Good case study about mod3case capacity planning and performance modeling

Business, Company

Mod3Case Capacity Planning and Performance Modeling.

Capacity evaluation is essentially an all-inclusive investigation into a given utility to determine the capacity of the evaluated to function in any required circumstances. A company needs computer capacity evaluation when its computing power has been transferred to cloud-based systems so as to help the company management understand what is needed of them, it involves determining the needs of the company, both current and future. As part of moving to a cloud-based computing environment, the company uses evaluation, planning processes and tools so as to improve speed to system deployment, achieve cost reductions and improve systems availability. These tools and processes give system administrators the information they need to plan for future computing needs and manage their environment. One of the promises of cloud-based systems is the limited use of hardware resources. It will, in turn, lead to the reductions in software licenses, hardware, maintenance and energy. For this reason, it is paramount to undertake identification of the minimum amount of cloud infrastructures that will be needed in order to counter the rising needs of the users and customers. With a few computing resources, requests from will have to wait till there are computing resources to process these requests. If it is not the case, the requests will not be served until there are more computing power for processing. With many computing resources, hardware costs and other expenses lowers the cost reduction promises of cloud computing. The aim of measuring storage system performance capability is to know the throughput of a single computer. Throughput measures the average number of megabytes that are transferred within a given period of a file specific size.

Measuring the ability of storage system handling many small packets of data requests needs more advanced benchmark, which is the IOPS (Woodford 2014).

When a company moves its computing power to the cloud, it will experience some benefits of cloud computing which include lower costs, more flexibility, greater scalability, increased security, disaster recovery and ease of use. Cloud based systems help the company to scale up or down its operations, and the storage needs quickly to suit its situations, allowing flexibility when the company's needs change. The cloud allows large companies not only provide the necessary computing power to sift through a lot of unstructured data but also store companies data in the cloud. It will give the company the intelligence needed to move its operations forward and achieve its goals (Myerson 2011).

Cloud based systems give the company collaboration efficiency; collaboration in a cloud environment gives the company the ability to share and communicate more easily outside the traditional methods. If the company is working on a project on different locations, it can use cloud computing to give contractors, employees and third parties access to same files.

After the implementation, the company can focus on enhancing core operations. Since automation has been built into cloud computing, IT technicians will have less work in troubleshooting and maintenance of computer systems, therefore the company will have enough resources and budgets to use in other operations that are important to the company. All companies rely on IT, and therefore infrastructure management should be

streamlined and made easy as possible, this kind of flexibility and efficiency comes with cloud computing. Cloud computing is scalable for large companies and affordable for small companies, providers of cloud services offer an infinite amount of resources needed by any company. As a result of reduced cost and time, company's efforts can be focused on other areas hence becoming efficient in its operations. (Williams 2011).

References

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