Abstract

Cloud computing is a new model of service provisioning in distributed systems. It encourages researchers to investigate its benefits and drawbacks on executing scientific applications such as workflows. One of the most challenging problems in workflow scheduling in cloud environment is its quality of service, which minimizes the cost of computation of workflows. In this paper, we use the Predicted Earliest finish time (PEFT) for initial seeding to Ant Colony optimization technique (ACO). As we know ACO is a very powerful technique appropriate for optimization. The increasing complexity of the workflow applications is forcing researchers to explore hybrid approaches to solve the workflow scheduling problem. In this paper we proposed PEFT with ACO algorithm which reduces the initialization complexity and converge ACO algorithm.

References

1. Q. Zhang, L. Cheng and R. Boutaba, "Cloud computing: state-of-the-art and
Deadline Constrained Workflow Scheduling Optimization by Initial Seeding with ANT Colony Optimization


Index Terms

Computer Science

Algorithms

Keywords

PEFT, Workflow, QOS, Cost