**Title: - SMM: A Secure Mobility Management Framework for Edge Assisted 5G Heterogeneous Network using Dual Blockchain**

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**Software Requirements:**

1) nS-3.26

2) ubuntu-14.04 LTS(32-bit os)

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**System Requirements:**

1) OS : Ubuntu-14.04 LTS(32-bit)

2) RAM : Minimum 2GB

3) Processor: 2.5 GHz and above

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**INSTALLING NS3 IN UBUNTU 14.04:**

I) Ubuntu is installed run following command opening your terminal(use shortcut:ctrl+alt+T).

II) To install prerequisites type given below command

sudo apt-get install gcc g++ python python-dev mercurial bzr gdb valgrind gsl-bin libgsl0-dev libgsl0ldbl flex bison tcpdump sqlite sqlite3 libsqlite3-dev libxml2 libxml2-dev libgtk2.0-0 libgtk2.0-dev uncrustify doxygen graphviz imagemagick texlive texlive-latex-extra texlive-generic-extra texlive-generic-recommended texinfo dia texlive texlive-latex-extra texlive-extra-utils texlive-generic-recommended texi2html python-pygraphviz python-kiwi python-pygoocanvas libgoocanvas-dev python-pygccxml

ask password, give your system password

III) Download NS-3.26 given below link

https://www.nsnam.org/ns-3-26/download/

IV) Ns-allinone-3.26.tar copy and paste into ubuntu Home location

then extract the ns-allinone-3.26.tar file

V) next terminal to type the command:

cd ns-allinone-3.26/

VI) Then you can find build.py along with other files so type the command

./build.py

If the build is successful then it will give output "Build finished successfully".

VII)To build with waf so move to ns-3.26 so type command: cd ns-3.26

sudo ./waf

display your ns3 supported modules like(AODV,DSR,CSMA,etc...)

These above seven steps to ns3 installation completed!

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**Execution Steps:**

Open the ternimal (ctrl + alt + t)

change the directory on terminal.

First execute the files

change the image locations in the main files.

command to execute :

./waf --run filename --vis

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**For NetAnim:**

Copy the img1 folder under the Code folder and paste into these path --> /home/[your device name]/ns-allinone-3.26/netanim-3.107

For run NetAnim to change your location --> /home/[your device name]/ns-allinone-3.26/netanim-3.107 in Proposed and Existing main files.

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**Additional software required:**

1) gunplot install command

sudo apt-get install gnuplot

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**Running procedure:**

1) Copy the src and scratch folder and paste into ns-3.26 folder

2) Go to terminal type this command

a) sudo ./waf configure

b) sudo ./waf build

3) Get build finished successfully message

4) Run command:

1) sudo ./waf --run filename --vis

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**How to add our model**

1) Copy the src and scratch folder and paste into ns-3.26 folder

2) Open the terminal go to ns-allinone-3.26/ns-3.26

3) Next type this command "sudo ./waf configure"

4) Next type this command to build our module "sudo ./waf build"