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ATTRIBUTE BASED HYBRID ENCRYPTION IN CLOUD COMPUTING

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ABSTRACT

Cloud achieving access control and keeping data confidential, the data owners could adopt attribute-based encryption to encrypt the stored data. Users with limited computing power are however more likely to delegate the task of the decryption to the cloud servers to reduce the computing cost. During the delegation, the cloud servers could tamper or replace the delegated cipher text and respond a forged computing result with malicious intent. Attribute-based encryption with delegation emerges. Since policy for general circuits enables to achieve the strongest form of access control, a construction for realizing circuit cipher text-policy attribute-based hybrid encryption with verifiable delegation has been considered in our work. A user is able to decrypt a cipher text if the key's attribute set satisfies the access structure associated with a cipher text. CP-ABE under certain access policies. The users, who want to access the data files. They are most likely to outsource part of the decryption process to the cloud server. Designed the first ABE with outsourced decryption scheme to reduce the computation cost during decryption. Hybrid encryption with verifiable delegation. Confidentiality data should not be leaked even if malware or hackers infiltrate server. Verifiability the unauthorized user without enough attributes could not access data.

Keywords:- *Ciphertext, Attribute-based encryption, Decryption.*

I. INTRODUCTION

Cloud computing is a type of Internet based computing that provides shared computer processing resources and data to computers and other devices on demand. It is a model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources (e.g., computer networks, servers, storage, applications and services), which can be rapidly provisioned and released with minimal management effort. Cloud Computing, and propose a protocol supporting for fully dynamic data operations, especially to support block insertion, which is missing in most existing schemes. We extend our scheme to support scalable and efficient public auditing in Cloud Computing. In particular, our scheme achieves batch auditing where multiple delegated auditing tasks from different users can be performed simultaneously by the TPA.

EXISTING CONCEPT:-

The public auditing system of data storage security in Cloud Computing, and propose a protocol supporting for fully dynamic data operations, the scheme is correct if the verification accepts when interacting with the server returns a valid response and it is sound if any cheating server that convinces the client it is storing the data file is actually storing that file. Note that in the between the adversary and the client, the adversary has full access to the information stored in the server; the adversary can play the part of the server. The goal of the adversary is to cheat the verifier successfully trying to generate valid responses and pass the data verification without being detected.

DRAWBACKS:-

- Polynomial time algorithm that can cheat the verifier extractor that can recover the original data files by carrying out multiple challenges-responses (very difficult).
- Designed the first ABE with outsourced decryption scheme to reduce the computation cost during decryption. Hybrid encryption with verifiable delegation.
- Confidentiality data should not be leaked even if malware or hackers infiltrate server.
- Verifiability the unauthorized user without enough attributes could not access data.

II. PROPOSED SYSTEM

Proposed system in notion of attribute-based encryption (ABE).In subsequent works they focused on policies across multiple authorities and the issue of what expressions they could achieve. The generic encryption based construction for hybrid encryption which can encrypt messages of arbitrary length and combined with symmetric encryption. Designed the first ABE with outsourced decryption scheme to reduce the computation cost during decryption. Hybrid encryption with verifiable delegation. Designed the first ABE with



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outsourced decryption scheme to reduce the computation cost during decryption. Hybrid encryption with verifiable delegation.

ADVANTAGES:-

- Confidentiality data should not be leaked even if malware or hackers infiltrate server.
- Verifiability the unauthorized user without enough attributes could not access data. The clients may interact with the cloud servers via CSP to access or retrieve their own data. More importantly, in practical scenarios, the client may frequently perform block-level (TPA Task) operations on the data file.
- The client or TPA can periodically challenge the storage server to ensure the correctness of the cloud data, and the original files can be recovered by interacting with the server.

III. DIAGRAM

IV. PROCEDURE

Authentication:

Input: Need to provide the needed information of the user to work on this application.

Output: An acceptable person only goes to use this application on distributed system.

Client:

Input: Here in this module, the client is going to give the page request to the server.

Output: You got message from server (received file).in that received file stored CSS.

Clouds storage Server:

Input: Here admin create access permission lists. In this list contain authorized user list and access level of file.

Output: It multiple clients request the same file means, after checking the TPA.

V. CONCLUSION

To ensure cloud data storage security, it is critical to enable a TPA to evaluate the service quality from an objective and independent perspective. Public audit ability also allows clients to delegate the integrity verification tasks to TPA while they themselves can be unreliable or not be able to commit necessary computation resources performing continuous verifications. Another major concern is how to construct verification protocols that can accommodate dynamic data files. In this paper; we explored the problem of providing simultaneous public audit ability and data dynamics for remote data integrity check in Cloud Computing.

VI. FUTURE ENHANCEMENT

To achieve efficient data dynamics, we improve the existing proof of storage models by manipulating the classic for block tag authentication. In Proposed No of user accessing single task at a time in the remote common server. In future we can implement no of user accessing no of task in remote common server. Where TPA can perform multiple auditing tasks simultaneously extensive security and performance analysis show that the scheme is highly efficient and provably secure.



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