

## *Abstract*

Bandwidth management gives guarantee for network with multi service on each user. Each user on a network, especially LAN, can be managed in a fair bandwidth allocation and according to the standard that used. The more quantity and the more vary applications that a network can handle impact on the link user on the network. The existence links should be able to handle the need of user to an application, even in the congestion, should there be guarantee that the links will functionally working even if there is a booming on an application demand. Each user on LAN has own bandwidth allocation, so in the limited usage of bandwidth, there will not be a huge bandwidth usage by uncontrolled user.

Bandwidth management holds important part in managing the uncontrolled bandwidth used with QoS handling. In arranging the kind of application that could access the link that exists, bandwidth management could give guarantee to the applicants which got the bandwidth allocation to continue on sending the data according to his allocation even tough there is traffic on the network. Besides that, in a certain circumstances when the bandwidth allocation that belongs to application (service) could not be used to optimally the existence links.

PRIO and HTB as the implementation of bandwidth management which is free and could be used on Linux operating system is a classful queue method that deserved to be analyzed the benefit and the weakness of it. Both of those methods used to share bandwidth allocation based on protocols such as HTTP, FTP, SMTP, and SSH. By implementing those methods hopefully unused bandwidth allocation could be shared so that it will not be useful. It can be analyzed which is more optimum from classful methods. This writing is intended to reveal which performance better between PRIO and HTB for QoS handling in the TCP/IP network.

**Keyword:** *Bandwidth Management, QoS Handling, PRIO, and HTB.*