

Abstract

TCP is the most popular networks protocol and most frequently used in the Internet together with IP protocol. TCP is a transport layer protocol which supports reliability for IP protocol. There is a period of time from sender sends packet until sender receives ACKnowledgement that packet from receiver when we send packet using TCP. If in that period of time the sender doesn't receive ACK, it will be timeout and packet will be retransmit. The precisions timeout calculation mechanism is very urgent because it will affect the network performances.

In this final assignment has been done a timeout calculation simulation on TCP using Jacobson/Karel algorithm and TCP using Original algorithm to compare the TCP performances when there is a difference in the timeout calculation mechanism. Based on the simulation result and the analysis on that result, it can be conclude that TCP using Jacobson/Karel algorithm have better performances than TCP using Original algorithm.

Kata kunci: TCP, timeout, Original algorithm, Jacobson/Karel algorithm, performances