## ABSTRACT

The need for expansion of data networks / multimedia on a particular agency is now higher. Various solutions are offered to establish a reliable network security, such as forming a private network with leased line between the corporate network by remote host or remote client. Another more efficient solution is the establishment of private networks over a public network that is often known as VPN (Virtual Private Network).

One of the virtual private network technology is used in addition to remote-access vpn site-to-site vpn. Remote-access VPNs are built for purposes other than building a tunnel to the mobile user, there is another purpose of user management. Management user to remote-access VPN is divided into 3 parts namely authentication for mobile-user, shared access to network resources and user quota restrictions (AAA).

In implementation, the remote-access VPN protocols can be built using Layer 2 Tunneling Protocol (L2TP) as the implementation of the VPN and RADIUS for user management system which includes the authenticationauthorization-accounting(AAA).

Keywords: VPN, L2TP, AAA, Mobile User, Remote Access VPN