

Installing ns2.34 on Ubuntu 9.10 (32 bit)

- (1) Download ns2.34
<http://sourceforge.net/projects/nsnam/files/allinone/ns-allinone-2.34/ns-allinone-2.34.tar.gz/download> or from any where else.
- (2) Unzip the ns-allinone-2.34.tar.gz to any place where you want to install your ns. In my case I want to unzip it in /home/gz/ (note that my zipped folder of ns2 was in /home/gz)
\$ cd /home/gz
\$ tar -xzvf ns-allinone-2.34.tar.gz
- (3) \$cd ns-allinone-2.34
- (4) \$sudo apt-get install build-essential autoconf automake libxmu-dev
- (5) \$./install

Errors:

It will take some time. After this step you may encounter some errors like the following snapshot

```
gcc-4.3: command not found
make: *** [libotcl.so] Error 1
otcl-1.13 make failed! Exiting ...
```

If you get the errors as above, follow the steps from 5.1 to 5.6, otherwise go to step (6)

5.1 \$gedit otcl-1.13/Makefile.in

5.2 edit the file as follows:

old file snapshot

```
6
7 CC=                @CC@
8 CFLAGS=            @CFLAGS@
9 RANLIB=            @RANLIB@
10 INSTALL=          @INSTALL@
..
```

new file

```
7 CC=                gcc-4.3
8 CFLAGS=            @CFLAGS@
9 RANLIB=            @RANLIB@
10 INSTALL=          @INSTALL@
..
```

```
5.3 $sudo apt-get install g++-4.3
```

```
5.4 $cd ns-allinone-2.34
```

```
5.5 ns-allinone-2.34$CC=gcc-4.3 CXX=g++-4.3 ./install
```

5.6 You are done if you get the following screen

```
IMPORTANT NOTICES:

(1) You MUST put /home/gz/ns-allinone-2.34/otcl-1.13, /home/gz/ns-allinone-2.34/lib,
    into your LD_LIBRARY_PATH environment variable.
    If it complains about X libraries, add path to your X libraries
    into LD_LIBRARY_PATH.
    If you are using csh, you can set it like:
        setenv LD_LIBRARY_PATH <paths>
    If you are using sh, you can set it like:
        export LD_LIBRARY_PATH=<paths>

(2) You MUST put /home/gz/ns-allinone-2.34/tcl8.4.18/library into your TCL_LIBRARY environmental
    variable. Otherwise ns/nam will complain during startup.

After these steps, you can now run the ns validation suite with
cd ns-2.34; ./validate

For trouble shooting, please first read ns problems page
http://www.isi.edu/nsnam/ns/ns-problems.html. Also search the ns mailing list archive
for related posts.

gz@gz:~/ns-allinone-2.34$ █
```

```
(6) $ gedit ~/.bashrc
```

It will open the file shown below. Edit the lines that are highlighted according to your path of ns2. I installed my ns2 in /home/gz/ns-allinone-2.34

```
# LD_LIBRARY_PATH
OTCL_LIB=/home/gz/ns-allinone-2.34/otcl-1.13
NS2_LIB=/home/gz/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=/home/gz/ns-allinone-2.34/tcl8.4.18/library
USR_LIB=/usr/lib
export TCL_LIBRARY=$TCL_LIB:$USR_LIB

# PATH
XGRAPH=/home/gz/ns-allinone-2.34/bin:/home/gz/Downloads/ns-allinone-
```

```
2.34/tcl8.4.18/unix:/home/gz/ns-allinone-2.34/tk8.4.18/unix
NS=/home/gz/ns-allinone-2.34/ns-2.34/
NAM=/home/gz/ns-allinone-2.34/nam-1.14/
PATH=$PATH:$XGRAPH:$NS:$NAM
```

(7) `$ source ~/.bashrc`

(8) `$ cd ns2.34`

(9) `$./validate`

It will take long time to finish(longer than the install)

If you get this screen shot, you are successful.

```
All test output agrees with reference output.
Wed Feb 16 17:54:30 KST 2011
These messages are NOT errors and can be ignored:
  warning: using backward compatibility mode
  This test is not implemented in backward compatibility mode

validate overall report: all tests passed
gz@gz:~/ns-allinone-2.34/ns-2.34$ █
```

(10) Create a symlink, so that ns can be called from everywhere

```
$ sudo ln -s /home/gz/ns-allinone-2.33/ns-2.33/ns /usr/bin/ns
```

(11) `$ reboot`

To restart the system.

(12) To check whether ns is installed successfully or not, test it by entering `$ns`. If you are prompted with `%`, it means your installation is successful otherwise check your environment variables, specifically compare the versions of `otcl`, `nam` etc in `./bashrc` with those in your

`ns-allinone-2.34`.

press `exit` to go back from `%`.

```
gz@gz:~$ ns
% exit
gz@gz:~$ █
```