

To: CIO
From: Vince Galasso
Re: Server Virtualization Investment

Currently, XYZ uses 1,000 physical servers in its center. XYZ can increase server utilization by hosting virtual machines on virtual servers and maintain some physical servers for mission critical applications. This will reduce the number of physical servers in XYZ's data center from 1,000 to 280. Furthermore, by investing in higher-end servers with VMware software, XYZ can realize net benefits of \$9.2 million over a three-year period.

Higher-end servers running VMware software will allow XYZ to consolidate the number of servers used to 280. This is because each virtual server will be capable of hosting 10 virtual machines. The virtual machine will act and run as if it was a physical server; however, it will exist only as a set of files on the (physical) host server. Therefore, XYZ will need only 80 high-end servers to accomplish the same goal as 800 traditional servers. Therefore, server efficiency and utilization will be increased.

By installing higher-end servers that can host virtual machines through VMware, XYZ will realize total net benefits over three years of \$9.2 million and an ROI of 192%. The project will cost \$4.8 million over three years which consists of higher-end server purchase and maintenance costs as well as traditional server purchase and maintenance costs. However, the project will yield \$14 million in gross savings over three years which represents the forgone costs of the traditional data center setup (see Figure 1).

Figure -1

	Year 1	Year 2	Year 3
Status Quo:			
Current Server Purchase Cost	8,000,000	-	-
Current Server Annual Maintenance	2,000,000	2,000,000	2,000,000
Total Costs Annual	10,000,000	2,000,000	2,000,000
Total 3 Year Benefit of New Proposal			14,000,000
Investment Proposal:			
Virtual Server Purchase Cost	1,280,000		
Virtual Server Maintenance	240,000	240,000	240,000
Reg Server Purchase Cost	1,600,000		
Reg Server Maintenance Cost	400,000	400,000	400,000
Total Annual Costs	3,520,000	640,000	640,000
Total 3 Year Costs			4,800,000
Annual Savings	6,480,000	1,360,000	1,360,000
Total Net 3 Year Benefits			9,200,000
ROI			1.92

Works Cited

Dawson, Phillip. "Hype Cycle for Virtualization 2014". Gartner. 23 July 2014

Rouse, Margaret. "Virtual Machine". TechTarget. October 2014.

VMware. "VMware Basics". VMware.com, nd. Web. 10 February 2015.