

Efficient and Secure Group Data Sharing Model Using Cloud Computing

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Abstract: Cloud computing is alleged to be the service homeward-bound computing technology, that is reasonable and versatile over the web. In past few years the cloud has become more experienced and provided several services, one in all the first service is knowledge sharing in cluster, wherever the information are often simply shared from one member to another. However, whereas sharing the information security is one in all the first concern. In past many methodology has been planned. However, these strategies lacked from the feasibility. Hence, during this paper we've propose methodology relies on the choice theme. Here General cluster secret's generated and what is more General Key agreement protocol is redistributed primarily based model wherever the information are controlled by the owner inside constant cluster. Moreover, the planned methodology is evaluated by analyzing the comparative analysis supported the assorted range of parameter. Result Analysis counsel that our methodology merely outperforms the present one.

Keywords: Cloud Computing, security, Group data sharing

1. INTRODUCTION

IN recent times as the concept of cloud computing rises, cloud storage is said to be the one of the hotspots of the storage of information. It basically refers to a model, that provides the data storage. Here, CSP (cloud service provider) is directly responsible for making data available as well as accessible according to the requirement of user. Storage capacity is either bought or leased from provider to store the data by the individual or organization. This service can easily be accessed through the application, which utilizes the API such as cloud storage gateway. Moreover, in the past few years, it has been observed that the demand of cloud storage has been increased phenomenal in accordance with the use of personal as well as business purpose, since it is highly based on the virtualized infrastructure and much more flexible in terms of multi-tenancy, scalability and availability. Since the cloud, computing provides the feature of pay as you go service, the organization needs to pay just for the service they use, and cloud service provides precisely the same. Business exploitation the caesium will truly scale backup to seventy p.c of energy consumption. CSP is completely liable for the upkeep of the info and still because the alternative tasks like shopping for the extra storage capability. Since the backup of the info area unit settled in many places within the globe, it can even be applicable because the proof backup of natural disaster. Meanwhile, cloud storage is one service, that isn't mentioned the physical device, however it's the aggregation of the many server and storage for its users.

2. LITERATURE REVIEW

1. Efficient and Secure Group Data Sharing Model based on Selection scheme in Cloud environment.

Description: Cloud computing is a service-oriented computing technology, that area is more reasonable and flexible over the web. In past few years the cloud has become additional matured and provided several services, one of the primary service is knowledge sharing in cluster, wherever the data can be simply shared from one member to another. However, whereas sharing the knowledge security is one of the primary concern. In past many methodology has been projected. However, these ways lacked from the practicableness. Hence, in this paper we've proposed methodology relies on the selection theme. Here General cluster key's generated and moreover General Key agreement protocol is decentralized based model wherever the knowledge area unit controlled by the owner within identical cluster. Moreover, the projected methodology is evaluated by analyzing the comparative analysis based mostly on the numerous range of parameter. Result Analysis suggest that our methodology merely outperforms the existing one. Key-words: cloud Computing, security, cluster knowledge sharing

2. Panda: Public Auditing for Shared Data with Efficient User Revocation in the Cloud

Description: With info storage and sharing services among the cloud, users will just modify and share info as a bunch. To substantiate shared data integrity as verified publicly, users among the cluster got to be compelled to cypher signatures on all the blocks in shared info. Fully totally different blocks in shared info are sometimes signed by different—totally fully totally different—completely different users as a result of info modifications performed by different users. For security reasons, once a user is revoked from the cluster, the blocks that were antecedently signed by this revoked user got to be re-signed by associated degree existing user. The straightforward methodology, that enables associated degree existing user to transfer the corresponding a district of shared info and re-sign it throughout user revocation, is inefficient as a result of the massive size of shared info among the cloud. Throughout this paper, we've a bent to propose a completely unique public auditing mechanism for the integrity of shared info with economical user revocation in mind. By utilizing the thought of proxy re-signatures, we've a bent to permit the cloud to re-sign blocks on behalf of existing users throughout user revocation, therefore as that existing users haven't have to be compelled to be compelled to transfer and re-sign blocks by themselves. Additionally, a public voucher is usually able to audit the integrity of shared info whereas not retrieving the complete info from the cloud, although some a district of shared info has been re-signed by the cloud. Moreover, our mechanism is in associated degree passing position to support batch auditing by verifying multiple auditing tasks at a similar time.

3. NPP: A New Privacy-Aware Public Auditing Scheme for Cloud Data Sharing with Group Users

Description : Today, cloud storage becomes one of the critical services, as a result of users will simply modify and share information with others in cloud. However, the integrity of shared cloud information is vulnerable to inevitable hardware faults, software failures or human errors. To guarantee the integrity of the shared information, some schemes are designed to allow public verifiers (i.e., third party auditors) to expeditiously audit data integrity while not retrieving the entire users' information from cloud. Sadly, public auditing on the integrity of shared information could reveal information owners' sensitive information to the third party auditor. In this paper, we tend to propose a fresh privacy-aware public auditing mechanism for shared cloud information by constructing a homomorphic verifiable group signature. Not like the prevailing solutions, our theme requires at least a cluster manager to recover a trace key hand and glove, which eliminates the abuse of

single-authority power and provides nonframeability. Moreover, our theme ensures that group users will trace information changes through selected binary tree; and will recover the latest correct information block when the current information block is broken. In addition, the formal security analysis and experimental results indicate that our scheme is incontrovertibly secure and economical.

4. Enabling Efficient and Protected Sharing of Data in Cloud Computing

Description : Cloud storage plays a very important role significantly in applications like medical files transfer and in-experienced computing where in-house data storage systems square measure established. In case of group-shared data, the data face every cloud-specific and conventional executive threats. Secure data sharing among a gaggle that counters executive threats of legitimate notwithstanding malicious users is an important analysis issue in cloud. Protected Sharing of knowledge in cloud got to maintain: data confidentiality and integrity; access control; data sharing (forwarding) whereas not victimization compute-intensive re-encryption; executive threat security; and forward and backward access management. The PrSDC methodology encrypts a file with one coding key. a pair of wholly completely different key shares for each of the users square measure generated, with the user only getting one share. The possession of 1 share of a key permits the PrSDC methodology to counter the executive threats and prevents stealing of medical files or simply in case of inexperienced computing on-line credit payment details. the alternative key share is kept by a sure third party, that's termed the scientific discipline server.

3. EXISTING SYSTEM

In Existing system data is shared through the social media, Email, and centralized system but there is no security provided by the system who can recover the data changed by the hacker. In existing system use end-to-end communication of computers which does not have any security system for data transaction.

4. PROPOSED SYSTEM

Since the structure and overall arrangement of optical access networks is complicated and meantime, the quantity of operational fiber is big, failures of optical fibre links occur a lot of oftentimes, and thus, the price and operation administration and maintenance (OAM) stays at a high level. The period on-line fiber-fault detection and site within the optical access network with ancient optical domain reflector (OTDR) is complicated and dear, and has low resolution of the fault location.

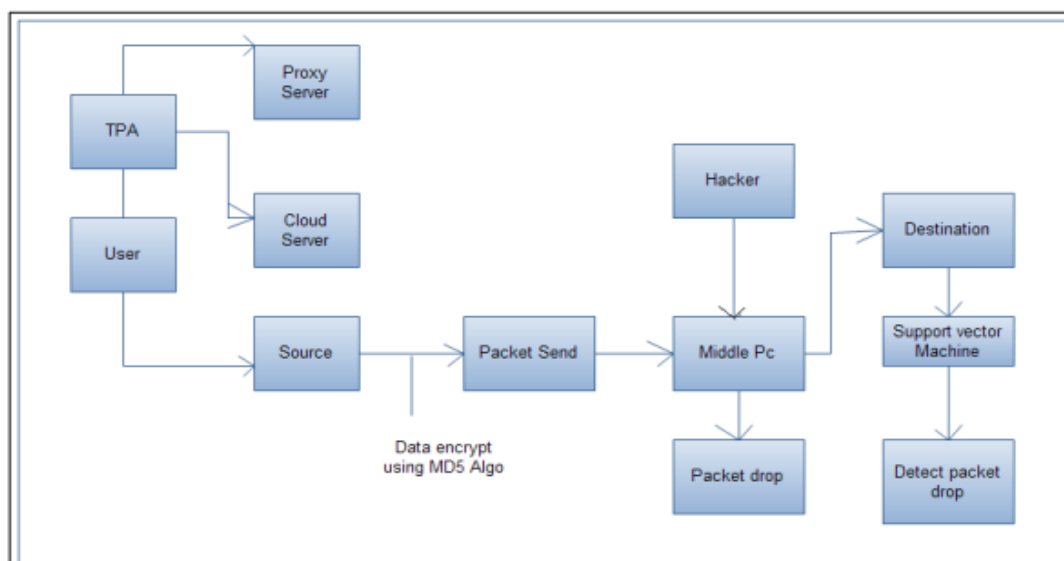


Fig. 1: Architecture Diagram

We transferred data between manager and the employees who are shared data between two system. When data is upload on system then we are stored in cloud server as well as proxy server for security purpose.

- If hacker change data between transaction then we are traces them and recover data using support vector machine (machine learning algorithm).
- So we are securely share and transferred data between multiple users on cloud computing.

Advantages of Proposed System 1) Secure data transaction

2) Data in encrypted through transaction

3) Data store in cloud server

4) Effective and efficient system for data transaction

5. CONCLUSION

Group data sharing in the cloud plays an important role when the data has to be distributed among the others. Moreover, security is one of the big concern when it comes to preserving the privacy. In this research work, we have developed a method based on the selection scheme, which helps in securing the data. We are provide cloud base encryption system for database for security purpose. Data is encrypted during the transaction which never decrypt

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