

ABSTRACT

The Internet Protocol Television (IPTV) service continues to grow because the demand and needs of better quality television services are increasingly high. Users want streaming video with good quality, it affects the allocation of the required bandwidth, efficient video technology becomes the appropriate ways of video quality but still can minimize the bandwidth consumption. Before the streaming process, the video is processed first, then a codec is needed (for compressing and decompressing videos). H.265 High Efficiency Video Encoding (HEVC) and VP9. VP9 produces image quality that is almost the same as H.265 but uses less bandwidth.

Tests were carried out on the H.265 (HEVC) and VP9 compression methods on video streaming-based IPTV services by comparing video resolutions from SDTV (480) and HDTV (720 and 1,080). The Quality of Service parameter becomes a benchmark for the data to be analyzed.

Tests were carried out to determine the effect of using H.265 (HEVC) and VP9 video compression (codec) with the original bitrate, framerate and bandwidth. From the test results throughput obtained for video compression H.265/HEVC approximately 50% compared with compression H.264 / AVC. In the video storage capacity H.265/HEVC result of approximately 50% compared to H.264/AVC. However, in compression process H.265/HEVC require a relatively longer time compared to H.264/AVC.

Keywords: *Streaming live, codec, H.265(HEVC), VP9, Quality of Service, performance.*