

Abstract

VoIP (Voice Over IP) is an IP Telephony Technology that is growing today. Voice packet that firstly through in telephon network, begin to develop with let through the voice packet in IP network.

VoIP is very sensitive to delay, because a great delay will cause information that have been heard can't be clear. At the same time, in IP network, the congestion will inevitably occur. This congestion, will cause delay be greater. Thus, it needed a mechanism Quality of Service to reduce the impact of congestion.

In this Final Project, will be trying to compare about Buffer Management (RED) and Fair Queue Schedule. Random Early Detection (RED) is an Active Queue Management (AQM) that will control Buffer in router to detect congestion. Thus, Fair Queue is a schedule mechanism that will make some queue that will be scheduling with round robin manner.

Implementation of RED and Fair Queue will be using GNS3 as an router emulator, and be running Local Area Network (LAN) environment.

The result shows that Fair Queue give a better QoS than Random Early Detection to a great background traffic

Keywords: *web server, throughput, fastest connection first, performance.*