

## ABSTRAK

Pada penelitian ini dilakukan monitoring jaringan dengan menggunakan aplikasi solarwinds NPM dan dilakukan penerapan di institut teknologi telkom jakarta kampus B. Simulasi performasi jaringan yang dianalisis untuk mendapatkan network latency, packet loss, dan CPU load/Memory Used. Hasil pengukuran menunjukkan bahwa nilai rata-rata network latency dari keseluruhan 7,35 ms yang dimana jika dibawah masih dibawah 10 ms itu masih bagus. Nilai packet loss tetap berada dibawah 0,1 % yang dimana Berdasarkan standar yang ditetapkan untuk jaringan yang berbasis IP, termasuk jaringan kampus, nilai packet loss harus dijaga agar tidak melebihi 1% untuk kelancaran telekomunikasi. Nilai rata-rata cpu load dan memory used rata 20,3 dimana penggunaan yang cukup menjaga kesehatan server dan memory used terpantau rata-rata 43,1 Mbps dimana cukup bagus pemakaian untuk server. Tujuan dari penelitian ini agar untuk Mengetahui Network Latency, Packet Loss dan CPU/Memory Usage pada jaringan Kampus.

Kata kunci : *Network Latency, Solarwinds NPM, NMS, Network Performance*

## **ABSTRACT**

In this study, network monitoring was carried out using the Solarwinds NPM application and implemented at the Jakarta Telkom Institute of Technology, Campus B. Simulations of network performance were analyzed to obtain network latency, packet loss, and CPU load/Memory Used. The measurement results show that the average network latency value is 7.35 ms, which if it is below 10 ms it is still good. The packet loss value remains below 0.1%, which is based on the standards set for IP-based networks, including campus networks, the packet loss value must be maintained so as not to exceed 1% for smooth telecommunications. The average value of CPU load and memory used is average 20.3 where the usage is sufficient to maintain the health of the server and the average memory used is 43.1 Mbps which is quite good for server usage. The purpose of this study is to determine Network Latency, Packet Loss and CPU/Memory Usage on the Campus network.

*Keywords: Network Latency, Solarwinds NPM, NMS, Network Performance*