

Analisis Verifikasi Seamless Handover Pada Implementasi Backup Multipath TCP

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Abstract

Generally streaming video applications such as youtube, dailymotion, oksusu, vlive, and VLC still use the TCP protocol, where the protocol still uses singlepath-TCP. Under certain conditions, such as the disconnection of the internet network used can affect the convenience of streaming. To overcome this problem, an effective solution is needed to implement multipath-TCP on the internet network. MPTCP has several methods, in this final project the MPTCP backup method is used. MPTCP backup as an operating mode can overcome failures in one path that is used by replacing to the second line that is connected, so as to get a seamless handover. This research conducted streaming video testing conducted by the client to verify seamless handover and Quality of Experience (QoE) testing. The test results show seamless handover can occur on MPTCP backups. The QoE test results showed better quality of seamless handover, namely 3.77 scale of respondents satisfaction level on image quality, on sound quality 3.95 scale of respondents satisfaction level, and on buffer quality 3.63 scale respondents satisfaction level.

Keywords: *backup-MPTCP, seamless handover*