ABSTRACT

Using virtual network architectures is easier and more profitable than physical network architectures. One of the capabilities of virtual architecture is the CPU Pinning method. CPU Pinning is a hypervisor characteristic that allows a server to tether a virtual CPU to a physical CPU that allows an instance or virtual machine not to be interrupted by an instance and allows multiple Virtual Machines (VMs) or instances to not share memory and cores provided by physical hosts. In this study entitled Analysis of Performance of Virtual Machines on Openstack Technology on Tunning CPU Pinning, We want to see how far the performance or Tunning of Virtual Machine is improved by the CPU Pinning method.

After the measurement is done, there is an increase in TCP throughput with the value the largest is obtained from instances with Pinning in background stress all instances of distress with an increase of 57%. In UDP throughput there is an increase with the largest value obtained from instances with Pinning in the background stress all instances of distress with an increase of 10%. Based on jitter measurement results, there is a decrease with the lowest value obtained from instances with pinning in background stress without stress with decreases by 96%. In packet loss, there is a decrease in packet loss with the lowest value obtained from instances with pinning on background stress without stress with a decrease of 99%. CPU benchmarking, when travel time is up instance there is a decrease in benchmarking with the lowest value obtained from instances with pinning on background stress without stress with a decrease of 4%.

Kata Kunci: *Openstack*, *CPU Pinning*, *Cpu Affinity*, *Numa*,