

## INTISARI

### **IMPLEMENTASI DAN ANALISIS SISTEM *MONITORING PERFORMANCE* JARINGAN DENGAN PARAMETER *QUALITY OF SERVICE* (QOS)**

Internet merupakan kumpulan dari berbagai jaringan komputer, yang saling terkoneksi satu sama lain dan dapat saling berkomunikasi. Penggunaan internet yang mencakup di segala bidang, membuat internet menjadi kebutuhan pokok dalam berkomunikasi. Pemakaian internet secara global harus memperhatikan dari segi manajemen jaringan. NMS (*Network Management System*) merupakan sebuah sistem yang memanajemen/mengelola, memonitoring jaringan antara *client* dan *server*. Konsep dari NMS ini terdiri dari 5 area yaitu *Fault management*, *Configuration management*, *Accounting management*, *Performance management*, dan *Security management* atau dikenal dengan istilah FCAPS. Fokus dari FCAPS harus memperhatikan dari segi QoS (*Quality of Service*) guna memberikan kepuasan bagi pengguna.

Pengelolaan kinerja jaringan (*Network Performance Management*) ditujukan untuk mengamati parameter – parameter QoS seperti *rate*, *latency*, *packet loss* atau *error*, *jitter*, dan *throughput* untuk mendukung kinerja jaringan. Sistem monitoring *performance* jaringan adalah salah satu *tool* untuk melakukan uji fungsional dan mengukur kinerja suatu *server/client*. Dengan menggunakan sistem monitoring *performance* jaringan terhadap parameter QoS di dalamnya diharapkan dapat mengetahui kualitas, reliabilitas serta stabilitas jaringan yang ada.

Kata kunci : Internet, NMS (*Network Management System*), QoS (*Quality of Service*), Sistem *Monitoring Performance* Jaringan, FCAPS (*Fault, Configuration, Accounting, Performance, Security*)

## ***ABSTRACT***

### ***IMPLEMENTATION AND ANALYSIS OF NETWORK PERFORMANCE MONITORING SYSTEM WITH PARAMETERS OF QUALITY OF SERVICE (QoS)***

The Internet is a collection of various computer networks, which are interconnected and can communicate to each other. The use of the Internet, which covers all fields, makes the Internet an essential communication tool. The global use of the Internet should be concerned on the network management. NMS (Network Management System) is a system that manages and monitors how clients and servers connect to web. The concept of NMS is derived from 5 areas, including *Fault management*, *Configuration management*, *Accounting management*, *Performance management*, and *Security management*, also known as FCAPS. The focus of the FCAPS should be concerned on QoS (Quality of Service) side to satisfy the users.

Network Performance Management refers to the monitoring of QoS parameters, such as rate, latency, packet loss or error, jitter, and throughput to support network performance. Network performance monitoring system is a tool for performing a functional test and measuring clients/servers performance. The implementation of network performance monitoring system to QoS parameters is expected to know the quality, reliability and stability of the existing networks.

Keywords: Internet, NMS (Network Management System), QoS (Quality of Service), Network Performance Monitoring System, FCAPS (Fault, Configuration, Accounting, Performance, Security)