**Install NS 2.35 on Ubuntu 14.04**

* Install Ubuntu 14.04 on VirtualBox in Windows 7

https://www.youtube.com/watch?v=CkDd6jClqEE

* Install ns2.35 on Ubuntu 14.04 with LTE patch

http://www.linuxquestions.org/questions/showthread.php?p=5385543#post5385543

**Step by step installing process for ns2.35 in ubuntu 14.04.02?**

$ sudo apt-get install g++ autoconf libtool libxmu-dev xgraph  
  
In /home/<username>/ns2/ :  
$ tar xvf ns-allinone-2.35\_gcc482.tar.gz  
$ cd ns-allinone-2.35/  
$ patch -p0 < LTE-ns235\_2014-2.patch  
$ ./install  
$ cd ns-2.35/  
$ sudo make install   
('make install' will copy the executable 'ns' to /usr/local/bin/)  
$ cp ns ns235-lte ( This is your "ns backup" )  
$ sudo cp ns235-lte /usr/local/bin/  
$ cd ../nam-1.15/  
$ sudo make install  
  
The folder with the simulation examples can have any location in /home/<username>/(ns2)/.  
$ cd lte-ex\_06.14/  
**$ ns235-lte** bic1.tcl

* To Setup Internet connection on Ubuntu 14.04:

1. From Virtual Machine----> Settings---->

Network---->Attached To---->NAT: Cable Connected (***Tick OK)***

1. Select Ethernet Connection and Edit connection
2. Device MAC ID: 08:00:27:F6:02:37
3. IPv4---->Automatic (DHCP)
4. IPv6---->Automatic
5. Open Firefox:
6. Click three horizontal bar

(right side)🡪Preferences🡪Network🡪Connection🡪Settings🡪Auto-detect proxy settings for the network🡪Save.

<http://ns2blogger.blogspot.in/p/1-ns-allinone-2.html>

### NS2 INSTALLATION ON LINUX

**1)** Download **'ns-allinone-2.35'** from :  
  <http://sourceforge.net/projects/nsnam/files/allinone/ns-allinone-2.35/ns-allinone-2.35.tar.gz/download>  
  
**2)** Extract the downloaded zip file 'ns-allinone-2.35.tar.gz file' to desktop.  
  
**3)** Now you need to download some essential packages for ns2,these packages can be downloaded by using the following command : **applications>accessories>terminal or dashhome>trminal**  
then type the below line on the terminal window  
  
            "sudo apt-get install build-essential autoconf automake libxmu-dev libtool gcc"  
  
    or type this command  
  
       "sudo apt-get install autoconf automake gcc g++ build-essential libxmu-dev libtool libxt-dev"  
  
**4)** Now change your directory(here i have already extracted the downloaded files to desktop,so my location is desktop) type the following codes in the command window to install NS2.  
  
                                            cd Desktop    
                                            cd ns-allinone-2.35  
                                            ./install  
  
                              **The installation procedure will take a few minutes..........**  
  
**5)** After compleating the installation type the following command in the command window  
  
                                            gedit ~/.bashrc  
  
**6)** Now an editor window appears,please copy and paste the follwing codes in the end of the text file (note that '/home/abhiram/Desktop/ns-allinone-2.35/octl-1.14' in each line in the below code should be replaced with your location where the 'ns-allinone-2.35.tar.gz'file is extracted)  
  
   
# LD\_LIBRARY\_PATH  
OTCL\_LIB=/home/abhiram/Desktop/ns-allinone-2.35/otcl-1.14  
NS2\_LIB=/home/abhiram/Desktop/ns-allinone-2.35/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=/home/abhiram/Desktop/ns-allinone-2.35/tcl8.5.10/library  
USR\_LIB=/usr/lib  
export TCL\_LIBRARY=$TCL\_LIB:$USR\_LIB  
  
# PATH  
XGRAPH=/home/abhiram/Desktop/ns-allinone-2.35/bin:/home/abhiram/Desktop/ns-allinone-2.35/tcl8.5.10/unix:/home/abhiram/Desktop/ns-allinone-2.35/tk8.5.10/unix  
NS=/home/abhiram/Desktop/ns-allinone-2.35/ns-2.35/  
NAM=/home/abhiram/Desktop/ns-allinone-2.35/nam-1.15/  
PATH=$PATH:$XGRAPH:$NS:$NAM  
  
**7)** Save and close the text editor and then type the following command on the terminal  
  
                                                 source ~/.bashrc  
  
**8)** Close the terminal window and start a new terminal window and now change the directory to ns-2.35 and validate ns-2.35 by exicuting the following command ( it takes 30 to 45 minutes)  
  
                                                   cd ns-2.35  
                                                   ./validate  
  
**9)** If the installation is successful, then you will be able to see **%**at the command prompt while typing the following command  
  
                                                    ns  
  
**10)** Now type  
  
                                                    exit