

# Trusted Cloud Service Selection Using Score Based Algorithm

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## ABSTRACT:

**Cloud Computing is the network-based computing service to the user supported by internet. The computing service may be a data storage, hardware, software or any internet-based service required for an individual user or a business organisation. The cloud services are On-demand services available to the users at anytime and anywhere. The Cloud Service provider is responsible for monitoring data, firewalls, intrusion detection management and other security concerns while providing cloud-based services to the end users. There are many challenges in selecting trusted cloud service. Many Cloud Service Selection Procedures are there which are based on data Models, decision making procedures, context and parameters of cloud services. In this paper, proposed a trusted Cloud service based on score based algorithm.**

**KEYWORDS:** cloud service selection, Cloud Provider, QoS, normal cloud model, trust mechanism

## 1. INTRODUCTION

Services provided by cloud are modelled into three categories such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS). Infrastructure as a Service provides a OnDemand computing services over the Web. These computing services include virtual private servers, storage, computing power and networking. The Known IaaS provider is Google Cloud Service Provider and Amazon. Software as a service provides a software application to end user or Business Organization. Offered Software will under the control of Software company not by the end-user which reduces the Maintenance overhead such as security, data storage, networking, operational issues by the end user. Platform as a Service is a hybrid of both IaaS and PaaS. Users can develop their applications, run their machine learning models in cloud environment. No need to have development environment in client device. Provides extensive data storage, fast computing services such as Graphical Processing Unit (GPUs) and Tensor Processing Unit (TPUs) to the applications and secure algorithms for the development trusted application. Examples of PaaS are Microsoft Azure Environment and Google App Engines. The users or Business Organization who are in need of cloud services have to go through number of Cloud Service Providers and need to evaluate their security credentials and also look after for the efficient services, which become significant challenge for the decision to make. A Cloud Market System have been

designed for Cloud Service Provider to publish their services and also provides a provision to users to locate their services. The second important thing is to establish techniques to choose appropriate cloud services from the cloud market system by the users. Approaches such as Multi Criteria Decision making and Optimization Technique have been proposed for the ranking of Cloud Service providers and aids the end-user in selection of the same. The Necessity of Cloud Service Ranking for selection is due to wide availability of Billing or payment Policies, different user groups, Evaluation Metrics and different cloud deployment model such as Public Cloud, Private Cloud, hybrid Cloud and Controlled Cloud .Other issues addressed in trusted Cloud Service Selections are difficulty in integration with other systems and equipment, Opaque of cost structure, loss of control over sensitive data.

## I. RELATED WORK:

Phaphoom et al [1] proposed an audit-based cloud service selection .Collected data from 352 individuals from an end users such as employees from all levels and the decision makers of an organization regarding the selection of trusted cloud service selections,data are trained using logistic regression and the results shows the non-likelihood index for the adoption of cloud computing services it shows the importance of developing the techniques for trusted cloud service selection.

Wittern et al [2] proposed variability model for cloud service selection using Cloud Feature Models which reduces constraints for decision making and combines with the other multi Criteria Decision making process.

Y. Yang et al [3] proposes a cloud service selection model based on multi granularity selection model using gaussian cloud transformation model. Then second model is developed based on the cloud analytic hierarchy with the end user preferences. Both the models are interpreted as a fuzzy evaluation model for validating trusted cloud service selection.

Shangguang et al [4] proposed cloud-based service selection model based on efficient Quality of Service (QoS). The QoS uncertainty value is calculated for reliable cloud services which is then combined with the integer programming for the service selection. The results by this approach provides the optimal cloud service selection efficiently.

Le Sun et al [5] proposed Cloud Service selection based on the Criterion Interaction framework which measures the fuzzy measures and find out the aggregate non-linear relationship between them. Also proposed the Optimization model to select the priority based cloud service selection when sufficient data about the cloud services are not available to find out service selection arguments

## 2. PROPOSED SYSTEM:

To evaluate the Trust worthiness of Cloud Service Providers, the following form of feedback are used 1) Analysis from Cloud Service providers about various CPs: This kind of information is hard to execute as CPs needs to share information about their own one of a kind resources.

2) Input from the clients about Cloud Service Providers : It can be all the more effectively gotten. In any case, such data might be malevolent and defective. Additionally, as a virtual system may length over the assets possessed by a few Clous Service Providers, it will be troublesome for a client to precisely recognize the CP that is in charge of blame.3) Input from

the service Providers about the clients: This type of criticism is anything but difficult to acquire. A Cloud Service provider can screen the exercises of its clients and settle on whether a client has awful goals. The proposed trust model provides scoring for Cloud Service Providers as well as the consumers

- The rating / scoring will be done by an algorithm
- Proposed “Trusted Cloud Certifying Authority” who will own the algorithm and act as an independent third party in providing the rating / scoring to the Cloud Actors which will be dynamic
- Both the consumers as well as the service providers can rely on the third party trust scoring / rating
- At least we know who are our consumers / providers and how trusted are the same

### **3. MODULE DESCRIPTION**

1. Load Dataset
2. Cloud Services
3. Calculate Rank By Trust Score
4. Consumer Purchase Cloud Service
5. Consumer Complaint
6. Make Payment
7. Un Trusted Consumer Vs Trusted Consumer
8. Graph

#### **LOAD DATASET**

In this module, both the cloud administration history and buyer objection history dataset has been gathered and transferred for further procedure. The Cloud administration dataset has the characteristics like name, cloud administration name, classification, unwavering quality, personality, the executives, security, notoriety, Features and cloud administrations plan. Customer grievance history dataset has the properties like item, issue, Consumer name, organization, protest id, Purchased date and so on. Both the dataset ought to be transferred.

#### **CLOUD SERVICES**

In this module, Uploaded data set will be appeared. Furthermore, Each Cloud administration has the diverse RAM, Bandwidth, Storage, Support esteems. Cloud administrations plan is shown. At first cloud administrations are shown in un-ordered positioning.

#### **CALCULATE RANK BY TRUST SCORE**

In this module, Collaborative filtering computation is proposed reliant on the estimations of cloud organization properties. In addition, the score rating is resolved and the estimation recommends the best most cloud organization reliant on trust score and situating.

#### **CONSUMER PURCHASE CLOUD SERVICE**

This module is controlled by the purchaser, can see all cloud specialist organizations dependent on the position. The customer can choose the cloud administration dependent on the secrecy, unwavering quality, character, the board, security, notoriety, and so on. Shopper can buy which cloud administration he/she needs dependent on the position.

#### **CONSUMER COMPLAINT**

Before buyer securing the cloud organization, the structure will check the client establishment affirmation and purchased history of the customer. If any customer has any past grumblings, that customer can't purchase the cloud organization else he can purchase the cloud organization.

### **MAKE PAYMENT**

After check, the qualified customer just can buy the cloud administration. While obtaining the cloud, Consumer needs to give card number and cvv to process the installment

### **UN TRUSTED CONSUMER VS TRUSTED CONSUMER**

In this module, both the trusted and supplied purchaser is organized reliant on their past procured history. The blessed customer can deactivate by the trust pro. With the objective that particular client can't login to the application and he can't purchase the cloud organization as well.

### **GRAPH**

Finally the diagram is created reliant on the trusted in client and enriched customer. Furthermore, after that reliant on the cloud rating, chart is created. Finally the diagram is created reliant on the trusted in client and enriched customer. Furthermore, after that reliant on the cloud rating, chart is created.

## **VII FUTURE ENHANCEMENT AND CONCLUSION**

Later on, we will build up an online association sharing stage to gather the authentic association confirmation and use information in various time designations and structure the self-versatile getting ready model of delineating the vulnerability, blunder and insufficiency of client inclinations. This model is to diminish the horrible parts using the cloud organizations and moreover preventing exploitative cloud master associations to offer an organization. The dynamic determined evaluation of both cloud master communities similarly as the purchasers perceives the agitator segments and shields the beguiling parts from offering similarly as using the organizations. There were events wherein the computerized offenders are using the free enlisting advantages for dispatch attack on a foreordained target and cause basic mischief. This model is depended upon to chop down the amount of utilization of free cloud based figuring power by computerized criminals.

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