Abtract

In the past few years, one of the most influential technology development is the development that happened in smarphone area. Smartphone technology not only able to do the feature like the usual phone does, which are calls and text message, but also it's now able to do data processing. Other than that, smartphone development has enable other features like camera, wifi, internet and there's still so many possibilities in innovating other fetures too.

Feature that is about to be develop even more is to build a live video streaming application. By combining smarphone technology and internet which the camera from the smartphone capture the video, in real time, then transfers it to a web page and then enable people from around the world to watch it. Thus, everyone can capture and share their live events in real time to everyone.

In this final assignment, live video streaming will be built in an android based smartphone. For encoding and decoding, H264 will be used. Then, for data transmition, Real Time Messaging Protocol with Red 5 as the server will be used.

The test resluts show that system built produce a good quality sercive in live video streaming, can be seen from the delays that were produces are only about 137,48- 146.02 ms, jitter 22.917 – 27.695 ms, packet loss approximately 0-0.4%. These show that the live video streaming performance meets the ITU-T real time standar is delay < 10s, jitter < 30ms and packet loss < 5%.

Keywords : *Smartphone, Android, Real Time Messaging Protocol (RTMP), H264, Live Video Streaming.*