

Kanatom Jindarak 2012: Development of Technique and Algorithm for Efficient Resource Management of Cloud Storage System. Master of Engineering (Computer Engineering), Major Field: Computer Engineering, Department of Computer Engineering. Thesis Advisor: Assistant Professor Putchong Uthayopas, Ph.D. 38 pages.

This thesis focuses on the development of techniques for an efficient resource management of the cloud storage systems. The goal is to provide a better service under limited system resources. This research focus on the use of effective workload balancing and a dynamic replication strategy. This will help balance the demand of object that is accessed heavily during a short period of time.

The genetic algorithm approach is employed to help balance the workload, the result is satisfactory. From the evaluation using simulation, the proposed method gives good results. Anyway, as the workload increased, the access can cause some server to be overloaded. The use of additional dynamic replication can be useful in enhancing the system performance.

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Student's signature

Thesis Advisor's signature

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