Implementing Enhanced ICPCP Algorithm with Task Replication in Public Cloud

Abstract

Cloud Computing has Large Scale Distributed Infrastructure which is accessible and scalable infrastructure. Cloud computing provides a pay as you go model in which the user has to pay for the services he uses. One of the characteristic of cloud is elasticity in which resources can be dynamically increases or decreases as per user requirement. The goal of this project is to execute the scientific workflows in public cloud within user define deadline and smallest possible cost. The deadline of the project can be meeting by provisioning more virtual machines that required. The algorithm Enhanced ICPCP uses the concept partial critical path which is defined in the ICPCP. The simulation result shows the algorithm reduces the execution time of different scientific workflows simulated using the cloudsim.

References

1787-1796, July 2014.
8. The XML files that describe the workflow applications are available via the Pegasus project: https://confluence.pegasus.isi.edu/display/pegasus/WorkflowGenerator.

Index Terms
Computer Science Information Sciences

Keywords