ABSTRACT

The need for backup systems today has become a major requirement. One of the things that need to have a backup system is internet network services. Almost all people wear it in daily life, especially in the offices area. It is not uncommon for internet networks to experience problems, such as loss, network maintenance and damage to internet facilities and devices. Because of this, a solution is needed to overcome these problems so as not to interfere with internet services. Examples of backup systems that are often used are failover systems.

This Final Project analyzes the performance of devices and failover and failback systems. The device that is analyzed for its performance is a back up device, both when the device is up and down. Analysis of availability values, mean time between failure, and time to repair analysis on the device were also carried out.

The study began with a tool performance test, where performance testing of backup devices was carried out which had an average delay value of 79 ms. Other tests performed are testing failover and failback times. The average time for devices to failover is 30.30 seconds, while for failback is 2.15 seconds. The next testing scenario is availability calculation with an availibility value of 97.64 %, the mean time between failure calculation is 6171.43 minutes, and the mean time to repair calculation is 145.57 minutes.

Keywords: failover, failback, backup