

Assignment 5

NS-3 (10 marks)

Deadline: 2/Nov/2018

Construct the following topology and perform the given tasks. Each client will send 50,000 packets to the server. Adjust the simulation time according to the number of packets. The CSMA channel capacity is 50Mbps and point to point link channel capacity is 10Mbps.

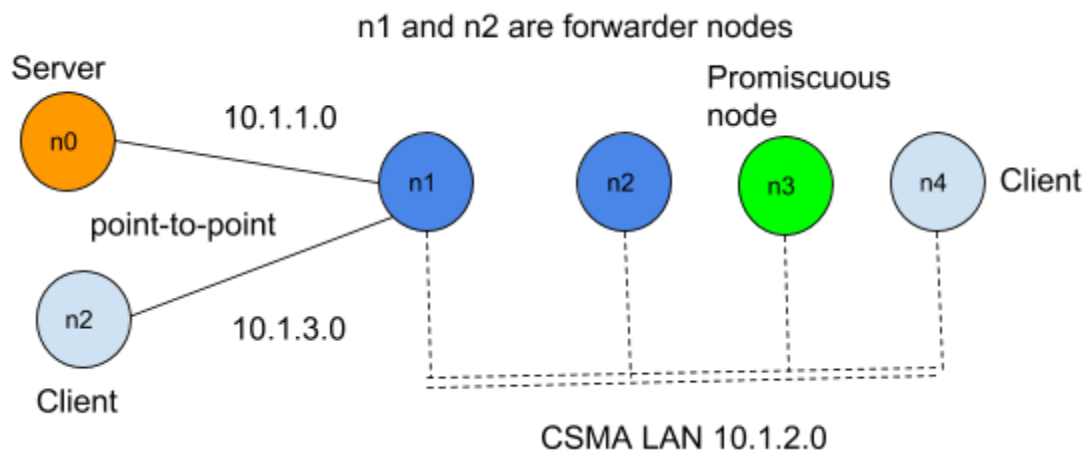


Figure 1. Topology

(4 marks)

1. Output the topology layout in animation. (1 marks)
2. Create packet capture and trace files of above topology. Expected number of packet capture files are 5. Less than 5 packet capture files will result to zero mark.
 - a. In your report paste the screenshots of readings of each .pcap file using *tcpdump*. Also write explanation of .pcap file of Promiscuous node. (3 marks)
3. Find throughput for each .pcap file except for promiscuous node using trace file generated for the above topology. (2 marks)

For help refer manual https://www.nsnam.org/docs/release/3.9/tutorial/tutorial_23.html