Effective Utilization Of CPU

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Abstract - *As there is a large amount of data present for data sharing fields like marketing, sales, Banks customer support, e-commerce such database having a size in GB and TB need fast processor. Serial approach can consume time and reduce performance. To solve this issue's the proposed model of parallel system to reduce time, increase performances and fast processing. For fast processing multicore processor are used. For finding useful knowledge an algorithm is required . Byte rotational algorithm is fast Cryptosystem approach Which complex to hackers In the Byte Rotation Algorithm involve two techniques. One is key generation technique is used. And second is data processing .We plan to implement cryptosystem in single threaded approach as well as multi-threading technique.*

1.INTRODUCTION

For proposing an online resource management frame-work that maximizes profit ratio while minimizing energy expenses by exploiting the distributed task elasticity and price heterogeneity. This is done by reducing the duration during which servers need to be left ON and maximizing the monetary revenues when the charging cost for some of the inelastic tasks depends on how fast these tasks complete, while meeting all resource requirements. The power supply and the core speed are increased when there are more tasks in server, such that tasks can be processed faster and the average task response time is reduced. It is possible to design a multicore server processor with workload dependent dynamic power management, such that its average task response time is shorter than a multicore server processor of constant speed (i.e., without workload dependent dynamic power management). Byte Rotational Algorithm(BRA) provides more security and takes smallest amount of time for transfer file . This algorithm can apply on different types of files like text, image, audio, video files.

Comparative studies conducted using UCI repository data traces show the effectiveness of our proposed framework in terms of improving resource utilization, reducing energy expenses, and increasing profits ratio by calculating memory and bandwidth with increasing speed. The process elasticity is exploited on heterogeneous environment in a distributed system. Elasticity is the degree to which a system is able to adapt to workload changes by provisioning and de-provisioning resources in an autonomic manner, such that at each point in time the available resources match the current demand as closely as possible. Various approaches are considered like serial, parallel and hybrid approaches. Accordingly, profit ratio is calculated. Process mining is taken as a task to calculate the profit ratio. Resources that are considered are CPU, Bandwidth, Time and Temperature and Memory. Tools used to calculate the profit ratio of CPU, Bandwidth, Time and Temperature and Memory is CPU-Z and HW-Monitor. The tasks involved are independent on each other. Profit ratio is calculated of factors i.se CPU, Bandwidth, Memory, Time and Temperature of systems with different processors.

1.1Problem Statement

It exploits the process elasticity on heterogeneous environment proposed by the resource management framework that maximizes profit while calculating Memory, Time, Temperature and Bandwidth by taking process mining as task.

1.2Goals and objectives

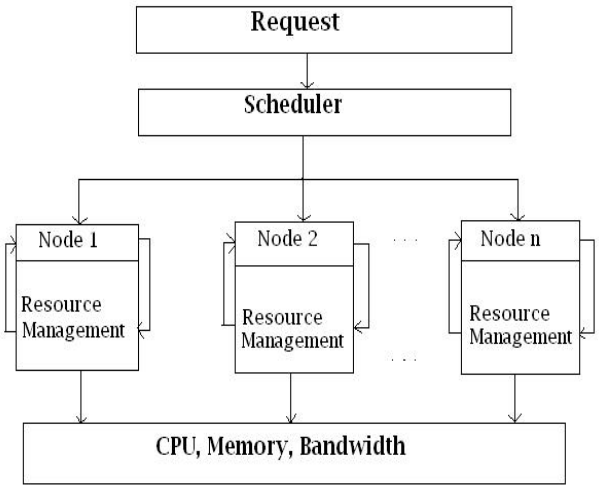
Goals:

1) Reducing time of the given work.
2) Tasks independency with multiple resources.
3) Reduction of the energy consumption.

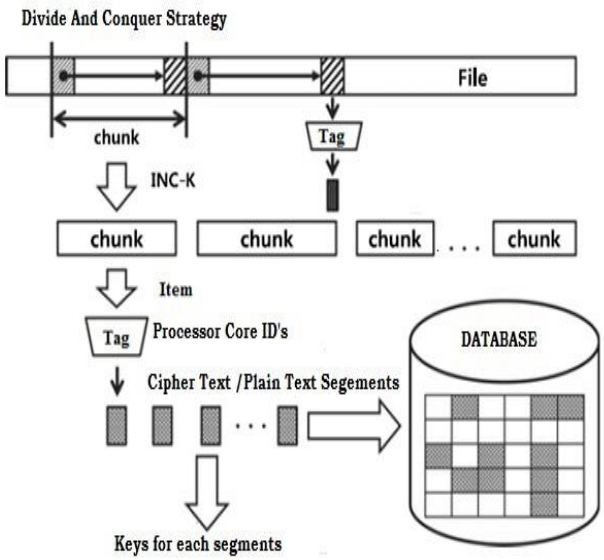
Objectives:

1) Calculating memory and bandwidth.
2) Increasing the speed of the processor.
3)Maximizing the profit ratio with multiple resources.

1.3 Architectural model:



Task Scheduler Modular Approach



Architecture diagram

3. CONCLUSIONS

A proft-driven online resource allocation framework for elastic task requests is proposed. The framework exploits the elasticity and the varying charging costs among the submitted requests and decides where to place the heterogeneous submitted task requests, and how much resources should be allocated to the elastic ones such that the cloud profits are maximized while meeting all tasks demand. The various algorithms like chunking algorithm, byte rotational algorithm and TTTD algorithms are discussed. TTTD algorithm, not only successfully achieves the significant improvements in running time and average chunk-size, but also obtains the better controls on the variations of chunk-size by reducing the large-sized chunks. Byte rotational algorithm is fast encryption algorithm. Byte Rotational Algorithm is complex to hackers but it's a strong algorithm in case of security.

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