



## Public Audit Privacy for Data in the Cloud

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### ABSTRACT:

Cloud data services, it is not only the data stored in the cloud, but also common among multiple users share. Unfortunately, cloud data integration / software and human error caused by hardware failures doubt the existence of the subject. However, the integrity of the data is already shared with the mechanisms for public disclosure of the audit is to identify the privacy of confidential information from the auditors must be disclosed. In this article, we will protect the privacy policy for a public audit of the novel have been proposed to support cloud data stored in shared.

Specifically, we use the ring to calculate the shared data, metadata authentication signature are needed to verify the accuracy. With our approach, each shared data effectively ruining the signer's identity to verify the integrity of the shared data file block private, public auditors without the recovery to be able to be put up for sale. Also, check our program instead of an audit of them, is able to perform multiple tasks simultaneously. Shared data integrity audit of experimental results demonstrate the effectiveness and efficiency of our administration.

### INTRODUCTION:

Many theories, which is listed as a public audit efficiently perform an integrity check from the cloud without having to download the data collected and only the owner, but also proposed to allow a verifier. The mechanical, signed by the owner of each block of data into smaller pieces, divide; Instead of a random combination of all of the blocks and all the data collected during the integrity check [1].

A broker with a specific user audience (eg, researcher) provides professional integrity verification, it cloud or third-party auditor (TPA) that would like to use the proprietary data. Moving one step ahead, Wang et al. So at the time of the diagnosis on the public cloud data created by the modern control mechanism, are the pawns of the content of the personal data of the member of the public have not been disclosed. Unfortunately, we have only a cloud of public control over the personal data on the data sharing between multiple users of the current solutions to simulate cloud storage is probably one of the most interesting features is expected [2]. Therefore, it is in the public cloud, the shared data control mechanisms to ensure the integrity of correct. Existing equally be extended to the fact that the need to verify the integrity of the shared data.

However, in the case of shared data with the use of existing mechanisms, put in a new issue of the privacy of people's privacy is lost verifiers. proposed a new mechanism for public oversight. to further increase the efficiency of the verification audit of the operations of our review process to extend our support. Meanwhile, Oruta WWRL in the privacy of the data used and inspectors to maintain public support for random masking [3]. And also from the solution as a control lever on the front of the data to support dynamic hash index tables. Oruta and high-level comparison of existing policies taken presented. A public integrity.

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A public audit process in each block of the shared data is not enough to distinguish the identity of the subscriber is able to control the shared data. We were able to preserve the privacy of the signing of the ring for their own identity, able to withstand without blocking the production of verifiability.

### **SYSTEM PRELIMINARIES:**

#### **System Model:**

Cloud server, user groups and public certification system model in this paper are three parties. The number of Japanese users and user groups: There are two types of consumer group. In fact, cloud users to share data in a group of users and shares. Japanese users and user groups, and two members of the group. Access and share data of all members of a group to modify [4]. Share data and metadata verification (ie, a signature) is stored in the cloud server. Public certificate, access shared data as the third wave of the audit of a team of external experts, public cloud servers or data stored in the data services provide users with auditing to verify the integrity of the shared data can. Sharing of data from the cloud server verification of the integrity of the people, and want to check and challenge leads thanks [5]. After the challenges of auditing, the cloud public shared data ownership verification and audit verification server responds to. Then two hundred verification audit to ensure the accuracy of all the data to check the accuracy of the evidence will be. In short, the public audit process between public cloud server response authentication protocol challenge and-. [Nine]

#### **Threat Model:**

Threatened to be honest. Risks related to the integration of the two types of information sharing is possible. First, the opposition tried to corrupt the integrity of the information can be shared. Second, service providers, hardware failures and human errors because of corruption, accidentally (or remove), you can listen to the data store [6].

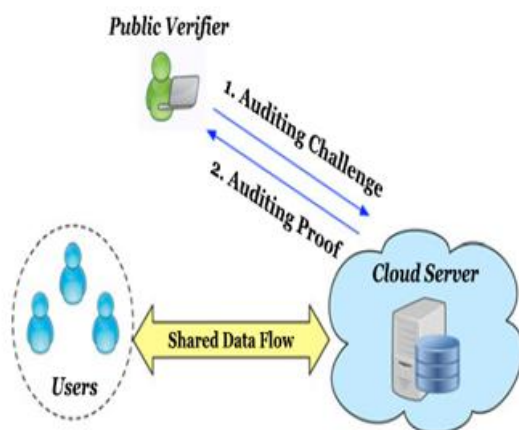
To make matters worse, it is a financial offering cloud services in order to prevent the loss of such information to the users about the corruption in order to protect their reputation and their profits, that is, the motivation will be notified. Privacy warned. Personal and confidential data for the signature profiles for each block group shared. Check the identity of the signer of the data link is shared only revealed to the public to share in each block are allowed to verify the accuracy of the metadata on the basis of the data confirmed the try. To show people the unique design of each block once confirmed, the target value (a specific group or a specific data block share) than the other can be easier to distinguish.

#### **RELATED WORK:**

Data (PDP), Ateniese, and they proposed to prove ownership. This monitoring to detect customer information is stored on secure servers. By using homomorphic and sample an array of RSA authentication, verification monitoring of the entire database, which can be defined as a public download can check the integrity of the data to the public. Unfortunately, their approach is only suitable for monitoring the integrity of personal information. Kaliski Juels and the others who are able to check the information for clues to secure an opportunity to renew the server (POR), that the layout. The guards set the value of the original documents is included in the control blocks [7]. Untrusted server authentication questions, as specified Safety and reliability of indicators related to the costs of server experience. Shacham and improved both the development of the water. BLS was first signature and the second intensive score is based on the work. To support dynamic data, Ateniese et al. PDP provides an efficient mechanism based on the same. This policy update and delete operations on data, however, this approach is not available, insert operations. Because of the symmetry, it is important to check the integrity of the information is not public and only a limited number of requests for verification of customers.

Wang et al. BLS signatures in support of the New Merkle hash tree and open examination of the data movement mechanisms. Erway et al. [10] The ranking is based on the information using a data dictionary (LCB), provided the movement of the check. Zhu et al. [5] Using the structure of the passage of the signature check procedure to reduce the storage of the Republic. Moreover, you can use a hash table, the index operation, data movement. Mechanics led by Wang et al. [5] and press [8] mask using random emphasized the ability to protect sensitive information to the public. In addition to a variety of user operate multiple effective audit, the process of checking the batch, as well as [1] Zoom digital signature. Wang et al. [3] Based on the distribution of multiple servers to ensure the accuracy of the data erasure code using homomorphic tokens. Only this approach, as well as support for dynamic data is to identify malicious servers. Data recovery costs, in order to reduce the communication of Chen et al. [4] server to check the accuracy of the information on the status of the proposed policy, to remove the code, instead of encrypting the data is encrypted using the network. Last Cao et al. [6] Under the cloud LT code for the safe and sustainable development. Compared with previous work [3-4], this method of calculating the annual high price would lead.

## SYSTEM ARCHITECTURE:



## CONCLUSION:

In this article, we Oruta, privacy protection for data sharing with the public cloud mechanical inspection. To get access to all data confirm that people share identical data authenticator so not check the integrity of a structure that will be able to, but can not distinguish who was signed in the block. Diversity audit work to improve the efficiency of inspections, we test batch to extend the scope of our global support continues. Two interesting issues we will continue to work for the future. Among them a special meaning to identify the signer of the metadata certification status, to appear outside the group (ie, original) capability. Oruta sign on the ring, with the identity of the signer is unconditionally safe [2] test, we do not support is designed to present. Our knowledge, privacy protection and to check the performance of the test system designed to support the best is still open to the public. Our vision of the future work issues (the latest version of the shared data to prove that the listener is fresh), while maintaining confidentiality proved informative.

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