

ABSTRACT

Nowadays, TV over IP or live TV streaming is an application which use a client-server system where server supply TV streaming application from internal TV tuner. Then TV tuner will be broadcasted to all computer that connect to LAN (Local Area Network). Whereas client that want to enjoy TV streaming application must open the web which has been prepared by server. And then client must follow the channel application too. When the channel want to be changed, the client must contact the server to replace it. In this case the client can not change the TV channel you want and need to follow the channel provided by server. So that the client is not free to choose channel.

TV over IP Multichannel is a part of IPTV service. Where IPTV is a new developmnet in the software client-server communication that broadcast video of high quality (equal to real time motion video simultaneously) to the window user data through a network of existing. IPTV program provides more than one channel on the client side, so the client can change the channel that desired. In this final task analyzed the QoS parameter delay, jitter, packet loss, throughput and MOS.

From the results of the test analysis of the implementation of this system it was found that the streaming TV using the TCP protocol as a server using web interface. Bitrate is better used on the network LAN IT Telkom on the bitrate 256 Kbps. Meanwhile, if the background traffic is enlarge, quality of QoS will reduced. If the number of client up will affect the delay and jitter on the bitrate 64 Kbps and 128 Kbps, and the throughput will decrease. The best quality of audio and video if applied to the LAN network that is in the IT Telkom is at 256 Kbps of bitrate based on the value of the MOS.

Keywords: streaming, TCP, server, client, LAN, Multichannel