MicroProjet 4

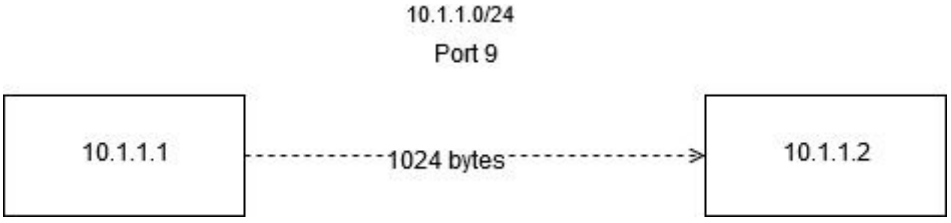
first.cc:

```
nico@nico-VirtualBox:~/Bureau/ns-allinone-3.30.1/ns-3.30.1$ ./waf --run scratch/
first
Waf: Entering directory `/home/nico/Bureau/ns-allinone-3.30.1/ns-3.30.1/build'
Waf: Leaving directory `/home/nico/Bureau/ns-allinone-3.30.1/ns-3.30.1/build'
Build commands will be stored in build/compile_commands.json
'build' finished successfully (3.686s)
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstan
tPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstan
tPosition if it is stationary
AnimationInterface WARNING:Node:0 Does not have a mobility model. Use SetConstan
tPosition if it is stationary
AnimationInterface WARNING:Node:1 Does not have a mobility model. Use SetConstan
tPosition if it is stationary
At time 2s client sent 1024 bytes to 10.1.1.2 port 9
At time 2.00369s server received 1024 bytes from 10.1.1.1 port 49153
At time 2.00369s server sent 1024 bytes to 10.1.1.1 port 49153
At time 2.00737s client received 1024 bytes from 10.1.1.2 port 9
```

```
address.SetBase ("10.1.1.0", "255.255.255.0");

echoClient.SetAttribute ("MaxPackets", UintegerValue (1));
echoClient.SetAttribute ("Interval", TimeValue (Seconds (1.0)));
echoClient.SetAttribute ("PacketSize", UintegerValue (1024));
```

First.cc is a program test of ns3. It's simulate traffic between two device from the same network (ipv4).



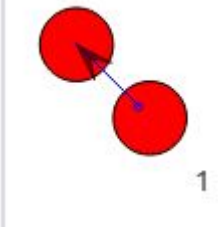
In order to visualize the traffic I've installed a graphic interface named Netanim.
I have changed the first.cc program and function of Netanim to produce a xml file with the information.

```
AnimationInterface anim ("test.xml");
```

Initialisation of the position of the two devices for NetAnim:

```
anim.SetConstantPosition(nodes.Get(0),1.0,2.0);
anim.SetConstantPosition(nodes.Get(1),2.0,3.0);
```

Once you have started Netanim,import the xml file and launch the simulation you have this simulation with the configuration of each node.



Node:0
IP:
10.1.1.1
127.0.0.1
IPv6:
::1

MAC:
00:00:00:00:00:01

Other Node:1
Other Node IP:10.1.1.2
Other Node MAC:
00:00:00:00:00:02
Info:

Node:0
IP:
10.1.1.1
127.0.0.1
IPv6:
::1

MAC:

Node:1
IP:
10.1.1.2
127.0.0.1
IPv6:
::1

MAC:
00:00:00:00:00:02

Other Node:0
Other Node IP:10.1.1.1
Other Node MAC:
00:00:00:00:00:01
Info:

Node:1
IP:
10.1.1.2
127.0.0.1
IPv6:
::1

MAC: