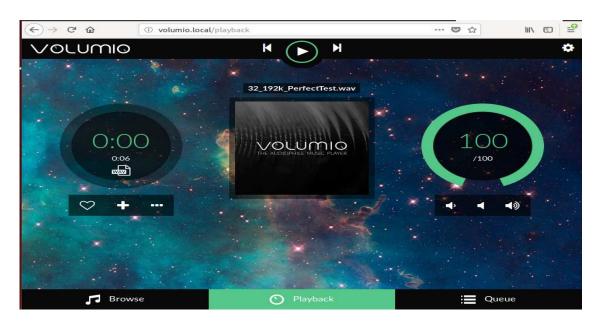
Volumio SSH enable on first boot

1. Upon flashing the volumio sparky image on a SD card or Emmc get the ip address of the particular board by connecting it to the monitor. On obtaining the Ip address you can access the volumio on the browser by typing the ip address or http://volumio.local/. You will get a display like this



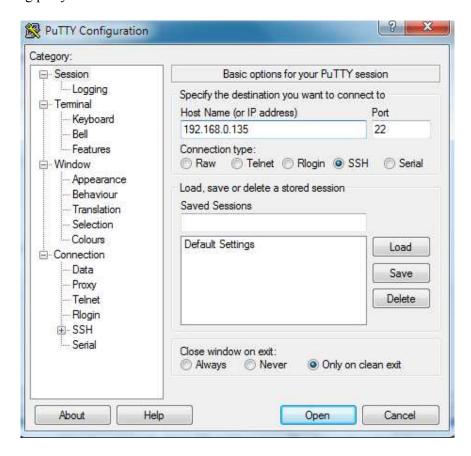
2. Now to enable ssh use the board ip (eg: 192.168.0.135) type http://192.168.0.135/dev/ a screen as below can be seen where you can enable ssh by clicking on "Enable" below the Ssh menu



Thus You can able to ssh the Board through terminal(linux and mac) or putty(Windows)

For downloading putty you can refer to this link http://www.putty.org/ and download the 32/64 bit according to your system configuration.

Upon installing putty run it



Enter the ip address of the board in the feild Host Name(or IP address) and click on open then it will ask for the credentials use the credentials stated below.

Login

Username : volumio password: volumio

On Mac systems The Terminal app is in the Utilities folder in Applications

Open Terminal and type on the prompt (IP shown as example, type volumio IP) ssh volumio@192.168.0.135

password: volumio

```
basic commands example
aplay -l
lsusb
lsusb -t
cat /proc/asound/card1/pcm0p/sub0/hw_params
```

listing audio devices : aplay -l (lower case of L) aplay -l

```
P volumio@volumio: ~
                                                                                                         Free Audiophile Linux Music Player - Version 2.0
          C 2015 Michelangelo Guarise - Volumio Team - Volumio.org
Volumio Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
volumio@volumio:~$ aplay -1
**** List of PLAYBACK Hardware Devices ****
 ard 0: ALSA [bcm2835 ALSA], device 0: bcm2835 ALSA [bcm2835 ALSA]
  Subdevices: 7/7
  Subdevice #0: subdevice #0
  Subdevice #1: subdevice #1
  Subdevice #2: subdevice #2
  Subdevice #3: subdevice #3
  Subdevice #4: subdevice #4
  Subdevice #5: subdevice #5
  Subdevice #6: subdevice #6
 ard 0: ALSA [bcm2835 ALSA], device 1: bcm2835 ALSA [bcm2835 IEC958/HDMI]
  Subdevices: 1/1
 Subdevice #0: subdevice #0
 ard 1: sndallodigione [snd_allo_digione], device 0: Allo DigiOne HiFi wm8804-spdif-0 []
  Subdevices: 1/1
  Subdevice #0: subdevice #0
 olumio@volumio:~$
```

Logs listing : dmesg

```
volumio@volumio:~$ aplay -1
**** List of PLAYBACK Hardware Devices ****
card 0: ALSA [bcm2835 ALSA], device 0: bcm2835 ALSA [bcm2835 ALSA]
 Subdevices: 7/7
Subdevice #0: subdevice #0
 Subdevice #1: subdevice #1
 Subdevice #2: subdevice #2
 Subdevice #3: subdevice #3
 Subdevice #4: subdevice #4
 Subdevice #5: subdevice #5
 Subdevice #6: subdevice #6
eard 0: ALSA [bcm2835 ALSA], device 1: bcm2835 ALSA [bcm2835 IEC958/HDMI]
 Subdevices: 1/1
 Subdevice #0: subdevice #0
ard 1: sndallodigione [snd_allo_digione], device 0: Allo DigiOne HiFi wm8804-spdif-0 []
 Subdevices: 1/1
 Subdevice #0: subdevice #0
volumio@volumio:-$ dmesg |

0.000000] Booting Linux on physical CPU 0x0

0.000000] Linux version 4.14.71-v7+ (dc4@dc4-XPS13-9333) (gcc version 4.9.3 (crosstool-NG crosstool-ng-1.22
0-88-g8460611)) #1145 SMP Fri Sep 21 15:38:35 BST 2018
     0.000000] CPU: ARMv7 Processor [410fd034] revision 4 (ARMv7), cr=10c5383d 0.000000] CPU: div instructions available: patching division code
                 CPU: PIPT / VIPT nonaliasing data cache, VIPT aliasing instruction cache
```