Efficient search system using triple des algorithm with data auditing system for secure cloud storage

Anchal Biayni, Shraddha Bijja, Nirmal Bachhav, Rajesh Adhale

DEPARTMENT OF COMPUTER ENGINEERING

RMD SINHGAD SCHOOL OF ENGINEERING,
WARJE, PUNE.

ABSTRACT

Cloud computing has been emerged as a computing network over the Internet. Cloud data indulge storing of the data in the cloud as well as has sharing capability among multiple users. Due to failures of human or hardware and even Software errors cloud data is associated with data integrity. Several mechanisms have been proposed in order to allow both the data owners as well as the public auditors to audit cloud data integrity efficiently without retrieving the entire data from the cloud servers. A Third Party Auditor will perform integrity checking and the identity of the signer on shared data is kept private from them. In this project, we only investigate for auditing the integrity of shared data in the cloud with efficient user cancelation while still preserving identity privacy. We also enhance this system, when any user change the data from files then we analysis that files and generate the log for future analysis.

Key Words: TPA, Cloud Computing, Auditing, MySQL.

ARTICLE INFO

I.   INTRODUCTION

Cloud computing is Internet-based computing, whereby shared resources, software, and information are provided to computers and other devices on demand. It describes a new supplement, consumption, and delivery model for IT services based on the Internet. It has been envisioned as the next generation information technology (IT) architecture for enterprises, due to its wide range of unprecedented advantages in the IT history: on-demand self-service, ubiquitous network access, location independent resource pooling, rapid resource elasticity, usage-based pricing and transference of risk. As a disruptive technology with profound implications, Cloud Computing is transforming the very nature of how businesses use information technology.

One fundamental aspect of this paradigm shifting is that data is being centralized or outsourced to the Cloud. From users' perspective, including both individuals and IT enterprises, storing data remotely to the cloud in a flexible on-demand manner brings appealing benefits: relief of the burden for storage management, universal data access with location independence, and avoidance of capital expenditure on hardware, software, and personnel maintenances, etc.

Problem Statement:

The Data Security and Data Integrity is the most important factor to any data centre, company and government records. To let off the burden of management of data of the data owner, TPA will audit the data of client.

II. LITERATURE SURVEY

NO	Paper Title	Author Name	Year	Algorithm	Advantages	Disadvantage
1	A novel data auditing approach to achieve data privacy and data integrity in cloud computing	Shivarajkumar Hiremath; Sanjeev Kunte	2017	SHA, AES	-Data Encryption -Data Tempered Analysis	-Not dynamic work on Updating, insertion and deletion data.
2	A novel triple DES to enhance E-governance security	I. Raja Sekhar Reddy; G. Murali	2017	DES	Pairing function and spiral scan path are used.	Pairing function and spiral scan path are used.
3	An Efficient Cloud Auditing Scheme for Data Integrity and Identity-Privacy of Multiple Uploaders	Zeyad A. Al-Odat and Samee U. Khan	2018	SHA, TPA	Data block signers are hidden from a Third Party Auditor (TPA)	Sometimes data loss or corruption not detected.
4	Identity-Based Dynamic Data Auditing for Big Data Storage	Tao Shang, Member, IEEE, Feng Zhang, Xingyue Chen, Jianwei Liu, Xinxi Lu	2018	Dynamic data auditing, Merkle hash tree	-Data security - Dynamic operation with integrity assurance	TagGen algorithm to make the scheme more efficient and improve the scheme to defend against attacks by TPA.
5	Ensuring Cloud Data Security using Public Auditing with Privacy Preserving	Shivarajkumar Hiremath	2018	AES, SHA-2	- We projected a secure auditing system using Third Party Auditor (TPA).	- Data dynamic operations on data are to be performed
6	A Lightweight Secure Auditing Scheme for Shared Data in Cloud Storage	Junfeng Tian; Xuan Jing	2019	Third Party Medium (TPM) LSSA Technology	-Improve the Agent Security - Identity traceability - Audit correctness and security	-Complex Structure
8	EAODBT: Efficient Auditing for Outsourced Database with Token Enforced Cloud Storage	C M Geeta; B N Rashmi; R G Shreyas Raju; S Raghavendra	2019	-EAODBT - Cloud Service Provider (CSP)	- Merkle Hash Tree - Verifiable Auditing for Outsourced Database in Cloud (V AODC)	- Not work enhance mechanism to multi-client setting

| 9 | Block Chain-Based Data Audit and Access Control Mechanism in Service Collaboration | Chao Wang, Shizhan Chen, Zhiyong Feng, Yanan Jiang, Xiao Xue | 2019 | -Block chain -Homomorphic Technology | -public data auditing protocol with privacy protection | -Not more extend work more -Complex Structure |
| 10 | An Authorized Public Auditing Scheme for Dynamic Big Data Storage in Cloud Computing | HAN YU, XIUQING LU, AND ZHENKUAN PAN | 2020 | Dynamic index table (DIT) TPA | Big data analysis Third party auditor can detect which block is corrupt | Efficiency and security of the integrity verification scheme can be furtherly developed, because they are most important issues in cloud storage of big data. |

III. CONCLUSIONS

Data privacy has become extremely important in the Cloud environment. In this system, the methods to solve the issue of file auditing of data on networks have been summarized. The object interface offers storage that is secure and easy to share across platforms.

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