

## **Abstract**

Hot Standby Router Protocol (HSRP) is a CISCO proprietary standard that allows to automatically take over if another router fails. One router is always active, and the other acts as a standby in case the first one should fail.

Gateway Load Balancing Protocol (GLBP) protects data traffic from a failed router or circuit, like HSRP. GLBP provides load balancing over multiple routers and sharing the traffic load more equitably among available routers.

Wide Area Network (WAN) covers many place and needs a network that always standby when router fails. HSRP and GLBP can be alternative choise. This research purpose to compare HSRP with GLBP based on performance parameter example packet loss, average delay, and throughput. And then compare HSRP and GLBP recovery time.

The result from this reseach is GLBP better than HSRP in normal condition because packet loss GLBP less than HSRP. When one router fail HSRP better than GLBP. In the other side, average delay, throughput and recovery time HSRP more better.

**Keywords:** HSRP, GLBP, WAN, performance, recovery.