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Survey on Efficient storage management system in Cloud Computing using Encryption Algorithm

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Abstract: Now a day's cloud computing is used in many areas like industry, military colleges, healthcare etc. to storing huge amount of data. We can retrieve data from cloud on request of user. To store data on cloud we have to face many issues. To provide the solution to these issues there are n number of ways. In Cloud Users can remotely store their data to cloud & realize the data sharing with other. In Some Common cloud storage system such as the electronic health records system, the cloud file might contain some sensitive information. Encrypting the whole shared file can realize the sensitive information hiding, but will make this shared file unable to be used by others. In cloud computing more Sensitive information hiding in cloud. This is very big problem that remote data integrity auditing scheme that realizes data sharing with sensitive information hiding in this cloud. In our System, our scheme makes the file stored in the cloud able to be shared and used by others on the condition that the sensitive information is hidden, while the remote data integrity auditing is still able to be efficiently executed. Meanwhile, the proposed scheme is based on identity-based cryptography, which simplifies the complicated certificate management.

Keywords: Cloud service provider (CSP), cloud server (CS), Encryption, Decryption, Delay, Integrity.

INTRODUCTION

The process of cryptography encrypts data so that it cannot be decoded. Strictly speaking, there are two types of cryptography: symmetric key and public key. This method makes data unreadable by encoding it with special keys. So only those who have been granted access to the cloud server are able to access the data. All people can see the cipher text data.

Symmetric key cryptography algorithms are AES, DES, 3DES, IDEA, BRA and blowfish. The main issue is delivering the key to receiver into multi user application. These algorithm require low delay for data encode decode but provides low security. Public key cryptography algorithm is RSA and ECC algorithm. Public and private keys are manipulated into public key cryptography algorithms. These algorithms accomplished high level security but increase delay for data encode and decode. Steganography hide the secret data existence into envelope. In this technique existence of data is not visible to all people. Only valid receiver knows about the data existence. Text steganography technique is used to produce high security for data. Secret data of user hide into text cover file. After adding text into text cover file it looks like normal text file. If text file found by illegitimate user than also cannot get sensitive data. If illegitimate user try to recover original data than large amount of time is essential. DES algorithm is used for text encode and decode. Advantage of text steganography technique is providing security to text.

MOTIVATION

- Data sharing with sensitive information hiding.
- New concept generating called identity- based shared data integrity.
- Cloud Data Security.

PROBLEM STATEMENT

- To build and Implement Secure File storage in Cloud Computing using Hybrid Cryptography Algorithm

Proposed System

In Our System proposed an identity-based data integrity auditing scheme for secure cloud storage, which supports data sharing with sensitive information hiding. In our Application user upload the data into cloud with user and researcher when Doctor Share the data with User that file go to Admin and admin convert into Binary format and after that binary format file again convert into Homomorphic encryption and Stored into Block Level.

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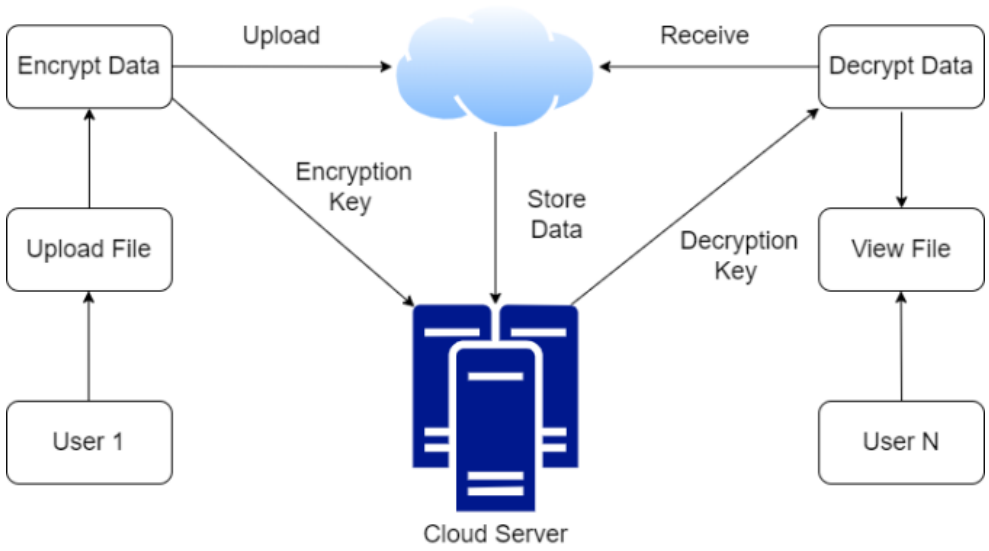
1. Figure 1. System Architecture



- In our system cloud then sensitive information is hidden with help of hidden data identity Auditing called as the identity based shared data.
- In Our System the file stored in the cloud able to be shared and used by others on the condition that the sensitive information is protected while the remote data integrity auditing is still able to be efficiently executed.
- In Cloud Stored using Block Level concepts.

DATA FLOW DIAGRAMS

1.The DFD is also called as bubble chart. It is a simple graphical formalism that can be used to represent a system in terms of input data to the system, various processing carried out on this data, and the output data is generated by this system.

2. The data flow diagram (DFD) is one of the most important modeling tools. It is used to model the system components. These components are the system process, the data used by the process, an external entity that interacts with the system and the information ows in the system.

3. Figure 4.1 shows level 0 DFD which shows how the information moves through the system and how it is modified by a series of transformations. It is a graphical technique that depicts information ow and the transformations that are applied as data moves from input to output.

ADVANTAGES

- In our system cloud then sensitive information is hidden with help of hidden data identity Auditing called as the identity based shared data.
- In Our System the file stored in the cloud able to be shared and used by others on the condition that the sensitive information is protected while the remote data integrity auditing is still able to be efficiently executed.
- In Cloud Stored using Block Level concepts.

CONCLUSION

In this paper, we proposed an identity-based data integrity auditing scheme for secure cloud storage, which supports data sharing with sensitive information hiding. In our scheme, the file stored in the cloud can be shared and used by others on the condition that the sensitive information of the file is protected. Besides, the remote data integrity auditing is still able to be efficiently executed. The security proof and the experimental analysis demonstrate that the proposed scheme achieves desirable security and efficiency.

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Applications

- Group sharing applications
- Security Applications
- Searching applications

FUTURE SCOPE

Furthermore, our work motivates interesting open problems as well including designing new scheme without random oracles or proposing a new scheme to support more expressive keyword search.

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