Alok Bhawankar
PA06
Panel 1

WMS Assignment-3

☆ Aim :- write a program to simulate routine in mobile AD-HOC network with multiple nodes. you may use net sim or NS2 or gualNet.

☆ Objective :-
- To simulate routine in mobile AD-HOC network with multiple nodes.
- To learn use of NS2 or Net Sim or goal net.

☆ Theory :-
- ADHOC on demand distance vector (AODV)
- Basic network setup such as TCP and UDP
- Network configurations
- Description of TCL commands.
- The route request message (RREQ)
- The route reply message (RREP)
- Node configuration Parameters.

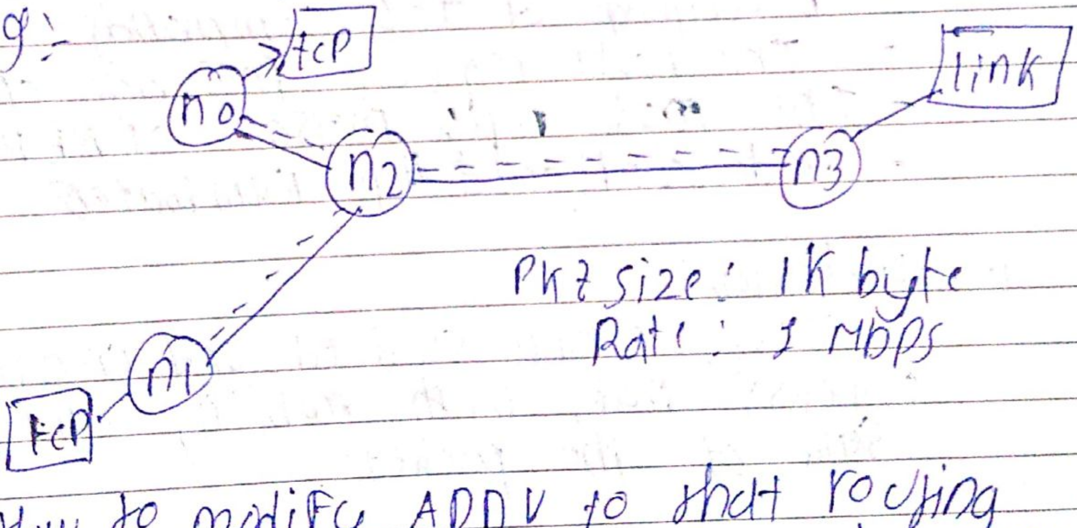
☆ Conclusion :-

Thus, we have studied and created wireless nodes with mobility and serial send of the packets.

FAQ's

Q1) Explain TCP and UDP agent with example
→ - A TCP agent is attached to n0. and a connection is established to a tcp "link" agent attached to n3
- As default, the maximum size of packet that a "tcp" agent can generate is 1k Byte
- A TCP "link" agent generates and sends Ack packets to the sender and frees the recieved packets
- A UDP agent that is attached to n1 is connected to a "null" agent.
- A null agent just frees the packets recieved.

eg:-



Q2) How do modify AODV to that routing decisions are made on remaining energy?
→ we can create our own function which returns residual energy while simulation

Eg:-
```
double ADDV::get_energy (nsaddr_ta_ddr)
{ node * thisnode = node::get_node_by_address
   (addr);
    double energy;
}
```
Here, get energy () takes the Id of node as argument and returns double value.

93) How to disable routing when you want to measure MAC layer performance?

→ To disable routing when you want to measure MAC layer performance are.

- First we have to disable all the routing protocols in NS2 ~~@~~ using Dumb Agent instead of ADDV in tcl script.
- Disable the router trace option and then you can measure the MAC layer performance.

94) Compare ADDV and DSR.

Page

STUDY BUDDIES

→ Parameters	ADDV	DSR
1. Bource Routing	No	Yes
2. Time Relay	yes	No
3. Dadh Discovered	Single routes	multiple routes
4. Route Storage structure	Routing Table	Route Cache
5. Routing overhead	Less	more
6. Cache overhead	Low	high