

Tutorial for installing ns2

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Contents

- 1- Requirements for installing NS2
- 2- How to install
- 3- Another (simple one) way to install
- 4- Install some associated software needed in simulation

*This Tutorial used Ubuntu 11.04 to make the steps discussed

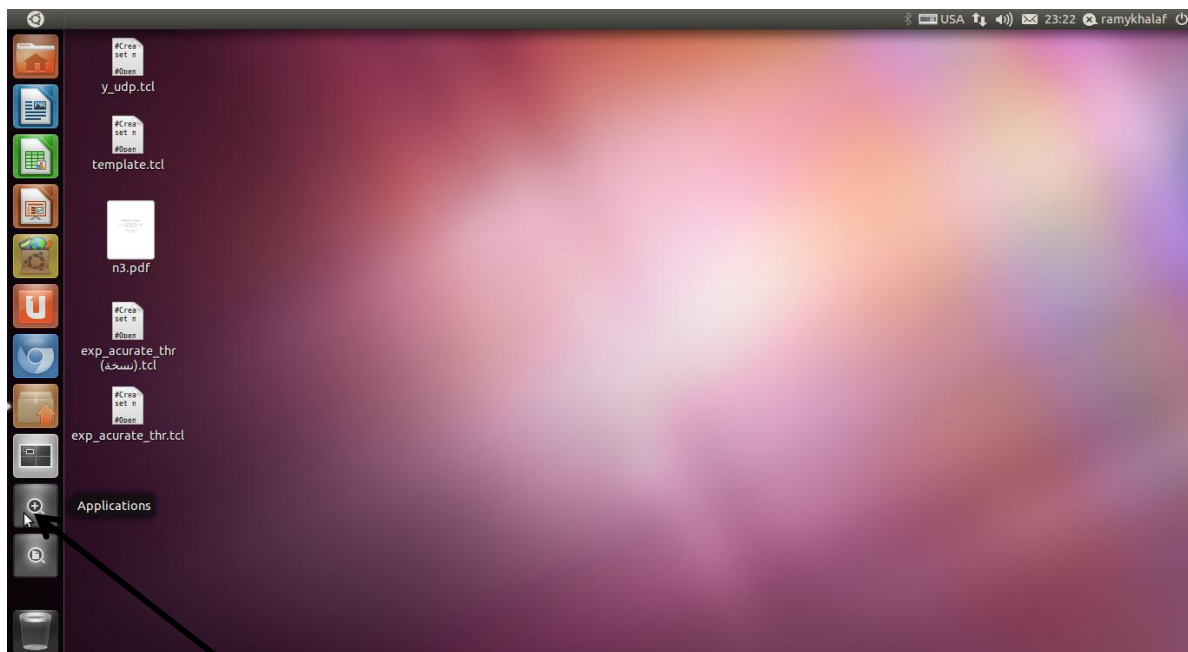
1- Minimum Requirements for installing NS2:

1. Linux environment (like Ubuntu 11.04).
2. Pentium II 400 MHz CPU.
3. 256 Megabytes of RAM (512 megabytes recommended).
4. 20 Gigabyte hard drive.

2- How to install:

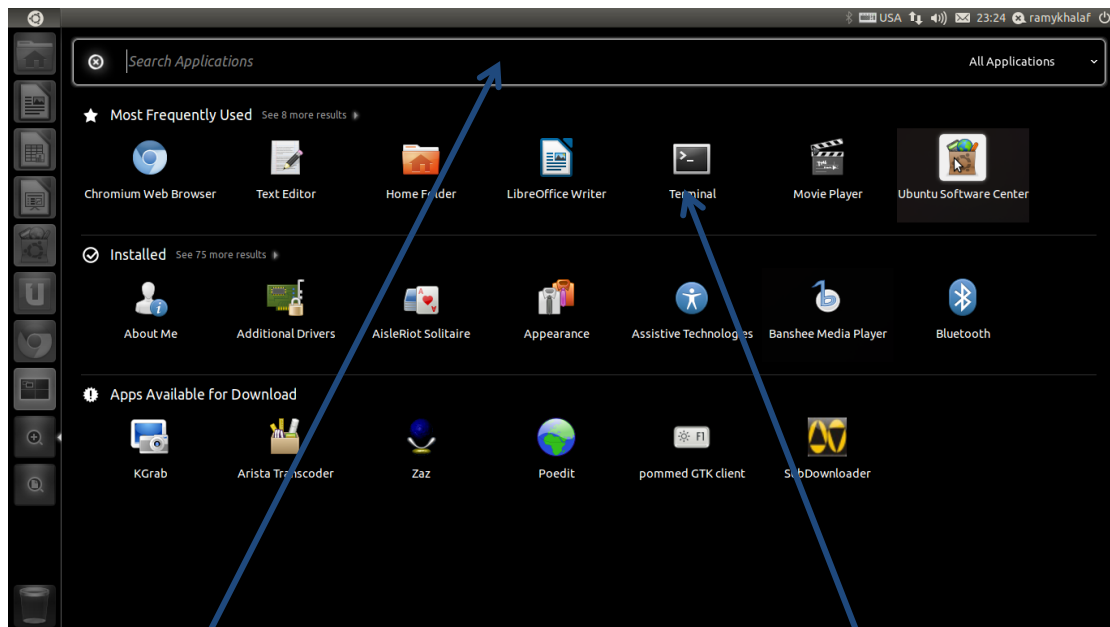
Go through the following steps:

- 1- Open **Applications** for the side bar as in the following figure:



Click here

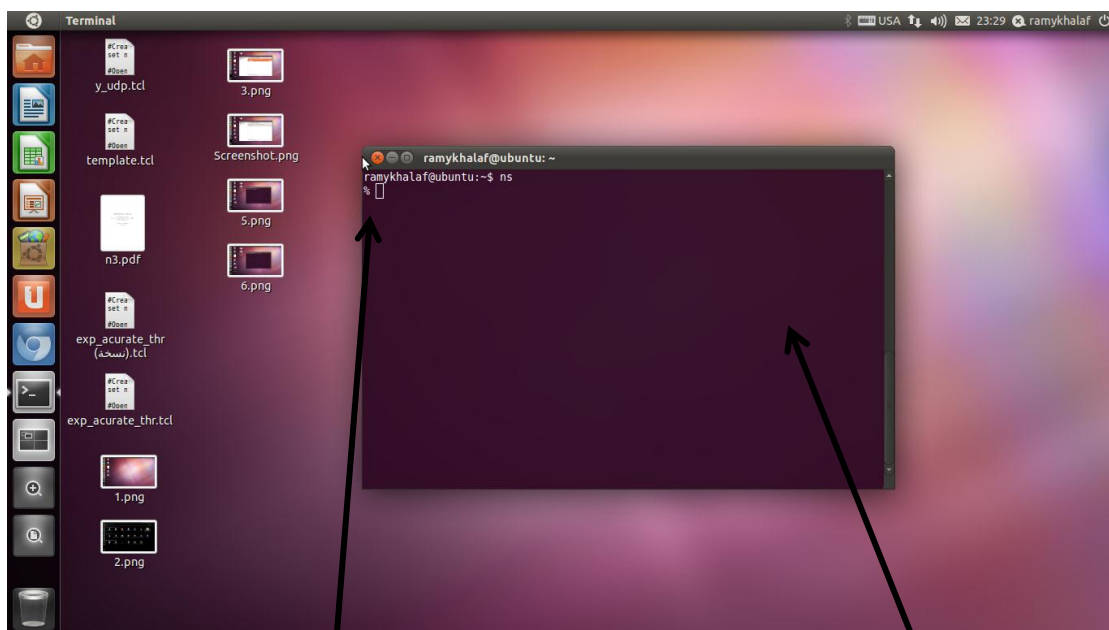
- 2- The following page will appear, click on **terminal** (if exist). If it not exist type "terminal" in **search Applications** bar



Or type "terminal" here

click here to open terminal

3- Now the **terminal** is opened as the following figure :



% appears after typing "ns"

Terminal window

Type the following lines in **terminal** to download NS2:

```
$ wget http://nchc.dl.sourceforge.net/sourceforge/nslam/ns-  
allinone-2.34.tar.gz  
  
$ tar -xzf ns-allinone-2.34.tar.gz  
  
$ cd ns-allinone-2.34  
  
$ sudo apt-get install build-essential autoconf automake  
libxmu-dev  
  
$ ./install
```

4- Type the following lines :

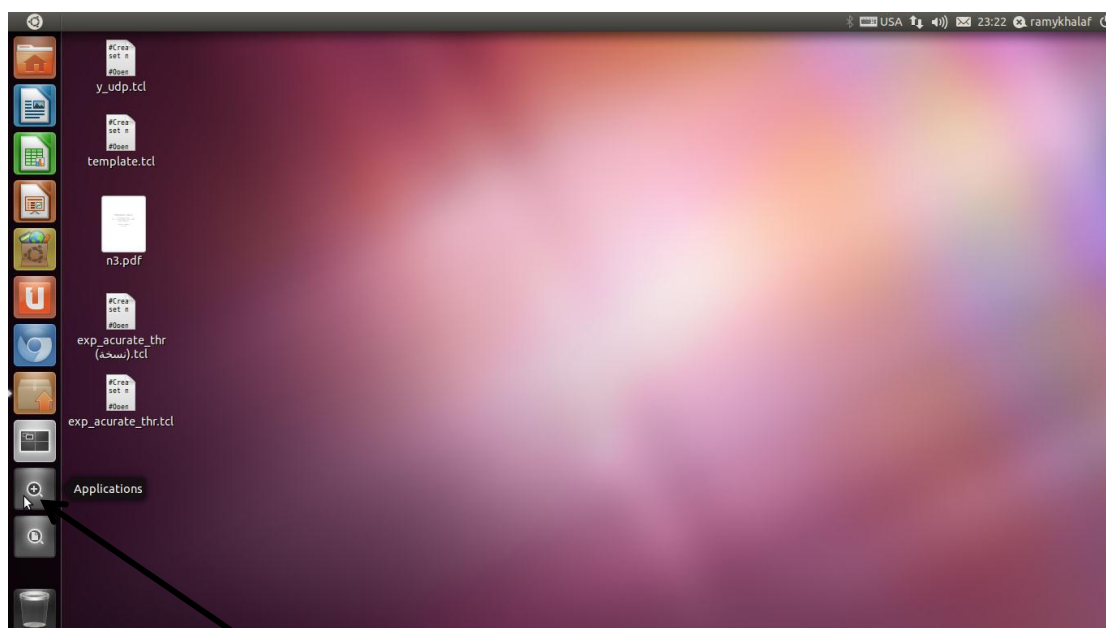
```
$ export CC=gcc-4.3  
  
$ gedit ~/.bashrc  
  
# LD_LIBRARY_PATH  
  
OTCL_LIB=/your/path/ns-allinone-2.34/otcl-1.13  
  
NS2_LIB=/your/path/ns-allinone-2.34/lib  
  
X11_LIB=/usr/X11R6/lib  
  
USR_LOCAL_LIB=/usr/local/lib  
  
export  
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$OTCL_LIB:$NS2_LIB:$X11_LIB:$USR_LOCAL_LIB  
  
# TCL_LIBRARY  
  
TCL_LIB=/your/path/ns-allinone-2.34/tcl8.4.18/library  
  
USR_LIB=/usr/lib  
  
export TCL_LIBRARY=$TCL_LIB:$USR_LIB  
  
# PATH  
  
XGRAPH=/your/path/ns-allinone-2.34/bin:/your/path/ns-allinone-  
2.34/tcl8.4.18/unix:/your/path/ns-allinone-2.34/tk8.4.18/unix  
  
NS=/your/path/ns-allinone-2.34/ns-2.34/  
  
NAM=/your/path/ns-allinone-2.34/nam-1.14/  
  
PATH=$PATH:$XGRAPH:$NS:$NAM
```

in the previous lines you must replace ***"/your/path"*** by the folder where you have stored extracted the ns-2 file (For example, if your Linux account name is purple, and you have extracted the file to your home directory, you have to change /your path to /home/purple).

- 5- Make sure that NS2 is installed in your machine by typing ***"ns"*** in ***terminal***, if ***"%"*** appears (as the last figure), your installation is successful. If not , repeat all previous steps again.

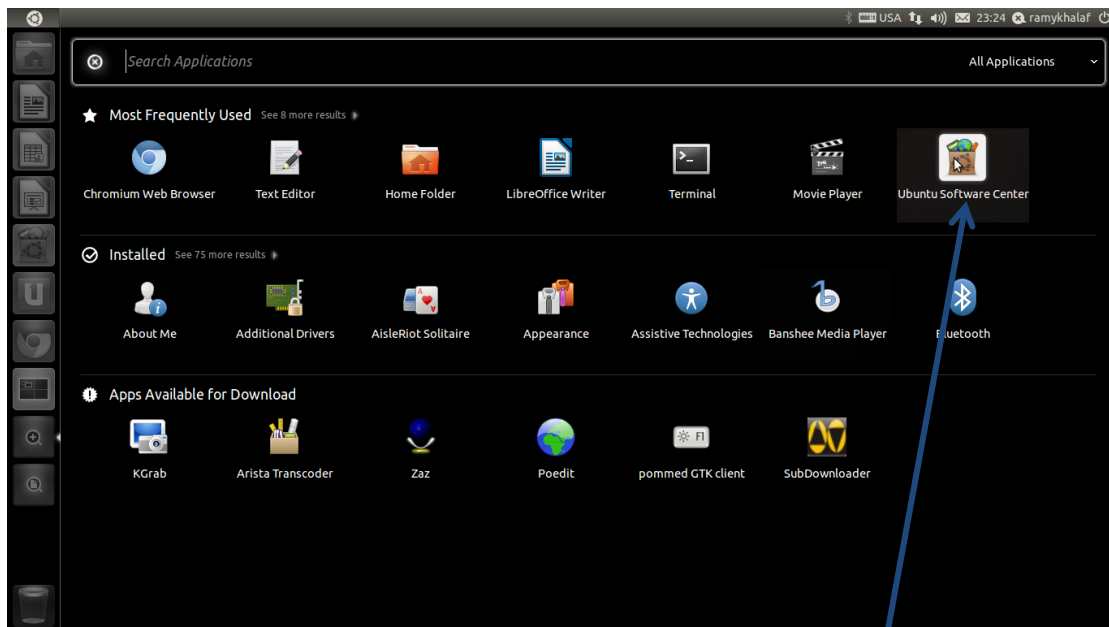
3- Another (simple one) way to install:

- 1-from the left bar click ***Applications***.



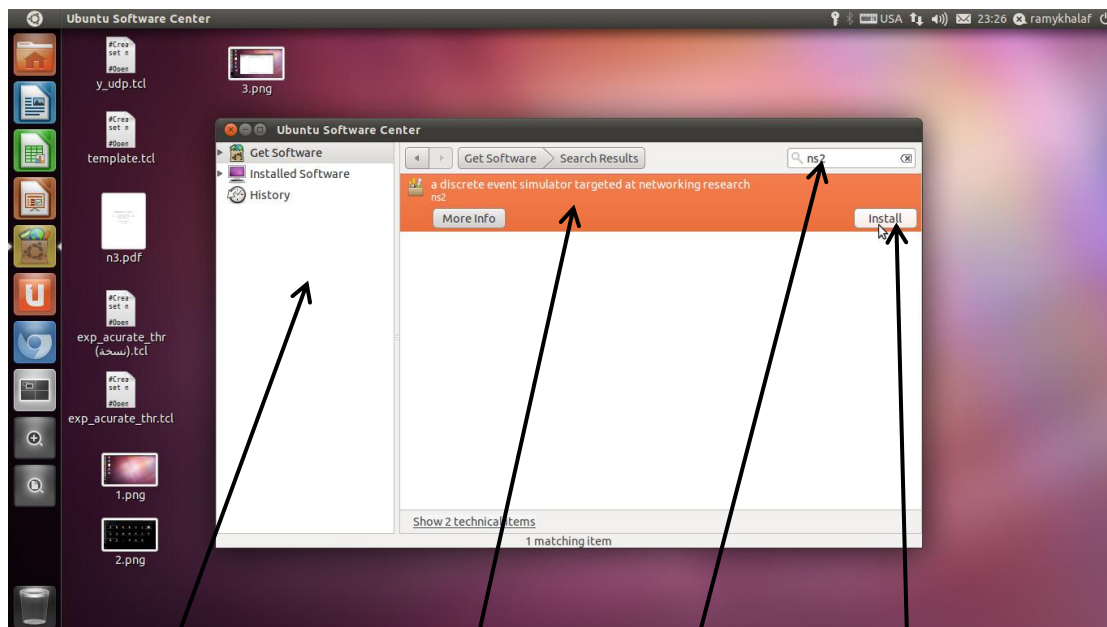
Click here

- 2- the following page will appear, click ***"Ubuntu Software Center"***.



Click here

3- The following window opens, type "**ns2**" in **search** bar, **Ubuntu** search for the program on Internet (for sure you must be connected to Internet) and it will be appear. Click **install** as shown below.



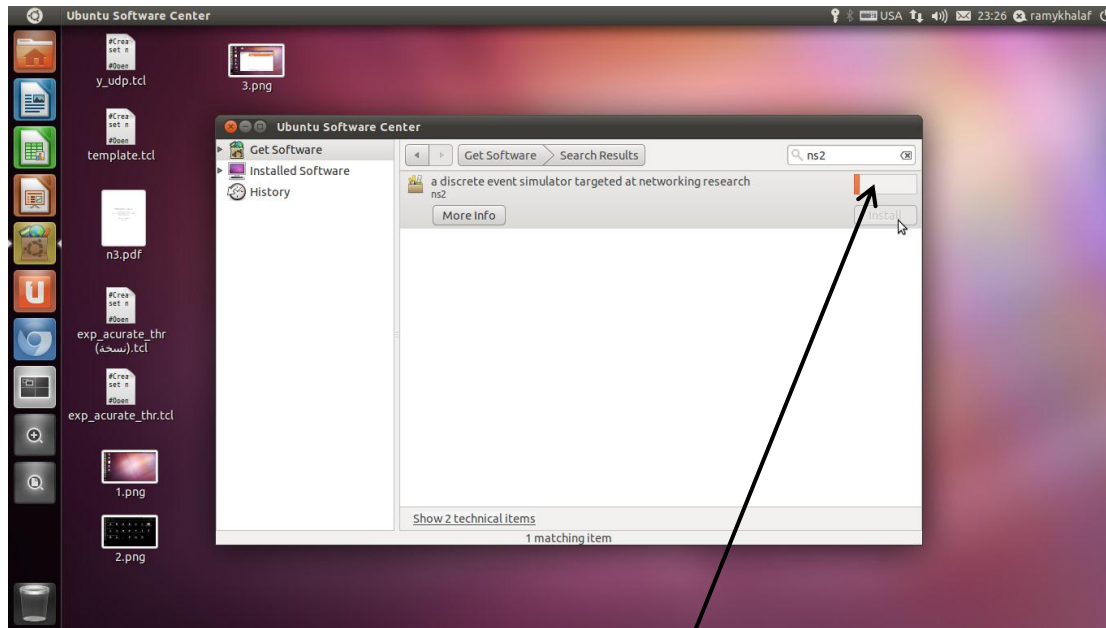
1-This is Ubuntu software center .

3-full name of the tool appears here.

2-type "ns2" here

4- click install.

- 4- The **process progress bar** appears after clicking **install** as shown below ,Wait till the installation completes.



Process progress bar

- 5- Close Ubuntu Software Center, and make sure the installation completed successfully as step 5 in the first method to install NS2 tool.

4- install some associated software needed in simulation :

we must install **nam** and **xgraph** to be able to take results from the simulator.

1- to install **nam**, type "**sudo apt-get install nam**" in **terminal**, you are asked for your password, enter it and press **enter**.

2- - to install **xgraph**, type "**sudo apt-get install xgraph**" in **terminal**, if you are asked again for your password, enter it and press **enter**.