

## ABSTRACT

Demand for Internet access today is very high, both to find information, articles, knowledge or just to chat. Along with the increased demand for internet in the office building, the network that used to run optimally, one way that can be taken is to implement a system Mikrotik RouterOS, VPN server, proxy well as collaboration.

In this final project designed intranet and internet in West Java DISORDA building using MikroTik useful as bandwidth management with only with standalone computers, is expected to optimize the use of network bandwidth and the corresponding portion of each client needs. Then for network security will be created VPN server can be connected locally to the office intranet network securely. As well as the proxy server to the Application Firewall..

With third collaboration system in the DISORDA building, providing improved QoS proxy for data on the conditions with and without background traffic with throughput improvement of 0.2 Mbps. Actually for VoIP applications without background traffic mikrotik not providing significant improvements, but with the background the traffic generated packet loss of 4,8% over low. Then proxy system in this study is useful as web page cache, as well as blocking porn sites.

**Keywords:** MikroTik, VPN (Virtual Private Network), Proxy, intranet, internet