Study on Cloud Computing Security from Single to Multi-Clouds

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Abstract-- The project entitled as "CLOUD COMPUTING SECURITY FROM SINGLE AND MULTI-CLOUDS". Cloud computing has increased in many organizations due to remote data access. It provides benefits in such as low cost and easy accessibility of data. The security factor of cloud computing is a major concern in the cloud computing environment, as users store sensitive information with cloud storage but these providers may be untrusted. While dealing with "single cloud" providers has become less popular with customers due to risks of service availability failure and the possibility of malicious activities in the single cloud. This led to the movement towards "multi-clouds", "interclouds" or "cloud-of-clouds" has emerged. This work is a genuine attempt to promote the use of multi-clouds due to its ability to reduce security risks that affect the cloud computing user.

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I. INTRODUCTION

Cloud computing is the delivery of different services through the Internet. These resources include tools and applications like data storage, servers, databases, networking, and software. Cloud computing is a popular option for people and businesses for a number of reasons including cost savings, increased productivity, speed and efficiency, performance, and security.

Cloud computing is named as such because the information being accessed is found remotely in the cloud or a virtual space. Companies that provide cloud services enable users to store files and applications on remote servers and then access all the data via the Internet. This means the user is not required to be in a specific place to gain access to it, allowing the user to work remotely.

II. EXISTING SYSTEM & PROPOSED SYSTEM

EXISTING SYSTEM

Cloud providers should address privacy and security issues as a matter of high and urgent priority. Dealing with "single cloud" providers is becoming less popular with customers due to potential problems such as service availability failure and the possibility that there are malicious insiders in the single cloud. In recent years, there has been a move towards "multi-clouds", "inter-cloud" or "cloud-of-clouds".

DRAW BACKS OF EXISTING SYSTEM

- Cloud providers should address privacy and security issues as a matter of high and urgent priority.

- Dealing with "single cloud" providers is becoming less popular with customers due to potential problems such as service availability failure and the possibility that there are malicious insiders in the single cloud.

PROPOSED SYSTEM

Managing Multi server Project focuses on the issues related to the data security aspect of cloud computing. As data and information will be shared with a third party, cloud computing users want to avoid an un-trusted cloud provider. This work aims to promote the use of multi-clouds due to its ability to reduce security risks that affect the cloud computing user. Although cloud service providers can offer benefits to users, security risks play a major role in the cloud computing environment.

In addition, the potential for migration from a single cloud to a multi-cloud environment is examined and research related to security issues in single and multi-clouds in cloud computing is surveyed.

ADVANTAGES

- Data Integrity
- Service Availability.
- The user runs custom applications using the service provider's resources
- Cloud service providers should ensure the security of their customers' data and should be responsible if any security risk affects their customers' service infrastructure.

III. MODULES

The project titled "CLOUD COMPUTING SECURITY FROM SINGLE AND MULTI CLOUD" is used to potential for migration from a single cloud to a multi-cloud environment is examined and research related to security issues in single and multi-clouds in cloud computing is surveyed.

Add Employee:

This module allows the user to enter their details in the form. The Details are stored in the Database.

View Employee:

Here the user can view the details of other employees who were entered before them.

Upload Files:

In this Module the user can login and upload the document containing the format and details saved to the Database. While uploading the document Main Server Database and Common Server Database should be saved.

Download Files:

In this Module If the user views the Main Server Details and click and Download the Document.

View Files:

This module allows the admin to view the files which are uploaded by the users into the cloud.

Crash Data:

Another major concern in cloud services is service availability. Cloud Service mentions in its licensing agreement that it is possible that the service might be unavailable from time to time. The user's Data may terminate for any reason at any time if any user's files break the cloud storage policy. In addition, if any damage occurs to any Cloud service and the service fails, in this case there will be no charge to the for this failure. Administrator Should Maintain the Failure Data.

Recovery:

A repair operation retrieves data from existing surviving clouds over the network and reconstructs the lost data in a new cloud. Today's cloud storage providers charge users for outbound data, so moving an enormous amount of data across clouds can introduce significant monetary costs. It is important to reduce the repair traffic.

IV.   INPUT DESIGN & OUTPUT DESIGN
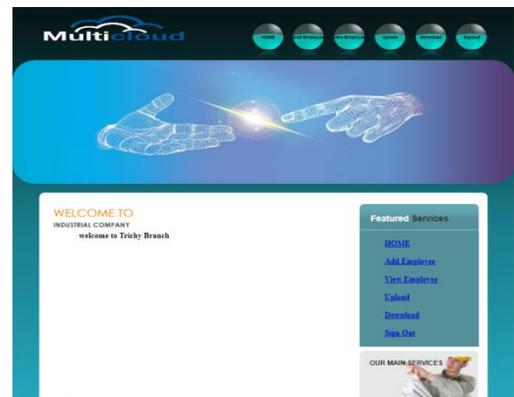

Fig 1: vinosree Admin And User Login Page   **Fig 2: User Page**

Fig 3:User Add Employee

Fig 4: User View Employee

Fig 5:User Upload Files

Fig 6:View File Details

Fig 7:Admin Page

Fig 8:Admin View Employee Details
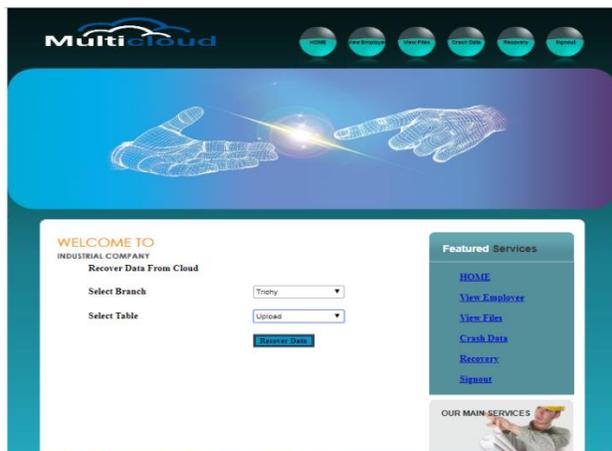

Fig 9:Admin View Files

Fig 10:Crash Da

Fig 11: Recovery Data Files

V. CONCLUSION

The "Cloud Computing Security from Single to Multi-Clouds" has been developed to satisfy all proposed requirements. The process is maintained more simple and easy. The system is highly scalable and user friendly. Almost all the system objectives have been met. The system has been tested under all criteria. The system minimizes the problem arising in the existing manual system and it eliminates the human errors to zero level. The design of the database is flexible ensuring that the system can be implemented. It is implemented and gone through all validation. All phases of development were conceived using methodologies. User with little training can get the required report. The software executes successfully by fulfilling the objectives of the project. Further extensions to this system can be made required with minor modifications.

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