Han Le

Our company will generate $9.2 million in savings by consolidating 80% of our physical servers at this new hardware refresh cycle. Virtualization platform VMware will allow ten current servers to run on only one virtual machine server, which substantially reduces our server acquisition and maintenance costs.

By consolidating servers using VMware, 80% of our servers could run as virtual machines using VMware and we can consolidate ten physical servers onto a single virtual machine server. Traditionally, our current servers are only utilized at 5% to 10% of their total computing capacity (Rouse, n.d). VMware is a widely installed operating system that allows different systems to run on the same server (Rouse, n.d). By adding a virtualization platform VMware to the server, the server’s hardware can increase “the total utilization of the physical server from 50% to 80% of its total computing capacity.” (Bigelow, n.d). This will reduce the number of servers we need from 1000 to 280, eliminating unnecessary 720 servers.

By reducing the number of servers, in three years, we will eliminate the acquisition cost of 1000 new traditional servers of $8 million and the maintenance cost, which sum up to $14 million. We will only need to invest $2,880,000 in purchasing new servers and spend $1,920,000 maintaining them over the next three years. Therefore, our net benefits will be $9.2 million in savings.

Reference

Rouse, M. (n.d.). VMware. Retrieved from http://searchvmware.techtarget.com/definition/VMware

Bigelow, S. (n.d.). How server consolidation can benefit your data center. Retrieved from <http://searchservervirtualization.techtarget.com/tip/How-server-consolidation-can-benefit-your-data-center>

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Total |
| Costs |  |  |  |  |
| Purchasing 80 VM servers | 1280000 | 0 | 0 | 1280000 |
| Purchasing 200 traditional servers | 1600000 | 0 | 0 | 1600000 |
| Maintaining 80 VM servers | 240000 | 240000 | 240000 | 720000 |
| Maintaining 200 traditional servers | 400000 | 400000 | 400000 | 1200000 |
| Total costs |  |  |  | 4800000 |
|  |  |  |  |  |
| Benefits |  |  |  |  |
| Eliminate 1000 traditional servers | 8000000 | 0 | 0 | 8000000 |
| Eliminate maintanence costs for 1000 traditional servers | 2000000 | 2000000 | 2000000 | 6000000 |
| Total benefits |  |  |  | 14000000 |
|  |  |  |  |  |
| Net benefits |  |  |  | 9200000 |