ABSTRACT

The use of the internet has become an important part of communication systems in every aspect of our lives. The use of the internet covers various aspects of life, both economic, public services, education, and lifestyle. Based on apjii survey internet users in Indonesia use the internet more than 7 hours a day, and 65.98% of internet users in Indonesia use the internet every day per week. With the increasingly widespread utilization of the internet by the public, backbone traffic becomes dense and the quality of connections becomes a challenge. Internet access organizers both network operators and service providers (Internet Service Providers) competitively provide services with a variety of Quality of Service (QoS) for network traffic. For that reason, the availability of internet networks is very important for us in this modern era and failures in a network should be as small as possible to avoid. There are 2 types of failures on the network, namely link failure and device failure. A gateway router is one of the most important devices because the gateway router serves to connect different segments of the network. Then a backup router is needed that can work if the main router fails. The reason for creating network backups is to anticipate interference in case of device failure on the main network. To solve this problem can be done by applying the First Hop Redudancy Protocol (FHRP). Some of the methods are Virtual Router Redudancy Protocol (VRRP), Hot Standby Router Protocol (HSRP). To find out the results on VRRP and HSRP, the Implementation of Virtual Router Redundancy Protocol and Hot Standby Router Protocol With Routing Protocol OSPF. QOS results in the form of Troughput and Delay

Keywords*: VRRP, HSRP, Routing Protocol OSPF, Quality of Service, Throughput, Delay.*