OPTIMIZATION OF LOAD BALANCING CLUSTER IN HOMOGENEOUS ENVIRONMENT

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ABSTRACT

Load balancing cluster is a collection of computers that work together and capable of transferring workload from an overloaded unit to other computers in the cluster. There are many ways to implement the cluster. This project focusing on how to optimize the performance of cluster based on the hardware, connection type of the cluster and the operating system used. It will be tested using sample coding such as distkeygen, eatmem and timewaster to test the performance. The cluster system is built using two computers that have different architecture. This project not only determines the functionality of the cluster, but also determines the suitable coding to run on the cluster system. The findings of this study is proved that more RAM on the node gives more power to single node and consequently to the cluster which is RAM 504MB gives more power compare to RAM 256MB, the best connection to the cluster is P2P topology which is two computers directly connected with cross cable compare to the connection using switch and the last finding is the homogeneous environment gives better performance compare to heterogeneous cluster.

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