

Network Programming Lab NS3 Programs Execution Steps

step 1.)

Login into sudo su

type the password:

```
administrator@administrator-HP-280-Pro-G6-Microtower-PC:~$ sudo su
[sudo] password for administrator:
```

Step 2.) Change your directory to ns3

cd ns-allinone-3.30.1/ns-3.30.1

```
root@administrator-HP-280-Pro-G6-Microtower-PC:~# cd ns-allinone-3.33/ns-3.33/
root@administrator-HP-280-Pro-G6-Microtower-PC:~/ns-allinone-3.33/ns-3.33#
```

Step 3.) Change your directory to scratch

cd scratch/

```
root@administrator-HP-280-Pro-G6-Microtower-PC:~/ns-allinone-3.33/ns-3.33# cd scratch/
root@administrator-HP-280-Pro-G6-Microtower-PC:~/ns-allinone-3.33/ns-3.33/scratch#
```

Step 4.) Create your file with .cc extension

gedit filename.cc

step 5.) change your directory.

cd ..

Step 6.) compile the file with waf

./waf

```
root@administrator-HP-280-Pro-G6-Microtower-PC:/home/administrator/ns-allinone-3.30.1/ns-3.30.1# ./waf
Waf: Entering directory `/home/administrator/ns-allinone-3.30.1/ns-3.30.1/build'
[1948/1999] Compiling scratch/1.cc
[1959/1999] Linking build/scratch/1
Waf: Leaving directory `/home/administrator/ns-allinone-3.30.1/ns-3.30.1/build'
Build commands will be stored in build/compile_commands.json
'build' finished successfully (9.734s)

Modules built:
antenna                aodv                    applications
bridge                 buildings               config-store
core                   csma                    csma-layout
dsdv                   dsr                      energy
fd-net-device          flow-monitor            internet
internet-apps          lr-wpan                 lte
mesh                   mobility                mpi
netanim (no Python)    network                 nix-vector-routing
olsr                    point-to-point          point-to-point-layout
propagation            sixlowpan               spectrum
stats                  tap-bridge              test (no Python)
topology-read          traffic-control          uan
virtual-net-device     wave                    wifi
winax

Modules not built (see ns-3 tutorial for explanation):
brite                  click                   openflow
visualizer

root@administrator-HP-280-Pro-G6-Microtower-PC:/home/administrator/ns-allinone-3.30.1/ns-3.30.1# ./waf --run scratch/1
Waf: Entering directory `/home/administrator/ns-allinone-3.30.1/ns-3.30.1/build'
Waf: Leaving directory `/home/administrator/ns-allinone-3.30.1/ns-3.30.1/build'
Build commands will be stored in build/compile_commands.json
'build' finished successfully (0.337s)
```

step 7.) execute the file

`./waf --run scratch/filename` without extension

```
root@administrator-HP-280-Pro-G6-Microtower-PC:/home/administrator/ns-allinone-3.30.1/ns-3.30.1# ./waf --run scratch/1
Waf: Entering directory `/home/administrator/ns-allinone-3.30.1/ns-3.30.1/build'
Waf: Leaving directory `/home/administrator/ns-allinone-3.30.1/ns-3.30.1/build'
Build commands will be stored in build/compile_commands.json
'build' finished successfully (0.337s)
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstantPosition if it is stationary
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstantPosition if it is stationary
root@administrator-HP-280-Pro-G6-Microtower-PC:/home/administrator/ns-allinone-3.30.1/ns-3.30.1# cd ..
root@administrator-HP-280-Pro-G6-Microtower-PC:/home/administrator/ns-allinone-3.30.1# cd ..
```

step 8.) execute netanimation

`cd ..`

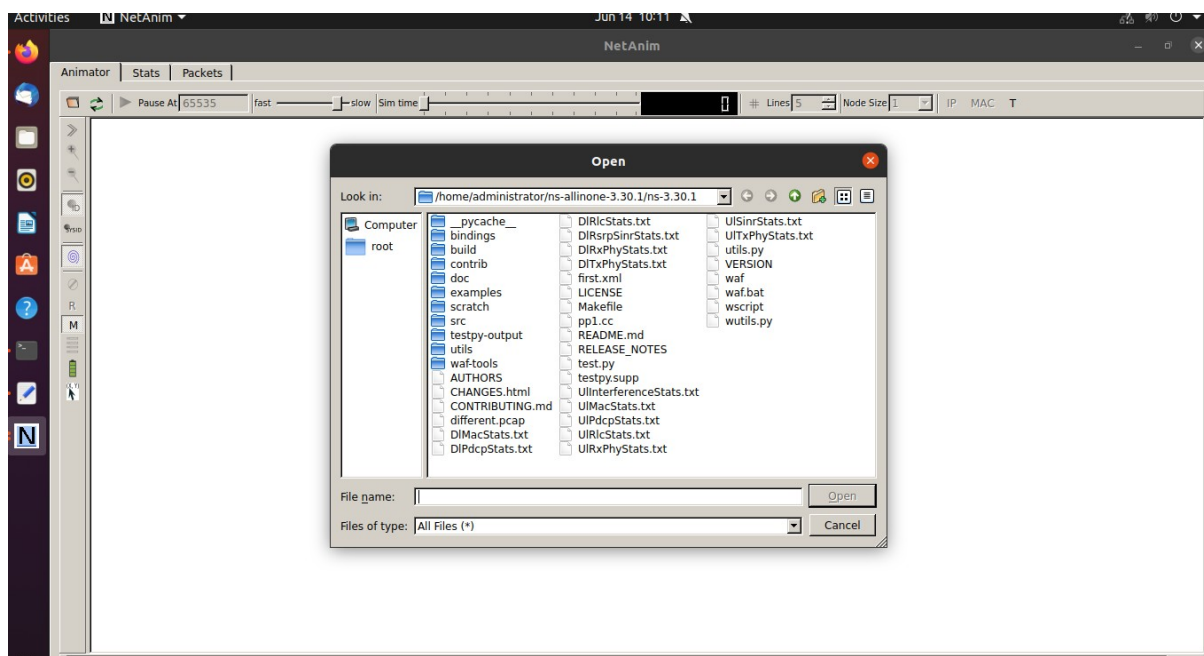
step 9.) Change your directoy to neanimation

`cd netanim-3.108/`

step 10.)enable netanimation

`export QT_X11_NO_MITSHM=1`

search .xml file and open



step 11.) execute

./NetAnim

