

ABSTRACT

The rapid development of cloud computing requires a storage system that is capable of handling large data according to data processing needs such as ceph cluster and raid storage systems. Each of these storage systems has different transfer speed and disaster recovery performance. With this research, it provides a goal that can compare the two system performance between transfer speed and disaster recovery on ceph cluster and raid systems. The results of this study found that ceph cluster achieved the highest transfer speed of 111 iops, bandwidth 210 kib/s, and read latency of 1129 ms, as well as 112 iops, bandwidth 210 kib/s, and write latency 1135 ms. On the other hand, the raid system achieved its highest values of 171 iops, bandwidth 320 kib/s, and read latency of 742 ms, and 170 iops, bandwidth 320 kib/s, and write latency of 747 ms. For the disaster recovery scenario, ceph cluster recorded 206 iops for read and write, with a bandwidth of 206 kib/s for read and write. Meanwhile, raid achieved the highest value of 259 iops and 259 kib/s bandwidth for read and write. With these results, the selection and use between ceph cluster and raid should be tailored to specific needs regarding data capacity and speed.

Keywords: *Ceph Cluster, Cloud Computing, Proxmox Environment, Raid.*