

Trouble Shooting Sheet for Basic Set-up

For Ubuntu 16.04, USRP N210, Wireshark2.3.0

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Here is an incomplete list of main bugs we met with during basic set-up for references.

Q1: When running the companion, I got an error saying "UHD warns about not being able to set thread priority".

A1: Online solutions might help, however in practice, most of them do not work in our case. The issues seems not causing problems during implementation currently.

Q2: The error "[string /usr/share/wireshark/init.lua]:46: dofile has been disabled due to running Wireshark as superuser" arise when running wireshark, how to solve it?

A2: The reason for the error is that it is run as root. To insist on running as root, the error could be ignored by disable the lua functionality. However, it is not recommended. The best way is to install all packages as normal user and give the user root permission to run wireshark.

Q3: When running gnuradio, it gives the error saying "No UHD Devices Found", how to fix it?

A3: The most important thing is to set a static ip for the port, e.g., enp0s3 by sudo ifconfig enp3s0 192.168.10.X, so that it is in the same range as USRP do. Ping 192.168.50.173 for example to check if the connection is successful.

Q4: When running wireshark as normal user, it gives the error saying "Couldn't run /usr/bin/dumpcap in child process".

A4: To fix this, run the following command, which basically create a wireshark group with root permission and add the current user into it.

```
sudo groupadd wireshark
sudo chgrp wireshark /usr/bin/dumpcap
sudo chmod 4755 /usr/bin
sudo gpasswd -a dd wireshark
```

Q5: When running GNU radio, why it does not give the intended GUI interface?

A5: Several aspects could be tried. E.g., generate and run python script, make sure tap0 interface is on, try open wireshark GUI as a bootstrap using following "sudo wireshark -k -i /tmp/wifi.pcap" command etc.

Q6: When listening to the traffic using wireshark, it does not give meaningful packets.

A6: Try to set the interface to promiscuous mode.

Q7: How to install wireshark 2.3.0 on Ubuntu 16.04?

A7: V2.3.0 is not released in Ubuntu 16.04 thus one has to manually get it online, e.g.,

```
wget https://www.wireshark.org/download/automated/src/wireshark-2.3.0-2826-
tar xvf wireshark-2.3.0-2826-gd49e7d9.tar.xz
cd wireshark-2.3.0-2826-gd49e7d9/
sudo ln -s /usr/bin/libtoolize /usr/bin/libtool
./autogen.sh
sudo apt-get install libgcrypt-devel
```

```
sudo apt-get install libgtk-3-dev
sudo apt-get install libpcap0.8-dev
./configure
make
make install
sudo ldconfig
sudo wireshark
```

Q8: The console print the information saying that gnuradio is not installed?

A8: Initialize the source under the installed folder. One has to repeat the process when using a new terminal.

Q9: After running the GNU radio, the program got stuck in a minute?

A9: Try to compile and run the python script from the terminal instead of from GNU radio interface directly.