

Abstract

Differentiated Service is a method to classified packets by give an unique marker on its. The architecture of Differentiated Service is classful which mean its involved link-sharing method and also it has a dropper which involved to avoid an link from congestion. Differentiated Service usually used by application which based on UDP protocol in case to provide a bandwidth to application.

Hierarchical Token Bucket and Hierarchical Fair Service Curve are a method to provide link-sharing and it's can be used to build an architecture of Differentiated Service and also it has an advantage each. Random Early Detection is a method to handle a queue and the purpose of it is to avoid the gateway from congestion.

In this case, the combination of link-sharing and dropper is an union to build an architecture of Differentiated Service, so it's can provide the best performance to each class which in Differentiated Service. To apply this project, we will use traffic control of Linux.

The main aim of this final project was to implement a Differentiated Service with the combination of HTB-RED and HFSC-RED and provide the best performance between its.

Keyword : Differentiated Service, UDP, HTB, HFSC, RED