

**User Manual**  
**NET900 Series**  
IP Phone  
Version 1.0

**IP-PHONE Technical manual**

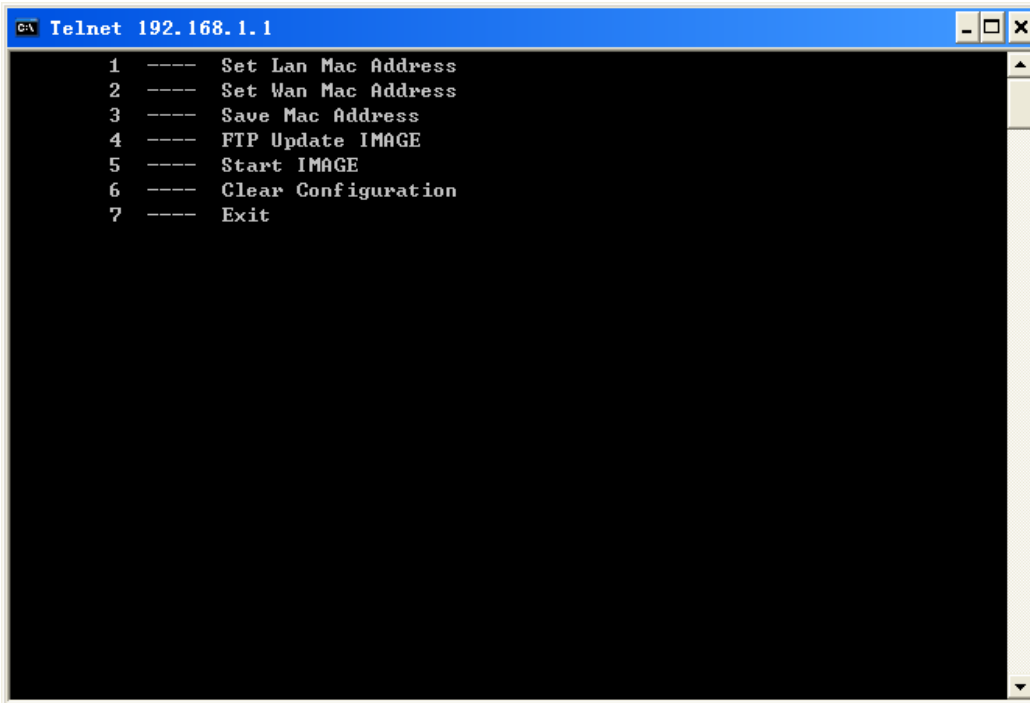
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Power up the phone there will be rolling dice shown on the screen if now press the " " key on the phone it will enter POST mode which is also called safe mode) otherwise when time out, the system will lead to APP it lasts about 7 seconds in the whole process.

## 1. POST mode

After system enters POST mode user should first of all make sure that the host computer is with the IP of 192.168.1.x network segment and then input "telnet 192.168.1.1" under command line, the picture as follows:



```
C:\ Telnet 192.168.1.1
1 ---- Set Lan Mac Address
2 ---- Set Wan Mac Address
3 ---- Save Mac Address
4 ---- FTP Update IMAGE
5 ---- Start IMAGE
6 ---- Clear Configuration
7 ---- Exit
```

### 1.1 Modify MAC address

Take modification of MAC of LAN as example  
Input 1 and then carriage return shown as follows:

```

c:\ Telnet 192.168.1.1
1 ---- Set Lan Mac Address
2 ---- Set Wan Mac Address
3 ---- Save Mac Address
4 ---- FTP Update IMAGE
5 ---- Start IMAGE
6 ---- Clear Configuration
7 ---- Exit
1
Current Ethernet Address is: 00:a0:24:b8:55:22
00-

```

Thus user can begin modifying the six two-figure groups of MAC address in turn if you don't want to modify the current two-figure group please enter carriage return directly if you want to modify, please input two new figures and then press carriage return. It is shown as follows after the modification

```

c:\ Telnet 192.168.1.1
1 ---- Set Lan Mac Address
2 ---- Set Wan Mac Address
3 ---- Save Mac Address
4 ---- FTP Update IMAGE
5 ---- Start IMAGE
6 ---- Clear Configuration
7 ---- Exit
1
Current Ethernet Address is: 00:a0:24:b8:55:22
00-
a0-
24-
b8-
55- 04
22- 08
New Ethernet Address is: 00:a0:24:b8:04:08
1 ---- Set Lan Mac Address
2 ---- Set Wan Mac Address
3 ---- Save Mac Address
4 ---- FTP Update IMAGE
5 ---- Start IMAGE
6 ---- Clear Configuration
7 ---- Exit

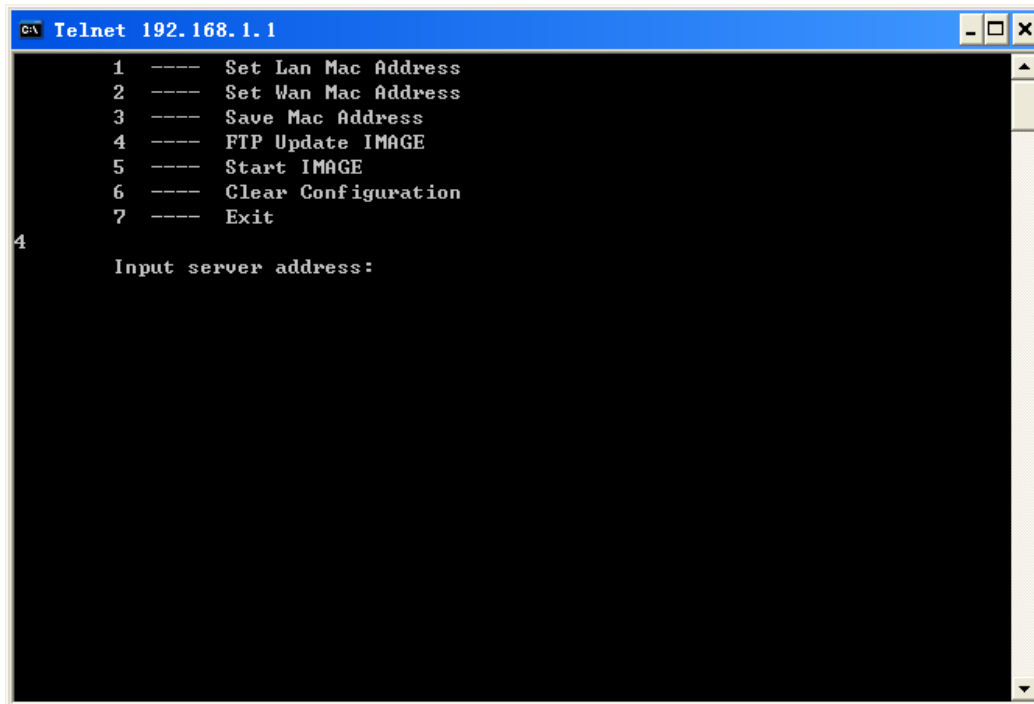
```

After modification, please remember to save the modified MAC address, the method is like this: input 3 and then carriage return.

## 1.2 Upgrade IMAGE

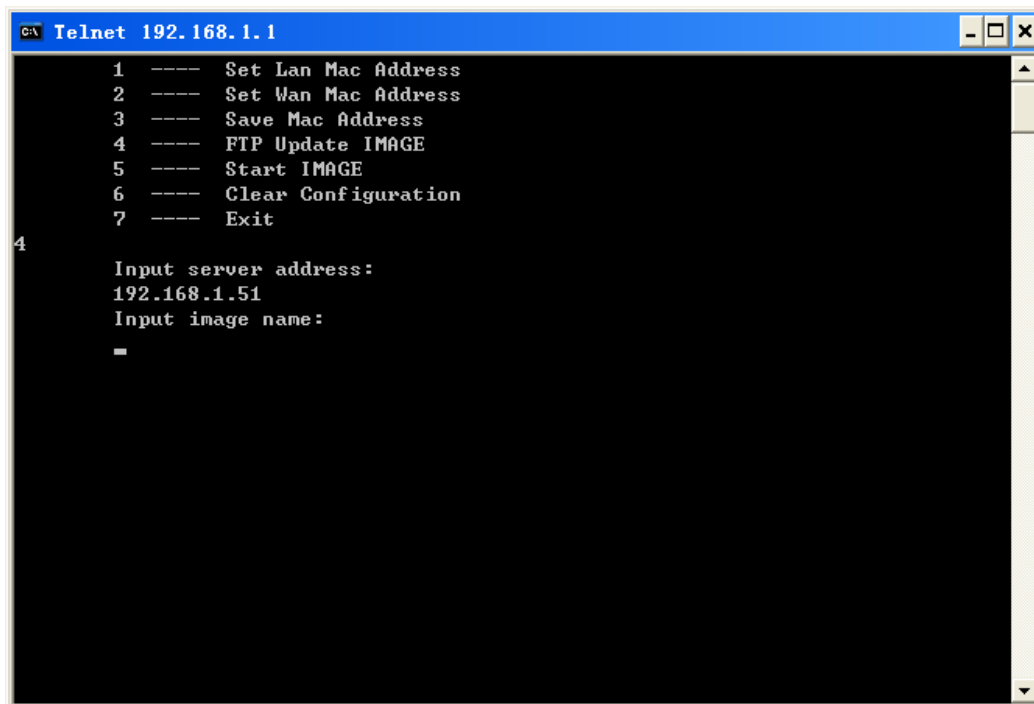
Upgrade via FTP mode

Input 4 and then carriage return shown as follows:



```
C:\ Telnet 192.168.1.1
1 ---- Set Lan Mac Address
2 ---- Set Wan Mac Address
3 ---- Save Mac Address
4 ---- FTP Update IMAGE
5 ---- Start IMAGE
6 ---- Clear Configuration
7 ---- Exit
4
Input server address:
```

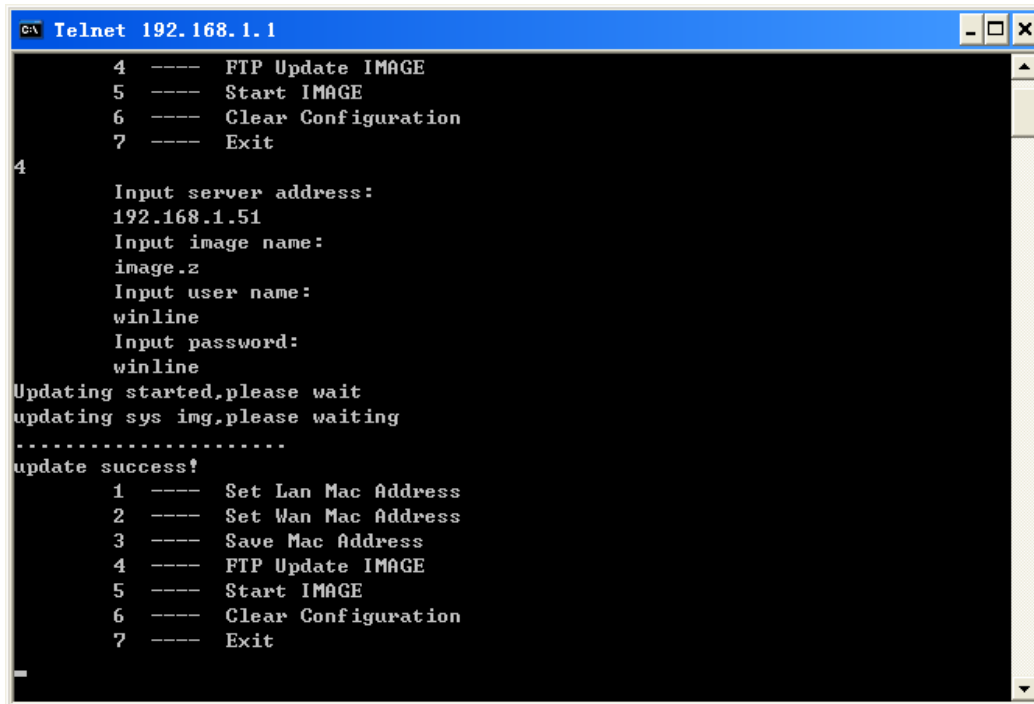
Input IP address of Server and then carriage return shown as follows:



```
C:\ Telnet 192.168.1.1
1 ---- Set Lan Mac Address
2 ---- Set Wan Mac Address
3 ---- Save Mac Address
4 ---- FTP Update IMAGE
5 ---- Start IMAGE
6 ---- Clear Configuration
7 ---- Exit
4
Input server address:
192.168.1.51
Input image name:
-
```

And then input file name, username and password of FTP in turn the upgrade begins, shown as

follows after upgrade



```
C:\ Telnet 192.168.1.1
4 ---- FTP Update IMAGE
5 ---- Start IMAGE
6 ---- Clear Configuration
7 ---- Exit
4
Input server address:
192.168.1.51
Input image name:
image.z
Input user name:
winline
Input password:
winline
Updating started, please wait
updating sys img, please waiting
.....
update success!
1 ---- Set Lan Mac Address
2 ---- Set Wan Mac Address
3 ---- Save Mac Address
4 ---- FTP Update IMAGE
5 ---- Start IMAGE
6 ---- Clear Configuration
7 ---- Exit
```

After upgrade we can input 6 and then carriage return to enable APP.

### 1.3 Clear configuration

Sometimes the system may not start up owing to certain reason at this time one of the ways is to clear configuration and recover default configuration the approach to clear configuration is to input 6 and then carriage return.

## 2 APP mode

After APP is enabled successfully, sometimes in order to meet different demands we should check the current configuration of the phone and modify some configurations according to our own needs. The phone provides three ways for checking and modifying configuration

- a. Command line
- b. WEB page
- c. Phone keyboard

After APP is enabled, the one near the power supply is WAN port another is LAN port.

## 3 Introduction of command line

### 3.1 Basic introduction

1 Type "help " or "?" " under a certain node and then you can view all daughter nodes under the current node and all non-global commands type " help " or "?" " under a certain command and then you can check all the parameters of this command.

2 Type "! " or "exit", it will return to the upper directory.

3 There is no necessity to input the name in full when entering the node name or command name input part of it and then press " TAB " to piece out. Sometimes if many nodes or commands have the same prefix, the system will list all alternative nodes or commands user can keep on entering according to the direction.

4 Every "help" information has comment of <command> or <node> which will be convenient for user to mark off node and command.

5 The parameter of command is divided into two kinds, " required " and " optional ", if "required " then all adopt "-" as prefix if "optional ", then all adopt "\_" as prefix. Thus there is no necessity to remember too many parameter names but only enter " - " or " \_ " and then press " TAB ", the system will piece out automatically.

6 User should remember to save the configuration in time, otherwise the phone will recover previous configuration when starting up next time the command to save is "write".

### 3.2 Main frame of the command line

Structure under the root node as follows

```
NET900
--- account
--- config
--- debug
--- download
--- password
--- setdefault
--- show
--- telnet
--- time
--- trancert
--- update
--- upload
```

Major parameters setup of command line are all under the config node structure of config node as follows

```
NET900<config>
--- accesslist
```



**Delete DHCP rules**            ---no entry -name xxx  
For example: NET900<config-dhcp>#no entry -name lan2004  
**Check DHCP setup**            ---show  
**[Disable] enable DNS-relay**    ---[no] dns-relay

### 3.3.3 Dial-Rule configuration

Path NET900<config-dialrule>#  
**Set the fixed length to end**    ---fixlen xxx  
**No fixed length to end**        ---no fixlen  
**Set to send numbers after time out**    ---timeout-send xxx  
**No timeout-send**            ---no timeout-send  
**[Disable] use of h323 RAS location**    ---[no] h323-location  
**Add user-defined dial rule**        ---entry -prefix xxx -length xxx  
For example:NET900<config-dialrule>#entry -prefix 010 -length 11  
**Delete user-defined dial rule**        ---no entry -prfix xxx  
For example:NET900<config-dialrule>#no entry -prefix 010  
**Show current dial-rule config**        ---show

### 3.3.4 H323 parameter configuration

Path NET900<config-h323>#  
**[Disable] enable Early H245**        ---[no]early245  
**[Disable] enable Faststart**        ---[no]faststart  
**[Disable] enable Early-Talk**        ---[no]early-talk  
**[Disable] enable Force\_g7231**        ---[no]force\_g7231  
**[Disable] enable Early-Talk**        ---[no]early-talk  
**[Disable] enable register**        ---[no]register  
**[Disable] enable Callajf**        ---[no]callajf  
**[Disable] enableH245 Tunnelling**    ---[no]h245tunnelling  
**[Disable] enable Multiplexing**        ---[no]multiplexing  
**[Disable] enable swap gatekeeper**    ---[no]swap-gk  
**Interval time configuration**        ---interval-time xxx  
**DTMF mode configuration**        ---dtmf-relay xxx  
**Alter-gatekeeper IP address and port configuration** --- alter-gatekeeper -ip x.x.x.x \_port xxx  
For example:NET900<config-h323>#alter-gatekeeper -ip 210.22.23.25 \_port 1719  
**Alter-gatekeeper ID configuration**    --- alter-gkid xxx  
**Default gatekeeper IP address and port configuration** --- gatekeeper -ip x.x.x.x \_port xxx  
**Default alter-gatekeeper ID configuration**    --- gkid xxx  
**H323 ID setup**            --- h323-id xxx  
**Gatekeeper RAS port configuration**    --- rasport xxx  
**Q.931 signal port configuration**    --- sigalport xxx  
**Show all of current relevant configurations of H.323:** ---show

### 3.3.5 Interface-Fastethernet-Lan Local area network(LAN) parameter configuration

Path NET900<config-interface-fastethernet-lan>#

**[Disable] bridging mode** ---[no]bridgemode

**[Disable] enable DHCP service** ---[no]dhcp-server

**Show DHCP current rules:** ---dhcpshow

**Show IP address of LAN:** ---ipshow

**Show NAT information:** ---natshow

**Change IP address of LAN** ---ip -addr x.x.x.x -mask x.x.x.x

For example: NET900<config-interface-fastethernet-lan>#ip -addr 192.168.1.10 -mask 255.255.255.0

When the phone is transfers data by NAT, don't use natshow command to view otherwise it will result in system's temporary zero response.

Enable bridge mode LAN configuration will be disabled, user is unable to access network by NAT of the phone.

### 3.3.6 Interface-Fastethernet-Wan wide area network parameter configuration

Path NET900<config - interface - fastethernet - wan>#

**[Disable] enable dhcp client-side service** ---[no]dhcp

**[Disable] enable pppoe** ---[no]pppoe

**[Disable] enable QOS** ---[no]qos

**IP configuration of the phone** ---gateway x.x.x.x

**Clear IP configuration of the phone** ---no gateway

**IP address configuration** ---ip -address x.x.x.x -mask x.x.x.x

For example:NET900<config-interface-fastethernet-wan>#ip -addr 202.112.241.100 \_mask 255.255.255.0

Note after changing the IP, telnet new IP again because IP has been changed.

**Show wide area network configuration:** ---show

### 3.3.7 MMI FILTER (man-machine interface filter)

Path NET900<config-mmifilter>#

**Add filter rule** ---entry -start x.x.x.x -end x.x.x.x

For example:NET900<config-mmifilter>#entry -start 202.112.20.1 -end 202.112.20.255

**Delete filter rule** ---no entry -start x.x.x.x

For example:NET900<config-mmifilter>#no entry -start 202.112.20.1

**Check filter rule** ---show

**[Disable] enable man-machine interface filter** ---[no]start-filter

**configuration**

**3.3.8 NAT parameter**

Path NET900<config - nat>#

**[Disable] enable ftp alg** ---[no]ftpalg

**[Disable] enable ipsec alg** ---[no]ipsecalg

**[Disable] enable pptp alg** ---[no]pptpalg

**Add TCP rule** ---tcp-entry -ip x.x.x.x -lanport xxx -wanport xxx

For example:NET900<config-nat>#tcp-entry -ip 192.168.1.5 -lanport 1720 -wanport 1000

**Delete TCP rule** ---no entry -ip x.x.x.x -lanport xxx -wanport xxx

For example:NET900<config-nat>#no tcp-entry -ip 192.168.1.5 -lanport 5060 -wanport 1000

**Add UDP rule** ---udp-entry -ip x.x.x.x -lanport xxx -wanport xxx

**Delete UDP rule** ---no udp-entry -ip x.x.x.x -lanport xxx -wanport xxx

**Check NAT configuration** ---show

### 3.3.9 Network service configuration

Path NET900<config - netservice>#

**DNS address configuration** ---dns -ip x.x.x.x \_domain xxx

For example:NET900<config-netservice>#dns -ip 202.112.10.36 \_domain voip.com

**Alter-DNS address configuration** ---alterdns -ip x.x.x.x \_domain xxx

**Host name configuration** ---hostname xxx

**Http port configuration** ---http-port xxx

**Check current http configuration** ---http-port

**Configure telnet port** ---telnet-port xxx

**Check current telnet configuration** ---telnet-port

**Configuration of media startport and the port amount** ---media-port -startport xxx -number xxxx

For example:NET900<config-netservice>#media-port -startport 10000 -number 200

**Add Route rule** ---route -gateway x.x.x.x -addr x.x.x.x -mask x.x.x.x

For example:NET900<config-netservice>#route -gateway 202.112.10.1 -addr 202.112.210.1 -mask 255.255.255.0

**Delete Route rule** ---no route -gateway x.x.x.x -addr x.x.x.x -mask x.x.x.x

**Check Route configuration** ---route

**Check current network service configuration** ---show

### 3.3.10 Pbook outgoing call number binding configuration

Path NET900<config - pbook>#

**[Disable] enable GK and Proxy call** ---[no]enableGKandProxy

**Add IP number binding rule** ---entry -number xxx -ip x.x.x.x -protocol xxx

For example:NET900<config-pbook>#entry -number 100 -ip 202.112.20.100 -protocol sip

**Add LIFELINE number** ---entry -number xxx -protocol lifeline

For example:NET900<config-pbook>#entry -number 110 -protocol lifeline

**Add number IP binding rule and add some numbers before the number**

---entry -number xxx -ip x.x.x.x -protocol xxx \_add xxx

For example:NET900<config-pbook>#entry -number 100 -ip 202.112.20.100 -protocol sip \_add

123(in this way when user dial 100,it will be equivalent to dial 123100)

**Add number IP binding rule and replace the current number by another number**

---entry -number xxx -ip x.x.x.x -protocol xxx \_all xxx

For example:NET900<config-pbook>#entry -number 100 -ip 202.112.20.100 -protocol sip \_all 123(in this way when user dial 100,it will be equivalent to dial 123)

**Add number IP binding rule and delete the X numbers in the front of the number**

---entry -number xxx -ip x.x.x.x -protocol xxx \_del xxx

For example:NET900<config-pbook>#entry -number 1234 -ip 202.112.20.100 -protocol sip \_del 2(in this way when user dial 1234,it will be equivalent to dial 34)

**Add number IP binding rule and replace part of the numbers in the front of the number**

---entry -number xxx -ip x.x.x.x -protocol xxx \_rep xxx \_length xxx

For example:NET900<config-pbook>#entry -number 1234 -ip 202.112.20.100 -protocol sip \_rep 567 \_length 2(in this way when user dial 100,it will be equivalent to dial 56734)

**Delete number binding rule** ---no entry -number xxx

**Check current number binding rule** ---show

**Current default VOIP protocol configuration** ---default-protocol xxx

### 3.3.11 Port configuration

If entering "port" under the "config" node then the configuration will go into effect for all ports if entering " port X" then the configuration will only into effect for X port X represents a certain port number but some functions will not go into effect for all ports so user must enter" port X" when configuring, otherwise it is shown as" Error : Missing parameter ".

Path NET900<config - port># or NET900<config - X>#

**Set accept relay mode** ---accept-relay xxx

**Set caller ID mode** ---callerid xxx

**No caller ID** ---no callerid

**Call forwarding configuration** ---callforward -conditon xxx -number xxx -ip xxx -port xxx -protocol xxx

For example:NET900<config-port 0>#callforward -condition busy -number 100 -ip 202.112.10.100 -port 5060 -protocol sip

**Disable call forwarding** ---no callforward

**[Disable] enable call transfer (CT)** ---[no]calltransfer

Note after call transfer function is enabled user make hooking operation to implement transfer after starting the phone call.

**[Disable] enable call waiting** ---[no]callwaiting

**DSP priority encoding mode configuration** ---codec xxx

**Set DTMF port volume** ---dtmfvolume xxx

**set fastcalled number** --- fastcalled xxx

**No fast called number (FXO)** ---no fastcalled

**Show fast called number (FXO)** ---fastcalled

**Set fast calling number(FXS)** --- fastcalling xxx  
**No fast calling number (FXS)** ---no fastcalling  
**Show fast calling number ( FXS )** ---fastcalling  
**[Disable] enable FAX ECM** ---[no]faxecm  
**Fax mode configuration** --- faxmode xxx  
**Fax rate configuration** ---faxrate xxx  
**Fax volume config** ---faxvolume xxx  
**Set DSP handdown validation time** ---handdown xxx  
**Set handup delay of FXO** ---handup xxx  
**Add phone numbers to in-limit blacklist** ---in-limit xxx  
**Check in-limit blacklist configuration** ---in-limit  
**Set DSP input volume** ---input xxx  
**Configure port number** ---number xxx  
**Add phone numbers to out-limit list** ---out-limit xxx  
**Check out-limit list configuration** ---out-limit  
**Configure DSP output volume** ---output xxx  
**Set port checking mode of the same numbers as pollup** ---pollup  
**Set port checking mode of the same numbers as no pollup** ---no pollup  
**Set the phone prefix** ---prefix xxx  
**Add [ delete ] private server FXS matching numbers** ---private [no]destination-pattern  
number xxx \_protocol noregister|publicregister|privateregister|all  
Note user can configure different kinds of numbers in different ports or the same port the system  
will automatically go into effect according to the protocol configured "noregister" means that this  
number will never be used for gk or proxy register "publicregister" means that this number is used  
for public server register and call "privateregister" means that this number is used for private  
server register and call "all" means that this number is used for all protocol register or  
point-to-point call. The appointed protocol of the system default configured number is "all". The  
following configurations have the same meaning of this configuration.  
For example:NET900<config-port 0>#private destination-pattern 1000  
**Add outgoing call number to the private server FXO** ---private destination-prefix  
number xxx+T \_protocol  
For example:NET900<config-port >#private destination-prefix 1000T  
**Add the outgoing call number to the private server FXO and set suffix**  
---private destination-prefix -number xxx+T \_suffix xxx  
For example:NET900<config-port >#private destination-prefix 1000T \_suffix 456  
**Add the outgoing call number to the private server FXO and set prefix**  
---private destination-prefix -number xxx+T \_prefix xxx  
For example:NET900<config-port >#private destination-prefix 1000T \_prefix 789  
**Delete the matching outgoing call number of private server** ---private no  
destination-prefix -number xxx+T  
For example:NET900<config-port >#private no destination-prefix 1000T  
**Add [delete] the matching numbers of the public server FXS** ---public  
[no]destination-pattern number xxx \_protocol  
**Add outgoing call number to the public server FXO** --- public destination-prefix

number xxx+T\_protocol

**Add the outgoing call number to the public server FXO and set suffix**

--- public destination-prefix -number xxx+T \_suffix xxx

**Add the outgoing call number to the public server FXO and set prefix**

--- public destination-prefix -number xxx+T -prefix xxx

**Delete the matching outgoing call number of public server** --- public no destination-prefix -number xxx+T

**[Disable] enable outgoing call** ---[no]shutdown out

**[Disable] enable outgoing call** ---[no]shutdown in

**[Disable] enable outgoing call and outgoing call** ---[no]shutdown

**[Disable] enable three way call** ---[no]threetalk

Note after the three-way-call function is enabled user make hooking operation and then press \* key to implement this function. For example, user A call user B after the phone call starts, A makes hooking operation to hold B, and then presses \* key to receive dialing tone and then call user C after starting the phone call with C, A makes hooking operation again and recover the call with B, in this way, A, B and C can begin the three-way-call.

**Set Tone Type** ---tontype xxx

**Check port configuration** ---show

### 3.3.12 PPPOE configuration

Path NET900<config - pppoe>#

**PPPOE username, password configuration** ---auth -user xxx -password xxx

For example:NET900<config-pppoe>#auth -user aaa -password 123456

**[Disable] PPPOE service** ---[no]service xxx

**Show PPPOE parameters configuration** ---show

### 3.3.13 QOS configuration

Path NET900<config - qos>#

**[Delete] add network address of 802.1p configuration list** --- [no]entry -addr x.x.x.x -mask x.x.x.x

For example:NET900<config-qos>#entry -addr 202.112.10.1 -mask 255.255.255.0

**[Exclude] include QOS list** ---[no]include

**Show all 802.1p priority guarantee configuration** ---show

Note after the "qos" is enabled acquiescently, the system will add qos acquiescently to all sending-out "rtp" packages when user configure "qos table" and "include" the system only sends voice packets with "qos" to the "ip" included in the table, and those of "no include" will be sent to the "ip" which is not included in the " qos table".

### 3.3.14 SIP configuration

Path NET900<config - sip>#

**[Disable] enable register to SIP** ---[no] register  
**[Disable] enable automatic detection server** ---[no] detect-server  
**Set DTMF mode** ---dtmf-mode xxx  
**Set detection interval time** ---interval-time xxx  
**Set RFC edition** ---rfc-version xxx  
**Disable [enable] auto-swap server** [no]swap-server  
**Set passwords to phone numbers of the ports** ---number-password -number xxx  
-password xxx  
**SIP signal port configuration** --- signalport xxx  
**SIP Proxy parameters configuration** ---server proxy -ip x.x.x.x \_port xxx  
\_user xxx \_password xxx

For example:NET900<config-sip-server># proxy ip 210.25.23.22 \_port 5060 \_user aaa \_password  
123456

**SIP Register server parameters configuration** ---server register -ip x.x.x.x  
\_port xxx -user xxx \_password xxx

**Alternate-proxy-server setup** ---alter-server proxy -ip x.x.x.x \_port xxx \_user  
xxx \_password xxx

**Alternate-register-server setup** ---alter-server register -ip x.x.x.x \_port xxx  
\_user xxx \_password xxx

**[Disable] enable stun server** ---stun [no]enable

**Set stun server detection interval time** ---stun interval-time xxx

**Set the stun server address and port** ---stun -ip x.x.x.x -port xxx

**Show all current relevant SIP parameters configuration** ---show

Note private server and public server have the same configuration changing the configuration  
under "server" into private-register and private-proxy will do.

### 3.3.15 UDP TUNNEL configuration

Path NET900<config - udptunnel>#

**[Disable] enable Udp tunnel** ---[no] start-tunnel

**set tunnel port** ---tunnelport xxx

**Add udptunnel rule** ---entry -addr x.x.x.x -mask x.x.x.x -tunneladdr x.x.x.x  
-tunnelport xxx

For example:NET900<config-udptunnel>#entry -addr 202.112.10.1 -mask 255.255.255.0  
-tunneladdr 210.22.25.24 -tunnelport 500

**Delete udptunnel rule** ---no entry -addr x.x.x.x -mask x.x.x.x

**Show udp tunnel configuration** ---show

### 3.3.16 User management configuration

Path NET900<config - user>#

**Modify user authority** ---access -user xxx -access xxx

For example:NET900<config-user>#access -user aaa -access 7

**Modify user password** ---password -user xxx

**Add users** ---entry -user xxx -access xxx

For example:NET900<config-user>#entry -user abc -access 7

**Delete users** ---no entry -user xxx

**View all users information** ---show

## 3.4 Other configurations outside the Config node

### 3.4.1 Account charging module configuration

Path NET900<config - account>#

**[Disable] enable Syslog** ---syslog [no] start

**Configure Syslog server address and port** ---syslog server -ip x.x.x.x \_port xxx

For example:NET900<config-account-syslog>#server -ip 202.112.20.10

**Check Syslog configuration information** ---syslog show

**Check all charging configuration information** ---show

### 3.4.2 Time configuration

Path NET900<time>#

**Set the time manually** ---manualset -year xxx -month xxx -day xxx

-hour xxx -minute xxx -second xxx

For example: NET900<time>#manulset -year 2004 -month 10 -day 1 -hour 8 -minitute 30  
-second 0

**[Disable] enable sntp** ---sntp [no] start

**Set the address of sntp server** ---sntp server x.x.x.x

**Set the effective time of sntp** ---sntp timeout xxx

**Set the sntp time zone** ---sntp zone xxx

**View sntp information** ---sntp show

**View current time** ---print

### 3.4.3 System upgrade command

Path NET900#

**Upgrade application program by FTP**            ---update ftp -user xxx -password xxx -ip  
x.x.x.x -file xxx

For example:NET900# update ftp -user abc -password 123 -ip 202.112.20.15 -file abc.dlf

**Upgrade application program by TFTP**            ---update tftp -ip x.x.x.x -file xxx

**Upload configuration files by FTP**            ---upload ftp -user xxx -password xxx -ip  
x.x.x.x

-file xxx

**Upload configuration files by TFTP**            ---upload tftp -ip x.x.x.x -file xxx

**Download configuration files by FTP**            ---download ftp -user xxx -password xxx  
-ip x.x.x.x -file xxx

**Download configuration files by TFTP**            ---download tftp -ip x.x.x.x -file xxx

### 3.4.4 Other command

Path NET900#

**Set all module debug level**            ---debug all xxx

**Set app module debug level**            ---debug app xxx

**Set cdr module debug level**            ---debug cdr xxx

**Set sip module debug level**            ---debug sip xxx

**Set h323 module debug level**            ---debug h323 xxx

**Set tel module debug level**            ---debug tel xxx

**Set dsp module debug level**            ---debug dsp xxx

**Close all modulars debug**            ---debug no all

**Close app modulars debug**            ---debug no app

**Close cdr modulars debug level**            ---debug no cdr

**Close sip modulars debug level**            ---debug no sip

**Close h323 modulars debuglevel**            ---debug no h323

**Close tel modulars debug level**            ---debug no tel

**Close dsp modulars debug level**            ---debug no dsp

**Recover the factory default setting**            ---setdefault

**Recover all modules to the factory default setting**            ---setdefault all

**Show a certain module information**            ---show xxx

**Active user update password**            --- password

**Telnet rlogin**            --- telnet x.x.x.x

**Telnet by specific port**            --- telnet x.x.x.x -port xxx

**Logout command for Telnet user**            ---logout

**Switch to Chinese help**            ---chinese

**Switch to English help**            ---english

**Save configuration**            ---write

**Restart**            ---reload

**View help**            ---help

**Exit current node**            ---exit

**Clear screen**            ---clear

**PING remote terminal host computer**            --- ping x.x.x.x

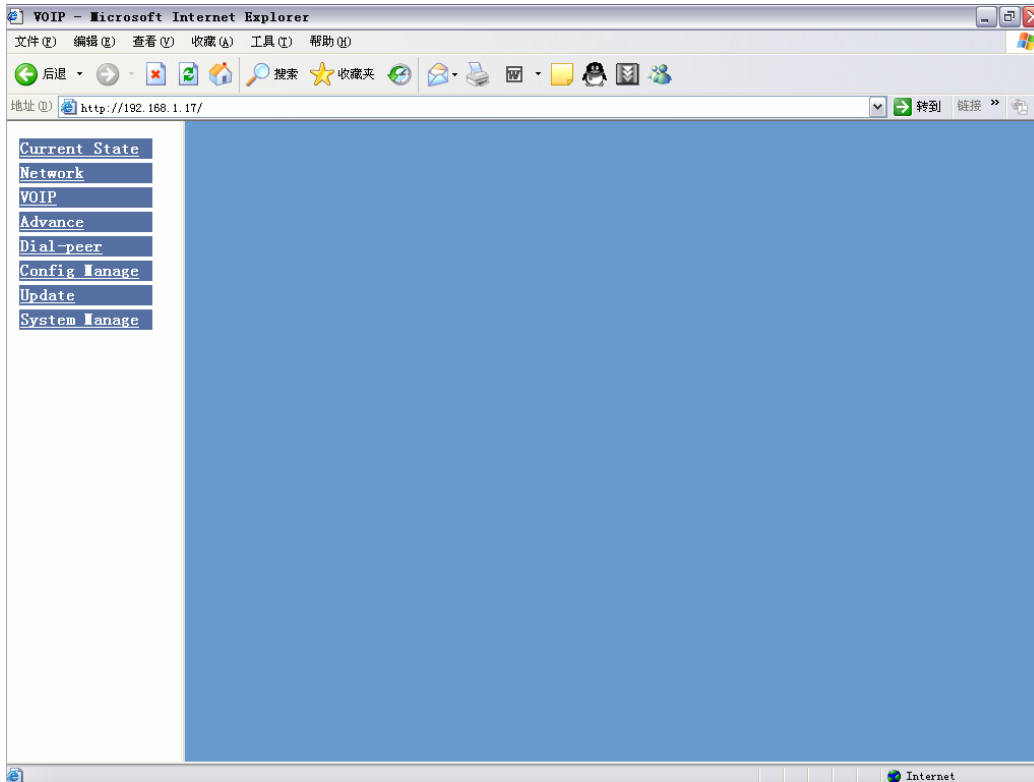
<b>Broadcast to all CLI users</b>	---broadcast xxx
<b>show system history record</b>	---history
<b>Terminal parameter settings</b>	---stty row xxx or stty columns xxx
<b>Send message to appointed users</b>	---sendmsg
<b>Show current login users</b>	---who
<b>Trace command</b>	---tracert x.x.x.x
<b>Add alias</b>	---alias xxx xxx
<b>Execute a document</b>	---exec xxx
<b>Echo input</b>	---echo xxx

After recovery of default configuration restart system directly without saving the configuration.

Technicians or administrator can know in more detail about information of the system by "debug" message. Debug message is divided into 0-7 level technicians can open messages of different levels as required.

## 4 Introduction of WEB page

Input IP address http://xxx.xxx.xxx.xxx of the phone on Internet Explorer if the web login port of the phone is configured as non-80 standard port then user need to input http://xxx.xxx.xxx.xxx xxxxx/ otherwise the web will show that no server has been found),it will be shown as follows:

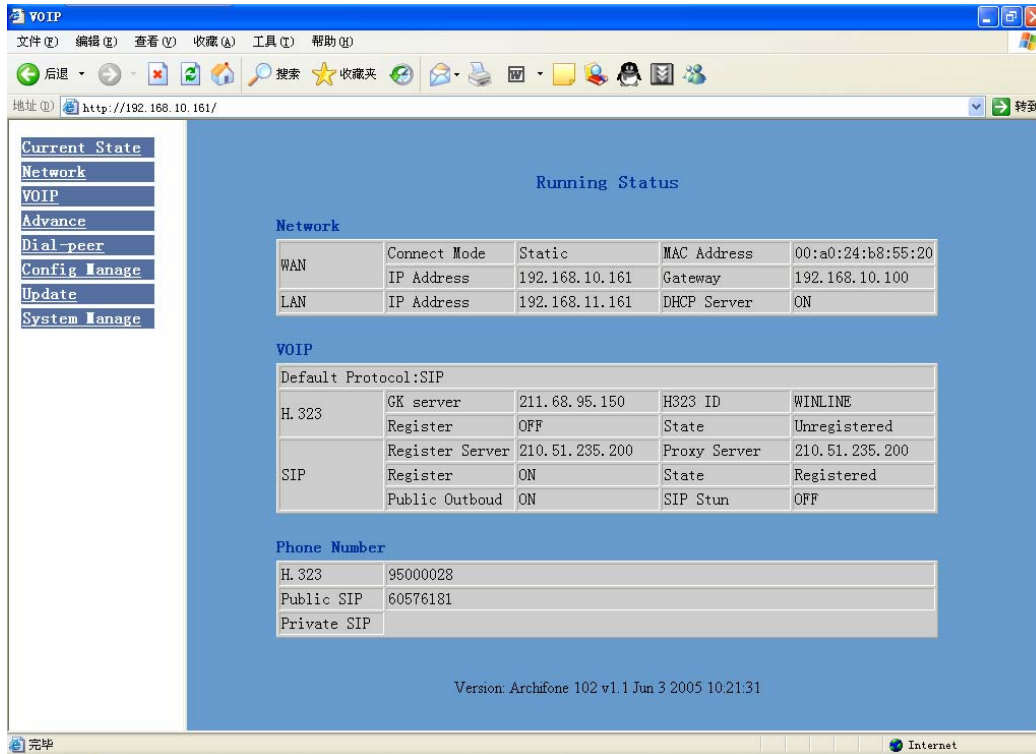


## 4.1 Current state

On this page user can gather information of each commonly-used parameter of the phone, it is shown as the following figure the network section shows the current WAN, LAN configurations of the phone including gaining way of WAN IP and IP static state, DHCP, PPPoE) MAC address WAN IP address of the phone LAN IP address of the phone opening state of LAN DHCP server.

The VoIP section shows the current default signaling protocol in use and server parameter in use of each protocol including GateKeeper IP of H323 H323ID whether enables register whether has registered on GK Register server IP of SIP proxy server IP whether enables register whether has registered on register server whether enables outbound proxy whether enables STUN server

The Phone Number section shows corresponding phone number of each protocol  
The version number and date of issue have been shown at the end of the page



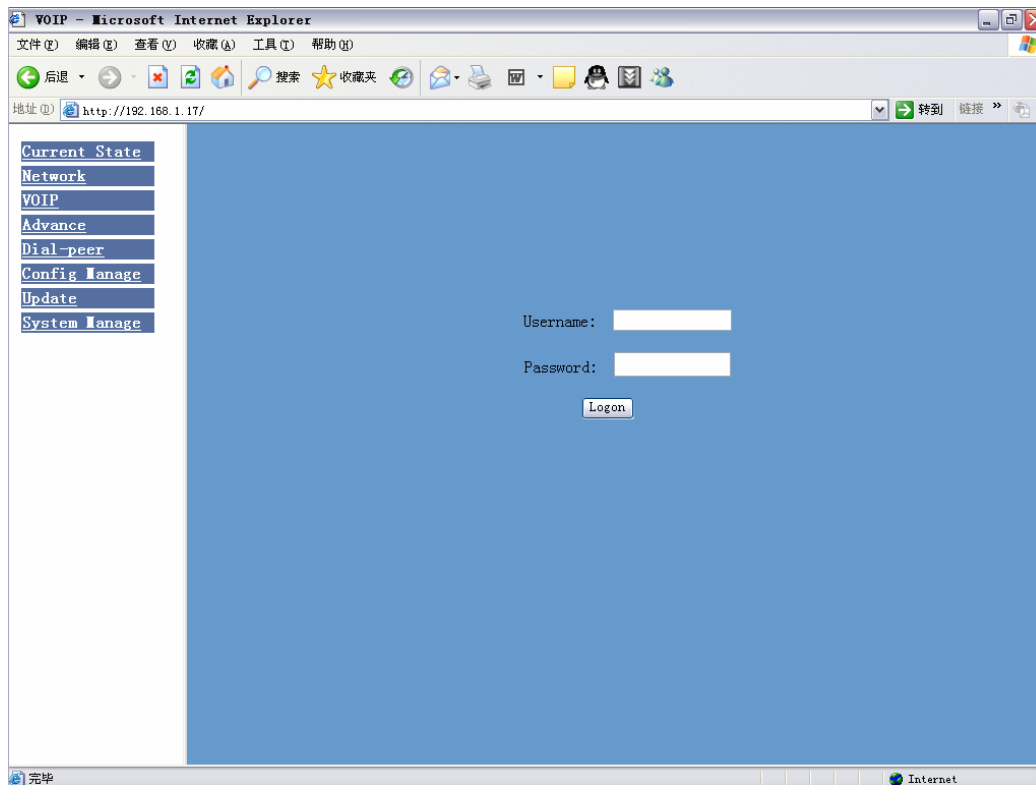
## 4.2 User verification

User should login before configuring dialogue machine.

Guest account the username and password are all " guest", user can have a browse of system.

Administrator account the username and password are all " admin" this user can configure the system.

Note after inputting username and password user press carriage return directly to enter the page.



## 4.3 Network configuration

### 4.3.1 Wide area network WAN

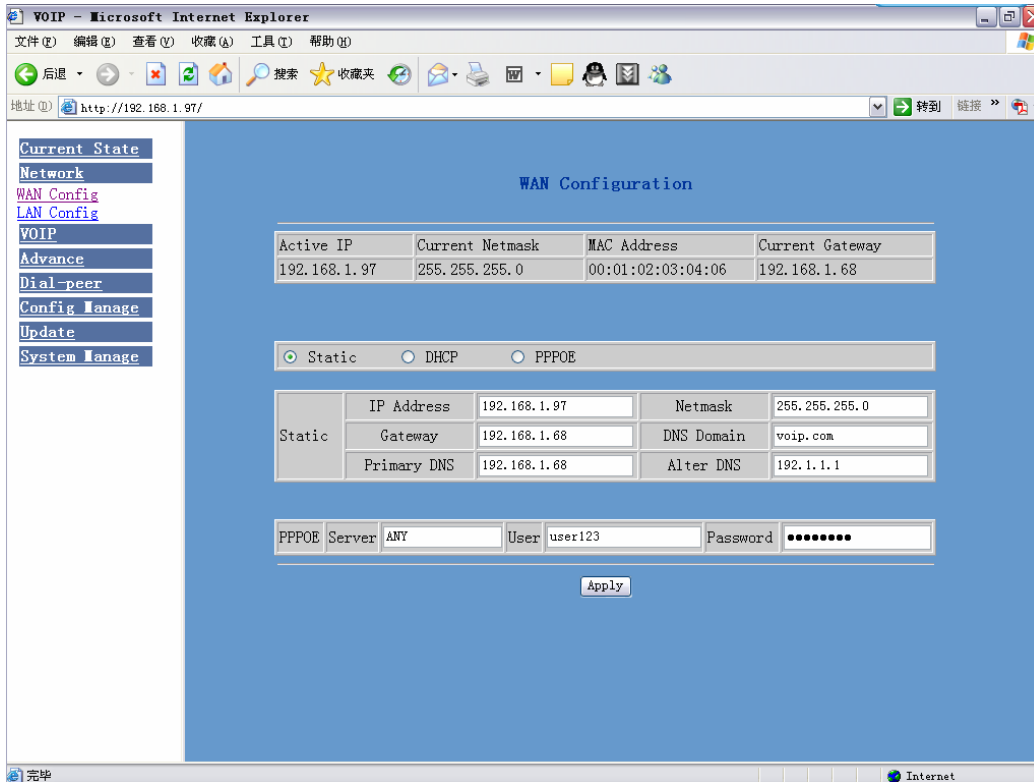
User can view the current network IP linking mode of the system on this page.

User will be authorized to set the network IP Gateway and DNS if the system adopts the static linking mode.

If the system selects DHCP service in the network which is using DHCP service, IP address will be gained dynamically.

If the system selects PPPOE service in the network which is using the PPPOE service, then the IP address will be gained by the set PPPOE ISP internet and password of the account.

**Note if IP address has been modified, the web page will no longer respond owing to the modification so new IP address should be input in the address field now.**



### Configuration Explanation

Active IP	Current Netmask	MAC Address	Current Gateway
192.168.10.77	255.255.255.0	00:01:02:12:34:57	192.168.10.86

Current phone IP subnet mask mac address and current phone IP

Static
  DHCP
  PPPOE
 Select acquisition way of IP for WAN This is single option Configure static IP parameter for WAN

Static	IP Address	192.168.10.77	Netmask	255.255.255.0
	Gateway	192.168.10.86	DNS Domain	voip.com
	Primary DNS	192.168.10.86	Alter DNS	192.1.1.1

IP Address  Configure static IP address

Netmask  Configure subnet mask

Gateway  Configure IP address of the the phone

DNS Domain  Configure "dns domain" suffix if user input "domain" and it can't be resolved then the phone will add and resolve the "domain" after user has input

Primary DNS	192.168.10.86	Main DNS server IP address
Alter DNS	192.1.1.1	The second DNS server IP address

Configure PPPoE

PPPOE	Server	ANY	User	user123	Password	●●●●●●●●
-------	--------	-----	------	---------	----------	----------

Server ANY Service name if PPPoE ISP has no special requirement for this name generally is the default

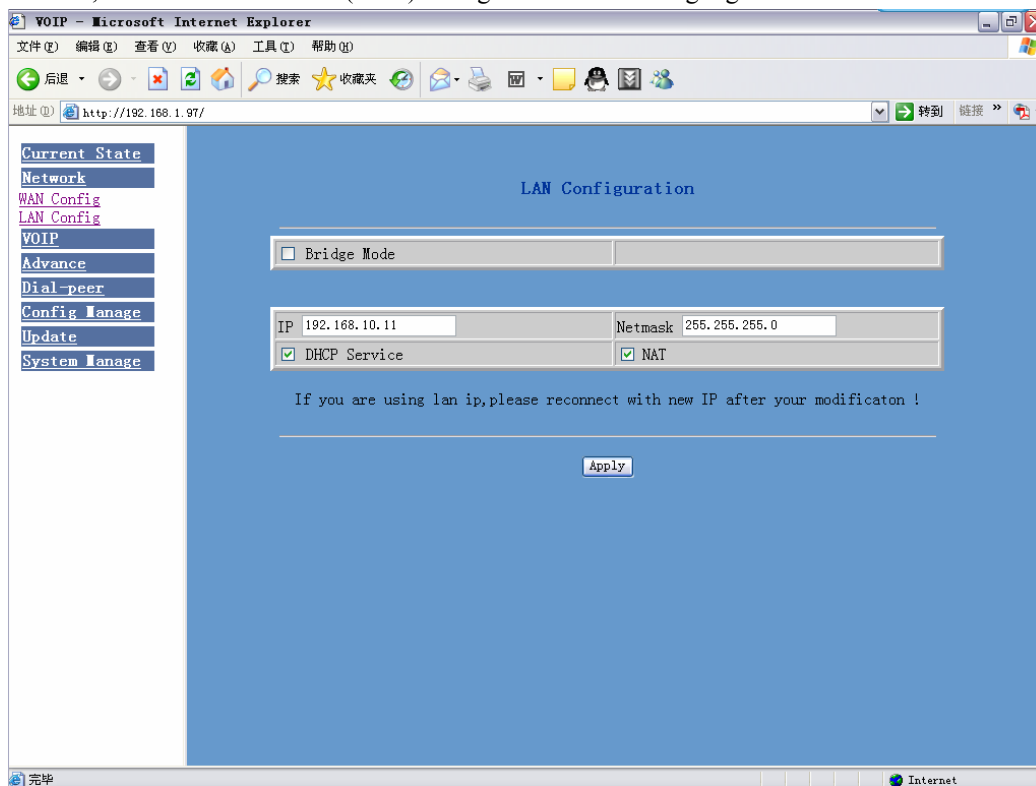
User	user123	PPPoE account
------	---------	---------------

Password	●●●●●●●●	PPPoE password
----------	----------	----------------

Configure the parameter and then click "apply" to go into effect

### 4.3.2 Local area network (LAN)

User can make local area network (LAN) configuration on this page, when bridging mode is selected, the local area network (LAN) configuration will no longer go into effect.



Configuration Explanation

Bridge Mode

Use bridge mode transparent mode bridge mode will make the phone no longer set IP address for LAN physical port LAN and WAN will join in the same network

IP 192.168.1.68

Configure LAN static IP

Netmask 255.255.255.0

Configure LAN subnet mask

DHCP Service

Enable LAN port DHCP server after user modify LAN IP the phone will automatically modify the adjustment and save the configuration according to IP and subnet mask team DHCP Lease Table user need to restart the phone to make DHCP server configuration go into effect

NAT

Enable NAT

## 4.4 VOIP configuration

### 4.4.1 H.323 configuration

User can configure specific parameter of H323 signaling protocol on this page

Default GK Addr	202.105.135.95	Alter GK Addr	211.68.95.130
Default GK Port	1719	Alter GK Port	1719
Default GK ID		Alter GK ID	
H323 ID	.ipgw.89001140	Q931 Signal Port	1720
Phone Number	89001140	GK Detect Interval	60 s
RAS Port	0	DTMF Mode	DTMF_RELAY
<input checked="" type="checkbox"/> Permit Call if not registered		<input checked="" type="checkbox"/> EARLY TALK	
<input type="checkbox"/> EARLY H245		<input checked="" type="checkbox"/> Fast Start	
<input checked="" type="checkbox"/> Enable Register		<input type="checkbox"/> Auto Detect GK	
<input checked="" type="checkbox"/> H245 Tunnel		<input type="checkbox"/> Select Multiplexing	
<input type="checkbox"/> H323 Force G7231		<input checked="" type="checkbox"/> GK Auto Swap	
<input type="checkbox"/> H323(Default Protocol)			

Configuration Explanation

**H323[Unregistered]Configuration** show H323 register state if register successfully,there will show Registered in the square bracket otherwise show Unregistered

Default GK Addr  Configure default GateKeeper IP address

Default GK Port  Configure default GK port

Default GK ID  Configure default GK ID if no special requirement of GK user don't need to fill in anything

Q931 Signal Port  The system initiates Q931 signal port the default is 1720

RAS Port  Configure the net gate RAS register port for the system terminal user can logon to gatekeeper through RAS passage and make a request for allowing to initiate the call request. If the request has been allowed, then the gatekeeper will return a transport address with IP address and port number as the call signaling passage of the called party

DTMF Mode    
  Fast Start   
  Auto Detect GK   
 Configure DTMF mode RTP mode RFC2833 mode H245-string mode and H245-signal mode

Permit Call if not registered Configure permission for no-registered call allow to initiate call without net gate register

EARLY H245 Early245 configuration which means that when initiating a call,the 225 message transmission begins at the same time with 245 message transmission the default is Disable

Enable Register Configure enable/cancel register

H245 Tunnel Configuration for transferring 245 message package to 225 message package

H323 Force G7231 Configure H323 to run the talking only by G.7231 encode the default is Disable

H323(Default Protocol) Configure the phone use H323 protocol as default call

protocol

**Fast Start** Configure quick start mode to start H323 call

**Select Multiplexing** Configure multiplexing of logical channel the default is Disable

**EARLY TALK** Configure the phone can receive IVR such as the voice prompt, dialing of PSTN color ring

Configure GK backup and enable GK detecting and auto-swap functions the phone will automatically swap to GK backup server when there is no response from default GK and test the default GK if the default GK recovers response the phone will automatically swap to the default GK.

**Alter GK Addr**  Configure GK backup server IP

**Alter GK Port**  Configure server port for GK backup

**Alter GK ID**  Configure ID for GK backup

**GK Detect Interval**  s GK detection interval time

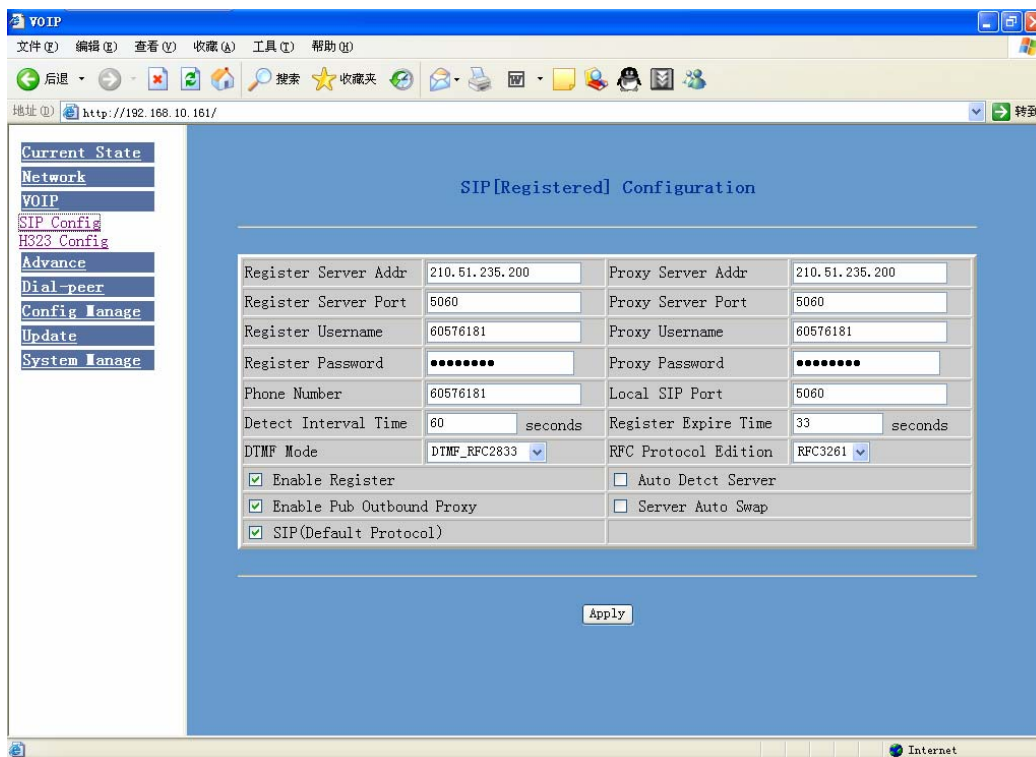
configuration the unit is second

**GK Auto Swap** Enable the phone's auto-swap to GK

**Auto Detect GK** Configure the phone to detect GK automatically

#### 4.4.2 SIP configuration

User can configure specific parameter of H323 signaling protocol on this page



## Configuration Explanation

**SIP[Unregistered] Configuration** show SIP register state if register successfully,there will show Registered in the square bracket otherwise show Unregistered

Register Server Addr  Configure SIP register server IP address

Register Server Port  Configure SIP register server signal port

Register Username  Configure SIP register account usually it is the same with the port number that configured some special SIP servers will have different port configurations,then the port configuration needs to be configured to be numbers here the configuration account can be arbitrary character string

Register Password  Configure password of SIP register account

Proxy Server Addr  Configure proxy server IP address

usually SIP will provide user with service of proxy server and register server which have the same configuration so the configuration of proxy server is usually the same with that of register server but if the configurations of them are different(such as different IP addresses), then each

server's configuration should be modified separately

Proxy Server Port  Configure SIP proxy server signal port

Proxy Username  Configure proxy server account

Proxy Password  Configure proxy server password

Local SIP Port  Configure local signal port the default is 5060 this port will go into effect immediately, the SIP call will use the modified port for communication after modification

Register Expire Time  seconds Configure expire time of SIP server register the default is 600 seconds. If the expire time that server requires is more or less than that configured by the phone the phone can automatically modify it to the recommended time limit and register

Detect Interval Time  seconds Configure detection interval time of the server if the phone enables SIP detection server function the phone will detect once for whether the server has response every other detection interval time

Enable Register Configure enable/disable register

Enable Pub Outbound Proxy Configure to enable public outbound proxy. If proxy server has been enabled the phone will consider the user as using outbound proxy automatically. If the configuration has been disabled the phone can still be registered to the server but can't make SIP call configuration of registered call by the phone will not have impacts on SIP point-to-point call

SIP(Default Protocol) Configure SIP of the phone as default protocol

RFC Protocol Edition  Enable the phone to use protocol edition. When the phone need to communicate with phones which is using SIP1.0 such as CISCO5300 and so on, then it should be configured into RFC2543 to communicate normally. the default is to enable RFC3261

DTMF Mode  DTMF sending mode configuration three kinds the above are basic configurations of SIP.

**Note** if you want to register and call through server you must configure corresponding numbers which are usually SIP accounts to local port otherwise the phone will reject for sending out register message when it considers that there is no number.

Auto Detect Server Configure automatic detection server of the phone

Server Auto Swap Configure main and backup auto-swap server if the phone enables main and backup server function the automatic detection and auto-swap functions should both be chosen

**After the aforesaid network and VoIP configurations have been configured on the phone and internetwork communication has been implemented the user can make VoIP calls by the calling register and proxy.**

**Some ISP internet may inhibit the phone to register and cancel the register in succession, so user had better not apply or register and cancel soon in succession and submit registration repeatedly. Server may stop response of dialogue machine, then the phone receives no certification of register/cancel login request and registration state will show as incorrect!**

## 4.5 Advance configuration

### 4.5.1 DHCP service configuration

User can configure DHCP service on this page user can define dynamic IP distribution scope and other configurations.

The screenshot shows a web browser window titled "VOIP - Microsoft Internet Explorer" with the address bar showing "http://192.168.1.97/". The page content is titled "DHCP Service".

On the left sidebar, there are several navigation links: Current State, Network, VOIP, Advance, DHCP Server, NAT, Net Service, Firewall, QOS, SIP, Digital Map, Call Service, UDP Tunnel, MMI Filter, DSP, Dial-peer, Config Manage, Update, and System Manage.

The main content area has a "DNS Relay" checkbox which is checked. Below it is an "Apply" button.

Below the checkbox is a table with the following data:

Name	Start IP	End IP	Lease Time	Netmask	Gateway	DNS
lan2005	192.168.10.1	192.168.10.30	1440	255.255.255.0	192.168.10.11	192.168.10.11

Below the table is a form for adding new configurations:

Lease Table Name	<input type="text"/>	Lease Time	<input type="text"/>	<input type="button" value="Add"/>
Start IP	<input type="text"/>	End IP	<input type="text"/>	
Netmask	<input type="text"/>	Gateway	<input type="text"/>	<input type="button" value="Delete"/>
DNS	<input type="text"/>			
Lease Table Name	lan2005			

## Configuration Explanation

**DNS Relay** Configure DNS Relay mode this mode enables user's LAN-linked equipments to use LAN port IP of the phone as DNS server address. The default is Enable click apply to make it go into effect after it has been selected

Name	Start IP	End IP	Lease Time	Netmask	Gateway	DNS
lan2005	192.168.10.2	192.168.10.50	1440	255.255.255.0	192.168.10.1	192.168.10.1

The display of DHCP lease table configuration of which the unit of the lease time is minute

Lease Table Name	lan_202	Lease Time	1440	<input type="button" value="Add"/>
Start IP	192.168.1.1	End IP	192.168.1.31	
Netmask	255.255.255.0	Gateway	192.168.1.99	
DNS	192.168.1.99			
Lease Table Name	lan2005			

Add and delete of the lease table

Lease Table Name  Additive lease table names

Lease Time  Time limit of additive lease table IP

Start IP  Start address of additive lease table IP

End IP  End address of additive lease table IP

Netmask  Subnet mask of additive lease table

Gateway  Default phone IP of additive lease table IP

DNS  Default DNS server IP of additive lease table IP

Click ADD to add DHCP lease table

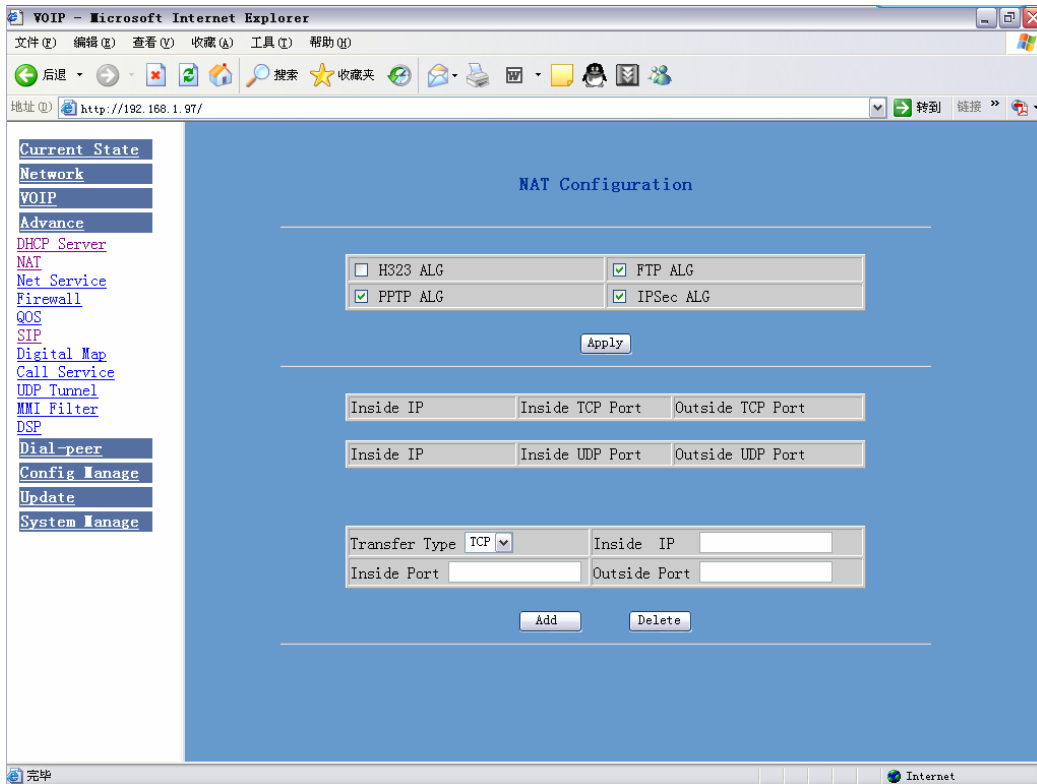
Lease Table Name  Select lease table names that you want to delete from the drop-down menu click Delete to delete your options from DHCP Lease Table.

If user modify dhcp lease table the configuration should be saved and will go into effect after restarting.

## 4.5.2 NAT configuration

User can configure NAT image on this page. Each kind of image can have 10 configurations at

most.



### Configuration Explanation

- H323 ALG Configure enable/disable of H323 ALG the default is Disable
- FTP ALG Configure enable/disable of FTP ALG the default is Enable
- PPTP ALG Configure enable/disable of FTP ALG the default is Enable
- IPSec ALG Configure enable/disable of FTP ALG the default is Enable

Click Apply to go into effect after selecting.

Inside IP	Inside TCP Port	Outside TCP Port
192.168.1.201	1719	1917
Inside IP	Inside UDP Port	Outside UDP Port
192.168.1.201	5060	5000

Configure the display of TCP and UDP inner-net image table of NAT

Transfer Type  Configure image protocol types of NAT TCP or UDP

Inside IP  Configure LAN equipment IP address of NAT image

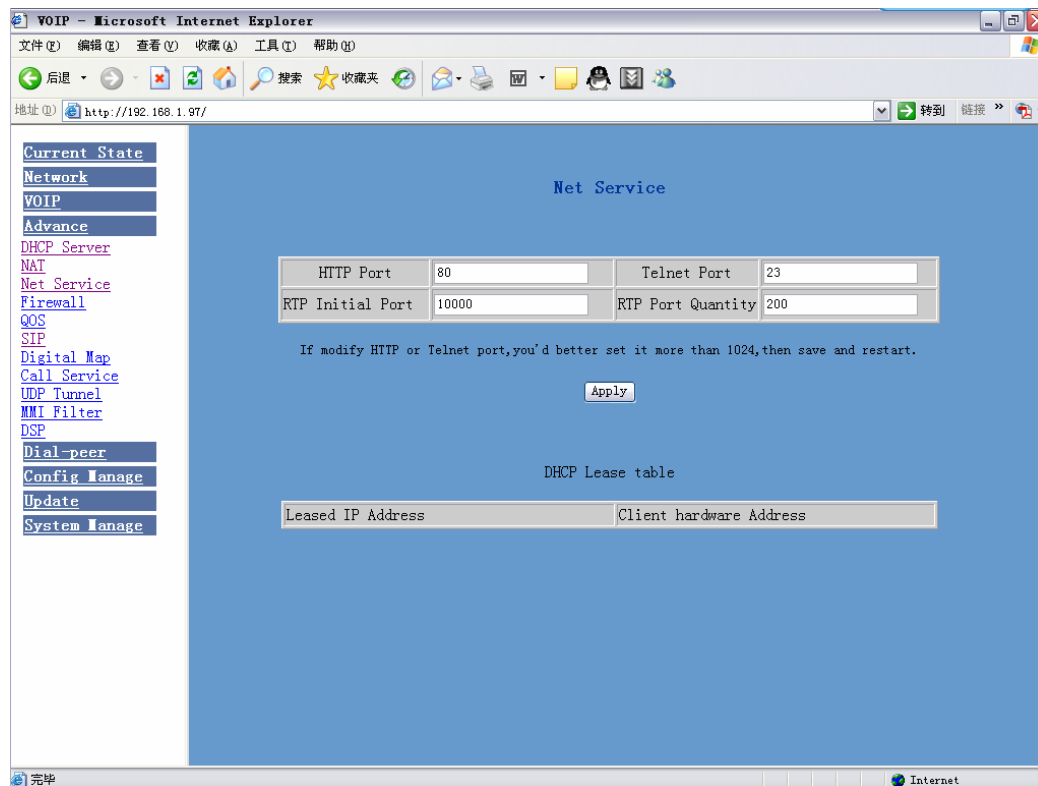
Inside Port  Configure the NAT image LAN equipment port

Outside Port  Configure the NAT image WAN port of the phone

After configuration, click Add to add to the image table, click Delete to delete from the image table.

### 4.5.3 Net Service configuration

User can set up Telnet, HTTP, RTP port on this page and view DHCP table.



### Configuration Explanation

HTTP Port  Configure web browse port the default is 80 port  
if you want to enhance system safety you'd better change it into non-80 standard port

Telnet Port	23	Configure telnet port the default is 23 port
RTP Initial Port	10000	Enable RTP initial port configuration. It is dynamic allocation
RTP Port Quantity	200	Configure the maximum quantity of RTP port. The default is 200
Leased IP Address	Client hardware Address	

Leased IP-MAC correspondence table of DHCP

The configuration on this page needs to be saved after modified and will go into effect after restarting.

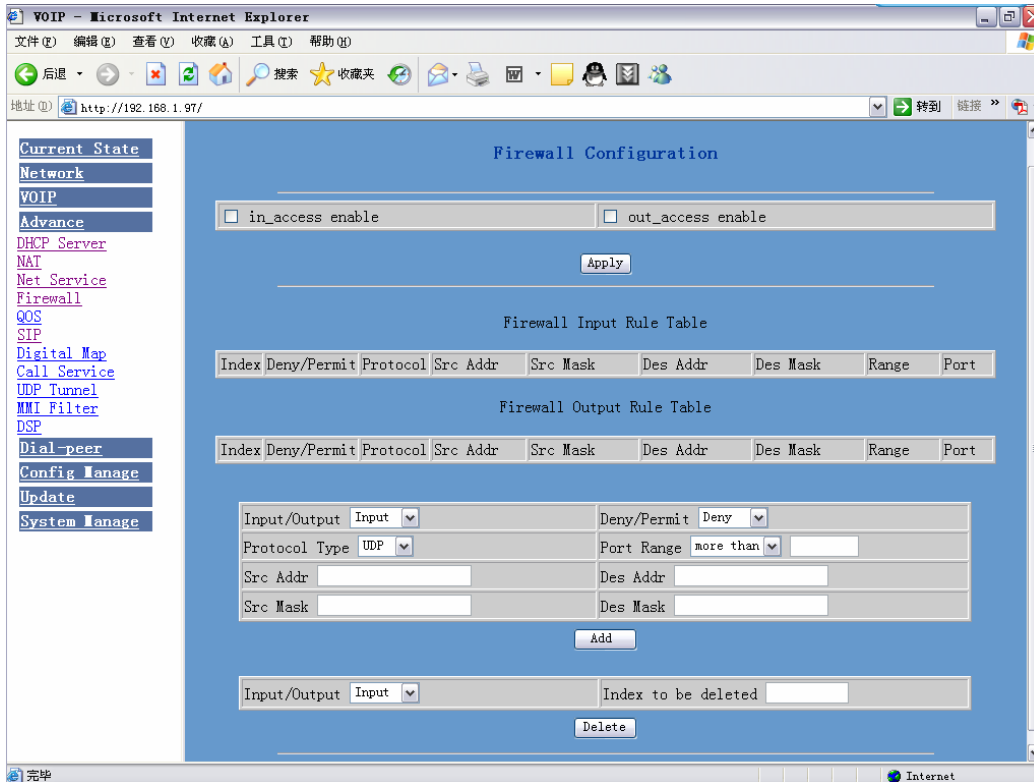
If the Telnet, HTTP port will be modified, the port is better to be set as greater than 1024, because the 1024 port system will save ports.

Set the HTTP port as 0 then the http service will be disabled.

#### 4.5.4 Firewall configuration

User can set whether enable the input and output firewall on this page and configure the IO(input-output) rule of firewall utilize these configurations to guard against some malicious IP to access this phone or restrict visiting some resource of the outside-net so that the security will be enhanced.

Accesslist is a simple execution module such as Cisco accesslist firewall .This function supports two rules input and output rule. Each rule will be provides with one serial number.Each rule is allowed to 10 configurations at most.



### Configuration instance

Debug configuration of icmp data packet sent from lan attached device to wan network segment device. wan ip of the phone is 192.168.10.77 lan ip is 192.168.1.68.

<input type="checkbox"/> in_access enable	<input checked="" type="checkbox"/> out_access enable
Input/Output: Output	Deny/Permit: Deny
Protocol Type: ICMP	Port Range: more than 0
Src Addr: 192.168.10.77	Des Addr: 192.168.10.86
Src Mask: 255.255.255.255	Des Mask: 255.255.255.255

### Configuration Explanation

out\_access enable

To enable the output rule application

Input/Output: Output

To select the current additive rule as input or output rule

Deny/Permit: Deny

To select the current rule configuration as deny or permit

Src Addr: 192.168.10.77

It is source address, which can be specific IP address or network address

Src Mask: 255.255.255.255

It is source address mask which stands for specific host computer when it is configured as 255.255.255.255 and it stands for network ID when the it has

been set as subnet mask 255.255.255.0

Des Mask

It is destination address mask which stands for specific host computer when it is configured as 255.255.255.255 and it stands for network ID when it has been set as subnet mask 255.255.255.0 in this way when this configuration has been added there will be an additive item in output rule table shown as the following figure.

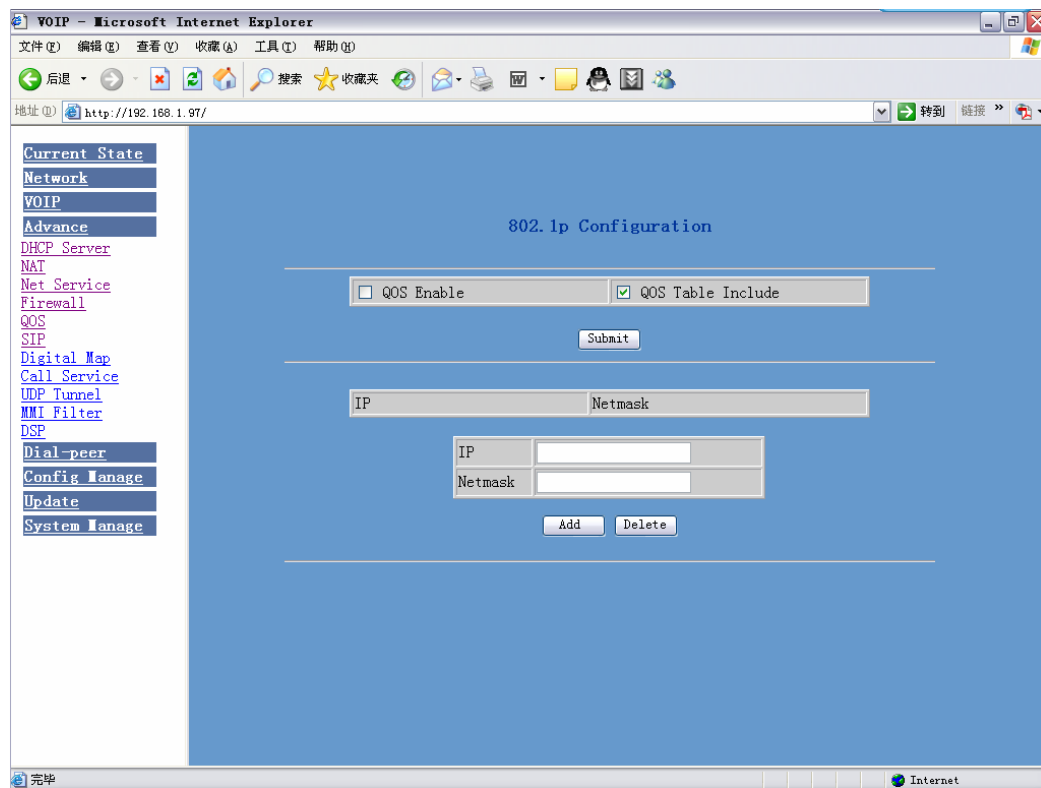
Index	Deny/Permit	Protocol	Src Addr	Src Mask	Des Addr	Des Mask	Range	Port
0	deny	ICMP	192.168.10.77	255.255.255.255	192.168.10.86	255.255.255.255	more than	0

And then select "out\_access table" and click the "apply" button.

When the lan port attached device ping 192.168.10.86 through wan port it can't receive echo of 192.168.10.86 because of the deny of the rule, but other IP of ping 192.168.10.0 network segment can still receive echo of destination host normally.

#### 4.5.5 QOS configuration

The phone is accomplished to base on the qos 802.1p and used for marking and ranking the priority of internetwork communication in data link/MAC sublayer. 802.1p communication is to be classified and transmitted to destination.



QOS Enable

The selected Qos Enable represents application of Qos service.

**QOS Table Include** The selected Qos Table Include means that the network segment addresses in the set Qos table are required to provide Qos service addresses those outside the table are not required to provide qos cancelling the checked qos table include is to say all the addresses outside the table are required to provide Qos service.

Click Submit to go into effect after selecting.

Description of qos table items the setup of IP can be network address or specific IP address. User can set destination address through the setup of IP and mask. When the setting is 255.255.255.255 then it stands for appointed specific IP.

Deletion of qos table input items that you want to delete in ip / netmask configuration table and then select delete.

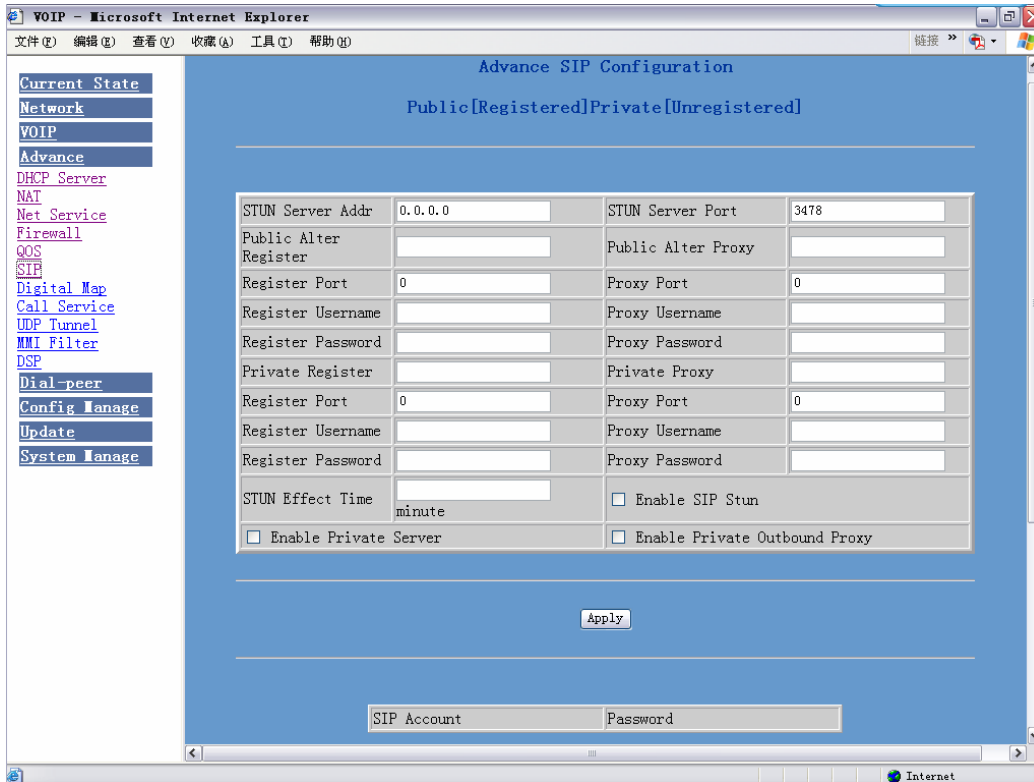
#### **4.5.6 SIP advanced configuration**

Set SIP STUN private and backup server, user password and so on.

SIP STUN is a kind of server that used to realize the SIP's enablement of NAT when the STUN server IP of the phone has been configured generally the default is 3478 and Enable SIP Stun has been selected, conventional SIP server can be used to realize the phone's penetration of NAT.

Public backup server can implement the proxy of the dialogue machine through auto-swap function when no response to public server. When the phone detect response of public server it will auto-swap to public server. Public backup server is redundancy backup of public server, it should have the same account with public server.

The phone's supports to two different kinds of SIP server concurrently can be implemented on private server. In this way user can register and use two different kinds of services concurrently.



Configure explanation of private server

**Public [Unregistered] Private [Unregistered]** To show the phone whether has been registered on public server or private server

STUN Server Addr  Configure IP address of SIP STUN server

STUN Server Port  Configure port of SIP STUN

STUN can support SIP terminal's penetration to NAT in the inner-net. In this way as long as there is conventional SIP proxy and a STUN server placed in the public net, it will do; but STUN only supports three NAT modes FULL CONE, restricted, port restricted

Public Alter Register	<input type="text" value="10.1.1.11"/>	Public Alter Proxy	<input type="text" value="0.0.0.0"/>
Register Port	<input type="text" value="5060"/>	Proxy Port	<input type="text" value="5060"/>
Register Username	<input type="text" value="1234"/>	Proxy Username	<input type="text" value="1234"/>
Register Password	<input type="password" value="••••"/>	Proxy Password	<input type="password" value="••••"/>

Public backup server configuration the specific configuration parameter has the same meaning with public server. It should be noted that the username and password should be the same with the public main server

Private Register	<input type="text" value="210.25.132.124"/>	Private Proxy	<input type="text" value="210.25.132.124"/>
Register Port	<input type="text" value="5060"/>	Proxy Port	<input type="text" value="5060"/>
Register Username	<input type="text"/>	Proxy Username	<input type="text"/>
Register Password	<input type="text"/>	Proxy Password	<input type="text"/>

Private server configuration. specific configuration parameter has the same meaning with public server

STUN Effect Time  minute Interval time for STUN's detection on NAT

type the unit is minute

Enable SIP Stun Configure enable/disable SIP STUN

Enable Private Server Register Configure permit/deny private server register

Enable Private Outbound Proxy Configure enable/disable private outbound proxy

If user has accounts of a certain SIP server and each account has different password then user should add each account and its corresponding password to the account& password table.

SIP Account	Password
1000	1000

Configure display of account & password list

Click Add to add account and password, it is shown as the following figure:

SIP Account

SIP Password

Configure additive accounts

Configure additive passwords

Click submit to submit the configuration, click return to cancel the configuration and return

Select accounts that you want to delete from the drop-down menu , click

Select drop-down menu to select accounts that want to delete. modify, click load to load the configuration and then click modify to modify

SIP Account

SIP Password

Accounts to be modified read-only

Passwords to be modified

Click submit to submit, click return to cancel the modification and then return

## 4.5.7 Dial mode configuration

Dial modes supported by this system

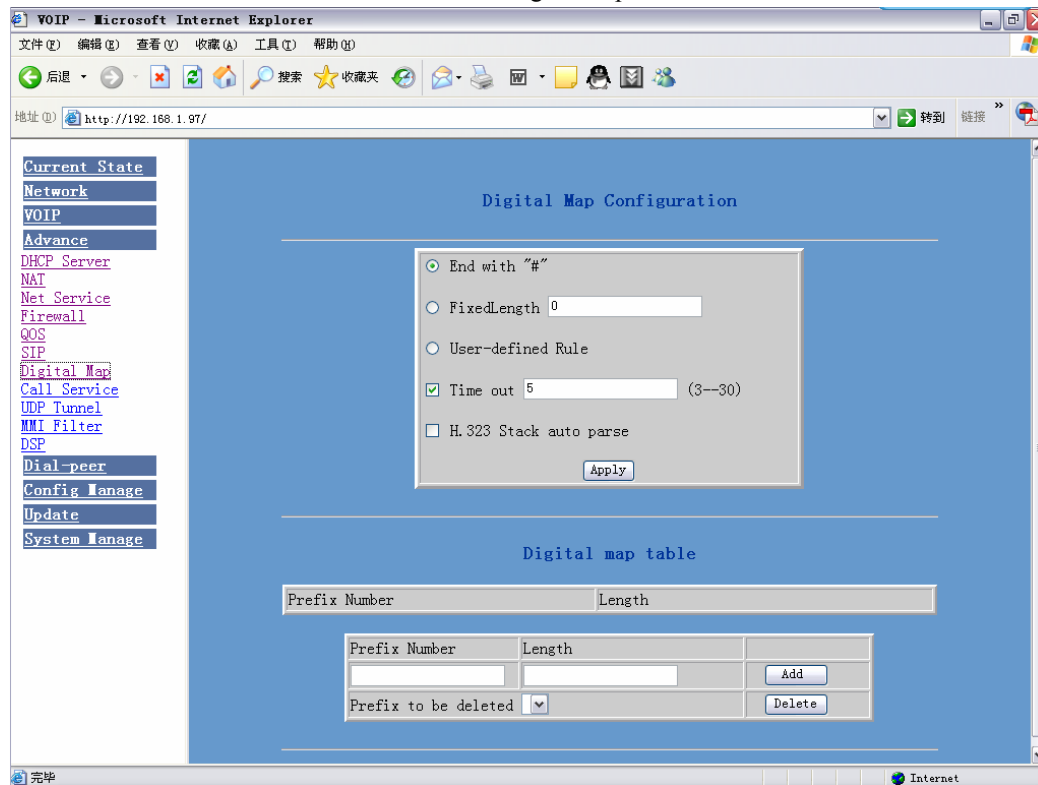
End with key user add an # to end the calling number.

End with fixed length the system intercepts numbers that user input by the fixed length.

End with H323 RAS the system checks each number that user input at net gate through H323 protocol.

End with timeout setup the system sends out number received after time out.

End with user-defined rule the user-defined length and prefix of the numbers.



Configuration Explanation

End with "#"  
Configure the phone to end with key

FixedLength 0  
Configure the phone to end with fixed length for example, when user set a "8", then when user have dialed 8 figures, the phone will make the call of this number of 8 figures automatically.

**User-defined Rule**

Configure to end with user-defined rule add configurations to the following user-defined list

**Time out**  (3--30)

Configure timeout length of dialing the unit is second. The default is 5 seconds that is, after the user has dialed a number and haven't dialed in 5 seconds the phone will consider that the user has finished dialing and then send out the number it has received as the called number

**H.323 Stack auto parse**

Configure to be H323 protocol automatic resolving

The following is list of user-defined rules

Prefix Number	Length
010	11
020	11

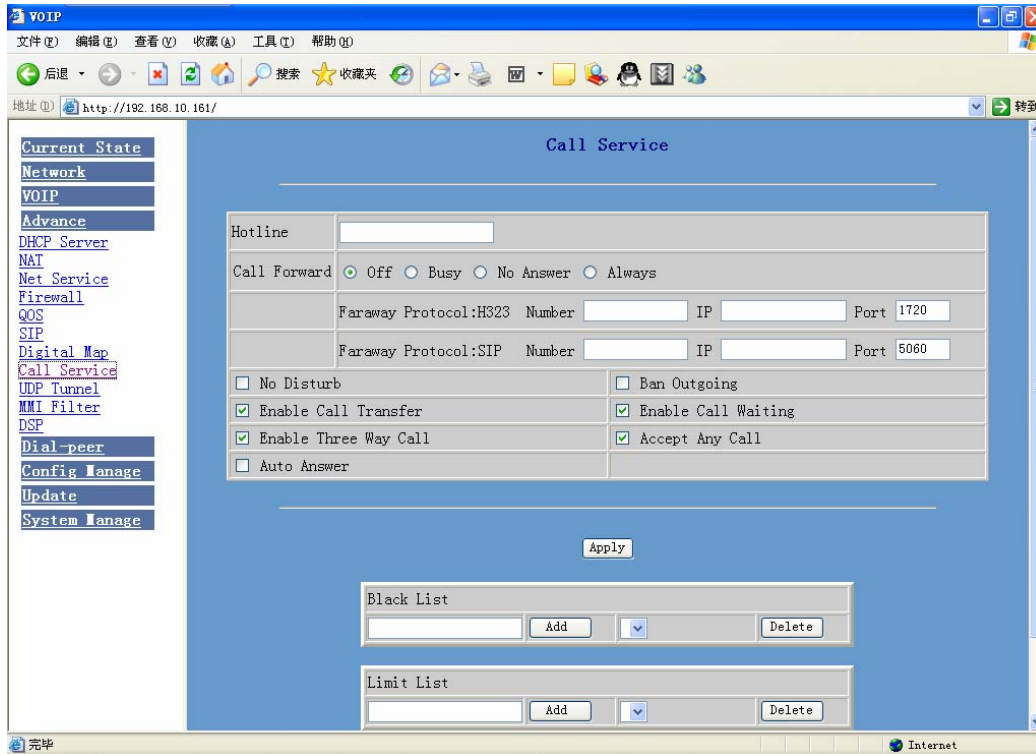
Display of user-defined digit reception rule list

Prefix Number	Length	
<input type="text" value="0139"/>	<input type="text" value="12"/>	<input type="button" value="Add"/>
Prefix to be deleted	<input type="text" value="010"/> ▼	<input type="button" value="Delete"/>

Configure add/delete of user-defined rule list. Configure the dialed number prefix in prefix number configure number length in length then click add to submit

#### 4.5.8 Value added service configuration

On this page, user can set value added services such as hot-line call forwarding call transfer (CT) call-waiting service three way call blacklist out-limit list and so on.



### Configuration Explanation

**Hotline**  Configure hot-line number of the port. With this number of the port this hot-line number will be dialed automatically as soon as off-hook and user can's dial any other number

**Call Forward**  Off  Busy  Always Call forwarding. The default is Disable when busy is selected if the number dialed is engaged after the phone has received a call, then it will automatically transfer to the configured number according to the following configuration when always is selected then the phone will directly transfer all the numbers that dial to this port to the configured numbers

Faraway Protocol:H323	Number	<input type="text"/>	IP	<input type="text" value="0.0.0.0"/>	Port	<input type="text" value="1720"/>
Faraway Protocol:SIP	Number	<input type="text"/>	IP	<input type="text" value="0.0.0.0"/>	Port	<input type="text" value="5060"/>

number IP configuration of call transfer (CT)

**Enable Call Waiting** Configure enable/disable call waiting service After it is enabled, user can hold calls of the other party by hooking, with hooking again, the hold call can go on.

**Enable Call Transfer** Configure enable/disable call transfer (CT) after it is enabled, user accept calls, with hooking and dial directly the phone will transfer the calls according to the

above configurations of the port number IP images

Enable Three Way Call

Configure enable/disable three way call user can call the other part as the call origination after talking make hooking to hold this part and then press \* key to hear the dialing tone after call completion to the third party, hooking again to recover the talk with the second part, then the three way call concurrently

After the aforesaid configuration has been done, click apply to make them go into effect.

Black List			
<input type="text"/>	<input type="button" value="Add"/>	<input type="button" value="v"/>	<input type="button" value="Delete"/>

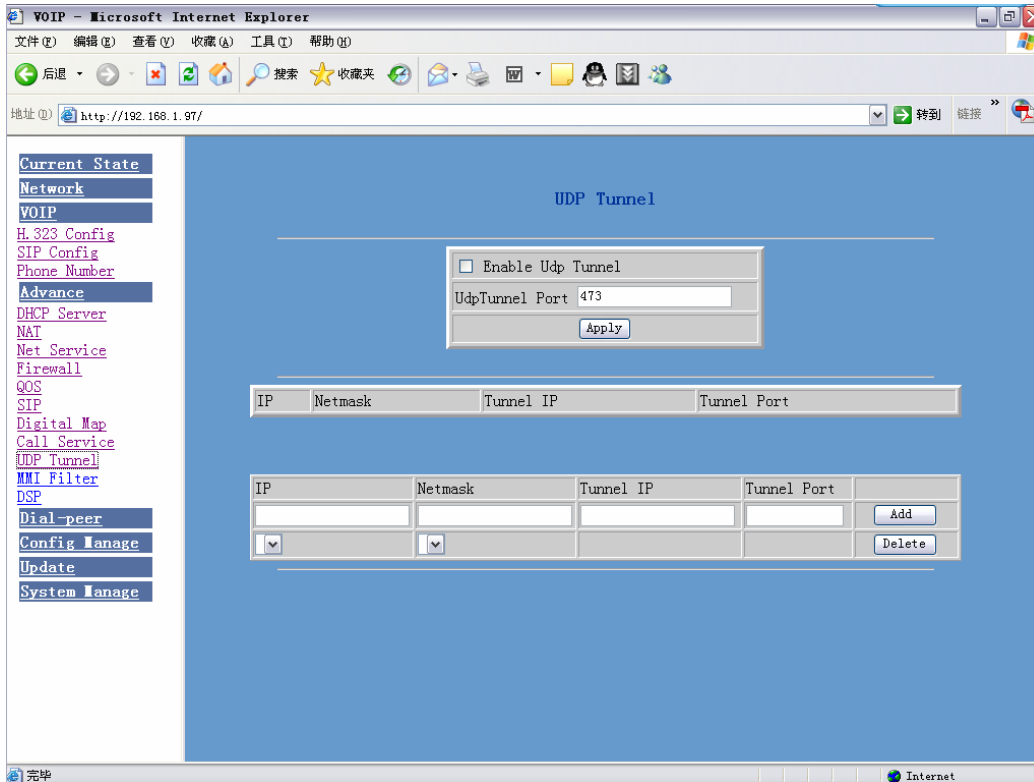
Configure add/delete blacklist. If user don't want to answer a certain number, please add this number to the list, and then this number will be unable to get through the phone.

Limit List			
<input type="text"/>	<input type="button" value="Add"/>	<input type="button" value="v"/>	<input type="button" value="Delete"/>

Configure out-limit list for example, if user don't want the phone to dial a certain number, please add the number to this table, and the user will be unable to get through this number.

#### 4.5.9 UDP Tunnel configuration

On this page, user can configure UDP Tunnel. User can make H323 point-to-point NAT call.



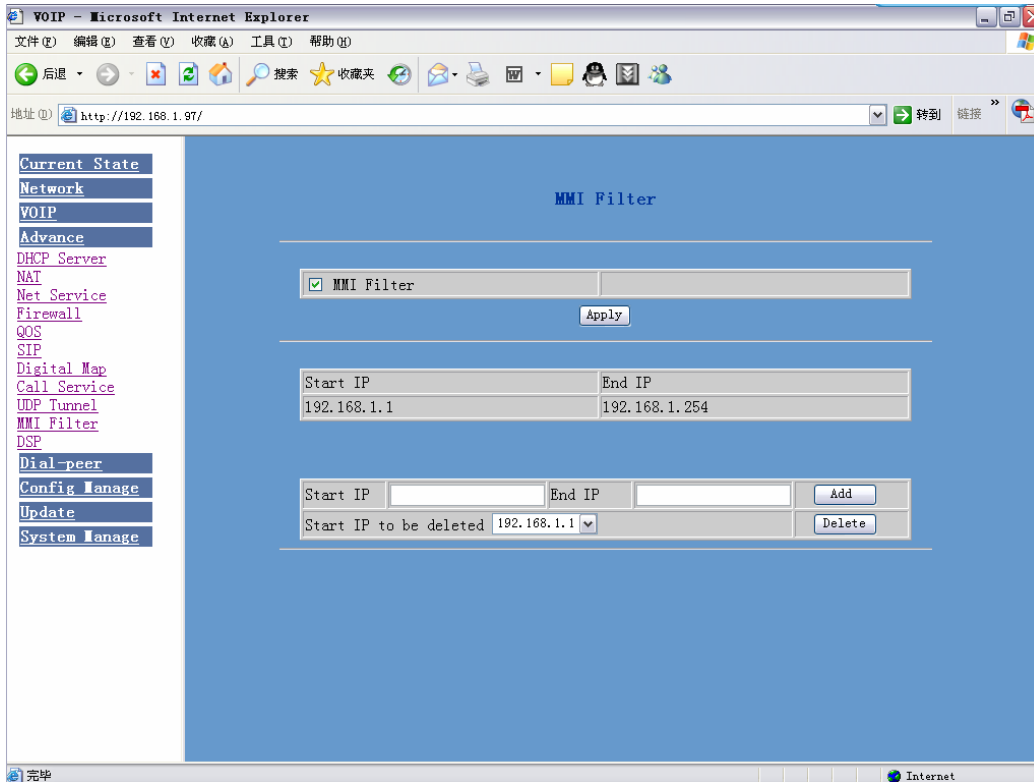
#### Configuration Explanation

Enable Udp Tunnel Configure enable/disable UDP Tunnel

UdpTunnel Port 473 Configure UDP tunnel port the default is 473

#### 4.5.10 MMI filter configuration

On this page, user can set MMI to permit only a certain network segment IP accessing the phone.



### Configuration Explanation

MMI Filter Configure enable/disable MMI access filter click apply button to go into effect

Start IP	End IP
192.168.10.1	192.168.10.254

### Display of MMI permitted IP network segment

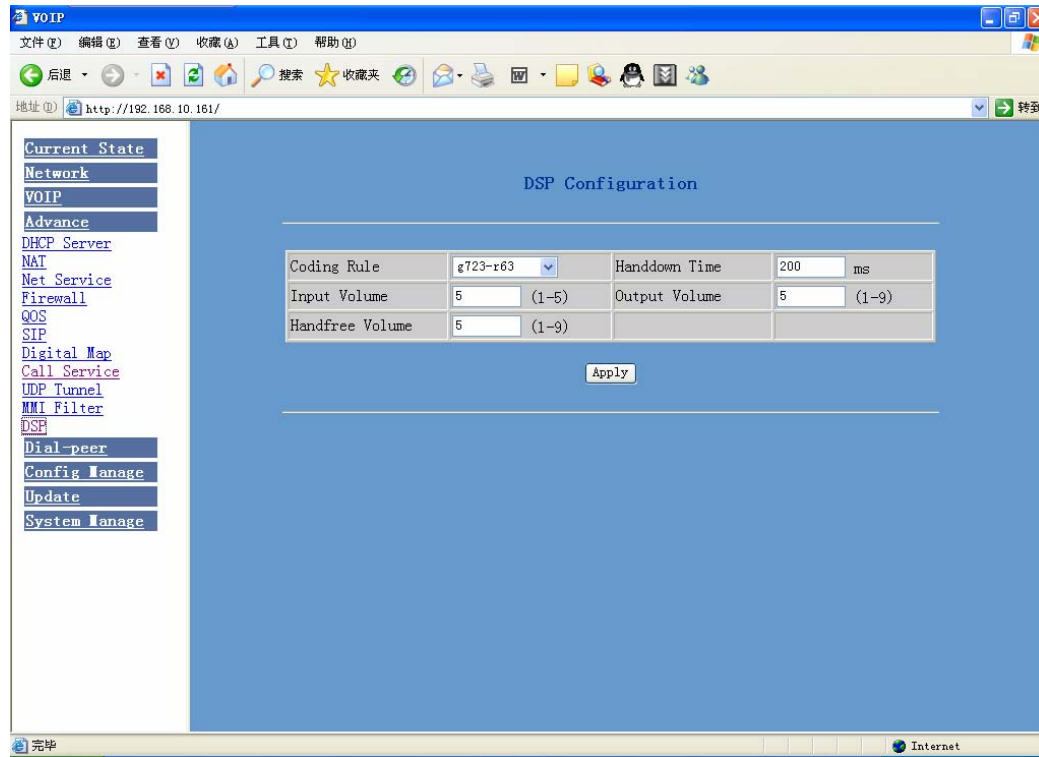
Start IP	<input type="text"/>	End IP	<input type="text"/>	<input type="button" value="Add"/>
Start IP to be deleted	192.168.10.1			<input type="button" value="Delete"/>

Add and delete MMI visit-permitted IP network segment configure start IP address in start IP and configure end IP address in End IP submit the configuration to go into effect. User can set a big network segment or set several network segments to add, when user make deletion, select the start IP of network segment that will be deleted and then click delete to go into effect

**It should be noted that if the phone device you are accessing is at the same network segment with the phone don't configure the mmi filter network segment outside of the network segment of the phone you have, otherwise it can't logging in web in the phone network segment.**

### 4.5.11 DSP configuration

On this page, user can set speech coding IO volume control, cue tone standard, caller ID standard and so on.



#### Configuration Explanation

Output Volume  (1-9) Configure output volume

Input Volume  (1-5) Configure input volume

Handfree Volume  (1-9) Configure handfree volume

Handdown Time  ms Configure handdown time that is, if the hooking time is shorter than this time, then the gateway will not consider the user has handdown

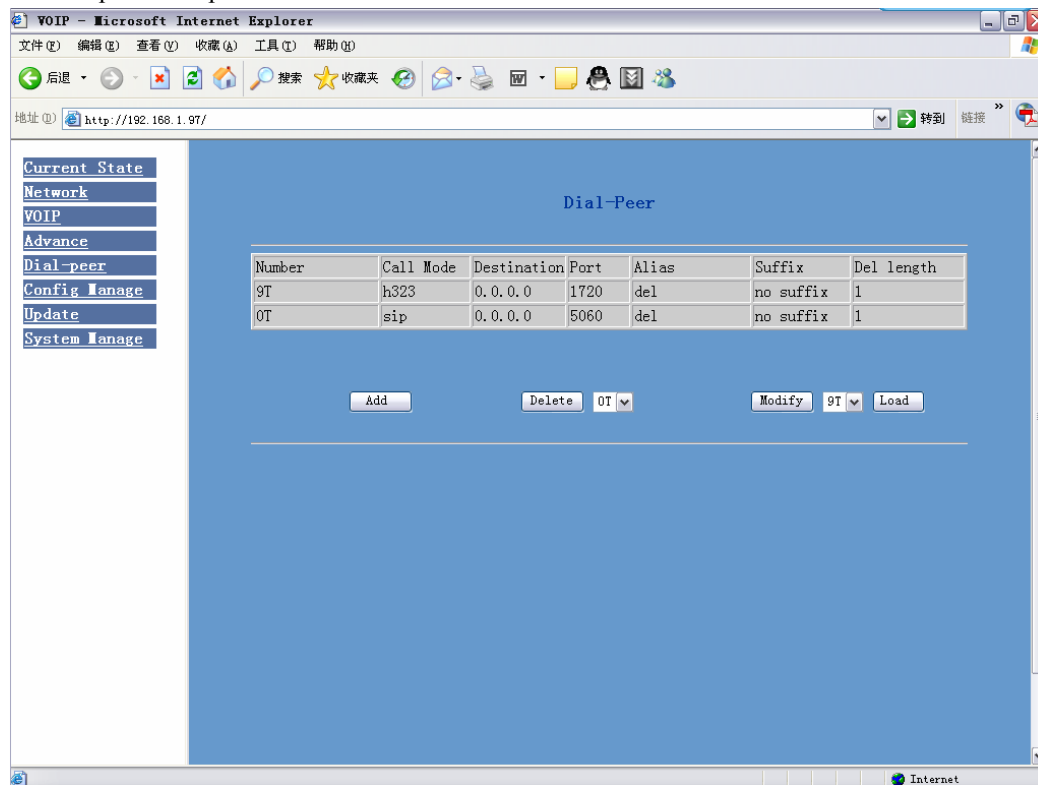
## 4.6 Number binding configuration

Number IP table configuration

Function of number IP table is one way to implement the phone's calling online, and the calling of

the phone will be more flexible by configuring the number IP table. For example, user know the other party's number and IP and want to make direct call to the party by point-to-point mode the other party's number is 1234 make a configuration of 1234 directly ,then the phone will send the called number 1234 to the corresponding IP address Or set numbers with prefix matching pattern for example, user want to make a call to a number in a certain region 010 user can configure the corresponding number IP as 010T—— protocol—— IP after that, whenever user dial numbers with 010 prefix such as 010 62201234),the call will be made by this rule. Bases on this configuration we can also make the phone use different accounts and run speed calling without swap.

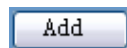
When making deletion or modification, select the number first and click load, then click Modify and complete the operation.



### Configuration Explanation

Number	Call Mode	Destination	Port	Alias	Suffix	Del length
0T	lifeline	0.0.0.0	0	no alias	no suffix	0
9T	sip	0.0.0.0	0	no alias	no suffix	0
1T	h323	0.0.0.0	1720	no alias	no suffix	0
8T	sip	255.255.255.255	5060	del	no suffix	1

Display of calling number IP image list



Click Add the following figure will be shown at the lower part of the page, of which

Phone Number

It is to add outgoing call number, there are two kinds

of outgoing call number setup One is exactitude matching after this configuration has been done, when the number is totally the same with the user's calling number, the phone will make the call with this number's IP address image or configuration; Another is prefix matching be equivalent to PSTN's district number prefix function if the previous N bits of this number are the same with that of the user's calling number(the prefix number length) then the phone will use this number's IP address image or configuration to make the call. When configuring the prefix matching, letter "T" should be added behind the prefix number to be distinguished from the exactitude matching; the longest length is 30 bits.

**Call Mode** sip  Configure the calling mode H323 and SIP

**Destination** 192.168.10.11  Configure destination address if it is point-to-point call then input the opposite terminal's IP address, it can also be set as domain name and resolved the specific IP address by DNS server of the phone. If no configuration has been made, then the IP will be considered as 0.0.0.0. This is an optional configuration item

**Port (optional)**  Configure the other party's protocol signal port, this is optional configuration item when nothing is input, then the default of h323 protocol is 1720 the default of sip protocol is 5060 lifeline required no configuration of this item, shown as 0

**Alias (optional)**  Configure alias this is optional configuration item it is the number to be used when the other party's number has prefix when no configuration has been made, shown as no alias

**Suffix (optional)**  Configure suffix this is optional configuration item it is the additive dial-out number behind the number; when no configuration has been made, shown as no suffix

**Delete Length (optional)**  Configure the replacing length, replace the number that user input according to this length this is optional configuration item

Of which the alias can be divided into four types it should be combined with replacing length to make the setup

**Add xxx** add xxx before number. in this way it can help user save the dialing length

**All xxx** the number is all replaced by xxx speed dialing can be implemented for example, user configure the dialing number as 1, with the configuration "all" , the actual calling number will be replaced;

**Del** delete n bit in the front part of the number, n can be decided by the replacing length this configuration can decide the protocol for appointed number

**Rep xxx** n bit in the front part of the number will be replaced. n is decided by the replacing length. For example, user want to dial PSTN 010 62281493 by VoIP's voice over service while actually the called number should be 8610 62281493 then we can configure called number as 010T, then rep 8610 and then set the replacing leangth as 3. So that when user

make a call with 010 prefix, the number will be replaced as 8610 plus the number and then sent out. It is a convenient thinking mode for user to make a call;

Delete selective number IP image

If user want to modify a certain current number image first select in the drop-down menu and then load the image parameter of the said number, click modify to make modification of which

this is the modified number. read-only

To modify call mode

To modify destination address this is optional configuration item

To modify destination phone port this is optional configuration item

To modify alias this is optional configuration item

To modify suffix this is optional configuration item

To modify replacing length if rep and del of alias have been configured

Click submit to go into effect click return to cancel configuration and return.

The basic application of the number IP table has been introduced now let me introduce how to configure IP table of number to implement configuration of using multi-accounts concurrently For example, now user has a H323 account and two SIP accounts, then under the default condition, user can only make calls by the default protocol. Configure the number IP table to select the call protocol then user don't need to select default protocol before making calls everytime.

The configuration process will not be repeated, now I will mainly introduce what kind of number IP image can implement this function.

By configuration image table as follows will be gained:

Number	Call Mode	Destination	Port	Alias	Suffix	Del length
9T	sip	0.0.0.0	5060	del	no suffix	1
8T	sip	255.255.255.255	5060	del	no suffix	1
7T	h323	0.0.0.0	1720	del	no suffix	1

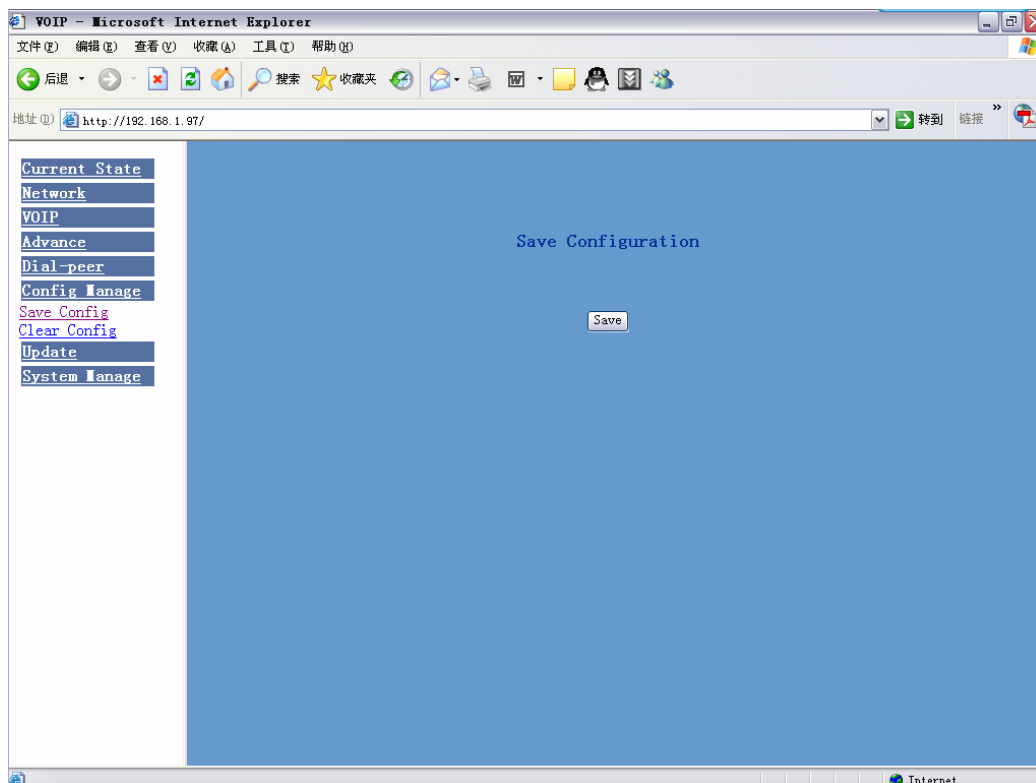
Image of 9T means when user configure public SIP server and register then user just need to add a"9"before the calling number whenever making a call by public SIP

Image of 8T means when user configure private private server and register then user just need to add a"8"before the calling number whenever making a call by private SIP

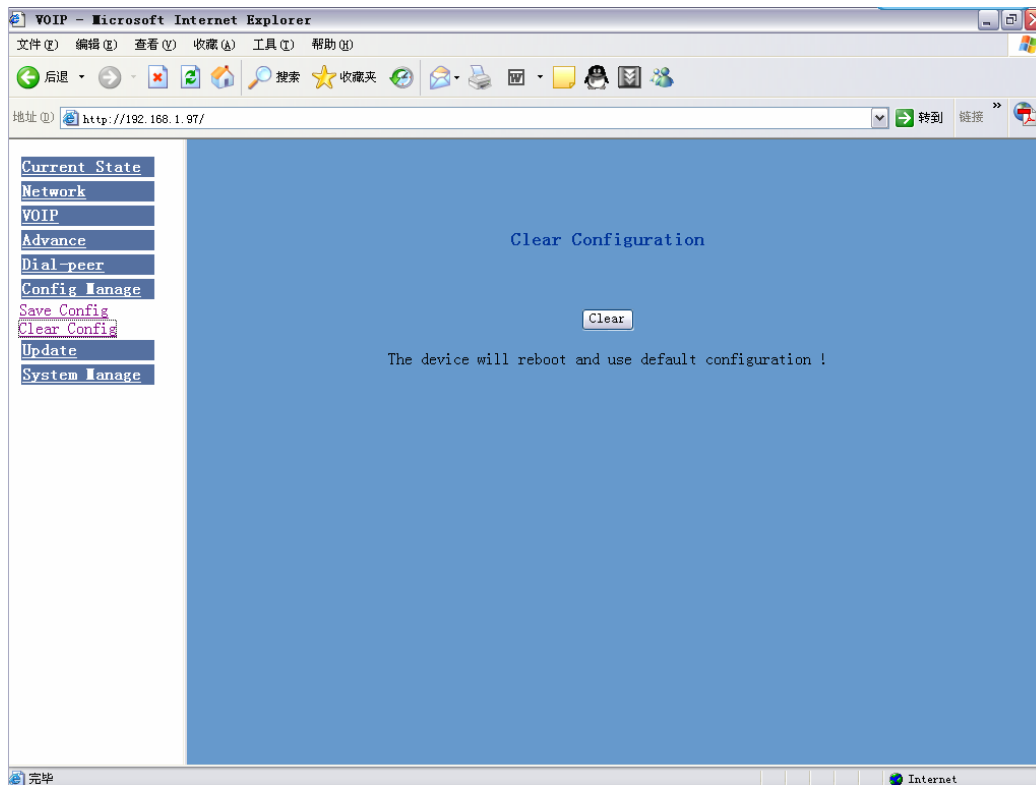
Image of 7T means when user configure h323 server and register then user just need to add a"7"before the calling number whenever making a call by H323 GK

## 4.7 Save configuration

User can save the current configuration on this page.



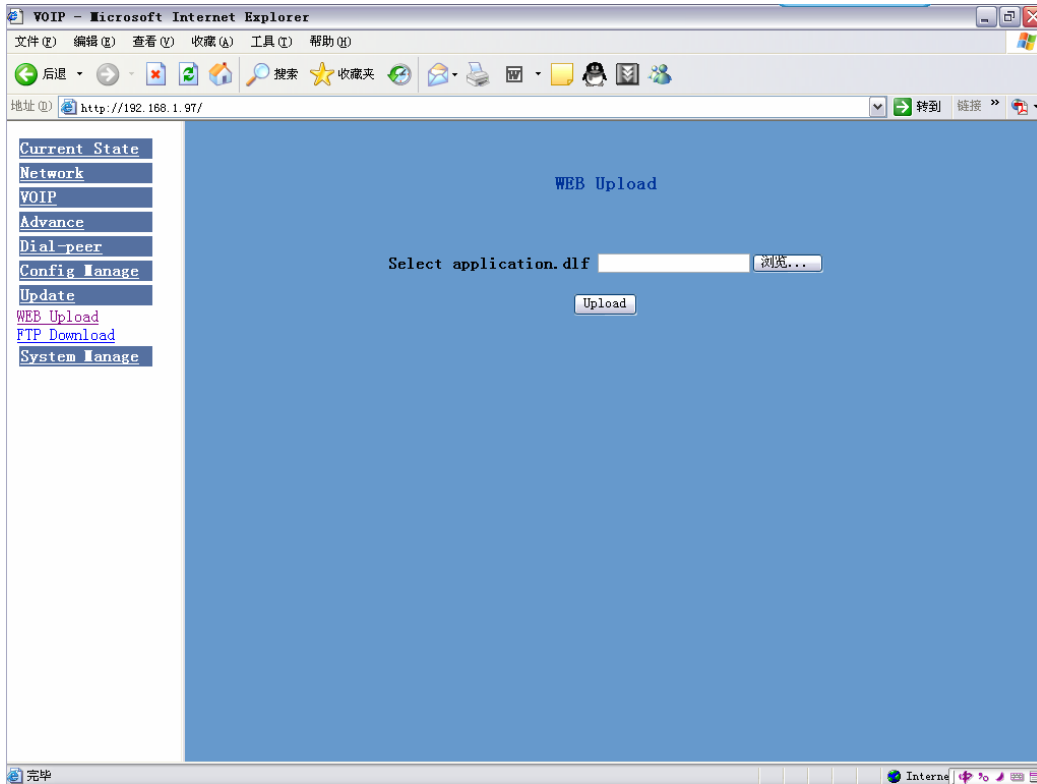
The system configuration can be set as factory default configuration on clear config page and the phone will restart automatically



## 4.8 Upgrade on-line

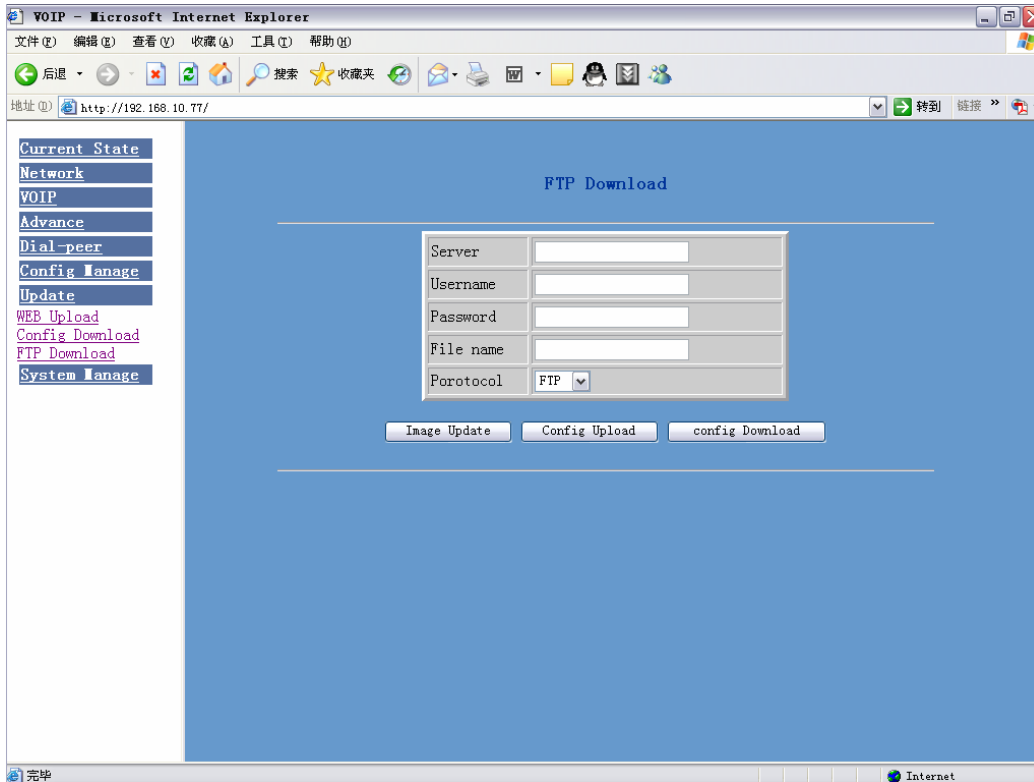
### 4.8.1 Upload WEB page

On this page, user can select the upgrade documents on hard disk of the computer directly to run the system upgrade. After the upgrade has been completed restart the phone and it will be usable at once.



#### 4.8.2 FTP download

On this page, user can upgrade system and configure files by FTP or TFTP mode.



### Configuration Explanation

**Server**  Configure upload or download FTP/ TFTP server IP address

**Username**  Configure username of the upload or download FTP server. If user select TFTP mode, username and password are not required to be configured

**Password**  Configure upload or download of FTP server password

**File name**  Configure upload or download system upgrade document or system layout file name. It should be noted that system files take .dlf as suffix and configuration files take .cfg as suffix

**Porotocol**  Select server type

**Image Update** Click image update button the phone will upgrade system file

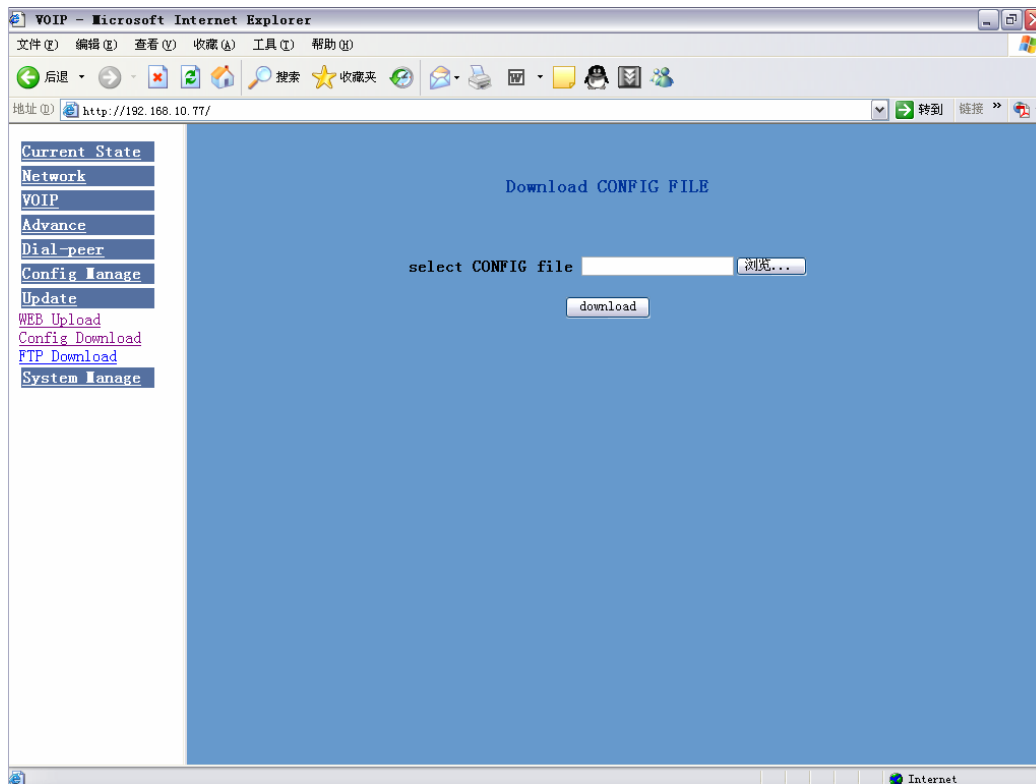
**Config Upload** Click config upload button the phone will upload its configuration files to FTP/TFTP server and save with names of user-defined configuration files

**config Download** Click config download button the phone will download configuration

files of FTP/TFTP server to the phone and the configuration will go into effect after restarting

#### 4.8.3 Configuration files WEB download

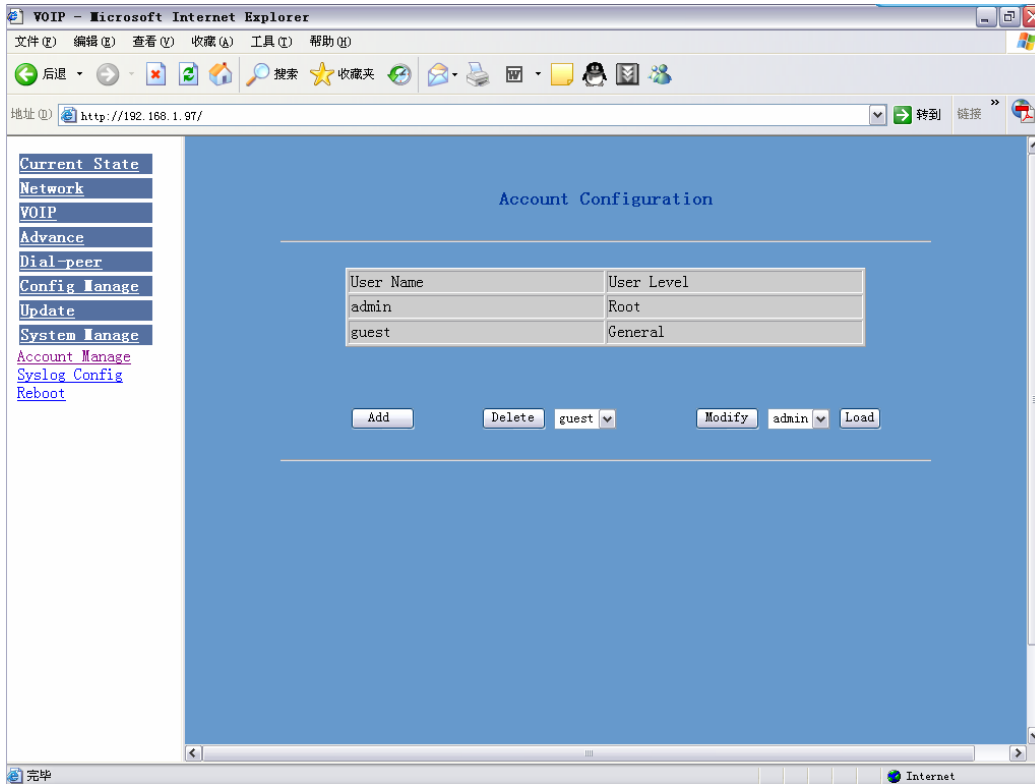
On this page, user can directly select the configuration files on the hard disk of the computer, and then make modification to the system configuration, after the download, restart the phone and the configuration will go into effect.



If configuration files are still noneffective, check whether the selective configuration files have correct suffix whether configuration files of the phone otherwise will create incorrect download of the phone and can't start! if in the process of the download if the system has some problems such as power-fail restart by insert or pull out of power pull out netting twine then the phone may be unable to start owing to system upgrade failure and only enter protected mode to download again!

#### 4.9.1 Account management

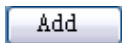
On this page user can add and delete users according to own needs and can modify user's authorities there have been.



### Configuration Explanation

User Name	User Level
admin	Root
guest	General

display of phone user account list



To add phone account it will be shown at lower part of page as the following figure

of which

User name	<input type="text"/>
User level	Root <input type="button" value="v"/>
Password	<input type="text"/>
Confirm	<input type="text"/>
<input type="button" value="Return"/> <input type="button" value="Submit"/>	

#### add new accounts

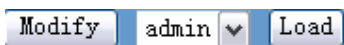
account level root possesses authorities to modify  
 read-only authority  
 additive account

second confirmation of password, to ensure correct setup of

Click submit to go into effect click return to cancel configuration and return.



Select users that you want to delete in the drop-down menu click Delete.



To modify the chosen accounts need to select account first click

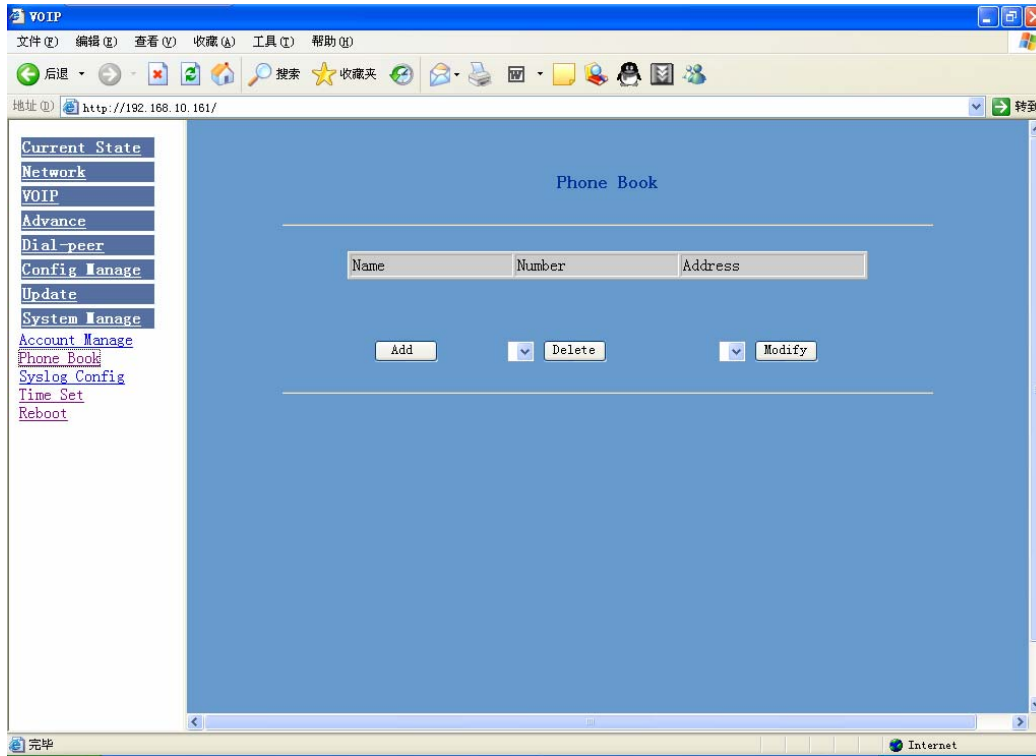
load again and then click modify it will be shown at lower part of page as the following figure, of which

User name	admin	modified username
User level	Root	fy user authorities
Password	•••••	fy user password
Confirm	•••••	e confirmation of the modified user password
	<input type="button" value="Return"/> <input type="button" value="Submit"/>	hit or cancel the modification

Owing to the phone's default account accounts of the administrator level-admin and the ordinary level guest are all weak account and weak password,the username and password will be easily to be guessed on public network, so the user had better modify the administrator and ordinary user. Enter with manager level when making modification create a administrator account and a browse account you'd better not set the name as admin, administrator, guest,etc. set password and then save configuration entering with new manager account, delete default manager and browse account and save configuration security will be enhanced!

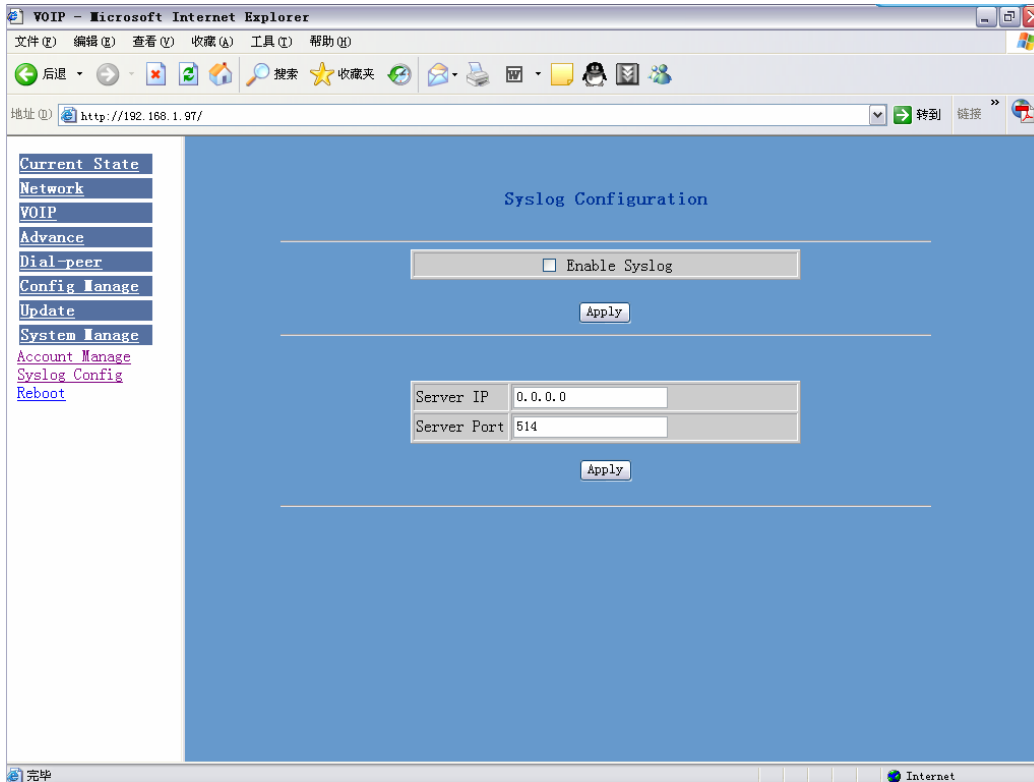
#### 4.9.2 Telephone book configuration

User can save and configure telephone book



#### 4.9.3 Syslog configuration

On this page, user can enable or close Syslog function and configure Syslog server address and port.



#### Configuration Explanation

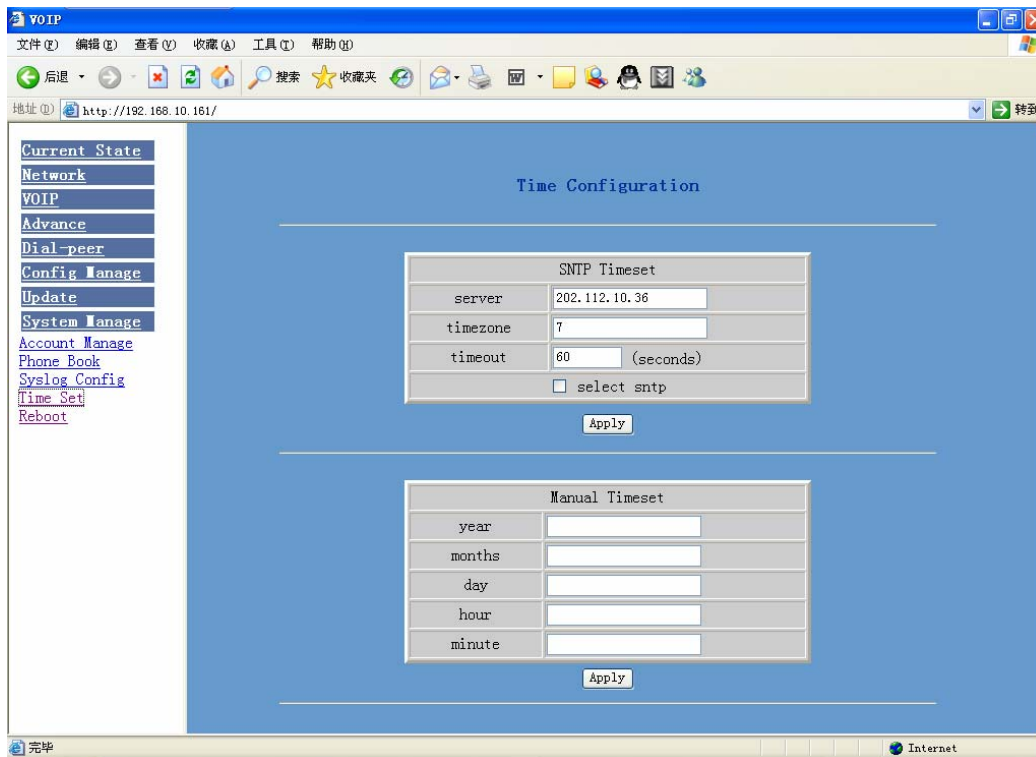
**Enable Syslog** Configure enable/disable Syslog. Click apply to go into effect after selecting.

**Server IP**  Configure Syslog server IP address

**Server Port**  Configure Syslog server port click apply and the configuration will go into effect.

#### 4.9.4 Time configuration

User can make a setup to acquire time from network.



#### 4.9.5 System restart

After certain configurations are made on user's dialogue machine, it needs to be restarted and then go into effect. Enter this page and click reboot, the phone will automatically restart. Please remember to see whether the phone configuration has already saved before restarting otherwise the configuration after restarting will still be the original one.