

# Freedom Fone



## Troubleshooting Guide

**Freedom Fone Pictus Lupinus 1.5.2**

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Author: Kubatana.net

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### 1. I've tried to call and leave a voice message, but my key selections seem to be ignored.

This problem usually arises because the DTMF (Dial Tone Modulated Frequency) tones associated with your keypad selections are not being correctly interpreted. Noise on the GSM network is usually the culprit. In countries where quality of service is well regulated, there is generally very little noise on the networks. However, in many developing countries the networks are very 'noisy' making it difficult to differentiate the subtle DTMF tones as you make your key selections.

**Fix: If you are using MobiGaters you can make modifications using the graphical mic gain adjustment interface from the command line**

- Open a terminal window by clicking the terminal icon in the centre of the title bar at the top of your screen.
- If you are prompted to do so, enter the password *lupinus*.
- For the first MobiGater connected to the Freedom Fone server do as follows
  1. At the prompt, type  
`alsamixer -c1 -Vcapt`
  2. You'll be presented with a "mixer" for capture (if it does not appear, try "`apt-get install alsa-utils`" to install it).
  3. Press the spacebar on the Mic so that the word "CAPTUR" appears on the screen in red.
  4. Use your mouse to click on the number displayed between Mic and CAPTUR – set it to zero.
  5. Try calling the number in the MobiGater again and see if your key selections are recognized.
  6. If your selections are NOT detected, try setting the value up a little each time between tests until your key selections are recognized regularly.
- For additional MobiGaters connected to the system, modify the `-c1` parameter as follows  
`alsamixer -c2 -Vcapt`  
`alsamixer -c3 -Vcapt`

Make sure the Microphone's sensitivity has been adjusted for each MobiGater attached.

### 2. I can't hear the voice menu prompts because a voice keeps nagging me about Cepstral. I don't know if the system is working properly.

Cepstral is the text to speech software used in Freedom Fone. Our software will work without a license but before it reads a line of text, Cepstral will play a reminder that you need to buy a license. We are using the Allison 8 Khz voice for Linux.

**Fix 1: Buy and register a license for Allison 8 Khz from the Cepstral website**

A license for the Allison 8 Khz voice for Linux can be bought from <https://www.cepstral.com/>. Once you get the license you can register the voice by running the swift executable from the command prompt as follows:

- Open a terminal window by clicking the terminal icon in the centre of the title bar at the top of your screen.
- If you are prompted to do so, enter the password *lupinus*.
- At the prompt type  
`/opt/swift/bin/swift --reg-voice`
- Follow the instructions to enter the details associated with your license. You will be asked for Name, Organisation and License key

#### **Fix 2: Create your own audio files and avoid text to speech completely**

- If you use your own audio files you do not need to use text-to-speech at all

#### **3. I have tried uploaded Menu options but none of my files are reflected on the Menu options screen. What's going wrong?**

The chances are that the file you tried to upload was larger than the maximum file size of 10MB allowed. Downsize the audio file by shortening its duration and/or ensuring it has been created as a WAV or MP3 file that is mono with a sampling rate of 8Khz.

#### **4. I don't want to use the default settings for associating MobiGaters and other telephony devices to Freedom Fone functions. How do I change these default settings?**

We have built an internal logic to allow multiple instances of our applications to exist under the same installation. The logic is as follows: each application has an internal extension number, the internal extension number consists of two parts AAAAXXXX. AAAA indicates the application ID, while XXXX indicates the instance of such application. For example, application leave a message has AAAA=2 while the IVR has AAAA=4. Internal extension 2100 means, leave-a-message instance 100.

Version 1.5 of Freedom Fone has two applications pre-configured: leave-a-message (2100) and IVR (4100)

Every GSM interface (interface1, interface2, interface3) has an internal extension assigned with the form 5XXX. Freedom Fone 1.6 has three GSM channels preconfigured: 5000, 5001, 5002. The leave-a-message application has an internal extension 2100 (2=leave a message 100=instance number). When a call arrives at the GSM interface, we transfer the call from its internal extension (5XXX) to the application's internal extension.

This is done by editing the file: `/usr/local/freedomfone/xml_curl/dialplan.xml`

```
<extension name="inbound_Mobigater1">
  <condition field="destination_number" expression="^5000$">
    <action application="transfer" data="4100 XML default"/>
  </condition>
</extension>
```

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```

        </condition>
    </extension>
    <extension name="inbound_Mobigater2">
        <condition field="destination_number" expression="^5001$">
            <action application="transfer" data="2100 XML default"/>
        </condition>
    </extension>
    <extension name="inbound_Mobigater3">
        <condition field="destination_number" expression="^5002$">
            <action application="transfer" data="4100 XML default"/>
        </condition>
    </extension>

```

You can see that the default values are 5000->4100, 5001->2100, 5002->4100. In version 2.0, this file will be created via the GUI once we implement ACL with the system.

## 5. Can I test Freedom Fone using a SIP device?

Yes, we have left the accounts 1000, 1001,...1019 configured in the system. Check the IP address of your installation and register your SIP devices as 1000-1019. The password by default is 1234. Once the device is registered you can call 2100 for leave-a-message or 4100 for the IVR.

## 6. What IP address is assigned to Freedom Fone?

By default Freedom Fone is trying to retrieve the IP via DHCP. Make sure that you have a DHCP server in your network. You can check the IP address of the box by issuing the command `/sbin/ifconfig eth0` from the terminal. You can manually configure a static IP address for your server.

## 7. Can I connect my SIP based GSM gateway (such as the

[http://www.2n.cz/products/gsm\\_gateways/voip\\_gsm\\_gateway/voiceblue\\_voip\\_gsm\\_gateway.html](http://www.2n.cz/products/gsm_gateways/voip_gsm_gateway/voiceblue_voip_gsm_gateway.html)  
Voice Blue Lite) to Freedom Fone?

Yes, register the GSM gateway as one of the extensions (1000,1001,...) and make sure that the INCOMING calls are forwarded to one of the Application internal extensions (2100 for leave-a-message, 4100 for IVR). Remember the password is 1234.

A guide to setting up the VoiceBlue Lite with Freedom Fone is available in your documentation folder and online at <http://freedomfone.org/page/documentation>

## 7. I am having problems listening to the audio files associated with my voice menus and voice messages.

There is a bug in v1.5.2!

To address the problem with voice menu files, please edit the file  
/usr/local/freedomfone/config/gui\_config\_core.php and change the IP address for your local IP address  
from 192.168.1.10 to your correct IP address.

```
define ( 'MY_DOMAIN' , 'http://192.168.1.10/freedomfone/' );
```

To address the problem with voice message files, edit the file  
/usr/local/freedomfone/config/leave\_message\_100\_core.conf and edit the variable lmURIRoot for your IP  
address.

If your Freedom Fone runs on the 192.168.0.0/24 network you might want to edit: Change:

```
var lmURIRoot = "http://localhost/freedomfone/";
```

To:

```
var lmURIRoot = "http://192.168.x.x/freedomfone/";
```