

Design of UDP-ping tool

The tool is designed to display statistics of client and server interaction. The client communicates with a server and monitors the observed RTT (Round trip delay time) and packet loss rate. It sends a unique message and waits for the echo reply. It tallies the number of messages sent and the sequence number not received. It maintains a timeout for each transmission. If the timeout pops, the client assumes either the message or the reply was lost. The client runs forever or until a CNT-C. Upon termination, display the number of messages sent, the average loss rate and the average response time. The server monitors the loss rate observed for each client. The server does not display anything to standard out until the program terminates. When the server is terminated by a CNT-C, it displays for each client it interacted with, the number of messages received, the number dropped and the average loss rate.

Language used: C

Technique: Socket programming

