

Our current datacenter is costing us an excess of \$1.36 million in maintenance and power each year. With the current setup of 1,000 servers, the available space in our datacenter is limited while utilization rates are constant. With the use of a virtualization application, such as VMWare, we can decrease the real estate and power consumption needed for the servers.

VMWare is an application that centers on increasing resource utilization by implementing server consolidation. VMWare accomplishes this increase in utilization by creating a fully functional virtual machine that operates like a real server without the need for another physical machine. By allowing one physical machine to have multiple operating systems running at once, a server's resources can be used to its maximum potential. By using virtualization, we can greatly decrease the amount of physical servers required and increase the utilization of the servers that we have. By investing in VMware's virtualization software, we can decrease our server count by 80%. With a 10 to 1 consolidation rate, this would decrease 800 of our servers into 80 servers, resulting in only 280 servers.

With such an increase in productivity, not investing in virtualization would be unwise. With the 1,000 servers we are currently using, we have spent \$8 million to purchase the servers and spend \$2 million in maintenance and power each year. Although these new servers have higher initial purchasing and maintenance costs, we would still save millions due to the decrease in physical servers. By implementing virtualization we would decrease purchasing costs to \$1.28 million and yearly maintenance and power costs to \$240,000 for the new, higher end servers. Adding that to the 200 original servers, total costs would be \$3.52 million for the first year. This would be a dramatic decrease in costs and would cut costs by \$9.2 million in a three year period.

Work Cited

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