

## **ABSTRACT**

Design applications for streaming video on the LAN network server is a system with a video stream output interface. This application is made by visual basic programming language and then implemented on a server connected to the LAN network where there are CCTV and client computers. At the end of this task there is an IP camera attached to a switch port, digital video streaming of data packets generated by the IP camera is transmitted via UTP cable and then switch over to the server package.

The purpose of this final report is to design and create a program to monitor indoor IP camera with Visual Basic programming language, so in this study can be aware of any events in the room so that no security can be maximized. Problems in this study is a component that can connect Visual Basic to Visual Basic program with IP cameras.

Functions of this application is to display streaming video from IP cameras. This application proved able to capture video images from IP cameras using Visual Basic programming language. This application is then implemented on a server connected to the network for later retrieval done in the form of quantitative data Quality of Service by using the wireshark software parameters are: delay / latency, jitter, packet loss and throughput. Obtained an average value of delay in the measurement of the first data packet is 0 ms, then the average data packet delay at the second measurement was 3628.99 ms. Both Packet Loss value on the first or second scenario is 0.99. And the throughput for the first scenario and 0.229 Mbps throughput for the second scenario is 1.121 Mbps. Datas from the Quality of Service is reflected in both the server how well perform its function as a recipient of UDP data packets.

**Key Word** : IP Camera, Visual Basic, Quality of Service,