

## ABSTRACT

Technology growth base on the digital video in this time fast enough. Various means done to apply the technology at data network that designed peculiarly and also at existing data network. Application from technology base on digital video for example Teleconference, Video Streaming, Live Streaming, Video on Demand, and Video Surveillance.

Live streaming have been described as a technology icon on the future. In its application more amount used for the Conference Call, Video Surveillance (like security monitoring), and entertainment amusement (Television). Video surveillance is application of live streaming by placing one or some cameras at one place that can monitoring by streaming or result of output from that camera recorded. Technology of live streaming do not far differ from the video streaming, just only its data source have the character of the real time stem from camera.

Process of live streaming much more difficult and complicated to be realized because doing process having the character of live encoding and live decoding and minimum buffering while the other side expected delay as minimum as possible. Another problem that faced by this technology is bandwidth limited, while communication process by using this digital video finish the big enough recourse causing network load increase.

This research will be studied how we analyze the network condition, build application and implementation a application of video surveillance from one server to many client. By the end of this research expected will be got method of streaming and correct video codec so that give the best quality, delay minimum and do not too load network although used by many client.

Keywords : Live Streaming, encoding, decoding, video codec