

## ABSTRACT

*The lack of research in network gaming was never a problem before Doom,2 released in 1993, because nearly all networked games before were text based and used telnet or similar protocols to transmit data from player to server and back. But even with the advent of Doom, networked gaming was still confined to a small portion of the population. However, in the last 5 years, with the growth of the Internet, this has changed drastically follow with the changes Games Graphically that more attractive, higher resolution and colors depth, and sound effect that getting better, other words bandwidth that needed is bigger.*

*The Limitation of Bandwidth and many kind and variation application that used in network need a different treatment to arrange traffic data so that the used bandwidth can be optimal. Bandwidth management is needed in network that used many application, the more application that used in the network will effect the used of link in that network. Bandwidth management can guarantee to the application who has bandwidth allocation to keep sending data appropriate with the bandwidth allocation he has, even if there is stagnation in the network, or if an allocation of bandwidth that belongs to the application/service is not in use, other class that have backlog can borrow it temporary, this will decrease a backlog in a class and optimal the used of bandwidth.*

*This Final Assignment will analyze the effect of changing queue discipline (p/b FIFO, p FIFO fast, RED, SFQ, and TBF) and conclusive queue discipline that suitable for network game, use Hierarchical Token Bucket (HTB) as Bandwidth management that available and free, used under LINUX.*

*Keyword: HTB, p/b FIFO, p FIFO Fast, RED, TBF, SFQ.*