Analisa performa jaringan Mobile IPV6 pada horizontal handover dan vertical handover dengan aplikasi FTP = Analysis of mobile IPV6 network performance in horizontal and vertical handover using FTP application

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Abstrak

Jaringan Mobile IPv6 mendukung perpindahan mobile node dari titik akses jaringan satu ke titik akses lain tanpa harus memutuskan koneksi. Pada jaringan mobile, perpindahan ini disebut handover yang dibedakan atas vertical handover dan horizontal handover. Untuk mengetahui performa jaringan dengan kedua jenis handover tersebut, dapat diukur beberapa parameter QoS seperti throughput, transfer time, dan delay. Dalam skripsi ini, aplikasi yang digunakan berupa File Transfer Protocol (FTP).
Hasil pengukuran membuktikan bahwa throughput mengalami penurunan sebesar 4,14% pada horizontal handover dan mengalami penurunan sebesar 26,25% pada vertical handover; transfer time bertambah sebesar 8,34% pada horizontal handover dan bertambah sebesar 41,49% pada vertical handover; delay bertambah sebesar 8,22% pada horizontal handover dan bertambah sebesar 41,05% pada vertical handover. Secara keseluruhan performa jaringan mobile IPv6 skenario horizontal handover lebih baik daripada vertical handover.
.....Mobile IPv6 network supports mobile nodes movement from one location to another within the network without having to disconnect. In mobile networking, the movement is called handover which is divided into vertical handover and horizontal handover. To determine the network performance with both types of handovers, we can measure several QoS parameters such as throughput, delay, and transfer time. In this final paper, application that is used is the File Transfer Protocol (FTP).
Measurement results prove that the throughput decreased by 4.14 % in horizontal handover and decreased by 26.25 % in vertical handover; the transfer time increased by 8.34 percent in horizontal handover and increased by 41.49 % in vertical handover; the delay increased by 8.22 % in horizontal handover and increased by 41.05% in vertical handover. Overall, network performance of mobile IPv6 on horizontal handover scenario is better than the vertical handover.