

ABSTRACT

Virtualization is a growing technology in the computer networks today. The virtualization technology simulates the hardware into the software that as though we are working on the actual hardware. One of many virtualization is a virtualization technology at the server which known as virtual private servers (vps). Server virtualization technology allows multiple operating systems server to run together on a single physical machine. The main objective of this technology is the use of a reliable infrastructure function and allow the maximum use of a server machine.

One of the benefits server virtualization is a live migration feature. Live migration is the ability to move a running virtual machine to another physical host without interruption to service hypervisor. With live migration technology, a virtual server can be moved from one physical server to another physical server with keep operating. This is expected to minimize downtime which perceived by the client within accessing the server.

In this research have implemented a virtual private server (vps) and the live migration process. The implementation results give the value of virtualization overhead on a virtual machine about 0.62782537 s and will increased with addition more virtual machines. For performance isolation, the virtual server will get the same part of the resource for all virtual servers from the source host. For the process of live migration virtual server gives downtime value about 2.82% of the total time migration process.

Keywords: virtualization, virtual private servers (vps), xen hypervisor, live migration