

## **Abstract**

When a segment is sent over TCP, the sender wait for its Acknowledgement until the *times* expires, called *timeout*. The sender will retransmit that segment after that. When an ACK arrives for a segment that has been retransmitted, there is no indication which transmission is being acknowledged.

In this final assignment, writer do some simulation and analyze about counting timeout with Original and Karn/Partridge Algorithm, to know which algorithm can gives a better value and analyze some effects to network performance.

Based on the result of simulation, Karn/Partridge Algorithm gives a better timeout than Original Algorithm. A better timeout, gives a better throughput also lower loss rate.

Key words: TCP, *timeout*, Karn/Partridge Algorithm, Original Algorithm, *throughput*, *loss rate*