

## Abstract

VoIP is an application that could make happen 2 way conversation between users using internet connection. The major benefit of VoIP is the cheap cost. That happens because VoIP only use internet connection as a medium. Beside of its benefit, VoIP has weakness too. The one that become major issue is the Quality of Service that gives.

At this final task, it's simulating the VoIP connection using CBQ and PQ queuing system. With the different queuing mechanism hopes that become a solution for its weakness. With using CBQ and PQ hopes that can guarantee the QoS of VoIP, so the VoIP could always give best service. And to compare between CBQ and PQ witch one that can give the best performance and QoS for VoIP connection.

The result of the simulation shows that PQ queuing system can give the best performance and QoS than CBQ queuing system. Within a limited bandwidth, PQ queuing system can give a good performance and QoS, so the VoIP service can be guaranteed.

**Keyword:** *VoIP, Quality of Service (QoS), CBQ, PQ, performance*