# Summarizing Papers – Integrity protection of data in a cloud.

An Approach to Verifying Data Integrity for Cloud Storage:

* This approach can efficiently verify data integrity and resist replay attack and man-in -the-middle attack
* HMAC method cannot resist replat attach\*
* This approach is based on MAC and there is no third party
* Client and Server make mutual authentication.
* Client generates public/private key pair for verification.
* Checksum is generated for each data block of file
* Random sequence is generated for each data block also.
* This sequence indicates where in the data block the checksum should be added.

A light Weight Centralized File Monitoring Approach for Securing Files in A

Cloud Environment:

* Tool solves the issue of tampering with important files from VM users.
* Generally, the security of individual hosts can be categorized into three broad domains: Security of individual hosts, security of network infrastructure and security of file and important data.
* Tool runs on a VM on a cloud
* Does not require a database.
* Store cryptographic checksum of the file in the file itself
* Runs on privileged VM of cloud.
* Centralized utility.



* Generate checksum for every file
* Add checksum to file between tags
* To generate checksum, need a key
* Key can be derived from password