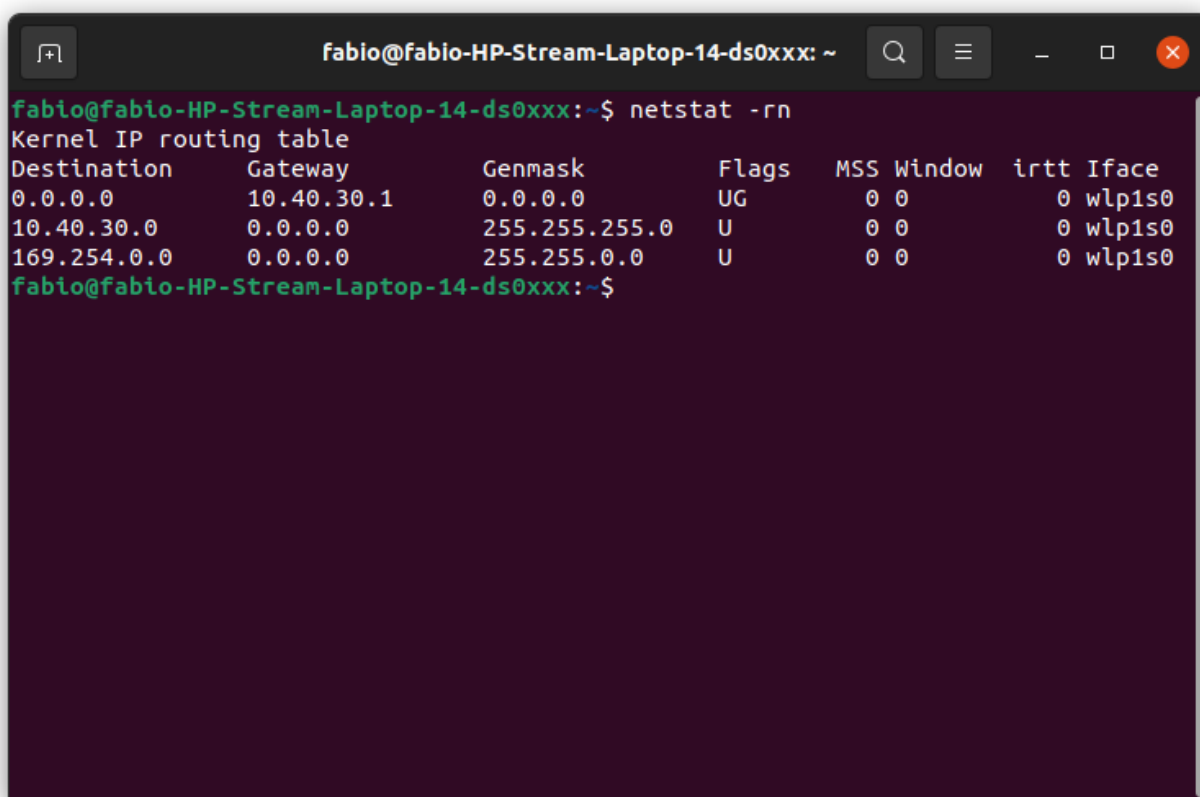


USE QUATTROCENTO WITH DHCP

This guide is meant to be used in order to communicate with the Quattrocento device on a computer that uses Linux OS. This is done by enabling the DHCP on the device itself and using the network to access the device from the Linux machine instead of using a direct connection. This will allow the device correctly communicate with OTBiolab+ software (eventually installed on a virtual machine) or any another software used to communicate (e.g. Matlab).

As first step, the IP routing table of your network needs to be checked. Connect in your Linux PC to your local network, open the command prompt and insert the command **netstat -rn** to obtain the list of IP address networks. What we need it's the domain of your local network, as show in Figure 1, in our case is 10.40.30.xx.



```
fabio@fabio-HP-Stream-Laptop-14-ds0xxx: ~  
fabio@fabio-HP-Stream-Laptop-14-ds0xxx:~$ netstat -rn  
Kernel IP routing table  
Destination      Gateway          Genmask         Flags   MSS Window  irtt  Iface  
0.0.0.0          10.40.30.1      0.0.0.0        UG      0  0       0     wlp1s0  
10.40.30.0       0.0.0.0         255.255.255.0  U       0  0       0     wlp1s0  
169.254.0.0     0.0.0.0         255.255.0.0   U       0  0       0     wlp1s0  
fabio@fabio-HP-Stream-Laptop-14-ds0xxx:~$
```

Figure 1 - Network list

What we have to do now is to assign an IP address to the Quattrocento device that matches the domain of your local network. To do so we need to access the device webpage. Using a Windows OS machine connect to a Quattrocento and type the address shown in its front display in the search bar. From the web page enable the DHCP and insert a new default IP address. This address must share the domain with the address you find in previous step, so the new one in my case will be:

10.40.30.AvailableNumber

Pay attention because AvailableNumber must not be used from anyone on the network and it has to be included between 0-255. In our case we choose 222 as show in Figure 2.

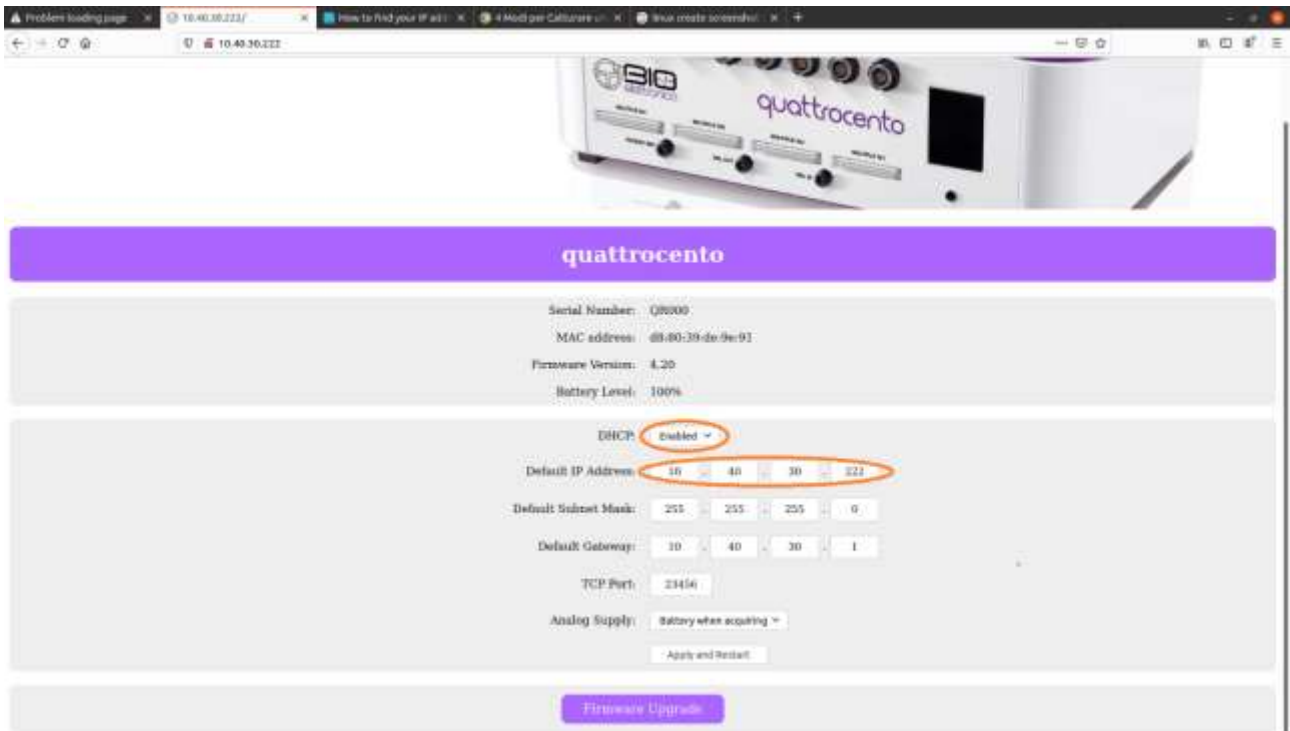


Figure 2 - IP address

Click Apply and Restart button. Now you can disconnect the Quattrocento from the window machine and connect it with ethernet cable to your network. The IP address on the display must be the same you insert in web page, if this does not happens restarts the device by turning it off. Below two images:



Now turn on your Linux PC and connect to the wifi. In the web page of your browser, with new ip address you should see the device.

N.B. At the beginning, the only necessary thing to do was the enabling of DHCP and automatically a free IP address is assigned to the Quattrocento. Depending on the firmware version this is not enough and the default IP address need to be changed by the user. If you have an old version maybe the enabling of DHCP could be enough, but for now follow the procedure explained before. Sorry for the inconvenience.

N.B. If something goes wrong, for example you choose the wrong new address in a different domain, the quattrocento will not be visualizable from any device. To solve this problem, you need to connect the device to window pc through ethernet/usb adapter, then change the network properties. So pay attention during this procedure.