ABSTRACT

Live streaming requires a streaming protocol to transmit packet data. The protocol has the function of connecting the user to the server to communicate with each other and exchange information. There are a lot of kinds of protocols used for live streaming, one of them that often used is the Real Time Messaging Protocol or RTMP.

In this final project, the author will analyze the use RTMP protocol as live streaming server protocol on the video surveillance system. Video surveillance system is implemented using an embedded sytem that is raspberry pi. Raspberry pi will be a live streaming server and a web server. RTMP protocol will be analyzed performance and eligibility to serve as a video surveillance system based on QOS parameters.

Based on the test in this final project, RTMP protocol has the largest throughput of 0,24 Mbps compared with the RTSP protocol. As for the value of delay, RTMP protocol has the greatest value of 126,93 ms smaller than the value of RTSP protocol. So the RTMP protocol is still eligible to serve as a live streaming server protocol on a video surveillance system. In addition, the Raspberry pi as live streaming media server that the performance is stable.

Keywords: *Video surveillance system , raspberry pi*, *live streaming server*, RTMP