

EM210 3G Settings Instructions

Platform: EM210

Operation system: Android 4.0.3

Setting items: APN, Dial number, user name, password.

Step 1, Modify the **wcdma script** of file system. (Modify user name and password).

Path: /system/etc/ppp/wcdma.

Copy the file **busybox** in CD to PC **C:\Documents and Settings\Administrator**, then open cmd.exe of PC. Connect the EM210 and PC with the serial cable, usb otg cable. After power on, the PC will report that found new hardware if it never install the usb adb driver (CD\EM210\tools\windows\usb_adb_driver), install the driver.

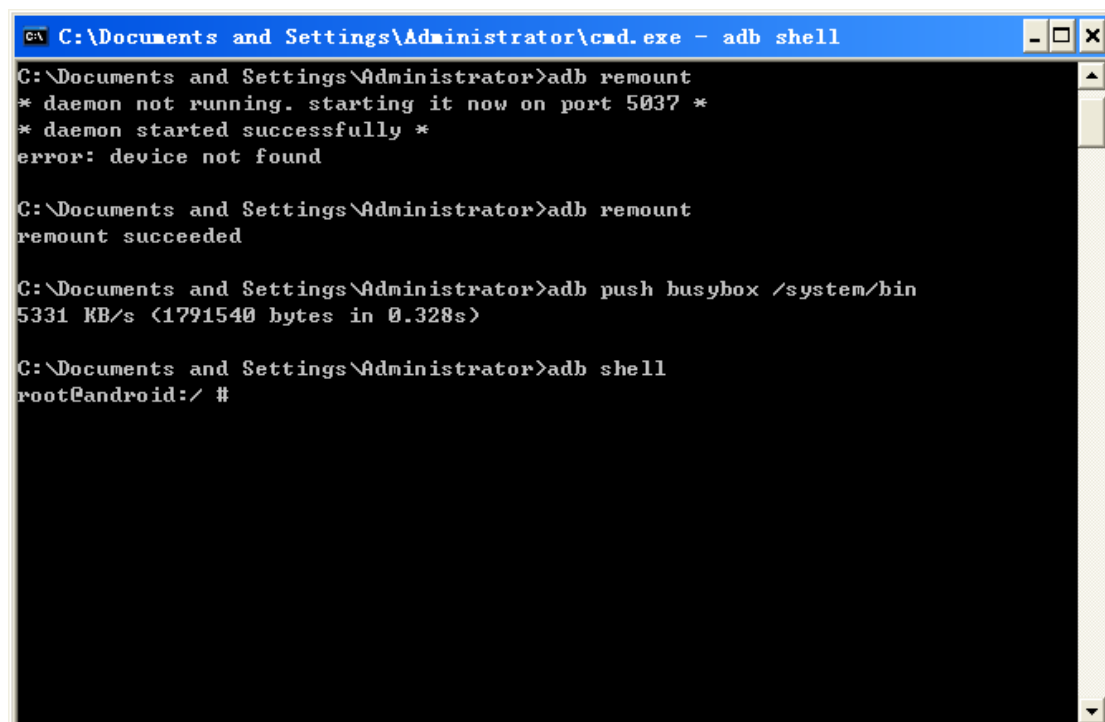
Note: Only copy the three files as follows from the directory **Tools/windows/adb** to **\\WINDOWS\system32** the “adb” can be used.



After install the driver, execute the commands at cmd:

```
adb remount
```

```
adb push busybox /system/bin
```

A screenshot of a Windows command prompt window titled 'C:\Documents and Settings\Administrator\cmd.exe - adb shell'. The window shows the following commands and their outputs:

```
C:\Documents and Settings\Administrator>adb remount
* daemon not running. starting it now on port 5037 *
* daemon started successfully *
error: device not found

C:\Documents and Settings\Administrator>adb remount
remount succeeded

C:\Documents and Settings\Administrator>adb push busybox /system/bin
5331 KB/s (1791540 bytes in 0.328s)

C:\Documents and Settings\Administrator>adb shell
root@android:/ #
```

Open serial terminal and execute the commands to check whether the file “busybox” loaded successfully to the board.

```
# cd system/bin
```

```
#ls
```



```
root@android:/ # cd system/bin
root@android:/system/bin # ls
BlobCache_test
InputChannel_test
InputDispatcher_test
InputEvent_test
InputPublisherAndConsumer_test
InputReader_test
Looper_test
ObbFile_test
String8_test
Unicode_test
ZipFileRO_test
adb
am
app_process
applypatch
applypatch_static
audioloop
bluetoothd
bmgr
bootanimation
bu
bugreport
busybox
```

Execute the commands to enter the directory and modify Permissions

```
# cd /system/bin
```

```
# chmod 777 busybox
```

```
Serial-COM1
uptime
vdc
vmstat
vold
watchprops
wipe
wpa_cli
wpa_supplicant
root@android:/system/bin #
root@android:/system/bin #
root@android:/system/bin # chmod 777 busybox
root@android:/system/bin #
```

Execute the commands to enter the PPP directory and open WCDMA script

```
# cd /system/etc/ppp
```

```
# busybox vi wcdma
```



```

root@android:/system/bin # cd /
root@android:/ # cd /system/etc/ppp
root@android:/system/etc/ppp # busybox vi wcdma

nodetach^M
no lock^M
/dev/ttyUSB2^M
115200^M
user ""^M
password ""^M
no crtscts^M
modem^M
hide-password^M
usepeerdns^M
noauth^M
noipdefault^M
novj^M
novjccomp^M
noccp^M
defaultroute^M
ipcp-accept-local^M
ipcp-accept-remote^M
connect 'chat -s -v -f /etc/ppp/chat-wcdma-connect'^M
disconnect 'chat -s -v -f /etc/ppp/chat-wcdma-disconnect'^M
~
~
- wcdma [Readonly] 1/20 5%

```

Press “i” to edit the script.

E.g the IPS is **WCDMA**, leave the user name / password blank.

China Network				
ISP	APN	Dial Number	User name	Password
WCDMA (China Unicom)	3GNET	*99#	null	null
CDMA2000 (China Telecom) EVDO network	null	#777	ctnet@mycdma.cn	vnet.mobi
1X network	null	#777	card(CARD)	card(CARD)
TD-SCDMA (China Mobile)	CMNET	*98*1#	null	null
GPRS (China Mobile)	CMNET	*99***1#	null	null



```
Serial-COM1
root@android:/system/bin # cd /
root@android:/ # cd /system/etc/ppp
root@android:/system/etc/ppp # busybox vi wcdma

nodetach^M
no lock^M
/dev/ttyUSB2^M
115200^M
user ""^M
password ""^M
noctsccts^M
modem^M
hide-password^M
usepeerdns^M
noauth^M
noipdefault^M
novj^M
novjccomp^M
noccp^M
defaultroute^M
ipcp-accept-local^M
ipcp-accept-remote^M
connect 'chat -s -v -f /etc/ppp/chat-wcdma-connect'^M
:wq!
~
- wcdma [Readonly] 1/20 5%
```

After modify the user name and password, press “ESC” to exit.

Then input “:wq!” to save the editing.

Step 2, Modify the chat-wcdma-connect script. (Modify APN and Dial number)

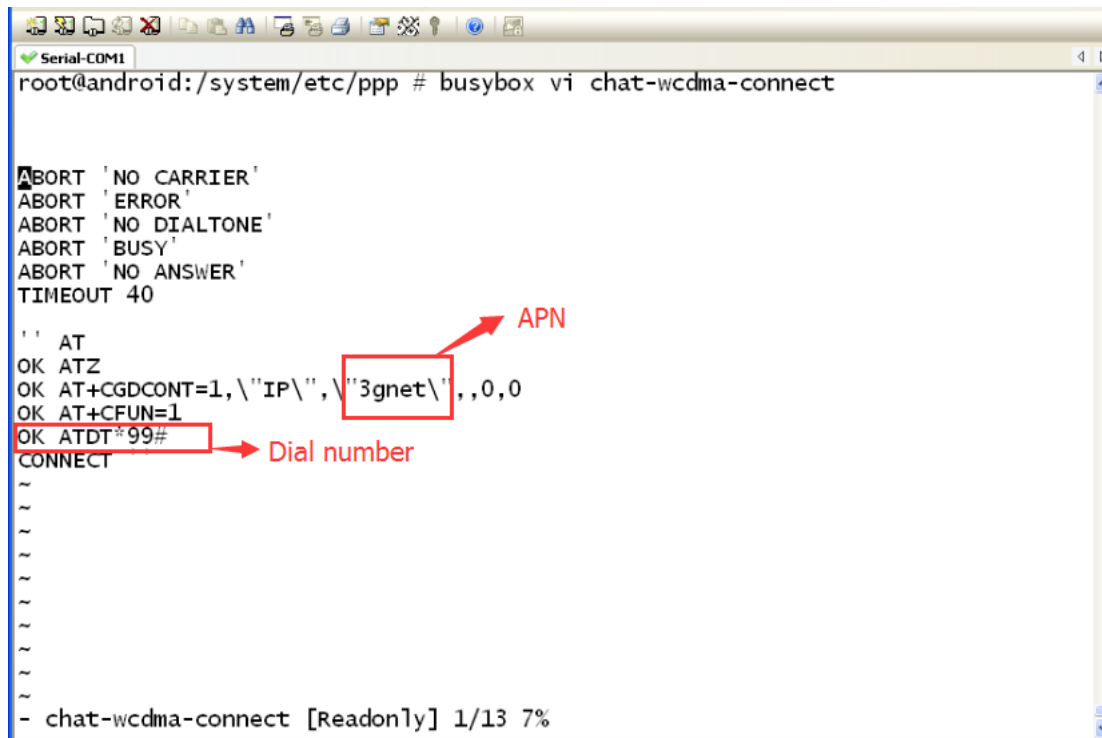
Path: /system/etc/ppp/chat-wcdma-connect.

Execute the commands

```
# cd /system/etc/ppp
```

```
# busybox vi chat-wcdma-connect
```

Input “i” to edit the script.



```
Serial-COM1
root@android:/system/etc/ppp # busybox vi chat-wcdma-connect

ABORT ' NO CARRIER '
ABORT ' ERROR '
ABORT ' NO DIALTONE '
ABORT ' BUSY '
ABORT ' NO ANSWER '
TIMEOUT 40

' ' AT
OK ATZ
OK AT+CGDCONT=1,\"IP\", \"3gnet\",,0,0
OK AT+CFUN=1
OK ATDT*99#
CONNECT
~
~
~
~
~
~
~
~
~
- chat-wcdma-connect [Readonly] 1/13 7%
```

After modify the APN and Dial number, press “ESC” to exit
And input “:wq!” to save the editing.

Step 3, Execute the command to call wcdma.

#pppd call wcdma &

Then you can successfully connect to internet and browse the web.