

PA168V SIP FXS Gateway

Telnet Setup Guide

➤ <i>Telnet Configuration</i>	2
➤ <i>PA168V Telnet Commands Explanation</i>	2
➤ <i>Command ?</i>	3
➤ <i>Command get</i>	4
➤ <i>Command set</i>	6
➤ <i>Command store</i>	18
➤ <i>Command load</i>	18
➤ <i>Command default</i>	19
➤ <i>Command exit</i>	19
➤ <i>Command write</i>	19

When PA168V SIP FXS gateway is properly installed, you can set each parameter through PC and Telnet commands.

Details please refer to 《PA168V SIP FXS gateway Spec and Install》

➤ Telnet Configuration

- On the PC choose **Start>Run**, type **telnet 192.168.1.100** into **Run** field in popuing Run dialog. Or input **telnet 192.168.1.100** in the DOS window. Then the following information will be displayed.

```
PA168X V1.60 settings
Password :
```

Then please type password. With debug set as 0[disable], if you type ordinary password (default one is 1234), after Retun, you will see:

```
Password : ****
P:\>
```

If you type super password, then you will see:

```
Password : *****
P:\>
```

The above information indicates that PA168V FXS gateway is under setting mode, and then you can set the PA168V FXS gateway by using the telnet commands.

➤ PA168V Telnet Commands Explanation

Command	Function
---------	----------

?	Supply command name and parameters
get	Display basic parameters of the PA168V FXS gateway
set	Set parameters of the PA168V FXS gateway
store	Save current settings to designated position
load	Load designated settings to current position
<hr/>	
default	Restore to manufactory defaults parameters
exit	Exit from the setting mode without saving the configuration
write	Exit with saving all configurations and restart PA168V

➤ **Command ?**

Syntax description: No optional parameter

Usage: Type command name and parameters by following P:\> . Be used as the keyword to supply keyword and parameters of the relevant commands.

Relevant usage: None

Detailed description:

? List help of all commands

For example:

```

P:\>?
set
get          list settings
store x      store current to xth settings
load x       load xth settings to current
default
exit
write        save settings
    
```

➤ Command get

Syntax description: No optional parameter of keywords

Usage: Display basic parameters of the PA168V FXS gateway

Relevant usage: None

Detailed description:

get Display basic running parameters of the PA168V FXS gateway. Input ordinary password without debug being set as 0[disable], or input super password with debug set as 0[disable], then following parameters of PA168V FXS gateway will be displayed:

```

PA168X V1.60 settings
Password: *****
P:\>get
*****Network Settings*****
iptype 0[static]
ip 192.168.1.100      subnetmask 255.255.255.0      router 192.168.1.254
dns 202.106.46.151  dns2 202.96.128.68             mac 00-0d-ea-00-00-03
*****Audio Settings*****
codec1 0[g729]      codec2 3[g711a]      codec3 2[g711u]
codec4 4[gsm]      codec5 6[null]      codec6 6[null]
vad 1[enable]      agc 0[disable]      aec 1[enable]
audioframes 2      6.3k 1[enable]      ilbcpayload 98
jittersize 0      handsetin 15        handsetout 20
dualmode 1[pstn first]  dualmodeprefix 30
*****Dial Plan Settings*****
dialplan 1[enable]  dddcode 10
iddcode 86         iddprefix 00        dddprefix 0
innerline 1[enable]  innerlineprefix 0   callwaiting 1[enable]
fwdnumber 95963     fwdpoweroff 0[disable]
fwdalways 1[enable]  fwdbusy 0[disable]  fwdnoanswer 0[disable]
digitmap 0[disable]
*****Protocol Settings*****
service 1[enable]   registerttl 60
servicetype 0[common]  sipproxy 203.93.9.57  domain 203.93.9.57
natTraversal 2[stun]

```

```

nataddr [empty]          natttl 30
phonenummer 272727      account [empty]          pin [empty]
registerport 5060       rtpport 6002             tos 0
dtmfpayload 101        dtmf 0[inband audio]
prack 0[disable]       outboundproxy 0[disable]
*****Other Settings*****
superpassword 12345678  debug 1[output ]
password 1234           upgradetype 0[disable]
upgradeaddr [empty]
sntpip 0.0.0.0         daylight 0[disable]
timezone 55[(GMT+08:00)Beijing,Hong Kong,Urumqi]

```

Input ordinary password with debug set as 0[disable], and the following information will be seen:

```

PA168X V1.60 settings
Password:****
P:\>get
*****Network Settings*****
iptype 0[static]
ip 192.168.1.100      subnetmask 255.255.255.0      router 192.168.1.254
dns 202.106.46.151  dns2 202.96.128.68           mac 00-0d-ea-00-00-03
*****Audio Settings*****
codec1 0[g729]        codec2 3[g711a]              codec3 2[g711u]
codec4 4[gsm]         codec5 6[null]               codec6 6[null]
vad 1[enable]         agc 0[disable]               aec 1[enable]
audioframes 2         6.3k 1[enable]              ilbcpayload 98
jittersize 0          handsetin 15                  handsetout 20
dualmode 1[psstn first]  dualmodeprefix 30
*****Dial Plan Settings*****
dialplan 1[enable]    dddcode 10
iddcode 86            iddprefix 00                  dddprefix 0
innerline 1[enable]  innerlineprefix 0             callwaiting 1[enable]
fwdnumber 95963      fwdpoweroff 0[disable]
fwdalways 1[enable]  fwdbusy 0[disable]           fwdnoanswer 0[disable]
digitmap 0[disable]
*****Other Settings*****
password 1234         upgradetype 0[disable]
upgradeaddr [empty]
sntpip 0.0.0.0       daylight 0[disable]

```

`timezone 55[(GMT+08:00)Beijing,Hong Kong,Urumqi]`

➤ **Command set**

Syntax description: set keywords value

Usage: It is to configure password and other running parameters of PA168V FXS gateway.

Detailed description:

set iptype X

Set how PA168V FXS gateway gets relevant network parameters.

X ranges from 0 through 3. 0: authorize users to set IP address, subnet mask and router IP address of PA168V manually; 1: use DHCP mode. With this system, 2: use PPPoE mode. Those ADSL and Cable Modem users please select this item. 3: use modem mode. Those who use PA168V with modem please set the value as 3.

set pppid XXX

With **iptype** set as **2**, use this command to set user name of PPPoE; with **iptype** set as **3**, use this command to set user name of dial-up network.

set ppppin XXX

With **iptype** set as **2**, use this command to set user name of PPPoE; with **iptype** set as **3**, use this command to set user name

of dial-up network.

set ip XXX.XXX.XXX.XXX

With **iptype** set as **0**, use this command to set IP address of PA168V FXS gateway.

set subnetmask XXX.XXX.XXX.XXX

With **iptype** set as **0**, use this command to set subnet mask of PA168V FXS gateway.

set router XXX.XXX.XXX.XXX

With **iptype** set as **0**, use this command to set router IP of network.

set dns XXX.XXX.XXX.XXX

With **iptype** set as **0**, use this command to set IP address of DNS server.

set dns2 XXX.XXX.XXX.XXX

With **iptype** set as **0**, use this command to set IP of backup DNS server.

set mac XX-XX-XX-XX-XX-XX

Set MAC address of the PA168V FXS gateway. Parameter xx-xx-xx-xx-xx-xx must be an HEX number.

set codec1 X

Set the priority 1of the audio compression algorithm. X ranges

from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5:
ilbc; 6: null.

set codec2 X

Set the priority 2 of the audio compression algorithm. X ranges
from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5:
ilbc; 6: null.

set codec3 X

Set the priority 3 of the audio compression algorithm. X ranges
from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5:
ilbc; 6: null.

set codec4 X

Set the priority 4 of the audio compression algorithm. X ranges
from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5:
ilbc; 6: null.

set codec5 X

Set the priority 5 of the audio compression algorithm. X ranges
from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5:
ilbc; 6: null.

set codec6 X

Set the priority 6 of the audio compression algorithm. X ranges
from 0 through 6: 0: g729; 1:g7231; 2: g711u; 3: g711a; 4: gsm; 5:
ilbc; 6: null.

set vad X

Enable/disable VAD. X ranges from 0 through 1: 0: disable VAD; 1: enable VAD.

set agc X

Enable/disable AGC. X ranges from 0 through 1: 0: disable AGC; 1: enable AGC.

set aec X

Enable/disable AEC. X ranges from 0 through 1: 0: disable AEC; 1: disable AEC.

set audioframes X

Set audio frames in RTP package. X is Arabic numerals between 0 and 7.

set 6.3k X

With G.7231 codec selected; set PA168V FXS gateway to use 6.3K rate or not. X ranges from 0 through 1: 0: use 6.3K rate; 1: use 5.3K rate.

set jittersize X

Set buffer size of RTP package. X ranges from 0 to 32.

set ilbcpayload X

Set the payload type of RTP package whne ILBC codec selected to DTMF delay.X is range from 96-255.

set handsetin X

Set initial volume of handset. X ranges from 0 through 15.

set handsetout X

Set initial volume of handout. X ranges from 0 through 31.

set dualmode X

Set to enable or disable the PSTN line. X ranges from 0 through 2.

0: do not use PSTN line; 1: use PSTN line first. 1: use IP side call first.

set dual modes prefix XX

When IP first is set in the dual modes setting, setting switches to PSTN prefix; XX ranges from 0 through 99.

set dialplan X

Enable/disable dial plan and dial number. Parameter X ranges from 0 through 4: 0: disable dial plan; 1: enable dial plan; 2: use dial number; 3: use hotline function.

set dialnumber XX

When **set dialplan** value set as 2, please use this command to set **dial number**. For example, with eTalk card used, please set it as 00. When **set dialplan** value set as 4, please use this command to set **hotline number**.

set dddcode XX

Set the area code when set **dialplan** value set as **1** or **2**. For

example, the area code of Beijing is 10; the area code of Shanghai is 21, and the area code of Chengdu is 28, etc. Parameter xxx must be an Arabic numeral and no longer than 3 characters.

set iddcode XXX

Set the country code when set **dialplan** value set as **1** or **2**. For example, the country code of China is 86; the country code of USA is 1, etc. Parameter xxxx must be an Arabic numeral and no longer than 4 characters.

set iddprefix XX

Set IDD service prefix number when set **dialplan** value set as **1** or **2**. For example, IDD service prefix number of china is 00; IDD service prefix number of USA is 1, etc. Parameter xxx must be an Arabic numeral and no longer than 3 characters.

set dddprefix XX

Set DDD service prefix number when set **dialplan** value set as **1** or **2**. For example, DDD service prefix number of china is 0; DDD service prefix number of USA is 1, etc. Parameter xxx must be an Arabic numeral and no longer than 3 characters.

set innerline X

Set use innerline call or not. X ranged from 0 through 1: 0: disable; 1: enable innerline call.

set innerlinepreifx X

With **innerline** set as **1[enable]**, please set the prefix to pick up inner line, such as 0.

set callwait X

Set whether to use call wait. X ranges from 0 to 1: 0: do not use call wait; 1: use call wait.

set fwdnumber XXXXXXX

Set receiving forwarded calls phone number. XXXX must be an Arabic numeral and no longer than 16 characters

set fwdalways X

Enable/disable forward all calls. X ranges from 0 through 1. 0: do not forward any call; 1: forward all calls.

set fwdbusy X

Enable/disable forward calls if busy. X ranges from 0 through 1. 0: do not forward calls if busy; 1: forward call if busy.

set fwdnoanswer X

Enable/disable forward calls without replying. X ranges from 0 through 1. 0: do not forward calls without replying; 1: forward call without replying.

set answer X

Set the ring seconds before the phone answers the call automatically or forward the calls. X is ranges from 0 through 60.

set digitmap X

Set whether to use digitmap. X ranges from 0 to 1: 0: do not use digitmap; 1: use digitmap.

set service X

Set register the SIP proxy server or not. X ranged from 0 through 1.

0: do not register; 1: register.

set registerttl X

Set register TTL. X is range from 10 through 65535 Sec. default value is 60 Sec.

set service type X

Enable/disable the prepaid and service system .choose the prepaid server provider. Parameter x ranged from 0 through 15:

0: common: disable prepaid card or specially system ;

1: use huawei's system;

2: use ZTE's system;

3: use harbour's system;

4: use utstarcom's system;

5: use uptech system;

6: use keimen's system;

7: use meidaring's service;

8: use italkBB service;

9: use nortel system;

- 10: use net2phone SIP service;
- 11: use fwd(freeworlddialup) service;
- 12: use inphonex system;
- 13: use sipphone system;
- 14: use ngstel system ;
- 15: use ayctel system
- 16: use callserve system
- 17: use qmaster system
- 18: use ringchat system
- 19: use t-online system

set sipproxy XXXX

Set IP address or domain name of SIP Proxy Server.

set domain XXXXX

Set the domain name of SIP proxy server.

set nattraversal X

X ranged from 0 through 2: 0: do not use NAT traversal. When the log in server and IP phone in the same LAN, or the log in system supports the IP phone working behind the LAN; 1: Use NAT traversal. When the login system does not support IP phone working behind the LAN, With this item selected, please make port mapping on NAT device; 2: stun.

set nataddr XXXXX

When “**nattraversal**” is set to “**1**”;set IP address of NAT device wan port or URI of free assistant service (Such as www.showmyip.com etc.) in Internet.

When “**nattraversal**” is set to “**2**”, set IP address or URI of the stun server, in the format as “domain name/IP address : service port”.

The default service port for stun is 3478.

 **NOTE** The free service list of Internet: www.ip-calculator.com; www.ipchicken.com; www.ipchicken.com; www.showmyip.com; www.whatismyip.com; www.myipaddress.com; www.whatismyipaddress.com; ip.sbbs.net; www.whatismyipaddress.net; checkip.dyndns.org

set natttl XX

Set NAT TTL XX is an integer between 10 and 65535 sec. default value is 20 sec.

set phonenumber XXXXXXXX

Set a local ID of PA168X IP phone. Value xxxxx must be an Arabic numeral and no longer than 16 characters.

set account XXXXXX

Set the account; Value xxxxxx must be an Arabic numeral and no longer than 32 characters.

set pin XXXXXXXXXXXX

Set the account; Value xxxxxx must be an Arabic numeral and no longer than 32 characters.

set registerport XXXX

Set register port. Value XXXX default is 5060.

set rtpport XXXX

RTP port is the port transferring and receiving voice flow using UDP protocol. XXXX is an even number between 1024 and 65535.

set tos X

Set TOS segment of IP head package in RTP digital follow. X is range from 0 through 224.

set dtmf X

Set DTMF relay type. X is ranged form 0 through 2: 0: inband audio; 1: rfc 2833; 2: sip info.

set dtmf payload X

When **dtmf X** select 1(**rfc 2833**).This parameter can be used indicating type of RTP payload type. The value can be use integer 96-101.

set prack X

Set enable/disable support pre-ack(RFC3262) . X is ranged form 0 through 1: 0: disable; 1: enable.

set outboudproxy X

Set enable/disable Outbound proxy support. X is ranged form 0 through 1: 0: disable; 1: enable.When X is 1(enable), please set the

URI of the Outbound proxy into “**sip proxy**” and set the domain name of SIP proxy server into “**domain**” . The default service port is 5060.

set superpassword XXXX

Set super password of the PA168V FXS gateway. XXX must be ASCII characters.

set debug X

Set open debugging message output grade for special tool. X ranges from 0 through 5: 0: close debugging output; 1: output the operation information to the window; 2: output all the bug information and data in test window; 3: save the bug information into SDRAM; 4: disable checking the mark.

set password XXXX

Set password of the PA168V FXS gateway. XXX must be ASCII characters.

set upgradetype X

Set auto-upgrade matching type, X ranges from 0 through 5, 0-----disable; 1-----all ; 2----- mac; 3-----ppp id; 4----- account; 5----- phone number。

set upgradeaddr HTTP://XXX.XXX.XXX.XXX:PORT

FTP://XXX.XXX.XXX.XXX: PORT

TFTP://XXX.XXX.XXX.XXX: PORT

Set IP address or domain name of upgrade server supplying upgraded program and configurations of PA168X IP phone.

set sntpip XXX.XXX.XXX.XXX

Set IP address of time server.

set daylight X

Set to use daylight or not. X ranges from 0 through 1: 0: do not use daylight; 1: use daylight.

set timezone XX

Set time zone.

➤ **Command store**

Syntax description: no keyword. Parameter ranges from 0 through 4.

Usage: Save the current settings to the designated position.

Relevant Usage: store 1

➤ **Command load**

Syntax description: no keyword. Parameter ranges from 0 through 4.

Usage: Load the designated settings to the current position.

Relevant Usage: load 1

➤ **Command default**

Syntax description: no keyword and parameter

Usage: Restore to manufactory defaults parameters.

Relevant usage: None

➤ **Command exit**

Syntax description: no keyword and parameter

Usage: Exit from Telnet command window without saving the configuration.

Relevant usage: None

➤ **Command write**

Syntax description: No keyword and parameter

Usage: Save the configuration and restart the PA168V FXS gateway.

Relevant usage: None

 **Note** All the Telnet commands of PA168V FXS gateway should be written in low case and the password is case sensitive.

*Reserves the right to make changes in technical and product specification
without prior notice.*

PA168V SIP FXS Gateway Telnet Setup Guide (V1.60)

Copyright© 2003---2007

All rights reserved