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Servers and Storage Technologies

Resources are not efficiently managed within organizations, which lead, to rising costs, we should invest in grid computing to exploit under utilized resources. Grid computing will save 93 percent in upfront hardware costs compared to HPC solutions. Grid computing combines resources while educing costs and maximizing utilization by delivering resources only when they are needed. It provides a way to increase capacity or add capabilities without investing in new infrastructure, training new personnel, or licensing new software. Operational expenses of grid computing deployment are 73 percent less than HPC solutions. Using public cloud computers often takes resources available over the Internet from an off-site third-party provider, which divides up resources among its customers. Grid computing allows resources to be shared with every other computer in the system. Processing power, memory and data storage are all community resources. Grid computing without using public computers is proven to utilize resources efficiently.

On a basic level, grid computing shares resources with every other computer in the network including processing power, memory and data storage (howthingswork). Grid computing can run an existing application on a different machine and if a machine, and if a machine that is running an application is busy due to a peak in activity, the application could be run on an idle machine, sharing resources on the network through the grid (Grid café). Grid computing provides a framework for exploiting these under utilized resources and has the possibility of substantially increasing the efficiency of resource usage. Grid computing can be used to aggregate this unused storage into a much larger virtual data store, possibly configured to achieve improved performance and reliability over that of any single machine. Another benefit of a grid is to better balance resource utilization. Grid implementations can migrate partially completed jobs to other machines in the network. A grid can provide a consistent way to balance resources throughout an organization (Jacob, Brown, Fukui, and Trivedi 8).

Grid computing has proved to be better than public cloud computing in many ways by utilizing resources efficiently. Grid computing shares resources with every other computer in the network including processing power, memory, and data storage. With grid computing there is no need to invest in new infrastructure, training new personnel, or licensing new software. Grid computing will save 93 percent in upfront hardware costs compared to traditional high performance computing solutions. Operational expenses of grid computing deployment are 73 percent less than HPC solutions. Grid computing is an optimal choice for enterprises that want to efficiently utilize resources over that of public cloud and high performance computing.

Work Cited

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