

## Network Traffic Analysis for Bandwidth Optimization Internet at STIK Bina Husada Palembang

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### *Abstract*

*Traffic Analysis bandwidth is how to organize or analyze ongoing bandwidth, as well as problems related to the bandwidth that will be had right solutions to overcome the bandwidth problem. Therefore, the analysis of network traffic, especially for Internet bandwidth optimization is needed, so adjusted with corporate policies/ institutions to use the network so that there is access to the Internet network will be more efficient, stable, and fast. Referring to the importance of quality Internet bandwidth and have not done that exact measurements can be used to measure how well the bandwidth management is running, then the central issue in this study is "Network Traffic Analysis for Bandwidth Optimization Internet At Bina Husada Palembang sticks". Software used in this study RouterOS, Biznet Speed Meter, Arence NetTools and Iperf. While the methods used are Action Research with models of QoS monitoring system. From the measurement results, the QoS parameters which consist of bandwidth, throughput, delay, jitter and packet loss to affect the measurement of network QoS. While the factors that could affect the QoS of the network itself is the attenuation, distortion, noise and bandwidth capacity.*

**Keywords :** Traffic Network, Bandwidth Management, QoS (Quality of Service), Throughput, Delay, Jitter and Packet Loss

### 1 INTRODUCTION

Now a days everyone needs information in a quick, concise and accurate, better to find the article, the latest knowledge, or even just to chat. Therefore, we needed a tool that can support it. One is a computer network that is connected to the Internet with fast and stable. Bandwidth is the maximum bin in delivering the data calculated by the amount of bps (bits per second), while the speed is the time spent in taking a distance, for example, takes about 1 meter per second. Internet bandwidth provided by the internet service provider with a certain amount depending on the rental customer. The availability of network bandwidth is an important factor in selecting a web service [1].

STIK Bina Husada Palembang currently has a network of computers connected to the Internet. Connection ISP (Internet Service Provider) using Astinet PT. Telkom. Currently