CS352 – Computer Networks   &   CS354 – CN Lab

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Activity Log:

1. Network Simulator 2 (NS2) and Network Simulator 3 (NS3)

   Online: https://www.youtube.com/watch?v=k_lfL93zDNQ

   https://www.youtube.com/watch?v=Z3SYhhYvsFU

   https://www.youtube.com/watch?v=_ygydLoy-is

Questions

1. Install NS2

2. What are the key features of NS2 and what is used for ?

3. Differences between NS2 and NS3

4. Why aren't the current nodes upgrading to IPv6 from IPv4?

Implementations

Task 1: Implement congestion control (leaky bucket algorithm)

Task 2: Implement a client-server program to make a client send a file name and a server to send back the contents of the requested file. It should also display appropriate error message in case the requested file is not available with the server.

Task 3: Simulate three nodes point-to-point networks with duplex links between them. Set the queue size, vary the bandwidth, and find the number of packets dropped

Task 4: Simulate a four-node point-to-point network, and connect the links as follows: n0 -> n2, n1 -> n2 and n2 -> n3. Apply TCP agent changing the parameters and determine the number of packets sent/received by TCP/UDP