ABSTRACT

Information technology, especially computer networks, is the right choice for companies and individuals to provide information and connect LAN to the internet. The computer network aims, among other things, to share resources, communication, and access to information. Network that connects between computers with a limited distance is called a *Local Area Network* (LAN). If the network consists of several separate LANs in several geographical and interconnected places, it is called a *Wide Area Network* (WAN).

By using a *Virtual Private Network* (VPN), it can be used to create networks that are *private* and remote network connections (*remote access*) with a high level of security over public networks or internet networks. VPN is a form of private network through a public network (Internet), with an emphasis on data security and global access through the internet.

QoS is the quality or assurance of services provided to users of the network. The guarantees are the system failure factor, network security and network stability. So with the guarantee that the user will feel comfortable with the service used. From the test results there are three *QoS* tested, *Packet Loss*, *Delay*, *Throughput*. From each test that has been done where the presentation of the *packet loss* 8.75%, and *Througputnya* 0.125. So from the test can be said network or the result of PING between PCS is still very good.

Keywords: Jaringan komputer, Wide Area Network , QoS, Virtual Private Network.