A multi-level scheduling for resource provisioning mechanism in cloud systems

ABSTRACT

Cloud computing has emerged as one of the paradigm in supplying compute resources to the users. It is capable to support heterogeneous applications demands and requirements for its job processing. Hence, agility of demands for job processing from the clients often affects the resource states, resulting to over or under provision resources state. This will impact the cloud provider's performance in executing the required jobs within the shortest amount of time. In this paper, we address the over and under provision of resources to execute the heterogeneous jobs within shortest time possible. We proposed a multi-level scheduling for provisioning mechanism by incorporating job ranking mechanism and best match resource allocation. Our simulation results show that our mechanism achieves better execution time compared to other scheduling mechanisms.

Keyword: Provisioning mechanism; Scheduling; Allocation; Multi-level scheduling