Abstract

Access to cloud manager should always be available because otherwise it will lead to the user not be able to monitor and manage image, networking, and configuration privilige IaaS cloud computing services. Given the importance of access to the cloud manager, we need a mechanism for cloud manager could always be accessed though the manager of cloud server is down.

Solutions that can be applied to anticipate failures that caused by downed of cloud manager server is with fault tolerance mechanisms. Fault tolerance mechanisms is expected to continue the job of system properly despite the manager of cloud server is down. Therefore, in this research is implemented a fault tolerance in Eucalyptus-based cloud computing using distibuted replicated block device (DRBD) and Heartbeat.

Based on the scenario server down, fault tolerance mechanism using Heartbeat and DRBD can be implemented on the server-based cloud manager Eucalyptus. Then, from the results of experiments and analysis, writer conclude that the optimal value of keepalive is 0.2.

Key words : fault Tolerance, cloud manager, Eucalyptus, DRBD, Heartbeat.