ABSTRACT

Live streaming is a technology for running a video or audio file directly with a server that is running a live streaming service. Server that provides live streaming using a streaming protocol as a controller and the sender of the packet data in real-time to a client that is running a live streaming service on the server. One of the real-time protocol used for live streaming server that is Real Time Streaming Protocol, or RTSP called, the protocol used to communicate with a client that is running live streaming.

In this final project, the author will do the analysis RTSP protocol implemented on a raspberry pi as a live streaming server for video surveillance systems integrated with camera supervisor. Surveillance system is a technology used to improve surveillance on the place or location out of reach of our vision or where it is being abandoned so that no one can supervise directly for example your home or workplace. The RTSP protocol will be analyzed its performance for use in video surveillance systems, as well as analysis of the use of raspberry pi as a live streaming server that is integrated with the camera.

RTSP protocol performance, especially on network throughput tends to be greater than the RTMP protocol. The greatest value of throughput in RTSP is 3,83 Mbps, so that the delay value is greater than RTMP. The RTSP protocol has advantages in the quality of the video output but for better performance RTMP for delay value is smaller so sending data faster. Reliability raspberry pi as a live streaming server has good stability when running video streaming on a network video surveillance system that is accessed by the user or client.

Keywords : Live streaming server, RTSP, raspberry pi, video surveillance system