

Asterisk + Mobigater Manual

1. Install Asterisk version 1.2.18 or 1.4.x (recommended). If Asterisk is already installed you'll need the source of the installed version

2. Download celliax - http://www.gsmopen.org/sites/default/files/chan_celiax.tgz i.e. in /usr/src and decompress it:

```
cd /usr/src
wget http://www.gsmopen.org/sites/default/files/chan\_celiax.tgz
tar xvf celliax_stuff.tgz
```

3. Change directory to celliax_stuff/build and replace Makefile with the example and/or change settings so they are corresponding to your Asterisk version. Change the path to include files, i.e. /opt/asterisk-1.4.xx/include

4. In chan_celiax.c replace:

```
.at_dial_post_number = "S\\",
```

with :

```
.at_dial_post_number = ";",
```

This is required for proper dialing outgoing numbers via MobiGater.

5. Run make

If the process completes successfully copy the module in the Asterisk modules directory:

```
cp chan_celiax.so /usr/lib/asterisk/modules
```

6. In /etc/asterisk/modules.conf change OSS and ALSA Asterisk options modules, so they didn't load:

```
noload => chan_alsa.so
```

```
noload => chan_oss.so
```

7. Insert SIM card and connect device to PC.

8. Copy the example [celiax.conf](#) in /etc/asterisk

Shown configuration is for 2 channels (S4 have 4 channes).

If you want to use more devices you'll need to add more sections to the example file. You shall to change the AT device (usually +1, but it could be /dev/ttyACMx or /dev/ttyUSBx, depending on configured modules in the kernel). ALSA device is incremented with +1 for every MobiGater. Extension, which receive incoming calls and have possibility to be different, for example: extension=mobigater12

Include MobiGater's extensions (mobigater1, mobigater2, mobigater3, mobigater4...

mobigaterX) in [/etc/asterisk/extensions.conf](#), which defines that happens, when somebody calls one of the MobiGaters (examples only)

Also sets which number routing via different MobiGaters.

9. With alsamixer -c0 ,alsamixer -c1 ,alsamixer -c... you can set volume level of every MobiGater. Exact values are set experimentally, around 45% of Capture and 100% of Playback, Mute Playback Mic to avoid Echo but also set level like Capture (because the set same value), Set Auto Gain to boost the sound if needed. Save with "alsactl store". Allow only "G.711u" codec to be used in "sip.conf".

10. Testing ...