

## **ABSTRACT**

This final task, comparing the performance of congestion control scheme called "Congestion Avoidance with Distributed Proportional Control (CADPC)" combined with "Performance Transparency Protocol (PTP)" - CADPC/PTP with TCP Reno. Single-bottleneck, double-bottleneck, parking-lot, and multihop topologies are used to compare the performance of these two algorithms. The test parameters used were throughput, fairness, and average queue length (AQL).

In tests performed show that the throughput of TCP Reno is better than CADPC/PTP -based on average throughput- for each simulation, but CADPC/PTP has better fairness index for each simulation and getting better in more complex topologies. Average queue length at CADPC was very small when compared with TCP Reno. Overall, TCP Reno is still better based on reliability and throughput generated from each simulation.

Keywords: Congestion Control, Performance Analysis, CADPC/PTP, TCP Reno