

## Abstract

In data transmission via satellite which has very high value of RTT, TCP Reno stumble on the timeout time. When RTT exceed the timeout time, then it is assumed by TCP Reno that the package does not reach the goal so that retransmit packet loss is necessary besides the package is not necessarily lost in the network. This can cause many same packet in network and decreasing effectiveness of the network

TCP Hybla birth is based on the case. By using the  $\rho$  constant as a variable number of packages, are expected to overcome the weaknesses in the TCP Reno.

On this last assignment, Quality of Service (QoS) analysis of congestion control which include delay, throughput, loss rate and link utilization performance in TCP Hybla and Reno using ns2 simulator is conducted. The conclusion that delay and loss rate on TCP Hybla are worse than on TCP Reno, but the TCP Hybla throughput and link utilization are better than TCP Reno.

**Keywords:** TCP Hybla, TCP Reno, congestion, congestion control, reliable, delay, throughput, loss rate, link utilization