

## **Efficient public Verification of Data Integrity for cloud storage systems from indistinguishability obfuscation**

### **Abstract:**

Cloud storage services allow users to outsource their data to cloud servers to save local data storage costs. However, unlike using local storage devices, users do not physically manage the data stored on cloud servers; therefore, the data integrity of the outsourced data has become an issue. Many public verification schemes have been proposed to enable a third-party auditor to verify the data integrity for users.

### **Existing system:**

In existing public verification schemes, the computation overhead of verification by the auditor linearly increases with the size of the verified data set. If the verification is required to be executed frequently for multiple users' data sets, the auditor will need a huge computation capability to accomplish the verifications and the verification delay will be huge. The deployment of such auditor is indeed a difficult problem.

### **Disadvantages:**

1. Data computational cost will be high.
2. Communication burden will be there to retrieve and use the data

### **Proposed system:**

We propose an efficient public verification scheme for cloud storage using indistinguishability obfuscation. The auditor in the proposed scheme only needs to compute a message authentication code tag for verification. We further extend our scheme to support batch

verification, where multiple verification tasks can be performed by the auditor simultaneously. The auditor's overhead in our batch verification scheme is independent of the number of verification tasks. The proposed scheme also achieves data dynamic operations, which include insertion, deletion and updating. We prove the security of our scheme under the strongest security model.

### **Advantages:**

1. Communication burden will not be there because dynamic operations can be performed here.
2. Performance and security are improved.

### **SYSTEM REQUIREMENTS**

#### **H/W System Configuration:-**

- Processor - Pentium –III
- RAM - 256 MB (min)
- Hard Disk - 20 GB
- Key Board - Standard Windows Keyboard
- Mouse - Two or Three Button Mouse
- Monitor - SVGA

#### **S/W System Configuration:-**

- Operating System : Windows95/98/2000/XP
- Application Server : Tomcat5.0/6.X
- Front End : HTML, Jsp
- Scripts : JavaScript.
- Server side Script : Java Server Pages.
- Database : MySQL 5.0
- Database Connectivity : JDBC