

Abstract

Nowadays, with the development of internet based-protocokl technologies have an impact on the diversity of services delivered through the Internet. With these demand are expected to have technology that can integrate a variety of services. Therefore, the IMS architecture emerged as a promising technologies to be able integrate various multimedia services in one platform only.

Instant messaging is a communication new trend is most often used by people in Indonesia today. Teherefore, the required knowledge about network ability to ensure instant messaging can still be used properly if there is the use of other services. For that, it takes a parameter to determine the distribution bandwidth fairness performed by the router to use the services. When the fairness said to be good, then we can conclude that the optimal bandwdth has been given.

Fairness of the best value obtained is 0.6 from 1, with instant messaging services can be run in conjunction with VoIP services and the bandwidth limiter is able to provide bandwidth as needed. Optimal bandwidth at th e rght instant messaging and VoIP services is 64Kbps, it is based on the best fairness index has been obtained. While the response time used is an interactive system. The response was found when the data sent by instant messaging client is able to read on purpose. The best response time that can be given by the bandwidth limiter for instant messaging is 0.4903 second.

Keyword : IMS, *instant messaging, fairness, optimal bandwidth, response time*