

ABSTRACT

Internet technologies in today's fast-growing and the predictions will continue to rise. One of the most popular Internet service is a web or http service. Web is a service that many sources of information accessed by around the world. Increased access to a Web push web server has a system with the capacity, performance, and reliable data storage. But the single machine web server in certain circumstances not be able to handle millions of visitors every day. Redundant web server is one solution to overcome this.

At this final project was made, redundant web server system where the system consists of two web servers and then equipped with a database replication system as its backup database. This redundancy system expected can be effective solution for single server failure which can not working anymore. While database replication approach as method to get an equal database condition between both of server.

According to implementation and analysis result figure out the system was build is able to handle income request simultaneously however failover held on primary server. It evidenced by throughput, request loss, and response time value decrease momentarily after failover time. This decrease value due to secondary server specification lower than primary server. This indicate http service still available and did not disappear altogether. For high availability value obtained show percentage at allowed value range. While database replication with master – master replication mode can running well proved by database content always same each other with tiny replication time. Thus this web server redundancy system and MySQL database replication can provide web service failover or http service failover with condition of database at exactly similar.

Keyword: *web server, redundancy, MySQL, replication, high-availability*