RINGKASAN

ANALISIS KINERJA LAYANAN VIDEO CONFERENCE VOOV MEETING DENGAN PARAMETER QoS MENGGUNAKAN JARINGAN SELULER DAN Wi-Fi

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Video conference merupakan sebuah aktivitas interaksi dan komunikasi yang memanfaatkan teknologi telekomunikasi yang digunakan sejumlah pengguna di lokasi yang berbeda secara *realtime*. Perkembangan *video conference* terus berkembang seiring dengan kebutuhan dalam berkomunikasi jarak jauh. Salah satu aplikasi *video conference* adalah VooV Meeting.

Metode yang digunakan dalam penelitian ini adalah pengamatan terhadap parameter *Quality of Service* dari layanan aplikasi VooV Meeting menggunakan jaringan seluler dan Wi-Fi. Parameter *Quality of Service* yang diamati adalah *delay, jitter, throughput, packet loss* dan *frame rate* menggunakan *software* Wireshark. Hasil pengujian dianalisis berdasarkan penggunaan jaringan, melihat pengaruh perbedaan kelas berdasarkan pengguna dan penggunaan fitur *on camera* pada peneliti. Hasil pengujian dinilai berdasarkan standar TIPHON.

Hasil penelitian yang didapatkan dari segi nilai rata-rata *delay, jitter* dan *packet loss* jaringan Wi-Fi memiliki nilai yang rendah dengan nilai rata-rata *delay* 0,002858 ms, rata-rata *jitter* 0,00298 ms dan rata-rata *packet loss* 0,71%. Nilai rata-rata *throughput* tertinggi didapatkan oleh jaringan seluler Indosat dengan nilai 80,34% dan nilai rata-rata *frame rate* tertinggi didapatkan oleh jaringan Wi-Fi dengan nilai 193 fps. Selain itu, fitur *on camera* memengaruhi hasil penelitian pada salah satu parameter *Quality of Service* yaitu *frame rate*.

Kata kunci : *video conference*, *Quality of Service*, analisis, TIPHON

SUMMARY

PERFORMANCE ANALYSIS OF VIDEO CONFERENCE VOOV MEETING SERVICES WITH QoS PARAMETERS USING MOBILE AND Wi-Fi NETWORKS

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Video conferencing is an interaction and communication activity that utilizes telecommunications technology which is used by a number of users in different locations in real time. The development of video conferencing continues to grow along with the need for long distance communication. One video conferencing application is VooV Meeting.

The method used in this research is observing the Quality of Service parameters of the VooV Meeting application service using cellular and Wi-Fi networks. The Quality of Service parameters observed are delay, jitter, throughput, packet loss and frame rate using Wireshark software. The test results were analyzed based on network usage, looking at the influence of class differences based on users and the use of on camera features on researchers. Test results are assessed based on TIPHON standards.

The research results obtained in terms of average delay, jitter and packet loss values for Wi-Fi networks have low values with an average delay value of 0.002858 ms, average jitter 0.00298 ms and average packet loss 0. .71%. The highest average throughput value was obtained by the Indosat cellular network with a value of 80.34% and the highest average frame rate value was obtained by the Wi-Fi network with a value of 193 fps. Apart from that, the on camera feature influences research results on one of the Quality of Service parameters, namely frame rate.

Keywords : video conference, Quality of Service, analysis, TIPHON