

ABSTRACT

Given the human need for communication continues to increase, it is necessary to exchange process data faster and wider coverage area. One of these is the LTE (Long Term Evolution) which is the next generation of mobile communications technology designed to move very large amounts of data. LTE that provides downlink peak rate at least 100 Mbps, uplink at least 50 Mbps, supports bandwidth operators varies, from 20 MHz down to 1.4 MHz and supports frequency division duplexing technology (FDD) and time division duplexing technology (TDD). Therefore, the LTE to support various forms of multimedia data service based on one of Video Conference or commonly referred to VCON.

In this final RSVP protocol performance analysis for data services, in this case is VCON, the LTE network by comparing the performance VCON using RSVP protocol and without the RSVP protocol. Research done by looking at performance improvement provided by the RSVP protocol to the service application VCON. The parameters used as reference standards of quality performance include delay, throughput, packet loss and jitter. Here it is simulated with two scenarios. The first scenario is with background traffic. Where the service provided background traffic of 20MB, 40MB, 60MB and 80MB. The second scenario is the user mobility. Users are given the speed of 0km / h, 10km / h, 35km / h and 50km / h.

The results of this thesis is the background traffic influences the value of service QoS VCON. In scenario one where there are ten users with speed 0 km / h, the ratio between the QoS value of service using RSVP and RSVP service without big enough. So here can be seen in improving the performance of RSVP protocol QoS value is enormous. While in the second scenario, a user with a predetermined amount of mobility, QoS value by using the RSVP protocol and without the RSVP protocol does not have significant differences.

Keyword: LTE (Long Term Evolution), video conferencing, QoS, RSVP