

ABSTRACT

To provide good Quality of Service (QoS), bandwidth management has important role in term of bandwidth allocation to each different services of internet application. A good bandwidth management is expected to provide Quality of Service appropriately at each service or different agency.

Researchers offered different QoS technique to facilitate the process of bandwidth management in the network. Hierarchical Token Bucket and Hierarchical Fair Service Curve are QoS technique in Linux based router that is focused on packet scheduling precision and ease of use.

In this case, Hierarchical Token Bucket and Hierarchical Fair Service Curve provide the traffic management and borrowing technique in bandwidth in link-sharing. Furthermore, Hierarchical Token Bucket and Hierarchical Fair Service Curve methods are expected to provide good QoS and optimal state of link utilization.

The main aim of this final project was to implement Hierarchical Token Bucket and Hierarchical Fair Service Curve scheduling algorithm into Linux kernel and provide some comparison of it's operation.