Abstract

TCP-friendly layered multicast protocol employs TCP-equation model to estimate target reception rate. One of the parameter of a TCP-equation model is round trip time (RTT). The accuracy of RTT estimation affects the accuracy of target rate estimation and the protocol friendliness towards TCP flows. However, estimating RTT in a large multicast session is problematic due to implosion problems. Consequently, a typical acknowledgement technique is not suitable for layered multicast protocol. Estimating RTT without receiversâ feedback (acknowledgement) will not produce accurate RTT. These have resulted to a number of RTT estimation techniques have been proposed. This research intends to study the current RTT estimation techniques for layered multicast and evaluate their performance.