

## **ABSTRACT**

*Internet users today have very high mobility, the number of internet users causes frequent obstacles, one of which is caused by bandwidth. These constraints are one of them is the uneven distribution of bandwidth. Therefore, bandwidth management is needed and very important. The frequent uneven distribution of bandwidth results in one user being able to access the internet smoothly while other users are slow to access the internet or even completely unable to access the internet. From the above problem, the author manages bandwidth by using the PCQ (Peer Connection Queuing) method on Mikrotik assisted by Queue Tree. By using the PCQ method, bandwidth allocation will be divided evenly on each user. PCQ can also optimize internet bandwidth and with the PCQ method, the quality of the network will also increase. The author uses the parameters of QoS (Quality of Service) namely throughput, packet loss, delay, and jitter to calculate whether the quality of the network is optimal. The results of this study measured using QoS are appropriate and optimal and using the PCQ method it is helpful to divide bandwidth evenly.*

**Kata kunci—Bandwidth, Manajemen Bandwidth, PCQ, QoS, Queue Tree**