ABSTRACT

Nowadays, the development of multimedia research application has combined voice and video communication. Conventional application on TCP/IP network mainly engages communication between two hosts. In its growth, communication between user engages more than two sides at once. Video LAN Streaming is one of the applications in computer network that is multimedia, real-time, interactive and the solution to multipoint communication needs.

In this live streaming application, the problem increases by the capturing process and live decoding at the server. Beside problem of server, the biggest problem prevented by this technology is the bandwidth limits, while communication process that uses this digital video spends much enough resource. Bandwidth is the crucial parameter to do streaming in network. Bigger available bandwidth give the better video quality displayed. Media streaming application that need high bit rate causes the increases network load, therefore service can not going well (disturbed)...

The research in this final project purposes to know bandwidth needed for video live streaming service. Testing of Quality of Service (QoS) performance in video streaming implementation uses software network analyzer Wireshark in local network. Analysis of measuring observes the influence of frame rate, bit rate, and background traffic.

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Keyword: bandwidth, live streaming, frame rate.