NS3 Installation Guide

You need an Ubuntu Virtual Machine running on VMware or Virtual Box OSE or any other VMM to use NS3 on a Windows Machine.

1. Download any version of ns-allinone like ns-allinone-3.31.tar.gz from https://www.nsnam.org/releases
2. If you don't have dependencies file run the below commands:

   Sudo apt-get update

   sudo apt-get install tcl8.5-dev tk8.5-dev gcc-4.4 g++-4.4 build-essential autoconf automake perl xgraph libxt-dev libx11-dev libxmu-dev.

3. Extract the file from downloaded .tar.gz file.
4. Run the commands

   sudo apt install build-essential autoconf automake libxmu-dev

   sudo apt install build-essential autoconf automake libxmu-dev python-pygraphviz cvs mercurial bzr git cmake p7zip-full python-matplotlib python-tk python-dev python-kiwi python-gnome2 python-gnome2-desktop qt4-dev-tools qt4-qmake qt4-qmake qt4-default gnuplot-x11 wireshark

5. Change your directory to ns-allinone-3.31 using

   cd ns-allinone-3.31/

6. Run the below command

   ./build.py --enable-examples --enable-tests

7. Change your directory to ns-3.31 from ns-allinone-3.31 using

   cd ns-allinone-3.31/ns-3.31/

   ./waf --run hello-simulator

   This will display "Hello Simulator" Which indicates that ns3 is installed successfully.

8. To test the installation process run the below command

   /waf --run first

```
fast@ubuntu:~/Desktop/ns-allinone-3.29/ns-3.29$ ./waf --run first
Waf: Entering directory `/home/fast/Desktop/ns-allinone-3.29/ns-3.29/build'
Waf: Leaving directory `/home/fast/Desktop/ns-allinone-3.29/ns-3.29/build'
Build commands will be stored in build/compile_commands.json
'build' finished successfully (47.610s)
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
```