



APBX Downgrade Manual

2013-05-31

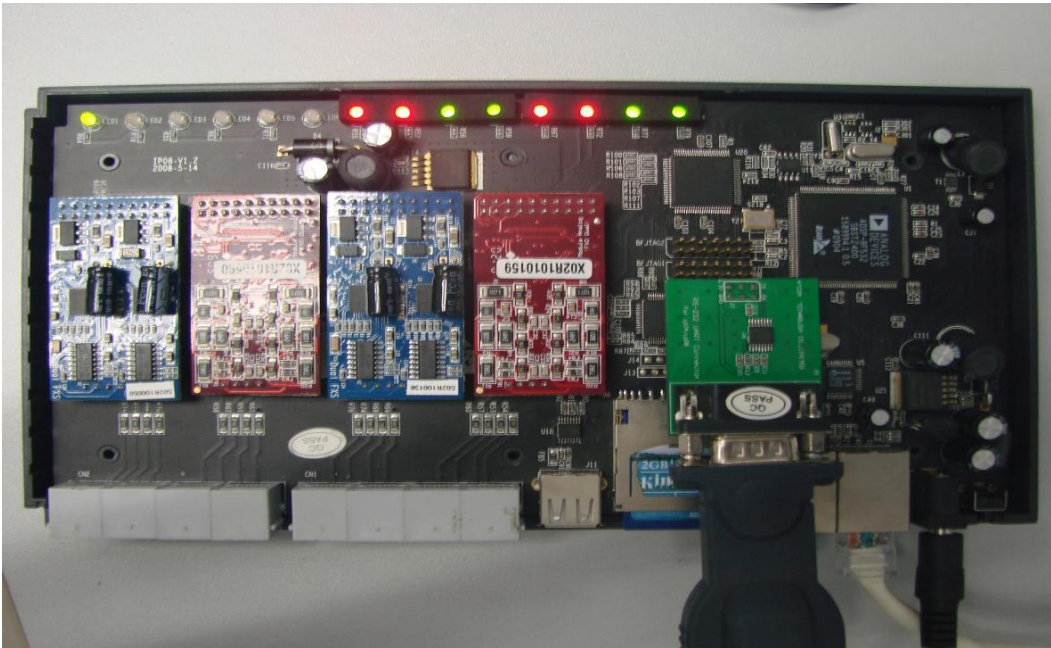
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1 Preparation

- (1) A console cable(direct RS232)
- (2) A serial console client (eg. PuTTY for Windows or minicom for Linux)
- (3) A TFTP server (eg. Tftpd32 for Windows)
- (4) IPOX-xx_release.ext2 firmware

2 Connection



- 1) Conect IPPBX to PC with serial console line

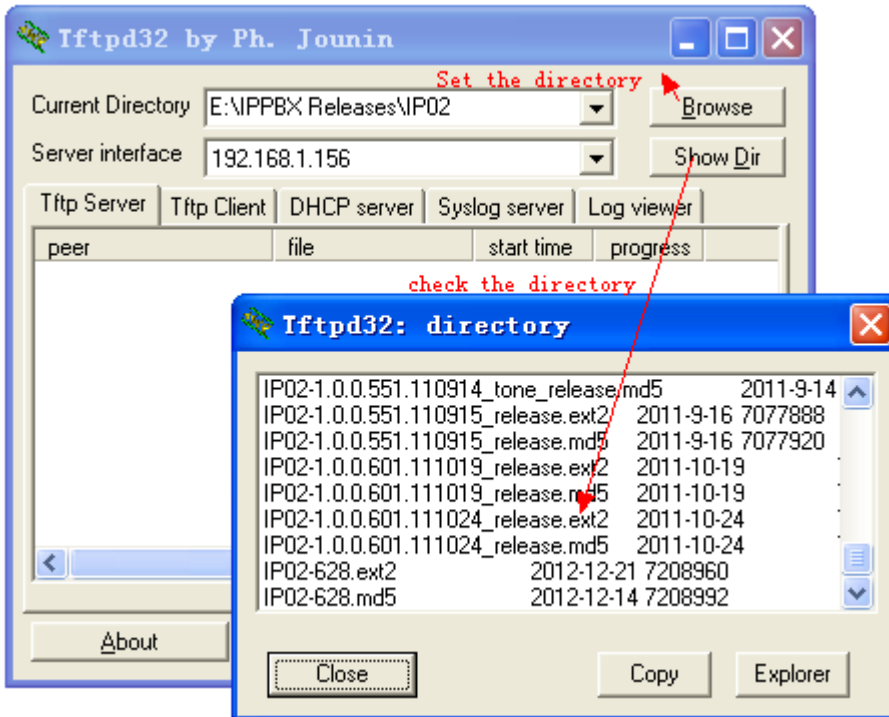
There is RS232 interface in IP01/IP2G4A/IP4G, just connecting them is OK. If your box is IP02/IP04/IP08, you have to remove the top cover from the IPPBX and install the small RS232 daughter board which was included in the package on J6 as shown above.

- 2) Connect IPPBX WAN port to your PC with Twisted Pair.

3 Firmware Downgrade

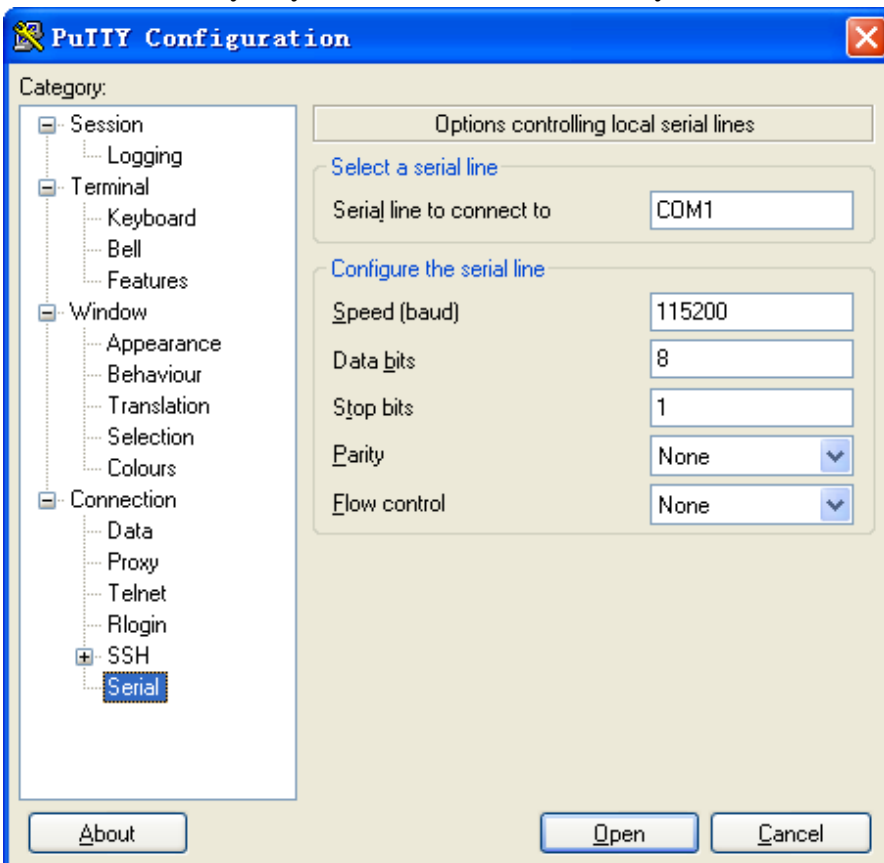
Assume that 192.168.1.156 is your PC IP address, 192.168.1.160 is that of IPPBX

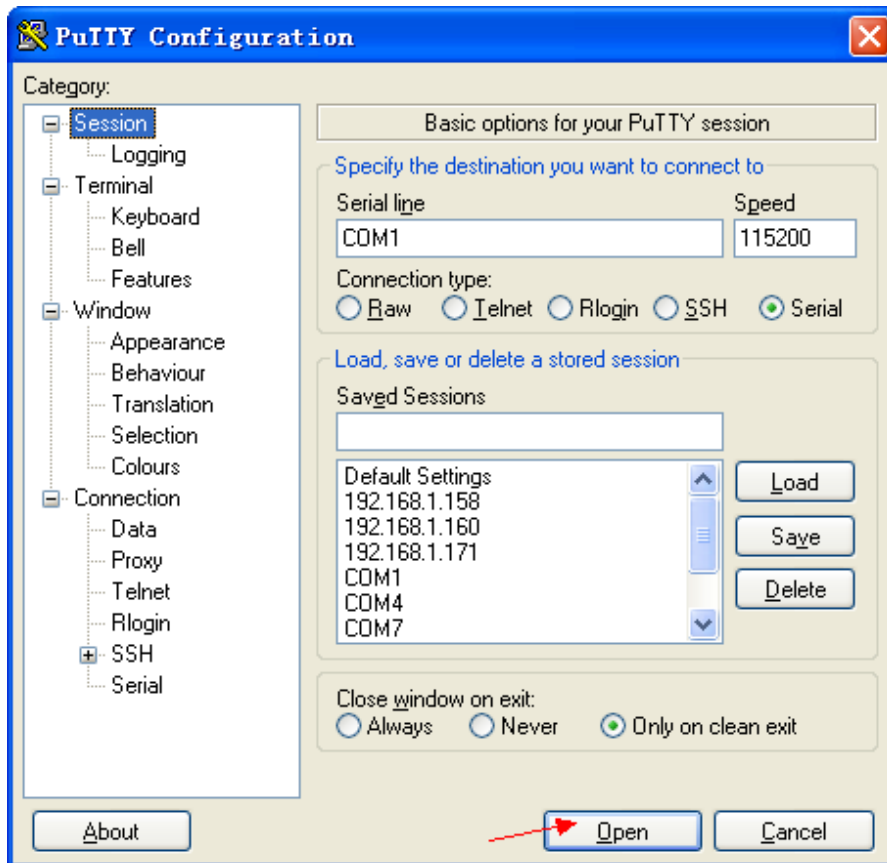
- 1) TFTP setting: Choose firmware uploading directory as tftp server base directory.



2) Putty setting

Configure your serial console client to 115,200 baud, 8 data bits and no parity. Also make sure Hardware Flow Control is turned off, and that you're using the correct port (minicom might be set to use /dev/tty0 by default instead of /dev/ttyS0)





- 3) Login IPPBX with serial console line
- 4) Power on the IPPBX
- 5) Press any key when you get the prompt 'Hit any key to stop autoboot'
- 6) Enter the following commands

```

ip0x>setenv autostart
ip0x>setenv ipaddr 192.168.1.160      ;set IPPBX IP
ip0x>setenv serverip 192.168.1.156  ;set tftp server IP
ip0x>setenv setbootargs 'setenv bootargs ethaddr=$(ethaddr) ethaddr1=$(eth1addr)
console=ttyBF0,115200 earlyprintk=serial,uart0,115200 root=/dev/mtdblock0 rw'
ip0x> setenv nandfirstboot 'run setbootargs;nand read.e 0x2000000 0x0 0x700000;bootm 0x2000000'
ip0x>save
ip0x>tftp 0x2000000 IP0x-xx_release.ext2
ip0x>nand erase
ip0x>nand write.e 0x2000000 0x0 0x700000
ip0x>boot
  
```

```

ip0x> setenv autostart
ip0x> setenv ipaddr 192.168.1.160
ip0x> setenv serverip 192.168.1.156
ip0x> setenv setbootargs 'setenv bootargs ethaddr=${ethaddr} ethaddr1=${eth1addr} console=ttyBF0,1
15200 earlyprink=serial,uart0,115200 root=/dev/mtdblock0 rw'
ip0x> setenv nandfirstboot 'run setbootargs;nand read.e 0x2000000 0x0 0x700000;bootm 0x2000000'
ip0x> save
Saving Environment to SPI Flash...
Erasing SPI flash...Erase: 20 03 00 00
Erase: 20 03 10 00
Erase: 20 03 20 00
Erase: 20 03 30 00
Erase: 20 03 40 00
Erase: 20 03 50 00
Erase: 20 03 60 00
Erase: 20 03 70 00
Erase: 20 03 80 00
Erase: 20 03 90 00
Erase: 20 03 a0 00
Erase: 20 03 b0 00
Erase: 20 03 c0 00
Erase: 20 03 d0 00
Erase: 20 03 e0 00
Erase: 20 03 f0 00
Writing to SPI flash...done
ip0x>

```

```

ip0x> tftp 0x2000000 IP02-1.0.0.601.111024_release.ext2
dm9000 i/o: 0x20100000, id: 0x90000a46
DM9000: running in 16 bit mode
MAC: 00:01:02:03:04:05
operating at 10M half duplex mode
Using dm9000 device
TFTP from server 192.168.1.156; our IP address is 192.168.1.160
Filename 'IP02-1.0.0.601.111024_release.ext2'.
Load address: 0x2000000
Loading: #####
#####
#####transmission timeout
#####
#####
#####
#####
#####
done
Bytes transferred = 7077888 (6c0000 hex)
ip0x> nand erase
NAND erase: device 0 whole chip
Really erase everything ? <y/N> input y here
Skipping bad block at 0x02360000
Skipping bad block at 0x02820000
Skipping bad block at 0x08ea0000
Erasing at 0xffe0000 -- 100% complete.
OK
ip0x> nand write.e 0x2000000 0x0 0x700000
NAND write: device 0 offset 0x0, size 0x700000
7340032 bytes written: OK
ip0x> boot

```