

## ENSC 833 Spring 2022

### Assignment #1: ns-3 installation guide and submission requirements

For Assignment #1, please include in your report screenshots and a brief description of the steps.

Your username and the date should be also included.

A sample screenshot for ns-3 (version ns-3.33):

```
zhidal@zhidal:~/ns-allinone-3.33$ cd ns-3.33/
zhidal@zhidal:~/ns-allinone-3.33/ns-3.33$ ./waf --run hello-simulator
Waf: Entering directory `/home/zhidal/ns-allinone-3.33/ns-3.33/build'
Waf: Leaving directory `/home/zhidal/ns-allinone-3.33/ns-3.33/build'
Build commands will be stored in build/compile_commands.json
'build' finished successfully (0.946s)
Hello Simulator
zhidal@zhidal:~/ns-allinone-3.33/ns-3.33$ date
Wed Sep  8 20:51:48 PDT 2021
```

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### ns-3 Installation:

*Operating System: Linux*

For Windows users, ns-3 can be installed in a Linux operating system (**Ubuntu**) using [VirtualBox](#), Hyper-V, or Windows Subsystem for Linux (WSL).

You may check on YouTube how to configure the VirtualBox, Hyper-V, or WSL.

Ubuntu 20.04 download URL:

<https://ubuntu.com/download/desktop>

Other Ubuntu versions:

<https://ubuntu.com/download/alternative-downloads>

Note: Ubuntu 18.04 is also acceptable.

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ns-3 (version 3.35) Installation Instructions:

<https://www.nsnam.org/docs/release/3.35/tutorial/singlehtml/index.html>

(Download page: <https://www.nsnam.org/releases/ns-3-35/> )

1. Download ns-3 (ns-allinone-3.35.tar.bz2)
2. Install packages on your Ubuntu system
3. Build ns-3
4. Test ns-3 by entering a command.

Note:

You need to install several packages before building ns-3.

List of Packages for the ns-3 (**Ubuntu/Debian/Mint**):

<https://www.nsnam.org/wiki/Installation#Ubuntu.2FDebian.2FMint> .

Example:

```
$ sudo apt-get install g++ python3 python3-dev pkg-config sqlite3
```

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*Operating System: macOS*

For macOS users, please follow the instructions:

<https://www.nsnam.org/wiki/Installation#macOS> .

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You may check the following YouTube tutorial in case you do not understand the procedure:

<https://www.youtube.com/watch?v=KaA6GiP8deQ&t=282s>

Note: Please run commands "*sudo apt-get update*" and "*sudo apt-get upgrade*" before installation.

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### **Submission requirement for ns-3:**

*(ns-3: run command `./waf --run hello-simulator`,*

*Path: /ns-allinone-3.35/ns-3.35)*

```
$ ./waf --run hello-simulator  
$ date
```

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Please always include "ENSC 833" in the subject line of your email messages.