

ABSTRACT

Rapidly evolving technology encourages the IT industry using information systems consisting of servers with complex architecture. Most of industry use one server to run one particular application, it makes too many servers that work with many application that must run. Virtualization engine is an technology that isolated duplicate of the original machine and can differ platforms from the original machine. Virtual machines can simulate the hardware even though no real hardware. With the virtual machine, IT industry can reduce cost, maximizing source, and make system make operation easier and more efficient.

Sun's Solaris 10 offering server virtualization called Sun Containers. Sun Solaris 10 is a UNIX based operating system produced by Sun Microsystem. Solaris 10 is a dedicated server operating system. Sun Containers is an implementation of the first virtual operating system level that are part of Solaris 10. Sun Containers are a combination of resources and control system has separation boundary called zone.

In this final study has been conducted several phases, first phase is installation Sun Solaris in Sunfire X2200 M2. The next stage is install Sun Containers and last stage is analyze the performance of sun containers on sun solaris 10 with a web application server as application to be tested and compared with the performance of real servers. Performance was assessed with the parameters CPU Utilization, Physical Memory Utilization, Response Time and Maximum User.

As Resultt is knowing the real server CPU Utilization and sun container reached at the same rate of 0.8 % in the current idle, while the sun container only requires the allocation of physical memory of 18 MB, whereas the performance in the application, web server response time in the real server and a web server in the sun container is reached at the same rate when given simulation reaches 6,000 requests response time figures obtained at 0.9 milisecond, and for maximum user declined by 4 users in the sun container, this is due to the influence of a shared interface that is configured with the host operating sytem. With the parameters measured can be concluded that the sun does not interdere with the sun containers system.

Key words: Virtualization, Sun Containers, Sun Solaris 10, Server, Cost, Source, Performance, System.