ABSTRACT

Should be a concern about the possibility of router's interference. VRRP and HSRP are redundancy protocol, that HSRP is the Cisco standard redundancy protocol which set a standby router and active router which sent hello packet to each other every 3s and automatically the standby router can take over the active router's task if there is a link failure. On the other hand, VRRP also has the backup router which works when the master router stops in sending the advertise packet every 1s and shows that the master router stops working.

This final assignment has three (3) scenarios. Scenario 1 is QoS VoIP testing on VRRP and HSRP on the normal condition. The second scenario is doing QoS VoIP test on VRRP and HSRP when the Link Failure happens. In the first and second scenario, there is a modification on the interval advertisement on VRRP and hello time on HSRP. The third scenario was proof that VRRP and HSRP protocol can be implemented as a Load Sharing.

From the measurement result and analysis on the first scenario, it can be concluded that among VRRP and HSRP, VRRP 3s has got the best performance because all router on HSRP group are sending hello time to each other that leads to crowded traffic. On the second scenario it is proved that VRRP, VRRP 1s has got the best performance and the worst is VRRP 3s because the downtime value is faster and the advertise packet sent by master router is not flooding the network. On HSRP, HSRP 3s, it has got the best value and HSRP 0.2s. The third scenario shows that VRRP and HSRP is the efficient redundancy's solution due to its reality of its function as Load Sharing protocol.

Keywords: VRRP, HSRP, QoS, Downtime, Advertisement internal, Hello time