

Stephanie Cheng
Virtualization and Cloud Computing

Virtualizing our servers, we will be saving \$9.2 millions dollars within a three-year span. Utilizing virtualization, we can consolidate 80% of sever workload, creating a 10:1 ratio of physical server. We will lower the cost of hardware and software maintenance, technical support, power and cooling by virtualizing our servers on VMware.

Virtualizing is the formation of virtue machines under VMware. Virtual Machine on VMware servers shares the same processor, storage, and memory while it independently works on a computer. Virtual machines can be duplicated, replaced, or deleted at anytime because it runs of folders that are made. Virtual machines are more efficiently managed compared to actually replacing physical servers. We would consolidate 80% of physical hardware can be virtualized and we will consolidate 10:1 ratio of computers in our workspace. With the consolidation to our workspace, we will have 200 physical servers and 80 more virtual machines rather than 1000 physical servers.

The start of this hardware refresh cycle we would originally replace 1,000 physical servers that will cost 14 millions dollar. Virtualization 80% of our servers and consolidating 10 physical servers to 1 virtual machine will have a total cost of 4.8 million dollars. In total, savings of virtualization will be 9.2 millions dollar. The net benefit of virtualization over a three-years span will be 4.4 million dollars.

Work cited:

Ward, Keith. "Cloud Computing Infuses Gartner Top Technology Trends -- Virtualization Review." *Cloud Computing Infuses Gartner Top Technology Trends -- Virtualization Review*. Virtualization Review, 08 Oct. 2014. Web. 15 Feb. 2015.

Angeles, Sara. "Virtualization vs. Cloud Computing: What's the Difference?" *BusinessNewsDaily.com*. Business News Daily, 20 Jan. 2014. Web. 15 Feb. 2015.

"Server Consolidation." *Server Virtualization & Consolidation*. N.p., n.d. Web. 16 Feb. 2015.