

Abstract

In the SCTP transport protocol reliability and retransmission mechanisms of packet loss could be a bottleneck on the network and cause a great delay. There are conditions when becomes very important to discard some packets are lost while waiting retransmission package. Original SCTP protocol was not designed specifically to handle such a mechanism, for it takes a protocol extension to support the SCTP protocol in conducting such a mechanism.

At this final project aims to look at and compare the performance of the protocol SCTP and PR-SCTP when using MPEG-4 traffic based on parameters throughput, delay, and loss rate. The final task is simulated using Network Simulator with patching MPEG-4 video traffic model with Transform-Expand-Sample (TES). In the implementation of the Network Simulator, PR-SCTP will be set with different levels of reliability, then compare it with SCTP in different issues.

Based on the test results it was found that PR-SCTP protocol at the level of reliability equal to 0 and 1 will show a smaller delay and larger throughput than SCTP protocol.

Keywords : PR-SCTP, SCTP, MPEG-4, Partial Reliability SCTP