RASP Model

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ABSTRACT

In latest years, the concept of cloud computing becomes more and more popular. Cloud computing as a new business model is developed from distributed processing, parallel processing and grid computing. At present, Google, Amazon, IBM, Microsoft, Sun and other IT giants are all seeking to develop cloud computing technologies and products. For example, Google has been dedicated to promoting application engines based on the techniques of GFS (Google File System), MapReduce , BigTable and so on, which provide users methods and means to process massive data. In this paper, we introduce the concept of cloud computing and cloud storage as well as the architecture of cloud storage firstly, analyze the cloud data storage technology—GFS and HDFS (Hadoop Distributed File System) under the specific cases of enterprises, and build the cloud storage architecture through eyeOS Web operating system in our computer.

I. INTRODUCTION

Cloud storage is a system that provides functions such as data storage and business access. It assembles a large number of different types of storage devices through the application software which are based on the functions of the cluster applications, grid techniques, distributed file systems, etc. Cloud storage can be simply understood as the storage in cloud computing, and also can be considered to be a cloud computing system equipped with large capacity storage. Cloud storage system architecture mainly includes storage layer, basic management layer, application interface layer and access layer

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. Cloud computing is a functional paradigm that is evolving and making IT utilization easier by the day for consumers. Cloud computing offers standardized applications to users online and in a manner that can be accessed regularly. Such applications can be accessed by as many persons as permitted within an organisation without bothering about the maintenance of such application. The Cloud also provides a channel to design and deploy user applications including its storage space and database without bothering about the underlying operating system. The application can run without consideration for on-premise infrastructure. Also, the Cloud makes massive storage available both for data and databases. Storage of data on the Cloud is one of the core activities in Cloud computing. Storage utilizes infrastructure spread across several geographical locations. Storage on the Cloud makes use of the internet, virtualization, encryption and others technologies to ensure security of data. This paper presents the state of the art from some literature available on Cloud storage. The study was executed by means of review of literature available on Cloud storage. It examines present trends in the area of Cloud storage and provides a guide for future research. The objective of this paper is to answer the question of what the current trend and development in Cloud storage is? The expected result at the end of this review is the identification of trends in Cloud storage, which can beneficial to prospective Cloud researches, users and even providers.Cloud computing is one of the most significant trends in information technology acquisition today, its adoption amongst the SMEs is still behind the larger conterparts. Additionally, among those that use, many face challenges to gain benefits as what is normally claimed. More research is needed to understand the issue. The purpose of this paper is to present the findings of a Systematic Literature Review (SLR) conducted related to cloud computing adoption among SMEs, particularly focusing on the post adoption stage. SLR method was employed as this method enable the review been done in a more comprehensive and rigorous manner. A total of 39 relevant articles were reviewed and the findings indicate that most past researches on cloud computing and SMEs focused on adoption, exploring factors that affect the adoption. Very few studies looked at the post adoption stage or the impacts of cloud computing on SMEs.

Trust between the Service provider and the customer is one of the main issues cloud computing faces today. There is no way for the customer to be sure whether the management of the Service is trustworthy, and whether there is any risk of insider attacks. This is a major issue and has received strong attention by companies. The only legal document between the customer and service provider is the Service Level Agreement (SLA). This document contains all the agreements between the customer and the service provider; it contains what the service provider is doing and is willing to do. However, there is currently no clear format for the SLA, and as such, there may be services not documented in the SLA that the customer may be unaware that it will need these services at some later time.

There are several regulatory requirements, privacy laws and data security laws that cloud systems need to adhere to. One of the major problems with adhering to the laws is that laws vary from country to country, and users have no control over where their data is physically located.

Confidentiality is preventing the improper disclosure of information. Preserving confidentiality is one of the major issues faced by cloud systems since the information is stored at a remote location that the Service Provider has full access to. Therefore, there has been some method of preserving the confidentiality of data stored in the cloud. The main method used to preserve data confidentiality is data encryption;Preserving Integrity, Therefore, there has been some method of preserving the confidentiality of data stored in the cloud. The main method used to preserve data confidentiality is data encryption;Preserving Integrity like confidentiality is another major issue faced by cloud systems that needs to be handled, and is also mainly done by the use of data encryption. In a common database setup, there would be many users with varying amount of rights. A user with a limited set of rights might need to access a subset of data, and might also want to verify that the delivered results are valid and complete (that is, not poisoned, altered or missing anything) A common approach to such a problem is to use digital signatures; however, the problem with digital signatures is that not all users have access to the data superset, therefore they cannot verify any subset of the data even if they're provided with the digital signature therefore they cannot verify any subset of the data even if they're provided with the digital signature of the superset; and too many possible subsets of data exist to create digital signatures for each. Recently, researchers have tried to find solutions to this problem. The primary proposal is to provide customers with the superset's signature and some metadata along with the query results.This system will work smoothly and efficiently if and only if there is a constant watch over the power suppliedto our system, as even if there is a powercut the entire system will come crashing down on the user.

II. LITERATURE SURVEY

Cloud Computing technologies are gaining increased attention both in academia and practice. Despite of its relevance and potential for more IT flexibility and its beneficial effects on costs, legal uncertainties regarding the data processing especially between large economies still exist on the customer and provider side. Against this background, this contribution aims at providing an overview of privacy issues and legal frameworks for data protection in Cloud environments discussed in recent scientific literature. Due to the overall complexity concerning international law, we decided to primarily focus on data traffic between the United States of America and the European Union. The result of our research revealed significant differences in the jurisdiction and consciousness for data protection in these two economies. As a consequence for further Cloud Computing research we identify a large number of problems that need to be addressed. Cloud computing is a functional paradigm that is evolving and making IT utilization easier by the day for consumers. Cloud computing offers standardized applications to users online and in a manner that can be accessed regularly. Such applications can be accessed by as many persons as permitted within an organisation without bothering about the maintenance of such application. The Cloud also provides a channel to design and deploy user applications including its storage space and database without bothering about the underlying operating system. The application can run without consideration for on-premise infrastructure. Also, the Cloud makes massive storage available both for data and databases. Storage of data on the Cloud is one of the core activities in Cloud computing. Storage utilizes infrastructure spread across several geographical locations. Storage on the Cloud makes use of the internet, virtualization, encryption and others technologies to ensure security of data. This paper presents the state of the art from some literature available on Cloud storage. The study was executed by means of review of literature available on Cloud storage. It examines present trends in the area of Cloud storage and provides a guide for future research. The objective of this paper is to answer the question of what the current trend and development in Cloud storage is? The expected result at the end of this review is the identification of trends in Cloud storage, which can beneficial to prospective Cloud researches, users and even providers. Cloud computing is one of the most significant trends in information technology acquisition today, its adoption amongst the SMEs is still behind the larger conterparts. Additionally, among those that use, many face challenges to gain benefits as what is normally claimed. More research is needed to understand the issue.

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data is dynamically updated in today's world, the existing remote integrity checking methods which served as a purpose for static data can no longer be enforced to authenticate the integrity of dynamic data in the cloud. In this scenario, cloud storage auditing conveys an efficient and secure dynamic auditing protocol which draws a confidence to the data owners that their data is correctly stored in the cloud. The present auditing protocols assume

that the secret key of the client is very secure while in reality, it is not. Thus, to overcome these flaws, this paper introduces an idea of lessening the client's secret key disclosure. In this paper, we propose a system where de-duplication strategy of data is adopted and it will check the duplicacy of data and eliminate the redundant one using MD5 hashing. Also, it uses tile bitmap method wherein it will check the previous and the current versions of the data to ease the auditor's workload and to make the system more efficient.

III. PROPOSED SYSTEM

There are some issue are found which required further research:

Trust and risk is a pair of contradictory unity, so we need to guard against the risk even of that we have high trust each other. "Slow rise" is a strategy that is to prevent the user immediately get a high trust value only after a small number of accessing cloud resources, only through a large number of the access, slowly to achieve high trust in the trust evaluation. This is an evaluation strategy to prevent user cheating beforehandThe behavior trust evaluation is constantly formed by accumulating, which is based on a large number of the historical behavior of user. So its results are stable and representative of the. architecture. The software code to be written in the next stage is created now.
"personality characteristics". However, if number of user access is not enough large, then the result is unstable and not representative. Therefore, the trust evaluation of user behavior should be based on a large number of behaviors access I have completed the research for various issues arises in trust evaluation model for cloud computing .I found the scope for cloud computing in current scenario we research about the basic concept about the cloud computing and the motivation for the research is the risk involves in cloud computing. cloud computing is primarily commercially-driven and commercial clouds are naturally realistic as research platforms, they do not provide to the scientist enough control for dependable experiments

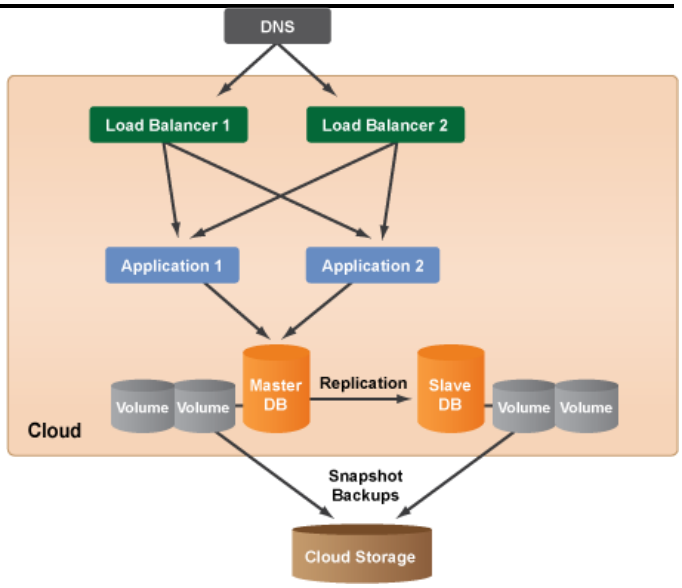

Fig. 1 System Architecture Diagram

- The first phase involves understanding what needs to design and what is its function, purpose, etc. Here, the specifications of the input and output or the final product are studied and marked.System Design: The requirement specifications from the first phase are studied in this phase and system design is prepared. System Design helps in specifying hard- ware and system requirements and also helps in defining overall system Implementation: With inputs from system design, the system is first developed in small. programs called units, which are integrated into the next phase. Each unit is developed and tested for its functionality which is referred to as Unit Testing. Integration and Testing: All the units developed in the implementation phase are integrated into a system after testing of each unit. The software designed, needs to go through constant software testing to find out if there are any flaw or errors. Test- ing is done so that the client does not face any problem during the installation of the software. Deployment of System: Once the functional and non-functional testing is done, the product is deployed in the customer environment or released into the market.

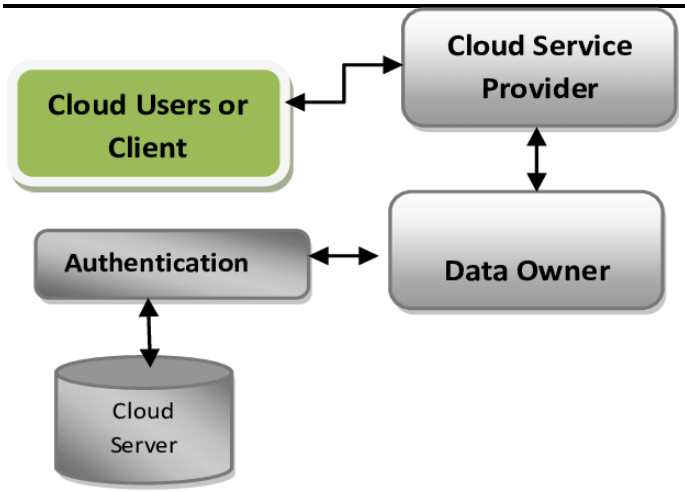

Fig.2 Remote Data Back Server

DATA REPLICATION

The reproduction management module sporadically scans all information to confirm that the information responsibility is maintained. the information table scans the information to come to a decision whether or not a reproduction should be checked. every scan spherical within the information table is termed a scan cycle, that is about to a hard and fast worth. The reproduction management module endlessly monitors the information table to understand once the files need checking. once checking is needed, the module retrieves the information from the information table and sends it to the virtual cloud machine, that performs the desired actions before causing the information file back to the reproduction management module. once a reproduction has been lost, the reproduction management module initiates the creation of a replacement.

IV. RESULT & DISCUSSION

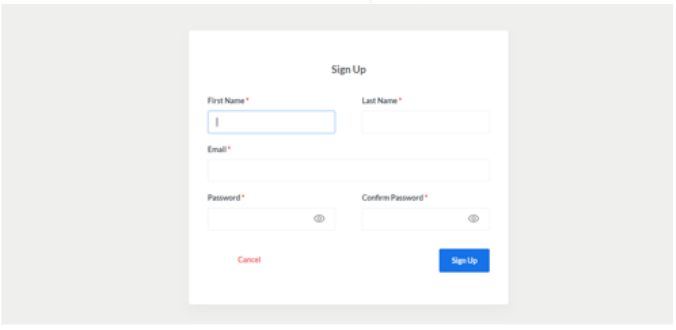

Figure 4.2: Register Window.

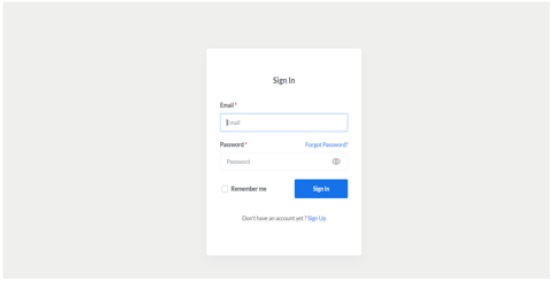

Figure 4.3: Login Window

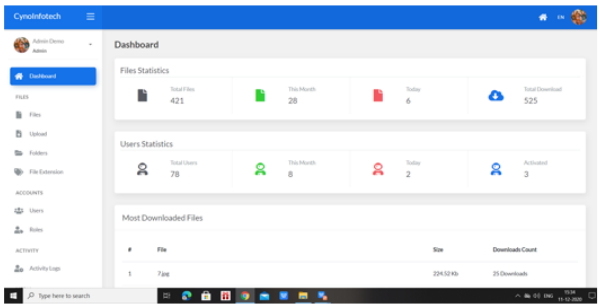

Figure 4.4: Dashboard

Fig.7. Cost of member deletion

V. CONCLUSION:

Trust evaluation model is of importance to supporting system security. This paper has presented a trust evaluation model based on evidence theory and sliding windows for cloud computing. The proposed model has a number of advantages. Cloud computing provides information resources for users in "Cloud" through the Internet. These information resources with a variety of different languages are distributed in Web pages and the databases. The scheduling of multilingual information resources becomes complex, as multilingual information resources are heterogeneous and uneven in cloud computing. The need arises in multilingual information resources in cloud computing for new mechanisms. This paper presents a four-tier architecture for multilingual information resources scheduling in cloud computing. It includes user accessing tier, technology supporting tier, resource scheduling tier and resources tier. We propose a three-layer scheduling model for multilingual information resources in cloud computing

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