Simerjot Sidhu

 We can save our company $9.2 million if we switch 80% of ours servers to use Virtualization. Virtualization software solves the problem by enabling several operating systems and applications to run on one physical server. We will be saving money using VMware which will run 10 servers in one virtual machine.

 Virtualization technology main feature is server consolidation. Through this main feature, we can severally decrease the number of servers we use. This means that there will be lower capital and operating costs due to the less power consumption. It will also increase the “efficiency of server resources”. Its integrated availability and fault tolerance will automatically restart the failed VMs which will prevent costly downtime and data loss. It includes a redundant servers on multiple machines incase if any unplanned interruptions do occur.

With 1000 servers we would be spending $10 million in year one to buy the new servers and $2 million in years 2 and 3 to maintain them, making a total cost of $14 million. If we use virtualization, we would have 10 servers in each VMware application for 80% of our physical servers, making the server count a total of 280. We will spend $3,520,000 in year one to purchase and $640,000 in years 2 and 3 to maintain. We would save $6,480,000 in year one and $1,360,000 in years 2 and 3. Making the total net savings $9.2 million.

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Costs of 1000 servers | Costs of 80% Vmware and 200 servers | Savings |
| 1 | 10,000,000 | 3,520,000 | 6,480,000 |
| 2 | 2,000,000 | 640,000 | 1,360,000 |
| 3 | 2,000,000 | 640,000 | 1,360,000 |
| total | 14,000,000 | 4,800,000 | 9,200,000 |

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