

POLVM: PARALLEL OPTIMIZED LIVE VM MIGRATION

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ABSTRACT

Live VM migration is a very dominant tool for cluster administrators, allowing parting of hardware and software considerations, consolidating clustered hardware into a single coherent management domain and facilitates fault management, load balancing. Live Migration is a planned scenario. In live migration move a running virtual machine from one host to another host with no perceived downtime for the VM. During migration there maintain TCP connections of the guest OS. VM is not aware of the migration and is considered as black box. Current system is based on future load prediction mechanism. VM resource allocation and optimized migration is done on this factor. During this VM migration, there is no suitable criteria for unique identification and location of VM that means which VM is migrated and where to be migrated. POLVM is based on a Cloud Booster Algorithm. In this system VM resource allocation mechanism carried out through by considering both Node weights and future prediction. To produce a better approach for solving the problem of VM resource migration in a cloud computing environment, this paper demonstrates Adaptive Genetic Algorithm based on VM resource migration strategy to accomplish system load balancing.

KEYWORDS: Cloud Computing, Optimized Migration, Adaptive Genetic Algorithm, Cloud Booster Algorithm, Virtual Machine