

Program: BCAN11151

Section: BCA-13

Course Name and Code: Computer Application Lab-BCAN11151

Assignment 3: Creating a table of contents and incorporating footnotes in a research paper.

Table Of Contents

Introduction	1
Related Words.....	1
Numerical result and discussion	2
Word flow scheduling	2
Particle scheduling	2
Time-slot based re-scrambling process.....	2
Conclusion.....	2

Introduction

In distributed computing, there is an accelerating technology called cloud computing. Many applications cloud computing uses, like data analytics, data storage, and the Internet of Things [1]. An individual enterprise deploys the services which are changed with cloud computing through conventional methods. Various types of services are provided by cloud computing to the users who are registered as web services. It make the users does not invest in the infrastructure of CC. SaaS, PaaS, and IaaS are the services in CC [2].

Related Words

Shen et al. [16] propose a heuristic-based Particle Swarm (PSO) method for scheduling cloud service workloads considering both computation and data transmission costs. By altering the cost of computing and connectivity, the study experimented with both the implementation of a procedure. When adopting PSO, the study compares cost reductions to the present "Best Resource Selection" (BRS) method.

Numerical result and discussion

The simulation is done in MATLAB 2020a environment, and various workflows scheduling process is considered for evaluating the proposed MC-PSO model. Also, various deadlines are considered for computing the ability of MC-PSO to fulfil one of the multi-objective constraints (deadline). The least execution time ζ specifies the workflow time (task) scheduled with the same VM instances and VM type. The execution time δ is evaluated based on the separate task scheduling.

Word flow scheduling

The proposed model includes particles population, and every particle gives the probable solution to resolve these issues. Here, N specifies the population size with the particles over the population. The fitness function provides the finest solution search by evaluating the particle quality. Every particle is composed of velocity and position. The particle velocity at iteration is specifies the best prior position with superior fitness.

Particle scheduling

The primary concept with MC-PSO is to handle the particle scrambling process. However, VM instances are infinite where the service providers offer a finite amount of VM. However, task prioritization demonstrates task scheduling by scrambling the instances. The task scheduling sequence is acquired by sorting the task priorities in lower to higher order (ascending).

Time-slot based re-scrambling process

The time-slot-based re-scrambling process is anticipated to re-scramble the particle towards the scheduling process. The process uses the available (idle) time slot for leasing the VM to enhance resource utilization and reduce the workflow execution cost. To preserve the data transfer time, some successive instances are provided tot, which is chosen first from X and recorded to H .

Conclusion

This research concentrates on providing a novel variant of PSO for scheduling process by considering three factors like selecting suitable VM for every task provisioning task scheduling sequentially, and idle time slot utilization. The proposed MC-PSO intends to resolve the issue as the particles specify the VM mapping essential for sequential task scheduling. Idle time-slot- based scheduling rules are anticipated to re-scramble the particles for scheduling.

Declaration:

Ethics Approval and Consent to Participate:

No participation of humans takes place in this implementation process

Human and Animal Rights:

No violation of Human and Animal Rights is involved Funding: No funding is involved in this work.

Conflict of Interest: Conflict of Interest is not applicable in this work.

Data Availability:

International Journal of Intelligent Systems and Applications in Engineering IJISAE, 2024, 12(7s), 426–440 | 3

Data available on request from the authors Acknowledgment:

No acknowledge

References

[1] Xu, K., Zhang, Y., Shi, X., Wang, H., Wang, Y., Shen, M.: Online combinatorial double auction for mobile cloud computing markets. In: 2014 IEEE 33rd International Performance Computing and Communications Conference (IPCCC), pp.1–8. IEEE (2014)