

## **OPTIMALISASI MANAJEMEN BANDWIDTH DENGAN METODE HFSC PADA FAKULTAS TEKNIK UNNES, QOS DAN QOE SEBAGAI PARAMETER KUALITAS**

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### **ABSTRAK**

Kebutuhan internet sekarang ini merupakan kebutuhan yang sangat penting. Management bandwidth yang matang dan terkini diperlukan dalam jaringan komunikasi dan komputer. Tujuan penelitian ini adalah untuk mengoptimisasi metode jaringan Fakultas Teknik yang lalu dengan metode jaringan HFSC yang merupakan management jaringan yang lebih terbaru. Metode yang diteliti pada penelitian ini yaitu HTB (Hierarchical Token Bucket) dan Management Bandwidth HFSC ( Hierarchical Fair Service Curve). Pengukuran optimalisasi menggunakan pengukuran integritas antara lain QoS (Quality of Service )dan QoE (Quality of Experience). QoS merupakan suatu pendekatan kualitas berdasarkan karakteristik layanan jaringan yang mengarah pada faktor teknik jaringan, dan QoE memberikan pengukuran kualitas jaringan berdasarkan kepuasan User. Hasil pengujian yang didapatkan meningkat antar management terdahulu (HTB) dengan management yang disarankan (HFSC), baik dalam parameter QoS (Throughput, Jitter, Packet Loss, Delay), berbeda secara signifikan pada parameter packet loss dan delay. QoE yang didapatkanpun mendapatkan hasil kriteria Cukup Baik.

Kata Kunci : HTB, HFSC, QOS, QOE

**OPTIMIZATION OF BANDWIDTH MANAGEMENT USING HFSC  
METHOD IN THE FACULTY OF ENGINEERING UNNES, QOS AND  
QOE AS A QUALITY PARAMETERS**

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**ABSTRACT**

The need of internet nowadays is a very important. The mature and newest bandwidth management are required in networks communication and computers. The purpose of this study is to optimize network methods in Faculty of Engineering with method of HFSC which is more recently bandwidth management. The methods examined in this study is HTB (Hierarchical Token Bucket) and Bandwidth Management HFSC (Hierarchical Fair Service Curve). Measurements optimization using integrity measurement include QoS (Quality of Service) and QoE (Quality of Experience). QoS is an approach based on the quality of the network service characteristics that lead to networking technique factors, and QoE is a measurement of network quality based on user satisfaction. The test results were obtained increases between the previous management with a suggested management (HFSC), the QoS parameters (throughput, Jitter, Packet Loss, Delay) and significantly difference on Packet Loss, Delay. QoE result is Good Enough criteria.

Keyword : HTB, HFSC, QOS, QOE