

ABSTRACT

Needs of human live for technologies are increasing, including of network technology. The Internet is the world's largest network technology. now, The more growing the Internet technology, so human dependence on the Internet will also increase, and the Internet became a necessity. Security while surfing is also increasingly out of control and some place, internet is restricted a proxy. So that we feel surfing comfort are reduced.

In this project, it will make an SSL VPN with OpenVPN as a solution to this problem that can bypass the proxy and ensure security when surfing. VPN stands for Virtual Private Network is a private network (not for public access) that use public medium (Internet network) for connect between remote-site safely. Need the application of certain technologies for although using a public medium, but the traffic (traffic) between remote-site cannot be intercepted easily, nor does it allow others to smuggle an undue traffic into the remote-site. So if this is used, IP will be hidden by the system and the data that we send will encrypted by the system. So, we can feel more secure if surfing in cyberspace. The software that use in this project are the OpenVPN using tunelizer-ssh as a remote to access the server. Hardware are a server with Centos operating system and a computer to remote servers connected to the Internet network.

From the results obtained, OpenVPN can be used as bypassproxy Because proxy server works by comparing or matching DNS and contents on the web with a list that has been made. And OpenVPN works to make the data sent and received is encrypted so that data sent and received is not readable by the proxy server as blocked content. Average throughput by using OpenVPN is greater than the throughput without OpenVPN. This happens because the header when OpenVPN gets the addition of encryption that will add to the total bits received. The average values delay with OpenVPN is much larger than the delay without OpenVPN. Because the data sent via OpenVPN no data encryption process that occurs at the end user and in the form of TCP. While the nature of TCP is the connection oriented wherein the data transmission has 3-way handshake.