

## **Resource renting for periodical cloud workflow applications**

### **ABSTRACT**

Cloud computing is a novel market-oriented distributed computing model enabling convenient access to a pool of sharable computing resources (e.g., networks, servers, storage) potentially distributed and in a seamless and straightforward way. In the Cloud, resources are owned by Cloud Service Providers (CSP) and are encapsulated as services. Basically, users do not need to own a resource which effectively spares them from expensive purchases and no less expensive run and maintenance costs. By renting resources from service providers for their requirements, users need to pay whenever they make use of the cloud computing services. In other words, cloud computing makes it convenient for users to access resources from anywhere and anytime with significant enhanced convenience and greatly reduced costs.

### **EXISTING SYSTEM**

In Existing System, there are two resource renting alternatives provided by CSPs: on-demand and reserved. The on-demand choice allows users to pay for computing capacity by the hour with short term commitments which are suitable for real time applications. This liberates users from the costs and complexities of hardware planning, purchase and maintenance. Large fixed costs can be transformed into much smaller variable costs. The reserved option is a long-term strategy which enables users to make a low, onetime payment for each resource they need and keep the rented resources for a relatively long time. Due to the nature of the considered periodical workflow applications, it is natural to adopt the reserved alternative as it is more cost effective to run in the long term. Renting the appropriate resources in different intervals of a time horizon is critical for minimizing the total resource renting cost of cloud computing resources.

### **DIS ADVANTAGES**

- All tasks are executed with the longest duration mode.
- Decrease in the number of resource types or modes.

## PROPOSED SYSTEM

In Proposed System, the periodical workflow applications scheduling problem with total renting cost minimization is considered. The novelty of this work relies precisely on this objective function, which is more realistic in practice than the more commonly considered make span minimization. An integer programming model is constructed for the problem under study. A Precedence Tree based Heuristic (PTH) is developed which considers three types of initial schedule construction methods. Based on the initial schedule, two improvement procedures are presented.

## ADVANTAGES

- It minimizes the total renting cost.
- Minimized the amount of resources for each time partition.

## SYSTEM REQUIREMENTS

### H/W System Configuration:-

Processor	-	Pentium –III
RAM	-	256 MB (min)
Hard Disk	-	20 GB
Key Board	-	Standard Windows Keyboard
Mouse	-	Two or Three Button Mouse
Monitor	-	SVGA

### S/W System Configuration:-

Operating System	:	Windows95/98/2000/XP
Application Server	:	Tomcat5.0/6.X
Front End	:	HTML, Jsp

Scripts : JavaScript.  
Server side Script : Java Server Pages.  
Database : MySQL 5.0  
Database Connectivity : JDBC