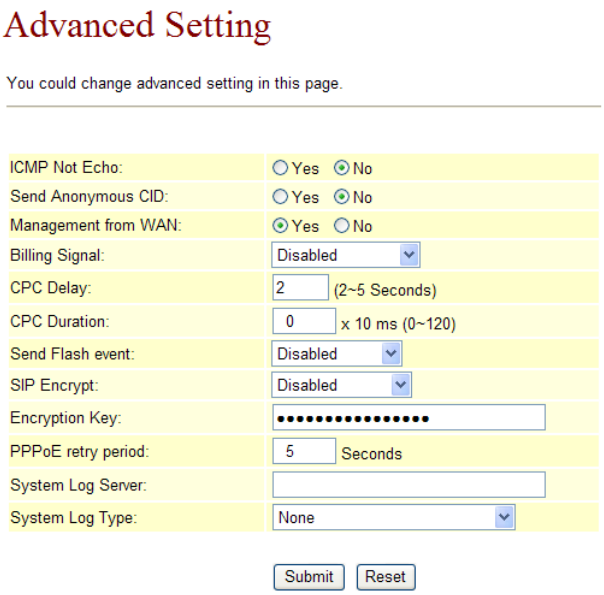
9.5.1 Advanced Settings

9.5.1 Function

Advanced Setting provides ICMP not Echo, Send Anonymous CID, Billing Signal (FXS only), CPC function (FXS only), Send Flash event, SIP Encrypt PPPoE retry period System Log Server functions.

9.5.2 Instruction

Figure 1: FXS equipment (included: FXS，FXS+PSTN，FXS+FXO)



Fifgure 1

ICMP Not Echo	Default: No. when setting YES, ICMP Not Echo function will be active.
Send Anonymous CID	Default: No. When setting YES, send out CID cannot be found by another person. Your Register Proxy server must support this function.
Billing Signal	Default: Disable. Provides Disable，Polarity Reversal，Tone_12K，Tone_16K mode.
CPC Delay	Default: 2(sec)；setting how long it takes for the voltage reaches 0V when receiving hang up signal. Only numbers are accepted, data range (2~5 sec.), maximum length: 1 byte.
CPC Duration	Default: 120ms. Setting how long it takes for the voltage reaches 0V, data range (0~120), maximum length: 3 bytes.
Send Flash event	Default: Disable. Provides Disable，DTMF Event，SIP Infomode.
SIP Encrypt	Default: Disable. Provides Disable，INFINET，AVS，WALKERSUN1，WALKERSUN2 modes. Your Register Proxy server must support this function.
Encryption Key	Set encryption password。Only support GVX encryption format, maximum data: 63 bytes.
PPPoE retry period	Default: 223 (Seconds)； setting how long it takes for PPPoE retry when PPPoE failed. Only numbers are accepted, data range: (5~255), maximum length: 3 bytes.

System Log Server	Display the system Log Server information, send System Log to the Server. Can be IP Address or Domain Name Address. Format: xxx.xxx.xxx.xxx; Maximum length: 63 bytes.
System Log Type	Default: None. Provides None，Call Statistics，General Debug，Call Statistics + General Debug，SIP Debug，Call Statistics + SIP Debug，General Debug + SIP Debug，All mode.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Figure 2: Phone equipment (included: Phone+FXO)

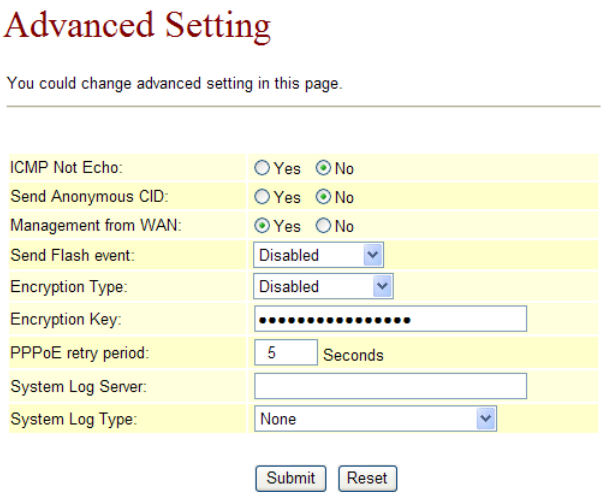


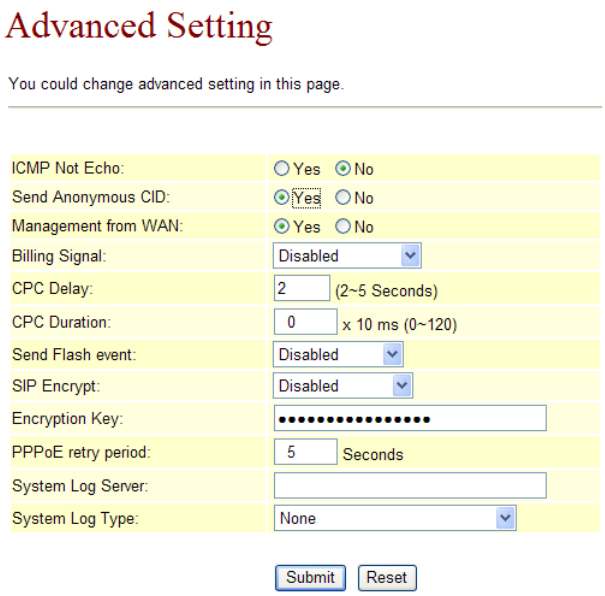
Figure 2

ICMP Not Echo	Default: No. when setting YES, ICMP Not Echo function will be active.
Send Anonymous CID	Default: No. When setting YES, send out CID cannot be found by another person. Your Register Proxy server must support this function.
Send Flash event	Default: Disable. Provides Disable，DTMF Event，SIP Info modes.
Encryption Type	Default: Disable. Provides Disable，INFINET，AVS，WALKERSUN1，WALKERSUN2，CSF1, CSF2, GX, VGX, RC4 modes. Your Register Proxy server must support this function.
Encryption Key	Set encryption password。Only support GVX encryption format, maximum data: 63 bytes.
PPPoE retry period	Default: 223 (Seconds)； setting how long it takes for PPPoE retry when PPPoE failed. Only numbers are accepted, data range: (5~255), maximum length: 3 bytes.
System Log Server	Display the system Log Server information, send System Log to the Server. Can be IP Address or Domain Name Address. Format: xxx.xxx.xxx.xxx; Maximum length: 63 bytes.
System Log Type	Default: None. Provides None，Call Statistics，General Debug，Call Statistics + General Debug，SIP Debug，Call Statistics + SIP Debug，General Debug + SIP Debug，All mode.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

9.5.3 Operate Instruction

Example1: Send Anonymous CID

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after start it, click [Submit] (See Figure 1).

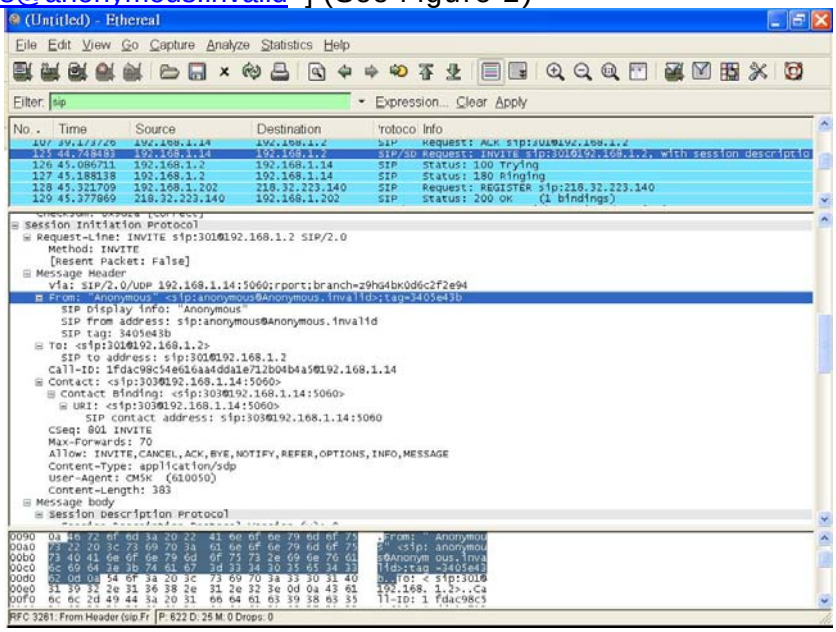


(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

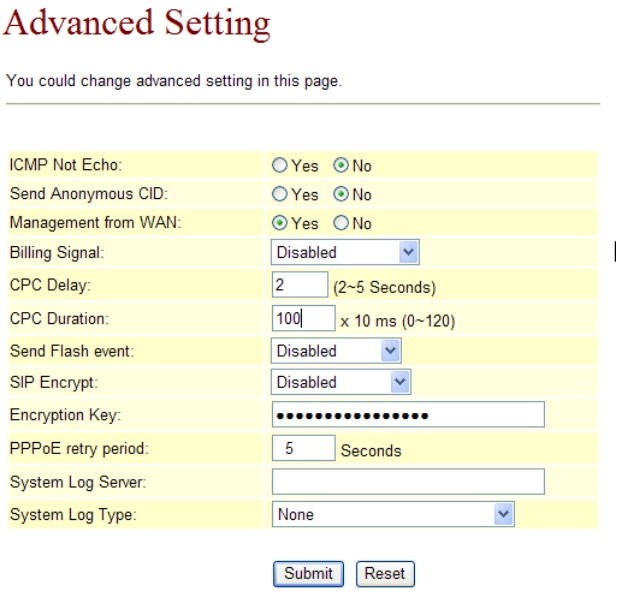
Step 4: After rebooting, and call to another equipment, dial out CID cannot be found. Please check [Ethereal] Packet and column [From: "Anonymous" <sip: anonymous@anonymous.invalid>] (See Figure 2)



(Figure 2)

Example2: CPC

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after setting CPS, click [Submit] (See Figure 3)



(Figure 3)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

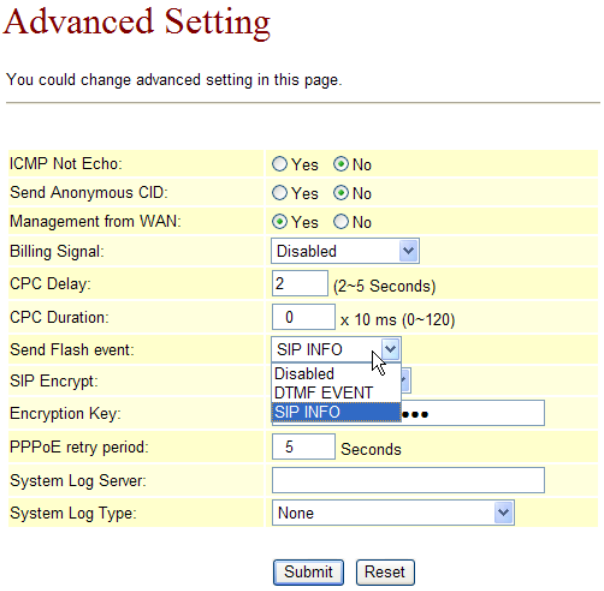
Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

Step4: Generally speaking，if a human is using a phone line，it doesn't matter whether the phone equipment recognizes CPC or not，since the human will physically hang-up the phone when they're done with the call，or they'll pick the call up off of hold when the phone system rings back after X seconds / minutes.

Example3: Send Flash Event

◆ Send Flash Event: DTMF Event

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after revising the information, (e.g.: Send Flash event: DTMF Event), click [Submit] (See Figure 4)

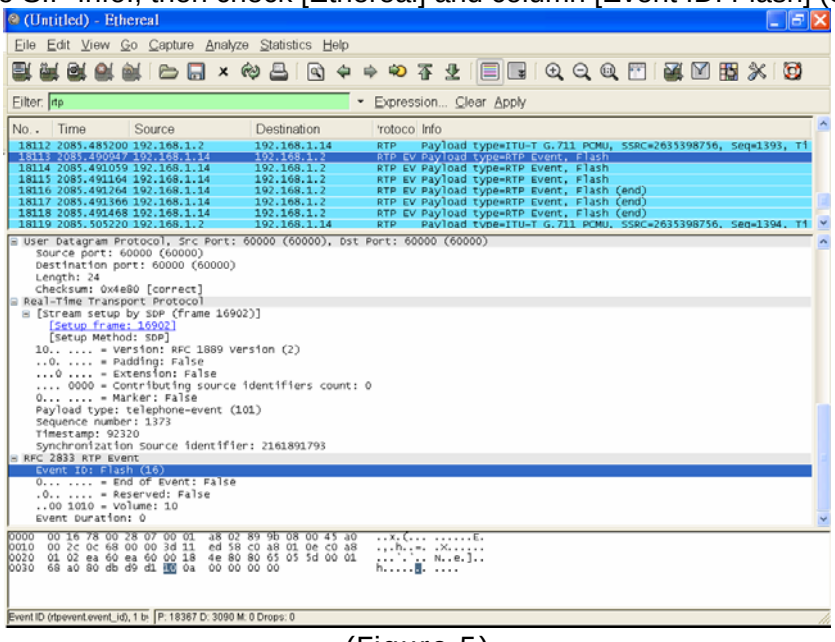


(Figure 4)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while.

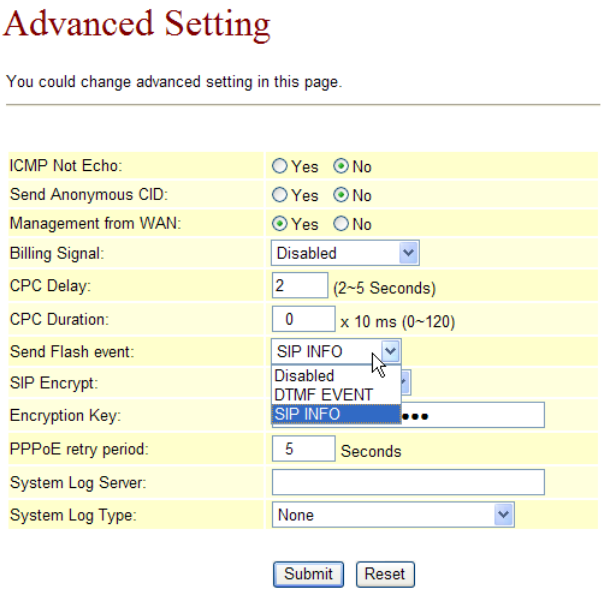
Step 4: After rebooting, and call to another equipment, please press [Flash] which will changing to SIP Info., then check [Ethereal] and column [Event ID: Flash] (See Figure 5)



(Figure 5)

◆ Send Flash Event: SIP Info

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after changing Send Flash event, (e.g.: Send Flash event: SIP Info), click [Submit] (See Figure 6)

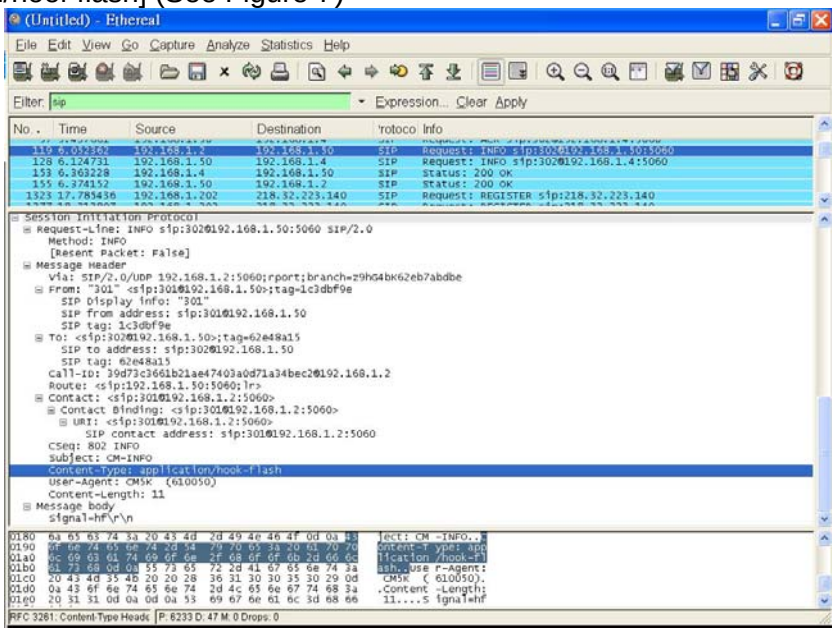


(Figure 6)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

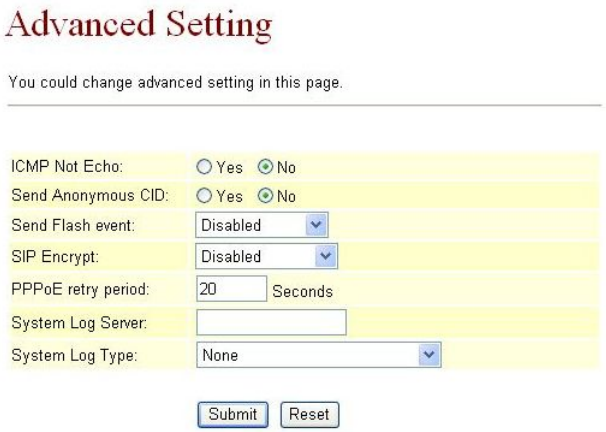
Step 4: After rebooting, and call to another equipment, please press [Flash], which will changing to SIP Info., then check [Ethereal] and column [Content-Type: application/hool-flash] (See Figure 7)



(Figure 7)

Example 4: PPPoE retry period

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after revising PPPoE Retry Period, (e.g.: PPPoE Retry Period: 20), click [Submit] (See Figure 8)

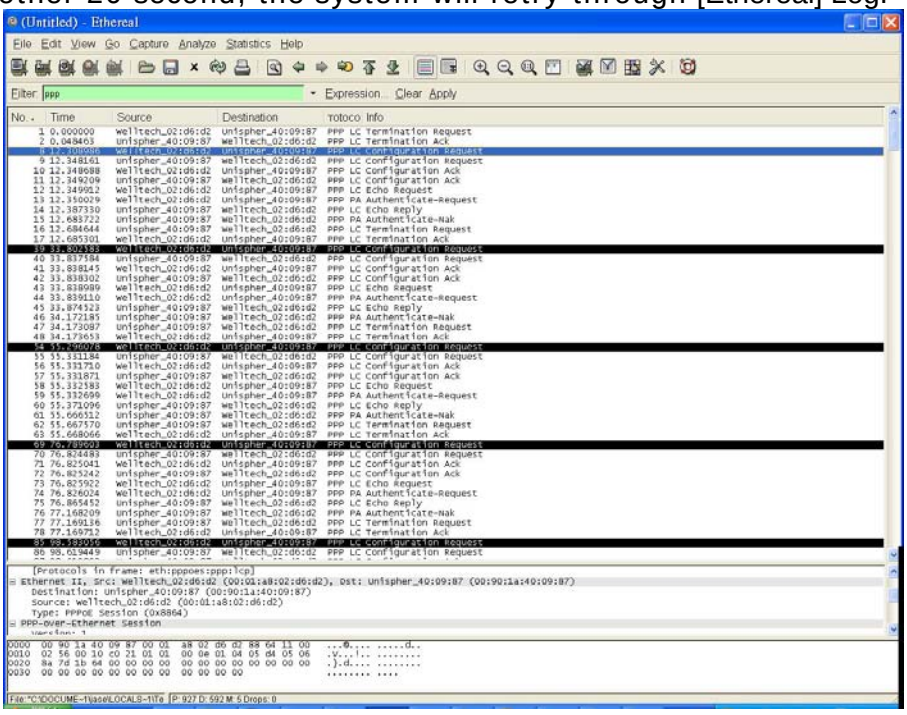


(Figure 8)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step4: Every other 20 second, the system will retry through [Ethereal] Log.

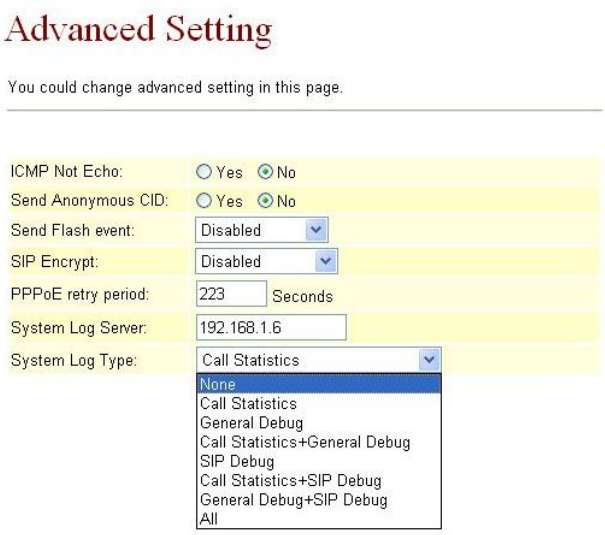


(Figure 9)

Example5: System Log (Please start TFTP or System Log Server first)

◆ System Log Type: Call Statistics

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after setting System Log, (e.g.: System Log Server: 192.168.1.6，System Log Type: Call Statistics), click [Submit] (See Figure 10)

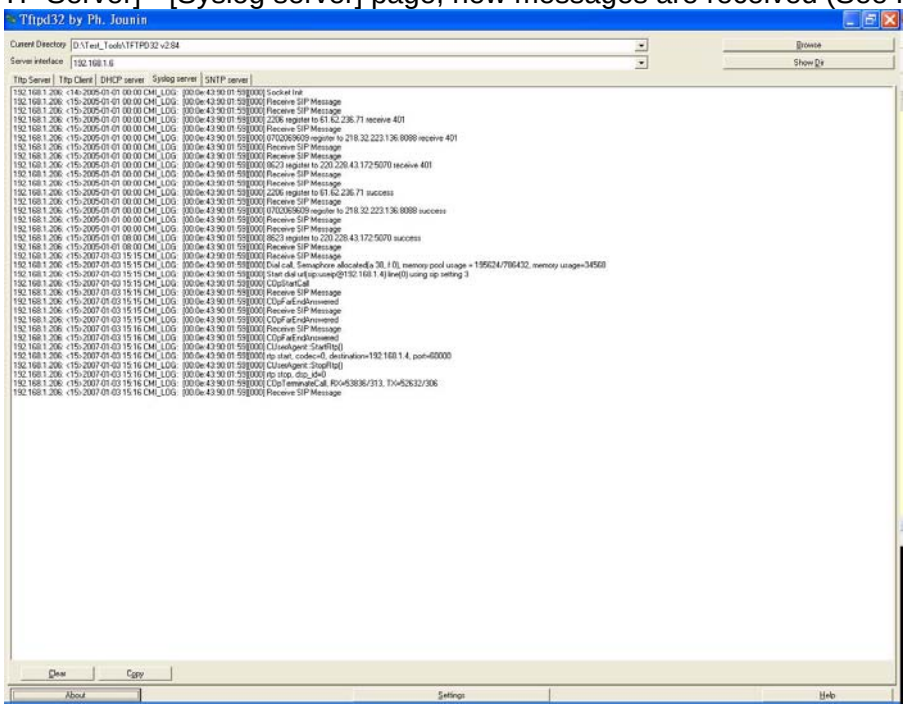


(Figure 10)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

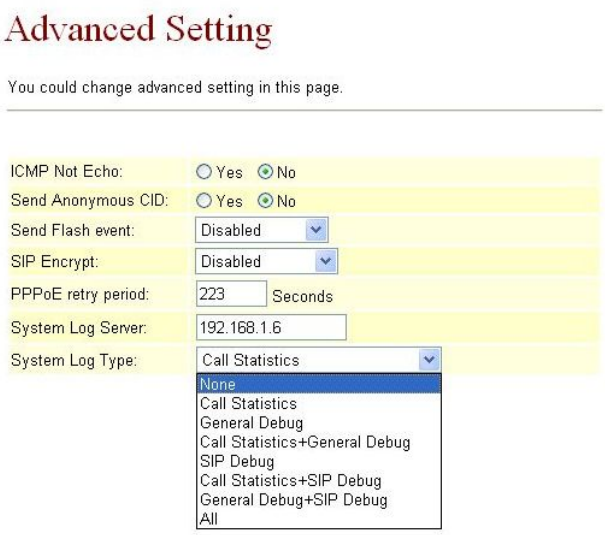
Step 4: On [TFTP Server]-- [Syslog server] page, new messages are received (See Figure 11)



(Figure 11)

◆ System Log Type: General Debug

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after setting System Log, (e.g.: System Log Server: 192.168.1.6，System Log Type: General Debug), click [Submit] (See Figure 12)

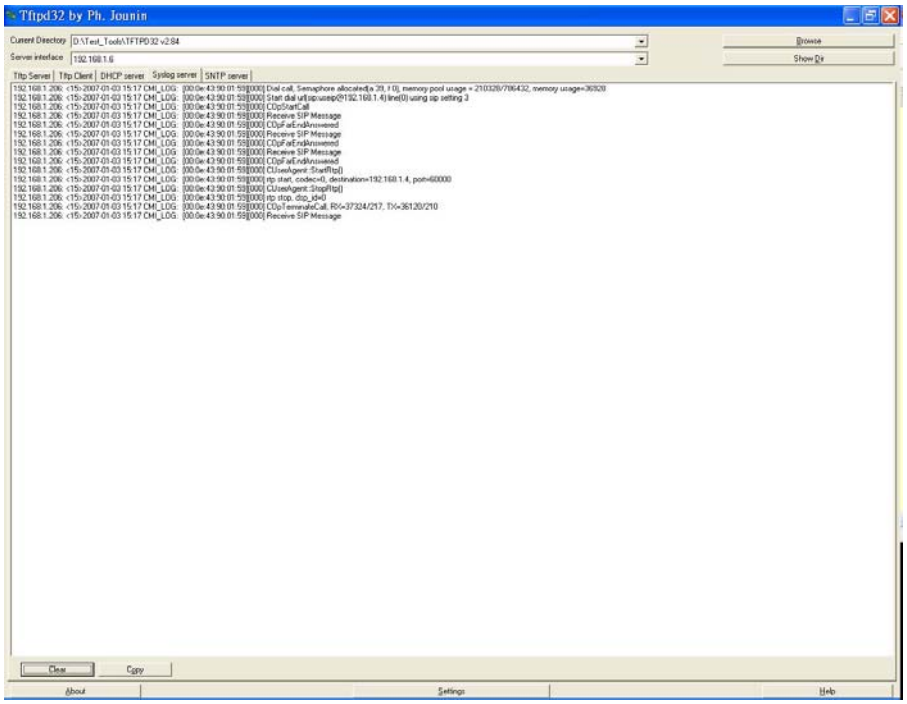


(Figure 12)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

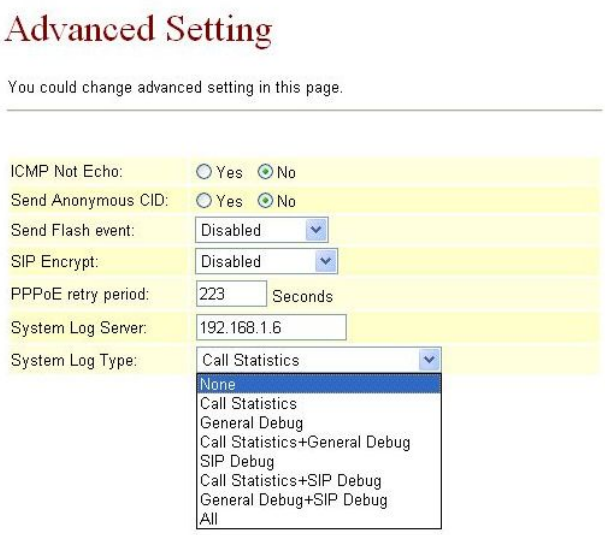
Step4: On [TFTP Server] -- [Syslog server] page, new messages are received (See Figure 13)



(Figure 13)

◆ System Log Type: Call Statistics + General Debug

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after setting System Log, (e.g.: System Log Server: 192.168.1.6，System Log Type: Call Statistics + General Debug), click [Submit] (See Figure 14)

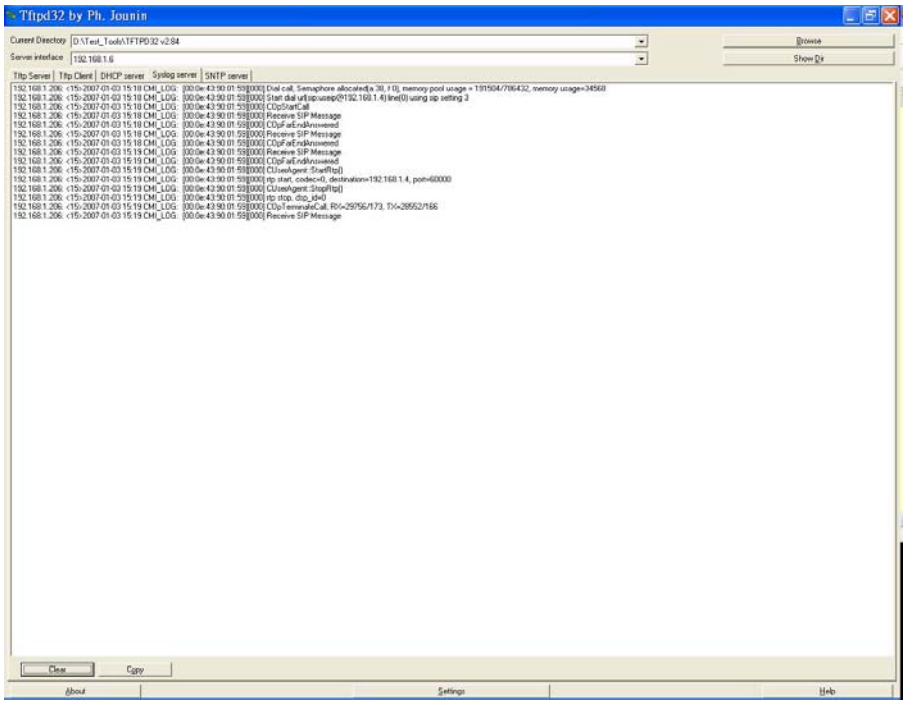


(Figure 14)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

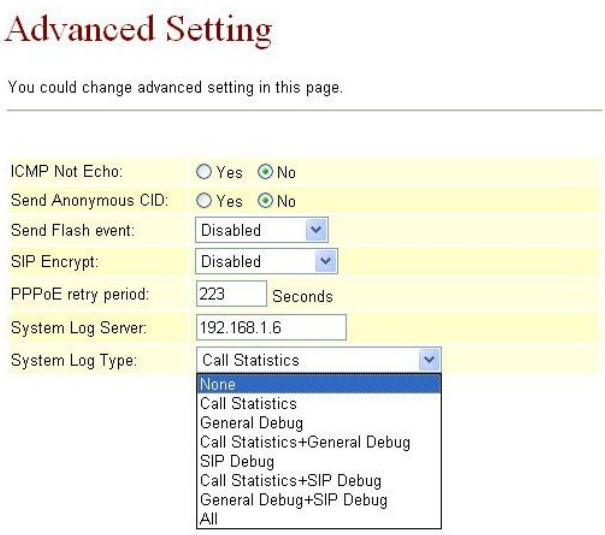
Step4: On [TFTP Server] -- [Syslog server] page, new messages are received (See Figure 15)



(Figure 15)

◆ System Log Type: SIP Debug

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after setting System Log, (e.g.: System Log Server: 192.168.1.6，System Log Type: SIP Debug), click [Submit] (See Figure 16)

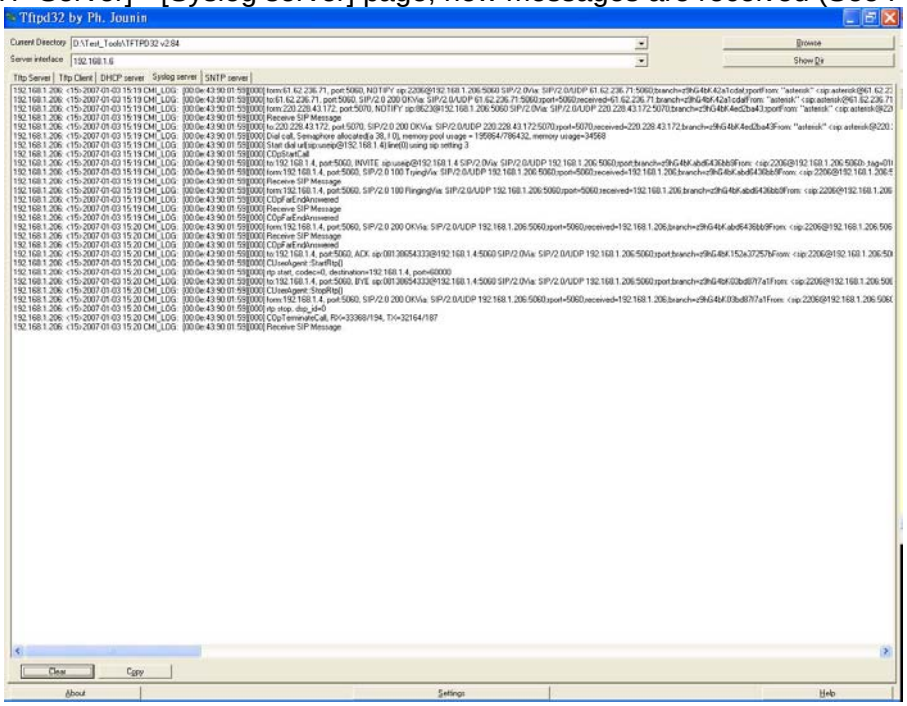


(Figure 16)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

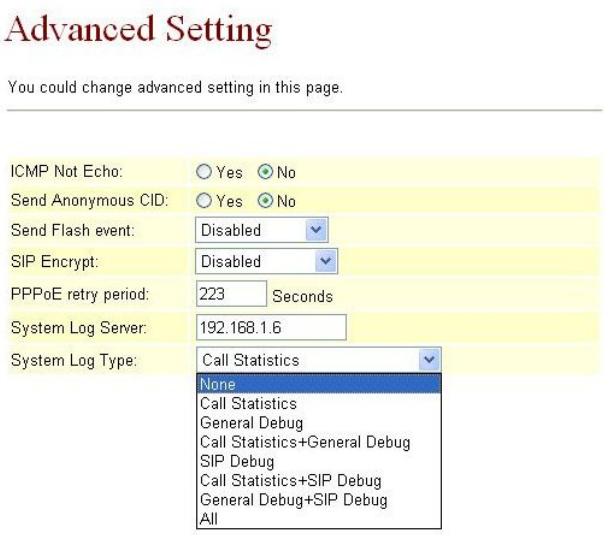
Step4: On [TFTP Server]-- [Syslog server] page, new messages are received (See Figure 17)



(Figure 17)

◆ System Log Type: Call Statistics + SIP Debug

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after setting System Log, (e.g.: System Log Server: 192.168.1.6，System Log Type: Call Statistics + SIP Debug), click [Submit] (See Figure 18)

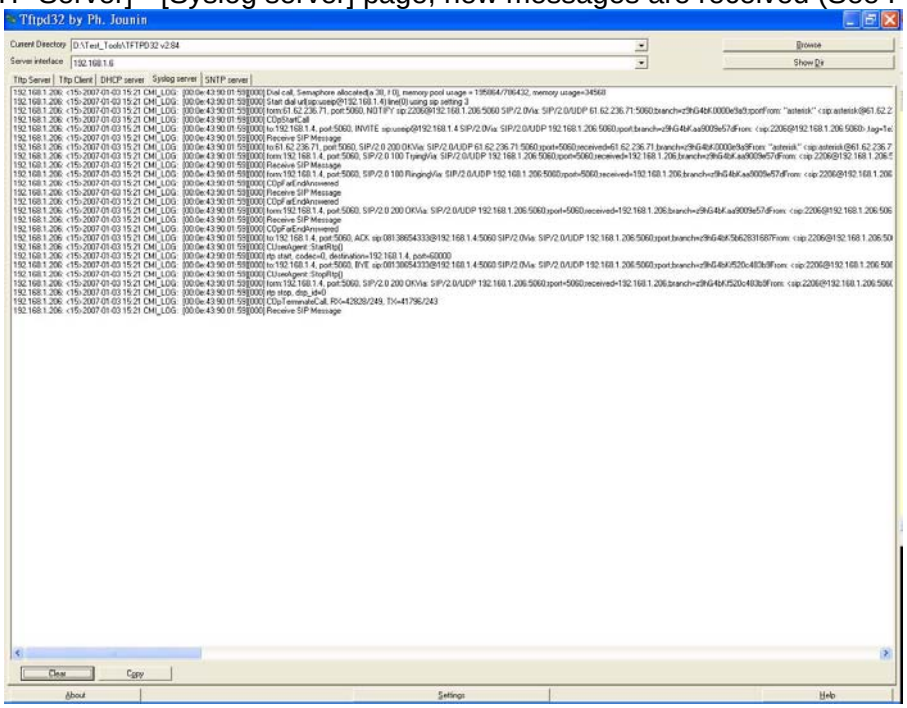


(Figure 18)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

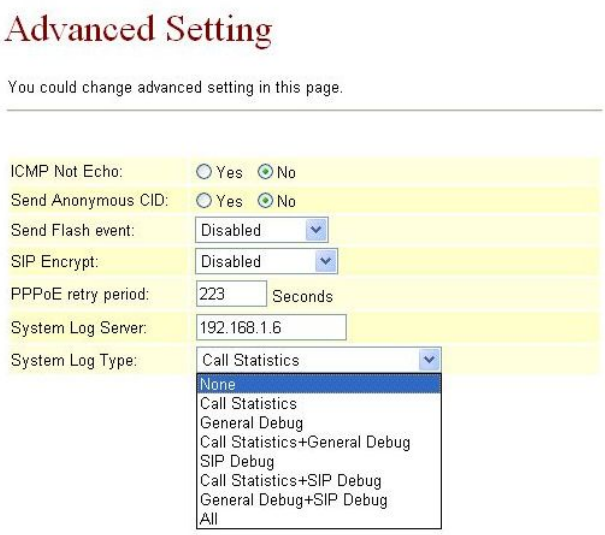
Step4: On [TFTP Server]-- [Syslog server] page, new messages are received (See Figure 19)



(Figure 19)

◆ System Log Type: General Debug + SIP Debug

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after setting System Log, (e.g.: System Log Server: 192.168.1.6，System Log Type: General Debug + SIP Debug), click [Submit] (See Figure 20)

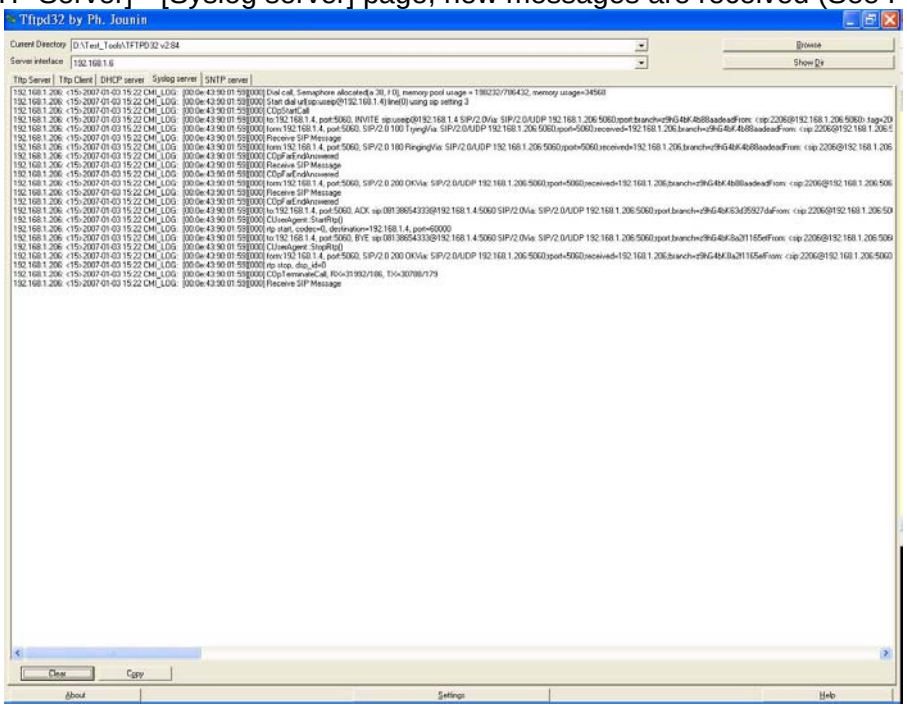


(Figure 20)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

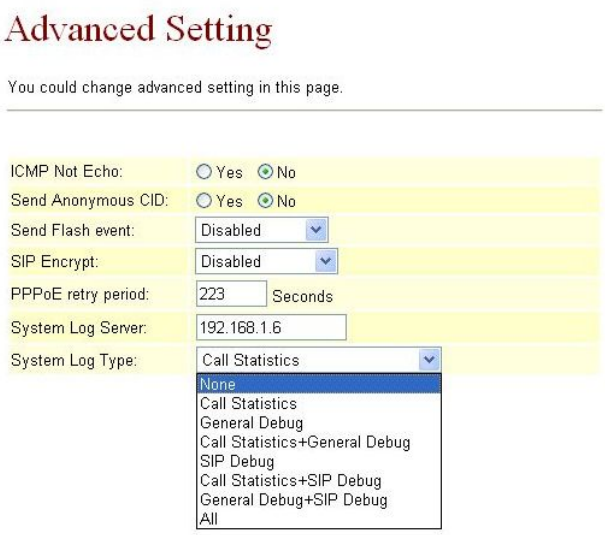
Step4: On [TFTP Server]-- [Syslog server] page, new messages are received (See Figure 21)



(Figure 21)

◆ System Log Type: All

Step 1: On the main page, select [Others→Advanced Settings], enter [Advanced Setting] page, after setting System Log, (e.g.: System Log Server: 192.168.1.6，System Log Type: All), click [Submit] (See Figure 22)

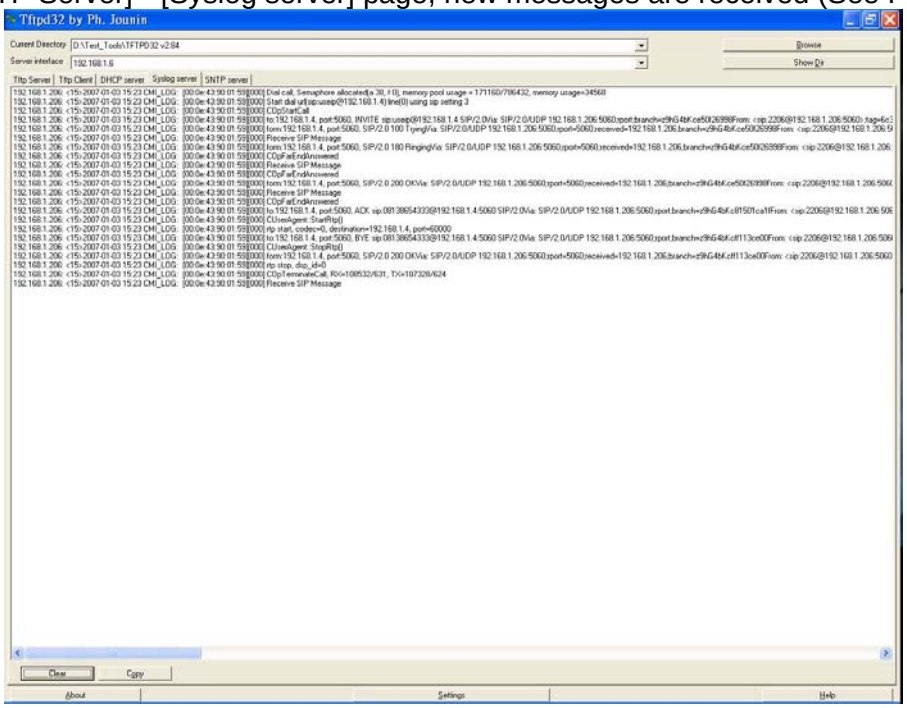


(Figure 22)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step4: On [TFTP Server]-- [Syslog server] page, new messages are received (See Figure 23)



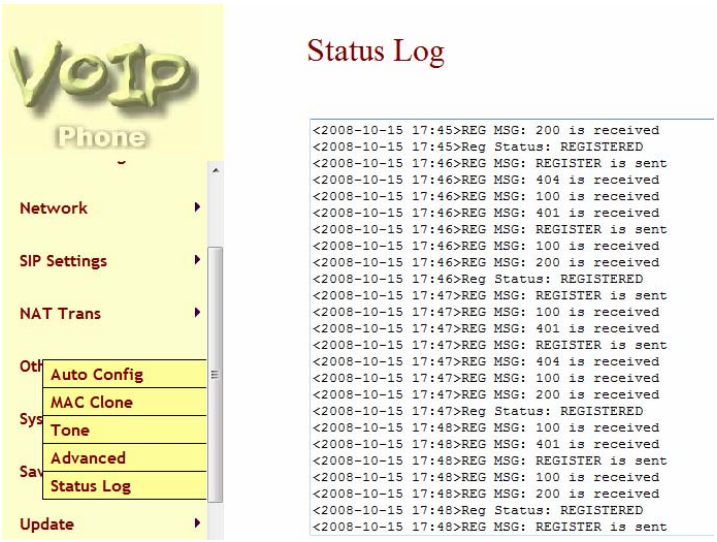
(Figure 23)

9.6.1 Status Log (Status Record)

9.6.1 Function

Check the register time of SIP server for CM5000 through Status Log.

9.6.2 Instruction


VoIP
Phone
Network
SIP Settings
NAT Trans
Auto Config
MAC Clone
Tone
Advanced
Status Log
Update
Status Log
<2008-10-15 17:45>REG MSG: 200 is received
<2008-10-15 17:45>Reg Status: REGISTERED
<2008-10-15 17:46>REG MSG: REGISTER is sent
<2008-10-15 17:46>REG MSG: 404 is received
<2008-10-15 17:46>REG MSG: 100 is received
<2008-10-15 17:46>REG MSG: 401 is received
<2008-10-15 17:46>REG MSG: REGISTER is sent
<2008-10-15 17:46>REG MSG: 100 is received
<2008-10-15 17:46>REG MSG: 200 is received
<2008-10-15 17:46>Reg Status: REGISTERED
<2008-10-15 17:47>REG MSG: REGISTER is sent
<2008-10-15 17:47>REG MSG: 100 is received
<2008-10-15 17:47>REG MSG: 401 is received
<2008-10-15 17:47>REG MSG: REGISTER is sent
<2008-10-15 17:47>REG MSG: 404 is received
<2008-10-15 17:47>REG MSG: 100 is received
<2008-10-15 17:47>REG MSG: 200 is received
<2008-10-15 17:47>Reg Status: REGISTERED
<2008-10-15 17:48>REG MSG: 100 is received
<2008-10-15 17:48>REG MSG: 401 is received
<2008-10-15 17:48>REG MSG: REGISTER is sent
<2008-10-15 17:48>REG MSG: 100 is received
<2008-10-15 17:48>REG MSG: 200 is received
<2008-10-15 17:48>Reg Status: REGISTERED
<2008-10-15 17:48>REG MSG: REGISTER is sent

Chapter 10.1 System Auth.

Provides System Auth.

10.1.1 System Auth.

10.1.1 Function

System Authority provides 3 entries login username/ password information.

10.1.2 Instruction

Figure Save Change

New username	Input new username. Can be Numerals or strings, maximum length is 63 bytes.
New password	Input new username. Can be Numerals or strings, maximum length is 63 bytes.
Confirmed password	Input new username. Can be Numerals or strings, maximum length is 63 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

10.1.3 NOTICE:

- Administrator: Can set only one account information.
- Default Account: root，Default Password: test.
- System: 5 accounts information are available. When using this account, the following page cannot be open: [Auto Configuration，Tone Setting，Auto Update]
  - Default Account: system Default Password: test.
- Normal User: 5 accounts information are available. When using this account, the following page cannot be open: [SIP Settings[including Service Domain，Port Settings，Code Settings，Codec ID Settings，DTMF Settings，RPort Settings，Other Settings]，Auto Configuration，Tone Setting，Auto Update，Default Setting] etc.
  - Default Account: user，Default Password: test.

10.1.4 Operate Instruction

Step 1: On the main page, select [System Auth.], enter [System Authority] page, after revising the information (e.g.: New User Name: totoro，New Password: 123456，Confirmed Password: 123456), click [Submit] (See Figure 1)

(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step 4: Please restart IE, and input new User Name & Password

Chapter 11.1 Save Change

Save Change

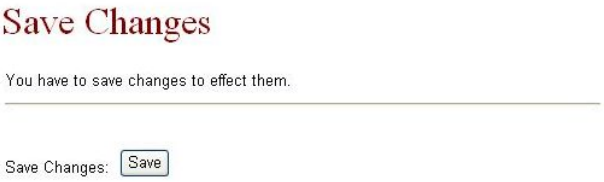
11.1.1 Save change

11.1.1 Function

After Save Changes, the system will be rebooted.

11.1.2 Instruction

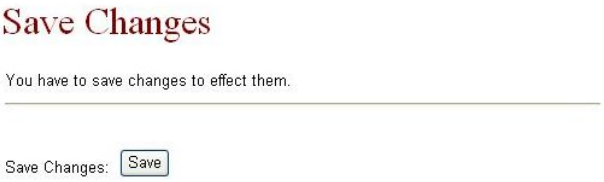
Figure Save Change



Save [Button]	Submit the change.

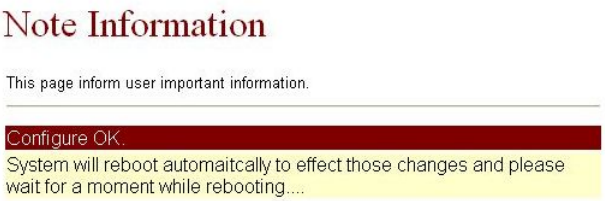
11.1.3 Operate Instruction

Step1: Select [Save Change], enter [Save Changes] page, execute the command, click [Save] (See Figure 1)



(Figure 1)

Step2: [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while



(Figure 2)

Step3: After rebooting, please press [(F5)] to continue other settings.

Chapter 12.1 Update

Provides New Firmware，Auto Update，Default Setting items.

12.1.1 New Firmware

12.1.1 Function

Update Firmware.Use Local PC or TFTP to update. Format: Risc (.gz) & DSP (.ds)

12.1.2 Instruction

Figure Update Firmware

Method	Default: Local PC
Local PC	Update by Local PC
Code Type	Default: Risc (.gz).Provides Risc (.gz) & DSP (.ds).
File Location	Please input File Location. Can be numerals or strings. Maximum length: 30 bytes.
TFTP	Update by TFTP
TFTP Server	Set TFTP Server. Please input TFTP Server Address. Can be IP Address or Domain name Address. Format: xxx.xxx.xxx.xxx; Maximum length: 15 bytes.
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

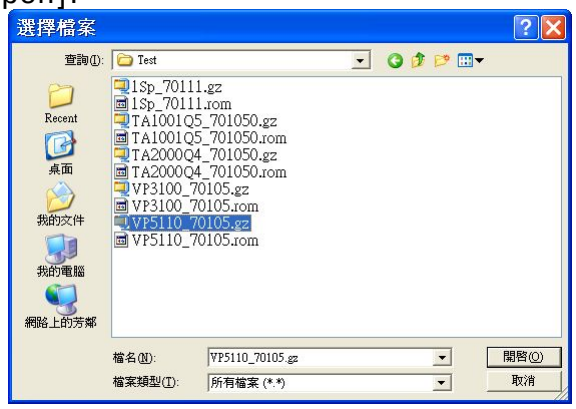
12.1.3 Operate Instruction

Example1: Update by Local PC

Step 1: On the main page, select [Update→New Firmware], enter [Update Firmware] page, after revising the information (e.g.: Method: Local PC，Code Type: Risc), setting File Location information, please click [Browse] (See Figure 1)

(Figure 1)

Step2: Enter the following page, select update [gz] file, (e.g. VP511_70105.gz), click [Open].



(Figure 2)

Step3: Back to page [Update Firmware], made sure the update file is on [File Location], please click [Update] (See Figure 3)

(Figure 3)

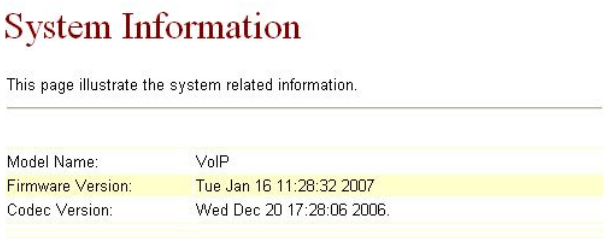
Step4: Note page will be seen, please click [Submit] (See Figure 4)

(Figure 4)

Step5: [Note Information] page will be seen. After updating, please reboot the

system.

Step6: After rebooting, and back to the main page, please press [(F5)] to view the result in page [System Information] (See Figure 5)

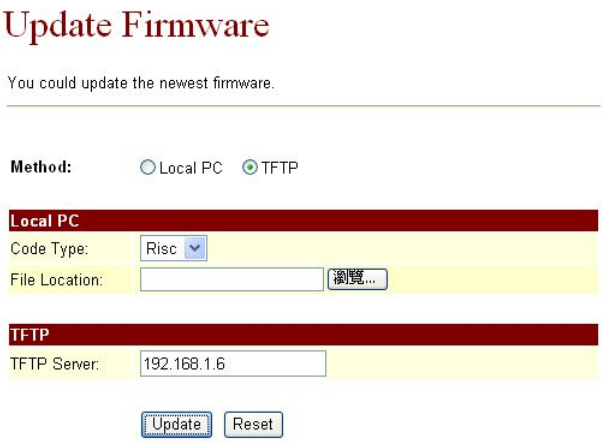


(Figure 5)

Example2: Update by TFTP (Please build Update List first)

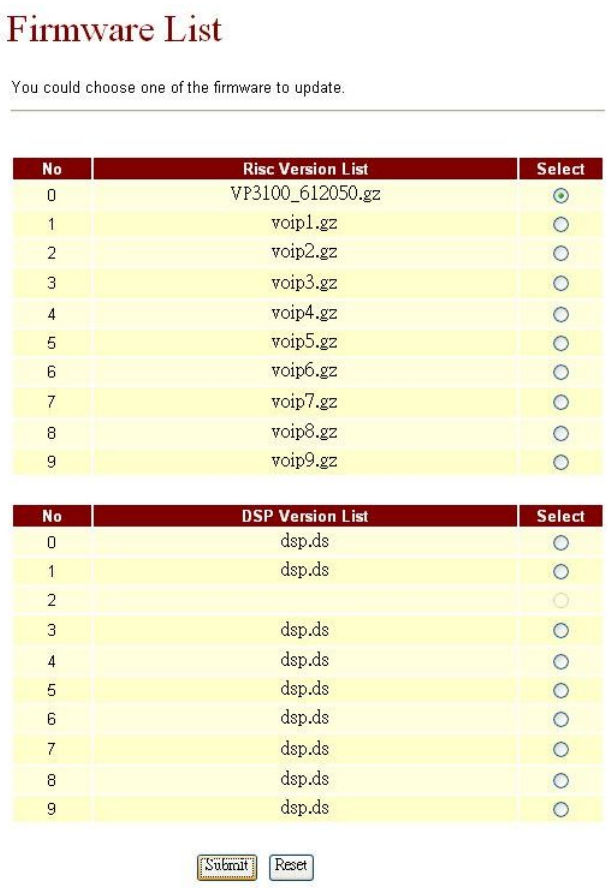
Step1: When updating by TFTP, make sure that the Update List is ready, which under TFTP Server.

Step 2: On the main page, select [Update→New Firmware], enter [Update Firmware] page, after revising the information (e.g.: Method: TFTP, TFTP Server: 192.168.1.6), setting File Location information, please click [Update] (See Figure 6)



(Figure 6)

Step3: Enter page [Firmware List], please select the Risc Version, (e.g.: Risc Version List: VP3100_612050.gz), click [Submit] (See Figure 7)



Firmware List

You could choose one of the firmware to update.

No	Risc Version List	Select
0	VP3100_612050.gz	◉
1	voip1.gz	○
2	voip2.gz	○
3	voip3.gz	○
4	voip4.gz	○
5	voip5.gz	○
6	voip6.gz	○
7	voip7.gz	○
8	voip8.gz	○
9	voip9.gz	○

No	DSP Version List	Select
0	dsp.ds	○
1	dsp.ds	○
2		○
3	dsp.ds	○
4	dsp.ds	○
5	dsp.ds	○
6	dsp.ds	○
7	dsp.ds	○
8	dsp.ds	○
9	dsp.ds	○

Submit Reset

(Figure 7)

Step5: [Note Information] page will be seen. After updating, please reboot the system.

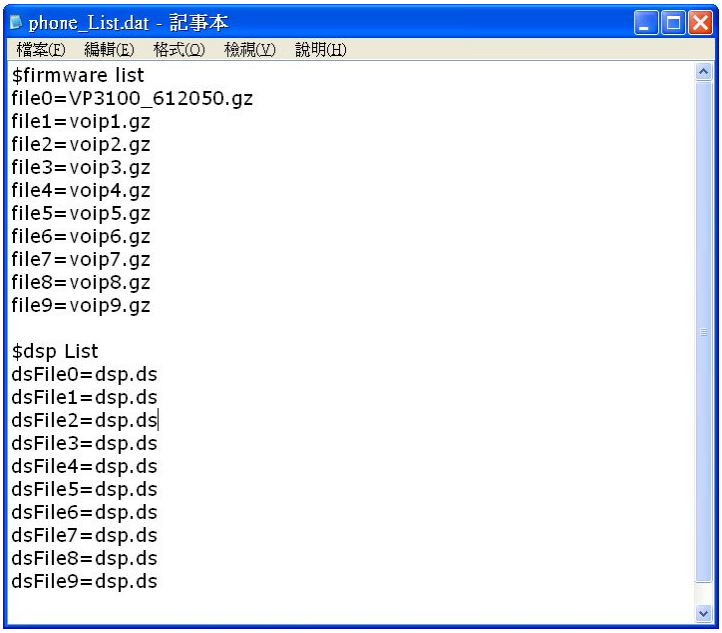
Step6: After rebooting, and back to the main page, please press [(F5)] to view the result in page [System Information].

12.1.4 Build List File

Step1: Build a list file, Format: Firmware File Prefix +_ List. dat，e.g.：Phone _ List. dat.

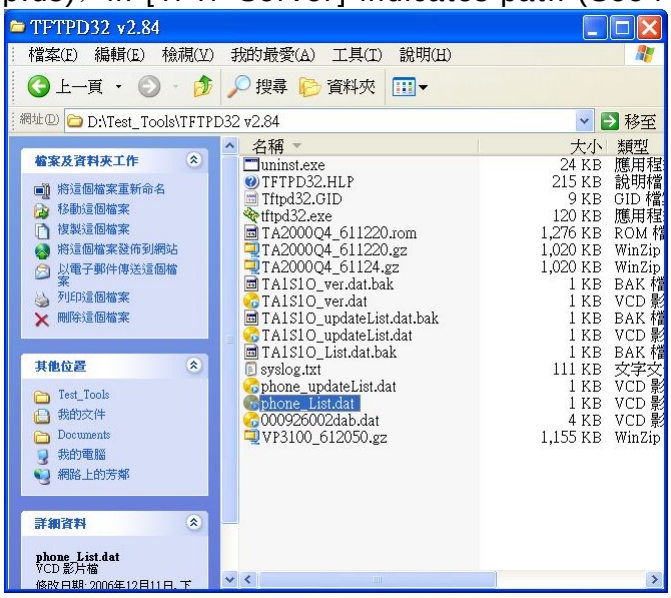
Step2: Please input the update version in "file0=", e.g.: file0=VP3100_612050.gz； if DSP version is involved, please input the update version in"dspfile0=", e.g.: file0=dsp.ds(See Figure 1).

- $firmware List：Display firmware List, provide 10 entries.
- $dsp List：Display dsp List, provide 10 entries.



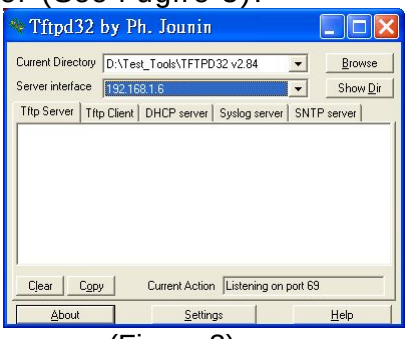
(Figure 1)

Step3: Put Phone_List.dat and all update file (e.g.: VP3100_612050.gz & dsp.ds)，in [TFTP Server] indicates path (See Fugire 2).



(Figure 2)

Step4: Start TFTP Server (See Fugire 3).



(Figure 3)

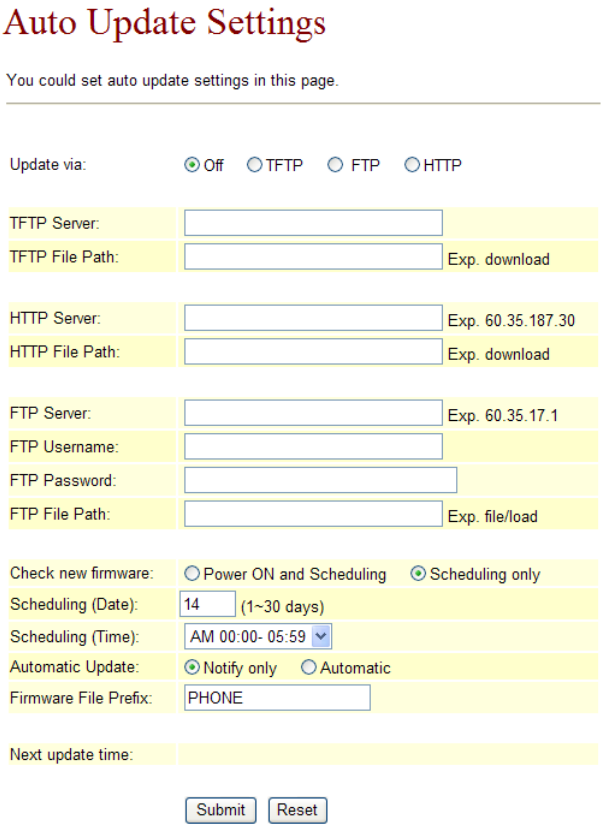
12.2.1 Auto Update

12.2.1 Function

Auto Update Settings provide **.gz(RISC)** or **.ds(DSP)** **format, .rom** is not available.

12.2.2 Instruction

Figure Auto Update Setting



Update via	Default: Off. Off，TFTP，FTP or HTTP modes are available.
TFTP Server	Setting TFTP Server, input TFTP Server Address, can be IP Address or Domain Name, format: xxx.xxx.xxx.xxx; maximum length: 63 bytes.
TFTP Path	TFTP Path, input the path of the file, can be numerals or strings, maximum length: 63 bytes. E.g.: download.
HTTP Server	Setting TFTP Server, input TFTP Server Address, can be IP Address or Domain Name, format: xxx.xxx.xxx.xxx; maximum length: 63 bytes.
HTTP Path	Setting HTTP Path, input the path of the file, can be numerals or strings, maximum length: 63 bytes. E.g.: /123/.
FTP Server	Setting FTP Server, input FTP Server Address, can be IP Address or Domain Name, format: xxx.xxx.xxx.xxx; maximum length: 63 bytes.
FTP Username	Setting FTP Username information. Input FTP username, can be numerals or strings, maximum length: 63 bytes.
FTP Password	Setting FTP Password information. Input FTP Password, can be numerals or strings, maximum length: 63 bytes.

File Path	Setting File Path, input the path of the file, can be numerals or strings, maximum length: 63 bytes. E.g.: /123/.
Check new Firmware	Default: Scheduling；provide Power ON，Scheduling mode. - Power On: Power on + Scheduling，means as long as start the system, it will check if there is update version or not, according to the schedule. If yes, it wouldn't update now, but update by your permit.
Scheduling (Date)	According to the date to check if there is update version or not. Default: 14 days. Minimum: 1 day. Maximum: 30 days. Only numerals are accepted, length: 2 bytes.
Scheduling (Time)	Default: AM 00:00 – 05:59； AM 00:00 – 05:59，AM 06:00 – 11:59，AM 12:00 – 17:59，AM 18:00 – 23:59 is available.
Automatic Update	Default: Notify only. Notify only，Automatic are available. - Notify only: the message will be found on LCD, and when up the phone, "Do Do Do" will be heard. - Automatic: Update automatically.
Firmware File Prefix	Default: Product model. Can be numerals or strings, maximum: 8 bytes.
Next update time	Next update time begins with the next day, not today. **Formula: the next day + days + time zone + MAC Address + Random = Next update time.**
Submit [Button]	Submit the change.
Reset [Button]	Clear the change.

Remark:

Check new Firmware: Power on

Notice: as long as start the system, it will check if there is update version or not, according to the schedule. If yes, new message will be found on LCD, and Bee tone will be heard when pick up the phone. It wouldn't update now, but update by your permit.

- **(Phone)**

  [Found new s/w] will be found on LCD，please select **[Menu]**-- **[7. Administrator→ 2. Upgrade System→1. Upgrade Now→ 1. Yes]**, then update.

- **(FXS/FXO)**

  When pick up the phone, DoDoDo will be heard. Please input**"#190#"** then hang up the phone, pick up the phone again, and input **"#190#"** to execute update.

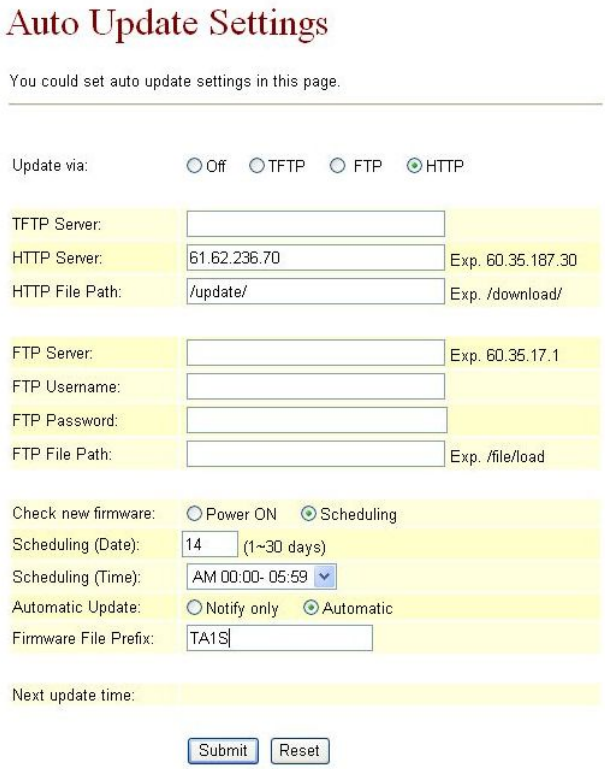
NOTICE: It takes 2~3 min to update, during the time period, dialing function cannot work, please don't move the power supply.

12.2.3 Operate Instruction

Example1: Auto Update. (Please build Auto Update file.)

Step 1: On the main page, select [Update→ Auto Update], enter [Auto Update Settings] page, after setting HTTP Server information and revising the information (e.g.: Update via: HTTP，HTTP Server: 61.62.236.70，HTTP File Path: /update/，Check new firmware: Scheduling，Scheduling (Date): 14，Scheduling (Time): AM 00:00-05:59，Automatic Update: Automatic，Firmware File Prefix:

TA1S), click [Submit], and saving change (See Figure 1).

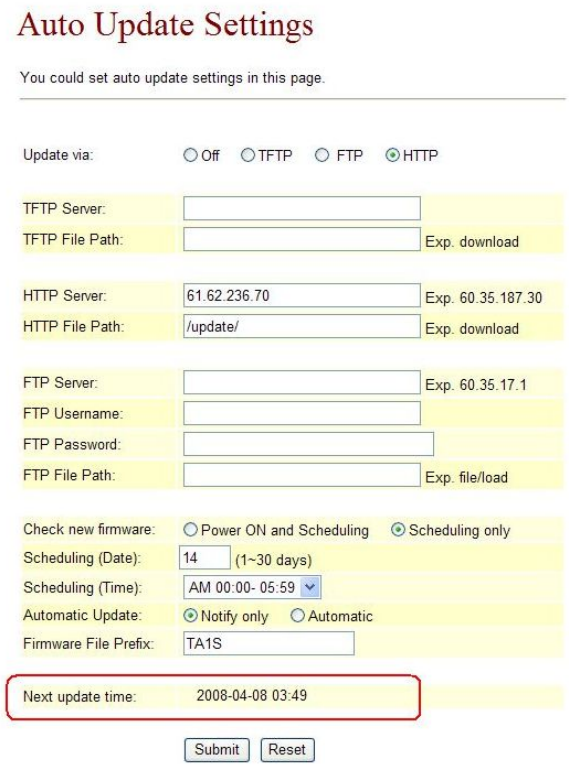


(Figure 1)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step4: After rebooting, and back to the main page, please press [F5] to refresh, select [Update→Auto Update], enter [Auto Update Settings], **to get next update time. E.g.: [Next Update time: 2007-03-07 04:45].** (See Fugire 2)

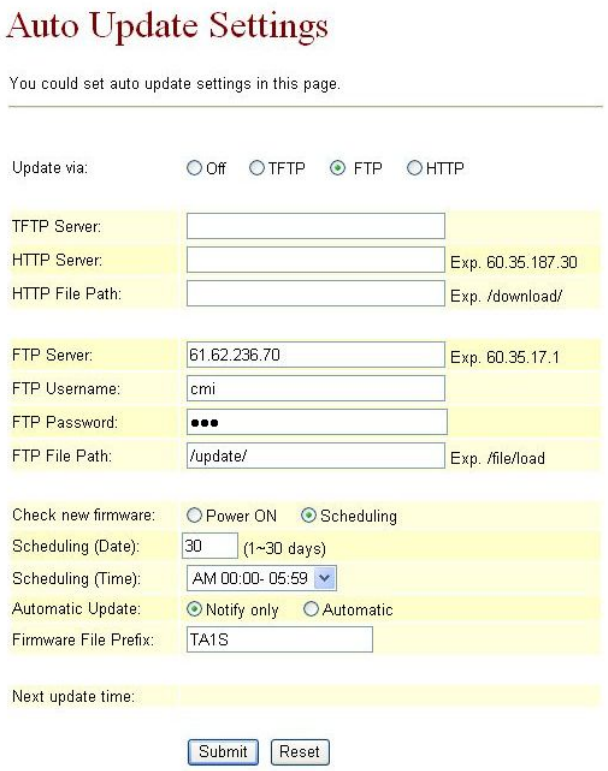


(Figure 2)

Step5: When [Next Update Time] comes, it will connect to HTTP Server to check if there is update or not, if yes, update will be made automatically.

Example2: Update with permit (Please build Auto Update file first)

Step 1: On the main page, select [Update→ Auto Update], enter [Auto Update Settings] page, after setting FTP Server information and revising the information (e.g.: Update via: FTP，FTP Server: 61.62.236.70，FTP Username: cmi，FTP Password: cmi，FTP File Path: /update/，Check new firmware: Power，Scheduling (Date): 30，Scheduling (Time): AM 00:00-05:59，Automatic Update: Notify only，Firmware File Prefix:TA1S] (如 Picture3), click [Submit], and saving change (See Figure 3).

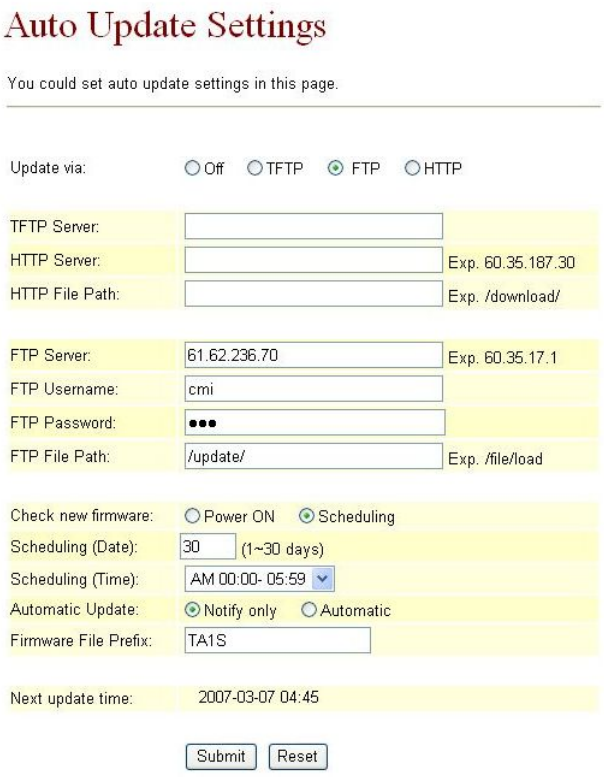


(Figure 3)

Step 2: After saving change, enter [Note Information] page, "Note Information" will be seen, then the changing will come into effect.

Step 3: On the main page, select [Save Change] item, enter [Save Changes] page, and execute the saving command by click [Save]. [Note Information] page will be seen which means saving successfully. And the system will be restarted, please wait for a while

Step4: After rebooting, and back to the main page, please press [F5] to refresh, select [Update→Auto Update], enter [Auto Update Settings], **to get next update time. E.g.: [Next Update time: 2007-03-07 04:45].** (See Fugire 4)



(Figure 4)

Step6: When [Next Update Time] comes, it will connect to FTP Server to check if there is update or not, if yes, a message will be sent.

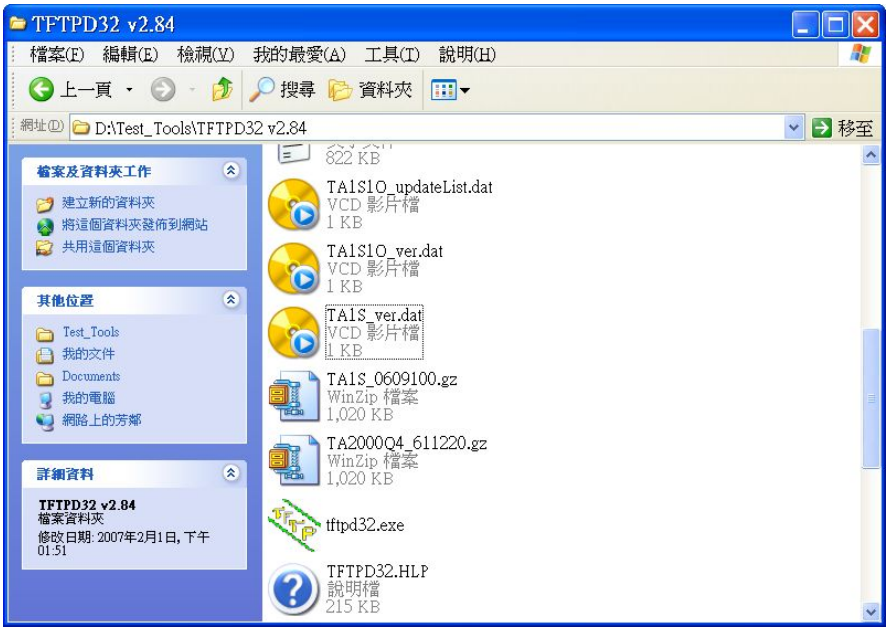
- **(Phone)**
  [Found new s/w] will be found on LCD，please select **[Menu]**-- **[7. Administrator→ 2. Upgrade System→1. Upgrade Now→ 1. Yes]**, then update.

- **(FXS/FXO)**
  When pick up the phone, DoDoDo will be heard. Please input**"#190#"** then hang up the phone, pick up the phone again, and input **"#190#"** to execute update.

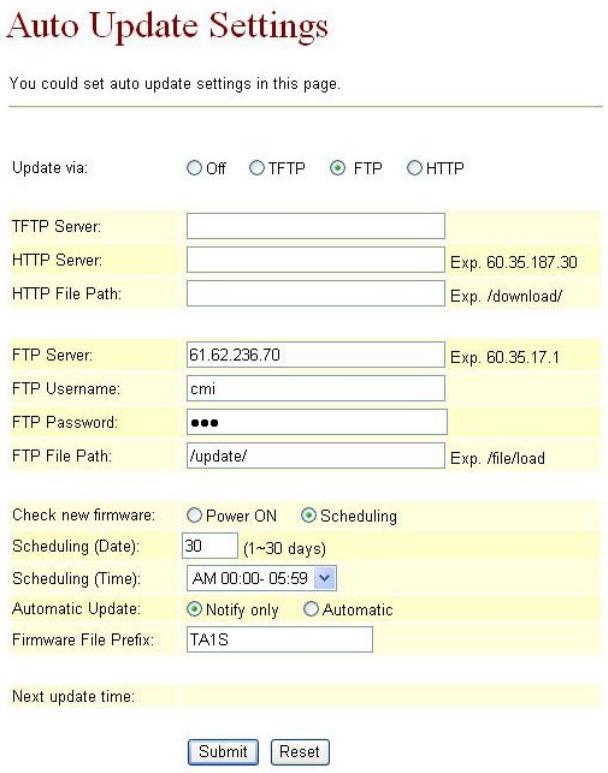
NOTICE: It takes 2~3 min to update, during the time period, dialing function cannot work, please don't move the power supply.

12.2.4 Auto Update File

Step1: Build an auto update file, format: Firmware File Prefix + _ver.dat (e.g.: TA1S_ver.dat) (See Figure 1). For Firmware File Prefix name，please refer [Auto Update Setting]-- Firmware File Prefix (e.g.: TA1S_ver.dat) (See Fugire 2).



(Figure 1)



(Figure 2)

Step2: TA1S_ver.dat file must have [Version & NAME]. Format: [Version:0609100 NAME:TA1S_], instruction：Version: show the update version, NAME: show the name, (**NAME must be capitalized.**) (See Figure 3). **The new version name is: NAME+Version e.g.: TA1S_0609100.gz，please make sure the name is correct. Format: Version: 0609100 NAMETA1S_.**

(Figure 3)

Step 3: The system will check with the server, if the file existing or not. (E.g.: Firmware File Prefix+_ver.dat). If existing, it will check the [Version] column, if the version is newer than the current version, update will execute.

Step 4: Put TA1S_ver.dat and new update version information (e.g.: TA1S_0609100.gz) to [TFTP or FTP or HTTP Server] indicate address.

12.2.5 NOTICE

- **(Phone)**

  [Found new s/w] will be found on LCD，please select **[Menu]**-- **[7. Administrator→ 2. Upgrade System→1. Upgrade Now→ 1. Yes]**, then update.

- **(FXS/FXO)**

  When pick up the phone, DoDoDo will be heard. Please input**"#190#"** then hang up the phone, pick up the phone again, and input **"#190#"** to execute update.

NOTICE: It takes 2~3 min to update, during the time period, dialing function cannot work, please don't move the power supply.

12.3.1 Default Setting

12.3.1 Function

Restore Default Settings restore all changing information (excluding Phone & Speed Dial). After restore default settings, the system will be rebooted.

12.3.2 Instruction

Figure Restore Default Setting

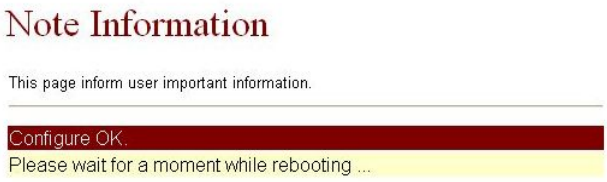
Restore [Button]	Restore the factory settings.

12.3.3 Operate Instruction

Step 1: On the main page, select [Update→Default Settings], enter [Restore Default Settings] page, and then click [Restore], the system will be rebooted (See Figure 1)

(Figure 1)

Step2: Enter [Note Information] page, please wait for a moment while rebooting (See Figure 2)



(Figure 2)

Step3: After rebooting, and back to the main page, press [(F5)] to refresh.

Chapter 13.1 Reboot

Reboot System

13.1.1 Reboot

13.1.1 Function

Reboot System; press the reboot button to restart the system.

13.1.2 Instruction

Figure Reboot System

Reboot [Button]	Execute.

13.1.3 Operate Instruction

Step 1: On the main page, select [Reboot], enter [Reboot System] page, and then click [Reboot] (See Figure 1)

(Figure 1)

Step2: Enter [Note Information] page, please wait for a moment while rebooting, please don't move power supply.

(Figure 2)

Step3: After rebooting, and back to the main page, press [(F5)] to refresh.

Chapter 14.1 Phone Transfer Rule

14.1.1 IP mode Transfer Rule

14.1.1 Blind Transfer

B calls A, while A and B are talking, if A would like to transfer the call to C, A should press [Hold] to hold B's call, and then press [Transfer/Flash], input C's number, and end with "#", then the call transferred to C.

14.1.2 Attendant Transfer

B calls A, while A and B are talking, if A would like to transfer the call to C, A should press [Transfer/Flash], and input C's number, end with "#", then C's phone rings. If A hung up the phone, then B can talk with C.

Chapter 15.1 Gateway/TA Transfer Rule

15.1.1 IP mode Transfer Rule

15.1.1 Blind Transfer

B calls A, while A and B are talking, if A would like to transfer the call to C, A should press [Hold] to hold B's call, then press #510# and C's number, end with "#" to transfer the call to C.

15.1.2 Attendant Transfer

B calls A, while A and B are talking, if A would like to transfer the call to C, A should press [Hold] to hold B's call, then press #511# and input C's number, end with "#", then C's phone rings. If A hung up the phone, then B can talk with C.

15.1.3 (3-way calling)

B calls A, while A and B are talking, if A would like to add C to talk, A should hold B's call, then press #512# and C's number, end with "#", then C's phone rings. If A can talk with C, and A press "flash", A, B and C can talk together.

15.1.4 Call Waiting

While A & B are talking, C calls A, A can hear the inset tone; A could press [Hold] to hold B, and talking with C.