

ABSTRACT

Codec (compression decompression) is a algorithm method using for compression streaming file to make file smallest. Codec can make change the video for visual quality and size video

IMS is an architecture in layer control for complete architecture NGN. Integration of audio services, video, and data over IP networks to IMS offers a wide range of multimedia services including audio, video, internet protocol television, and data. IPTV is one of the real-time applications that require bandwidth and high data transmission speed and sensitive to delay and jitter. In the video over IP services required special handling to get good quality service from the service server to the recipients of services.

In this Final Project has been doing design and implementation of the IMS network architecture by using MPEG-2 video codec, MPEG-4 and H.264. Analysis of the quality of the measured QoS include throughput, delay, jitter, packet loss for each codec. The analysis of the image display quality streaming results obtained by measuring the MOS (Mean Opinion Score).

From the testing and analysis results showed that the use of MPLS can produce a better QoS. It can be seen from the delay improvement using MPEG-2 get average delay at 16.42%. for MPEG-4 get average delay at 15.12 % and for H.264 got average delay at 13.16 %.

Keywords: IMS, QOS, IPTV, NGN, Codec