

NETWORK SIMULATION LAB

WEEK – 10,11,12

DATE:

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**PROBLEM STATEMENT: 10, 11, 12**

Implementation of AODV Routing Protocol, DSDV Routing Protocol, AODV Routing Protocol

Program execution of last Three Program:

**Step-1:**

Go to Examples/Routing/

Copy manet-routing-compare.cc file and paste in scratch folder

**Step2:**

Then goto terminal

Type these commands to get CSVfiles for 1: **OLSR**, 2- **AODV**, 3- **DSDV**, 4- **DSR**

`./waf --run "scratch/manet-routing-compare --CSVfileName=OLSR --protocol=1"`

The above command creates csv file for OLSR

Similarly do the same for AODV, DSDV and DSR as shown below

`./waf --run "scratch/manet-routing-compare --CSVfileName=AODV --protocol=2"`

ITS FOR AODV

`./waf --run "scratch/manet-routing-compare --CSVfileName=DSDV --protocol=3"`

ITS FOR DSDV

`./waf --run "scratch/manet-routing-compare --CSVfileName=DSR --protocol=4"`

**Step3:**

AFTER CSV FILE ARE GENERATED OPEN ALL TOGETHER AND FOLLOW STEPS AS SHOWN BELOW

1. REMOVE FIRST LINE
2. REPLACE , WITH SPACE ( )
3. SAVE ALL FILES

**Step4:**

Then write a GNUPLOT code as shown below by opening

`gedit gnucode.plt`

`set terminal pdf`

`set output "abhi.pdf"`

`set title "Recieve Rate"`

`set xlabel "Simulation Time (Seconds)"`

`set ylabel "Recieving Rate"`

`plot "AODV" using 1:2 with lines title "AODV_R", "OLSR" using 1:2 with lines title "OLSR_R", "DSDV" using 1:2 with lines title "DSDV_R", "DSR" using 1:2 with lines title "DSR_R"`

`set title "Packet "`

`set xlabel "Simulation Time (Seconds)"`

`set ylabel "Packet Recieved"`

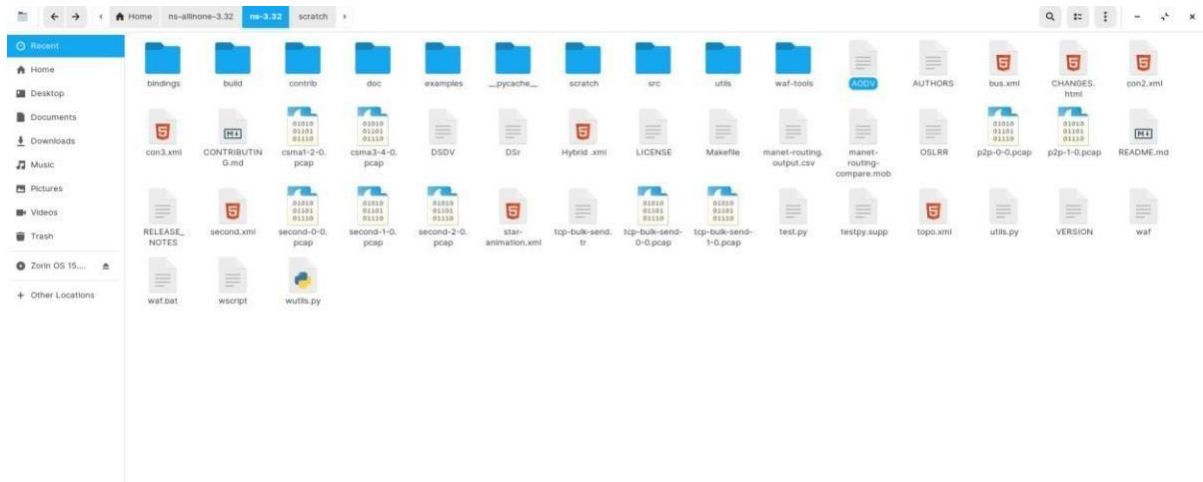
`plot "AODV" using 1:3 with lines title "AODV_P", "OLSR" using 1:3 with lines title "OLSR_P", "DSDV" using 1:3 with lines title "DSDV_P", "DSR" using 1:3 with lines title "DSR_P"`

Final Step: After saving above code with .plt extension

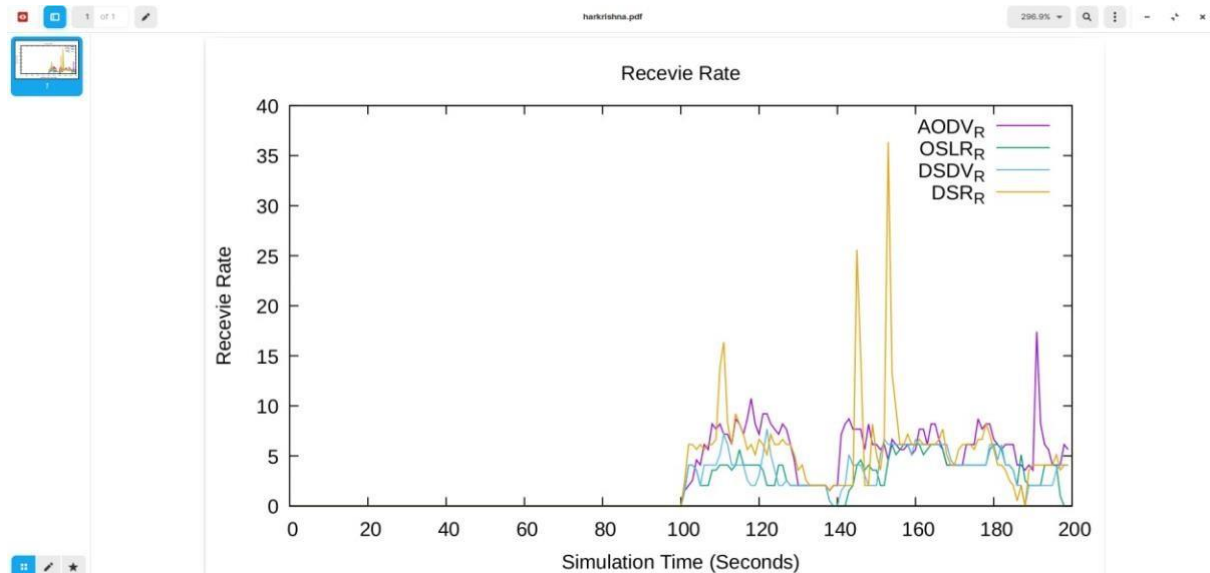
Link to ns-3.32 in terminal and run command which is shown below

`gnuplot gnucode.plt`

OUTPUT:



FOR RECEVIE RATE:



FOR PACKET:

