

A Revenue Maximization Scheme in Cloud Storage

Priyanka Mishra and A.M.J. Muthukumaran

ABSTRACT

As an effective and efficient part way to providing combined source computing resources and services to customers on demand. From cloud services they act as an providers as part of the profit and it is mainly configured of a cloud service platform under service demand. A single long source term renting scheme is usually adopt to configure a single platform and source of a double resource tariff are designed. This scheme can assure the consequences of of all services provided by it and increases the resource optimization part for it. The average charge of an assumed ratio of requests that need temporary servers as part of a profit maximization problem is formulated for the double renting scheme, and the optimized configuration of a cloud platform is obtained. The results show that, our scheme doesn't only provide the quality of services and it's also providing more profit based service request.

Keywords: Virtual Machine (VM), Service Level Agreement (SLA), optimal cloud resource provisioning (OCRP), double quality guaranteed renting scheme (DQG)

1. INTRODUCTION

It is an effective and efficient way to consolidate computing process in resources and computing services providing in clouding that has attractive. Cloud centralizes management of resources and delivers hosted services on the Internet.

The databases are provided with information and all resources are concentrated in provided to consumers' process. In a cloud computing the infrastructure providers are services providers. An Infrastructures are hardware and software facilities of resources from customer submit its requests. In this paper we are enhanced at researching the multiserver configuration of a service provider where it's get initiated.

Each multiserver system of an application is to execute a special type of service requests and applicable for the systematic purpose. Hence, for therenting cost of systematic is proportional to the number of servers in a multiserver system application. The power consumption of amultiprocessor system is linearly proportional to the number of servers and the server utilization of speed execution system.

To summarize a profit of a service provider is determined by the configuration of an application. However, the waiting time of the service to satisfy requirements and the waiting time of each incoming service request is limited within a certain range which is determined by a service level agreement (SLA) process. Our contributions in research paper can be presented as follows.

A novel presented renting scheme is proposed for service providers as it combines long term renting with applicable which can not only satisfy the quality of service requirements under the workload but also reduce the resource process.

A multiserver system adopted in our paper is modeled as a queuing model for indicators are analyzed such as the average service charge the ratio of requests. The optimal configuration problem of service providers for profit, where the actual solutions are obtained in multiserver.

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2. RELATED RESEARCH

In this process, we review as for recent work relevant to the profit of cloud service provided by it. The benefit of service providers is related to many factors such as the price of the market demand the system configuration in the customer satisfaction are proceed by it.

Service providers wish to set a higher profit margin as the customer satisfaction which leads to a risk of discouraging products demand Static pricing means that the price of a service request is fixed and known in advance as proceeding by it

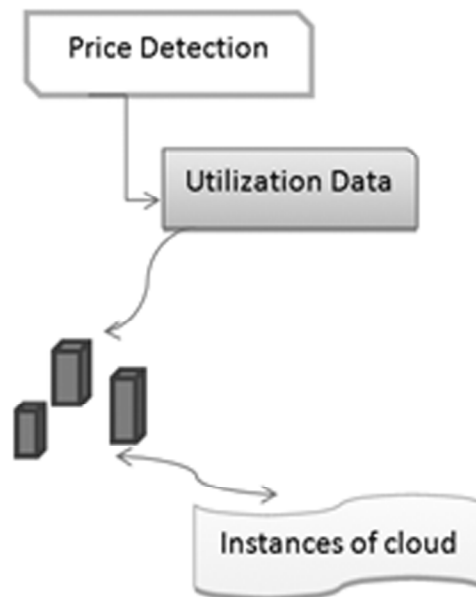


Figure1: Related work of configuration

3. CLOUD INFRASTRUCTURE MODEL

It is a set of services provided in the form of virtual machine (VM). Infrastructure provides kinds of resource like; renting schemes provides a procedure form.

A customer submits a service request to a service where it is sent by it sends it to the provider which delivers and deals with demand.

The customer receives the desired result from service level as it provides information and pay for the service based amount and the service quality provided by it.

Service providers require an infrastructure for renting their physical condition and charge customers for processing their service requests in which generates cost and revenue for the purpose of it.

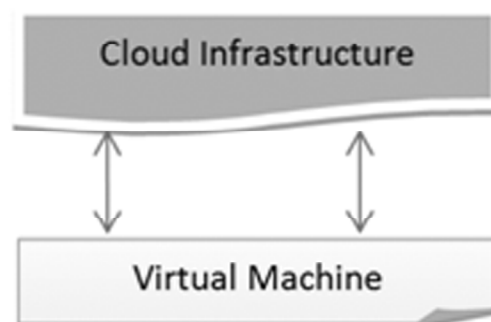


Figure 2: Cloud Infrastructure Model

3.1. Multiprocessor Provisioning Model

Cloud computing platform such as private clouds proceeds by the resources for jobs in the form of virtual machine (VM).

Computing is scheduled by the job scheduler and assigned in a centralized way. Computing provides a job queueing mechanism such as scheduling policy, priority scheme like resource monitoring, resource management for queue process.

The reasonable for evaluating cloud service platform as a multiserver model with a service request queue for adopted in the system.

4. KNOWLEDGE BASE

The factor affecting the profit of service providers based on customer satisfaction, which is determined by the quality of service (QoS).

Cloud computing improves the customer satisfaction level with the help of Service Level Agreement (SLA) for that it adopts the mechanism for the customers with service quality.

If a service request is proceeding before its deadline where service request served with quality service are normally charged for its acquisition.

5. REVENUE COST MODEL

The pricing strategy for the SLA is adopted as cloud computing services provided by required a negotiation for the service providers where the service quality and the price is distributing among limited servers.

However, quality of service requirements for the waiting time of each service request should be limited to a certain range. The only difference is that its performance is based on required process and availability determined by it. The cost of resource type of rental cost is considered as the major part of a service provider.

The resources can be the rental price of short term renting. We assume that the rental price of one server of an unit by the cost of energy consumption is determined by the electricity.

6. LIMITATIONS

The renting scheme is to configure a cloud platform for the service quality. The challenges occurred when trying to define a cloud-caching service. To define a simplified model for the price demand is dependency to achieve a feasible solution for a representative.

A scheme is in demand for services that has deterministic fluctuations. Static results in an unpredictable manner that is the unruly behaviour of profit.

7. MERITS

An efficient solution is occurred by pricing problem based on non-linear process.

A correlation measure for cache structures that is suitable for the cloud cache pricing scheme and a method for its efficient computation. An experimental study which shows that the dynamic pricing scheme out-performs, any static one by achieving two orders of magnitude more profit per time unit.

8. ALGORITHM: OPTIMAL CLOUD RESOURCE PROVISIONING (OCR P)

The OCRP algorithm is used for the provision in computing resources being used in the demand where the uncertainty occurs. OCRP algorithm is sample based decomposition where Numerical studies are

performed with Cloud consumer that can be used to minimize cost by provisioning in cloud computing environments.

To minimize the gathered solution for Optimal by formulating and programming with OCRP that yields with the Resource provisioning algorithms based on stochastic programming results on robust optimization. The algorithms can be applied in real world for provisioning cost for more benefits.

9. CLOUD STORAGE

Cloud Storage that allows you proceed with files in storage then access those files with Cloud. When the files have stored in hard drive, a USB Flash drive or another type of drive as local data drives can be damaged.

This allows the drives to be secured in a data centre and backed up automatically as the network storage required fast local networks. The second part of Cloud Storage as the Cloud represents service available over the internet.

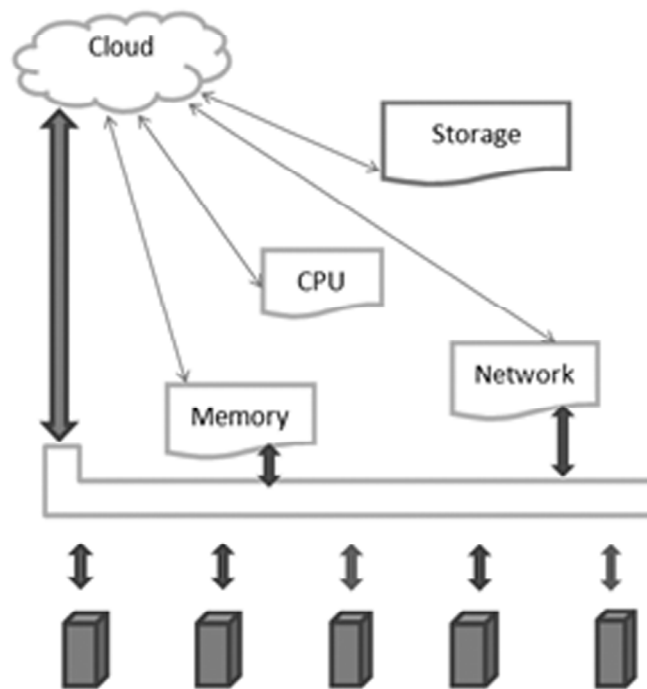


Figure 3: Cloud Storage

When networks are connected to one another as cloud represents a network provides connectivity in its own way where external network of the Internet has always been drawn as a cloud.

9.1. Security issues in Cloud Storage

Even though there are many cloud based solution as the cloud computing is about the security risks occurred by it. The applications and data being control of management and prone to vulnerabilities.

The application and data in shared infrastructures is hosted according to increase such as privacy, identity management, authentication, compliance, confidentiality and integrity and physical security.

10. COMPARISON OF PERFORMANCE

Using our resource renting scheme the temporary servers of a structured model that are rented for requests where the waiting time is equal to all requests that are served with high service quality.

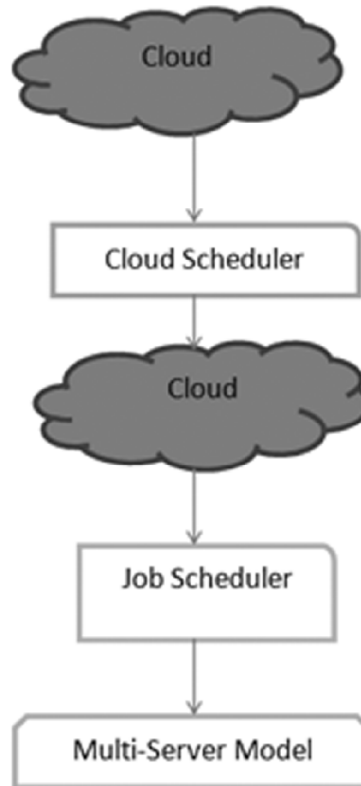


Figure 4: Security Issues in Cloud.

Hence the scheme is superior to the traditional resource for renting scheme in terms of service quality for the compared scheme under the proposed manner. In order, to verify the superiority of the proposed scheme regarding profit, where the optimal profit achieved by our renting scheme.

The optimal profit and the corresponding configuration is formation of two renting schemes that are represented from optimal profit obtained using the renting scheme. It shows that our scheme represents in terms of quality and service. The scheme shows that using the renting scheme of the capacity provided with rented servers is much less than the capacity due to renting scheme. The server speed is configured and is reduced to the waste of resources in idle period.

In conclusion that the scheme can not only guarantee the service quality of all requests but also achieve more profit than the compared one.

11. CONCLUSION

In order to implement the quality of service requests to provide with and maximization of the profit in service providers. It has proposed a Double Quality Guaranteed (DQG) renting scheme for service providers for cloud storage.

This scheme combined with renting which can reduce the resource waste for demand of computing capacity for system size. An optimal configuration problem of profit maximization is formulated such as the market demand with the workload of requests where the server-level and the rental cost are the energy consumption.

The optimal solutions are obtained in series of calculating the profit obtained by the DQG renting scheme. The results show that the rental price of service performs with service quality and profit. In this paper we implement the profit maximization problem in a cloud environment because the analysis of a heterogenous environment.

12. FUTURE ENHANCEMENT

The caching service is used for maximizing a profit for a demand model purpose. The building cost is more fetched here in the cache table. The maintenance cost of cache is used for purpose of cloud storage.

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