Abstract

TCP's technology in infrastructure of wireless LAN that used to build intenet has important network element such congestion control. Congestion control influences performance of TCP flow not only in wired technology but also in wireless too as infrastructure of internet. TCP that firstly build for wired networks which low error rates nowdays has implemented for wireless networks which higher error rates where this condition can perform higher packet losses.In improvement of control congestion performances, Fuzzy Explicit Window Adaptation (FEWA) is applied as one of fuzzy-based approach in TCP router. FEWA is explicit feedback congestion information mechanism from router. In this final project, there will be done performance analysis of TCP flow through throughput, end to end delay, jitter (delay variation), packet loss, queue length in wireless network connection using FEWA.

Keywords*: congestion control, FEWA, end to end delay, jitter (delay variation), throughput, packet loss, queue length, router, wireless.*