

Running Virtual Machines under the VMware vSphere software is more cost effective than a traditional computing model because it can reduce maintenance costs by \$2,480,000.00 in the first three years (Table C). vSphere is a piece of software that consolidates 10 physical servers onto a single virtual machine. By investing in this virtualization software our company will go from spending \$6,000,000 to \$3,500,00 over a three year period, therefore consolidating up to 80% of our servers.

vSphere allows multiple virtual servers to run on one physical machine, therefore utilizing the majority of a single computers processing. Although the computer is one physical device, it will be running multiple operating systems. If we consolidate our servers, 80% of our existing machines are capable. Therefore for every ten servers we have, it will be replaced by a single unit. Virtualized servers are also very easy to manage. Every server that is converted to a virtual one comes with management software tools that allow all maintenance to be done from a desk. This is a much less time consuming process than having to physically investigating the problem for each individual server.

With our current physical server setup, we pay maintenance costs of \$6,000,000 every three years (Table B). Over the next three years, if we switch to a virtual server our cost will only be \$3,520,000. We currently have 1,000 physical servers, which we can consolidate to 280 servers after virtualization. Therefore if we switch to virtual servers, after the one time installation cost of \$1,600,00 we can be saving \$2,480,000 over the next three years. Since we will be running more efficiently, our company will be cutting costs while utilizing our resources in more productive ways.

Sources

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Table A

	Current Server	Higher End Server
Cost	\$8,000	\$16,000
Maintenance (Per Year)	\$2,000	\$3,000
Total Servers Needed	1,000	100
Servers That Could Run Cloud	200	80
One Time Install Cost		\$1,600,000

Table B

Total Costs Over 3 Years

	Year 1	Year 2	Year 3	Total Costs
Current Server Costs	\$2,000,000.00	\$2,000,000.00	\$2,000,000.00	\$6,000,000.00
High End Server Costs	\$2,240,000.00	\$640,000.00	\$640,000.00	\$3,520,000.00

Table C

Total Savings Over 3 Years

	Over 3 Years
Current Server Costs	\$6,000,000.00
High End Server Costs	\$3,520,000.00
Total Savings Per Year	\$2,480,000.00