

Simulator

The CloudSim simulation layer provides support for modeling and simulation of virtualized Cloud-based data center environments including dedicated management interfaces for VMs, memory, storage, and bandwidth. The fundamental issues, such as provisioning of hosts to VMs, managing application execution, and monitoring dynamic system state, are handled by this layer.

NetBeans

NetBeans IDE is a free, open source, popular (with approximately 1 million downloads), integrated development environment used by many developers. Out of the box, it provides built-in support for developing in Java, C, C++, XML, and HTML.

4. Results and Discussion

Proposed system is tested more than 1000 times. Proposed system shows very good results for online requesting system. In the result the percentage of successful requests by the user increases to 80-90% because of the migration of data from one virtual machine to other, in case of any failure of request due to virtual machine failure.

4.3.1 Average Waiting Time Graph

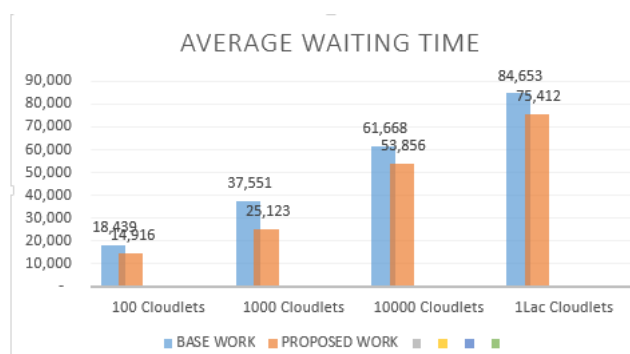


Figure 4.3.1: Average Waiting Time

4.3.2 Average Cost Graph

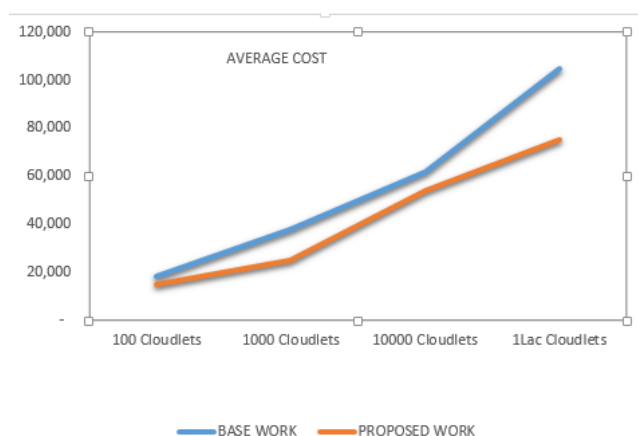


Figure 4.3.2: Average Cost

4.3.3 Total Execution Time Graph

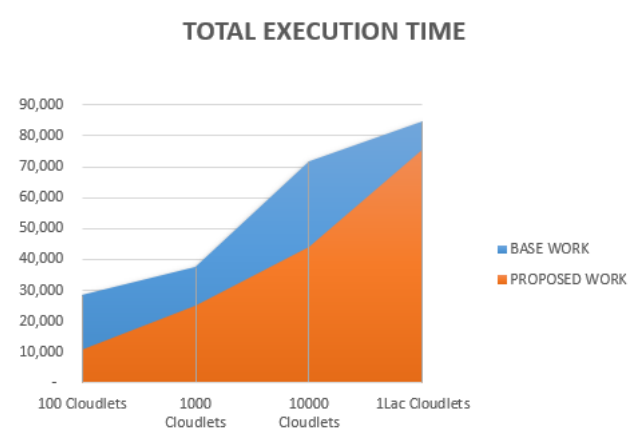


Figure 4.3.3: Total Execution Time

5. Conclusion

The research work is increasing the chances of success of a request made by user to cloud. We enhanced the online billing system using cloud. We are increasing the success rate of requests sent by the users to cloud in the billing system. We are using the phenomenon of migration of virtual machines to improve the online billing system. Multiple virtual machines are used at the cloud side, in case of failure of one machine the data is migrating to the other machine. When data migrates from one virtual machine to other due to any failure at first machine, chances of failure of requests sent reduces. So using of phenomenon of migration of data from one vm to other is very useful to increases the success rate of the requests send to cloud.

6. Future Scope

- In the present work we are improving the efficiency of billing system by multiple virtual machines. In case of failure of one vm is migrating to the other, which increases the success rate of the requests sent to the cloud.
- Still there is some hope of improvement. In future, in case of failure of all the virtual machines present in a host, the request will be failed so to reduce this failure we can use migration of data from of one host to the other host.

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