Abstract

Cloud computing presents an architecture that delivers computing services via the internet on demand and payed per use of a pool of resources that are shared, such as networks, storage, servers, services and applications, without having to acquire them. Cloud computing reduces managing cost and time for organizations. Many industries, such as banking, healthcare and education are shifting to the cloud, due to the effectiveness of services delivered by the pay-per-use concept depending on the resources, such as processing power utilized, transactions performed, bandwidth consumed, data transmitted, or storage space occupied etc. Cloud computing is considered as a technology that relies completely on the internet, where client data is saved and kept in the data center of a cloud supplier. The goal of this paper is to implement and evaluate different allocation, scheduling and ranking techniques, where, different methods for the allocation, scheduling and ranking of workflow tasks are proposed, implemented and evaluated. Simulation was performed on these techniques, and the results were analyzed to find the best technique in terms of efficiency and performance in reducing completion time and cost.
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Index Terms

Computer Science

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Keywords

Cloud Computing, Cloud Architecture, Cloud Platform, Tasks Scheduling, Tasks Ranking.