Mona:Secure Multi -Owner Data Sharing For Dynamic Groups in the Cloud

OBJECTIVE:

This paper presents a Secure Multi owner data sharing scheme, Named Mona, For dynamic groups in the cloud. By leveraging group Signature and dynamic broadcast Encryption techniques, any cloud user can anonymously share data with others.

DOMAIN: Cloud Computing

SYNOPSIS:

The major aims of this method a secure multi-owner data sharing scheme. It implies that any user in the group can securely share data with others by the un trusted cloud. This scheme is able to support dynamic groups. Efficiently, specifically, new granted users can directly decrypt data files uploaded before their participation without contacting with data owners. User revocation can be easily achieved through a novel revocation list without updating the secret Keys of the remaining users. The size and computation overhead of encryption are constant and Independent with the number of revoked users.

We present a secure and privacy-preserving access control to users, which guarantee any member in a group to anonymously utilize the cloud resource. Moreover, the real identities of data owners can be revealed by the group manager when disputes occur. We provide rigorous security analysis, and perform extensive simulations to demonstrate the efficiency of our scheme in terms of storage and computation overhead. Cloud computing provides an economical and efficient solution for sharing group resource among cloud users. Unfortunately, sharing data in a multi-owner manner while preserving data and identity privacy from an untrusted cloud is still a challenging issue, due to the frequent change of the membership

EXISTING SYSTEM:

Several security schemes for data sharing on untrusted servers have been proposed. In these approaches, data owners store the encrypted data files in untrusted storage and distribute the corresponding decryption keys only to authorized users. Thus, unauthorized users as well as storage servers cannot learn the content of the data files because they have no knowledge of the decryption keys However, the complexities of user participation and revocation in these schemes are linearly increasing with the number of data owners and the number of revoked users, respectively. By setting a group with a single attribute, Lu et al. proposed a secure provenance scheme based on the cipher text-policy attribute-based encryption technique, which allows any member in a group to share data with others. However, the issue of user revocation is not addressed in their scheme. presented a scalable and fine-grained data access control scheme in cloud computing based on the key policy attribute-based encryption (KP-ABE) technique. Unfortunately, the single owner manner hinders the adoption of their scheme into the case where any user is granted to store and share data.

PROPOSED SYSTEM:

This paper, we propose a secure multi owner data sharing scheme, named Mona, for dynamic groups in the cloud. By leveraging group signature and dynamic broadcast encryption techniques, any cloud user can anonymously share data with others. Meanwhile, the storage overhead and encryption computation cost of our scheme are independent with the number of revoked users. In addition, we analyze the security of our scheme with rigorous proofs, and demonstrate the efficiency of our scheme in experiments.

ADVANTAGES:

➢ We propose a secure multi-owner data sharing scheme. It implies that any user in the group can securely share data with others by the untrusted cloud.

➢ We provide secure and privacy-preserving access control to users, which guarantees any member in a group to anonymously utilize the cloud resource.

SYSTEM ARCHITECTURE:
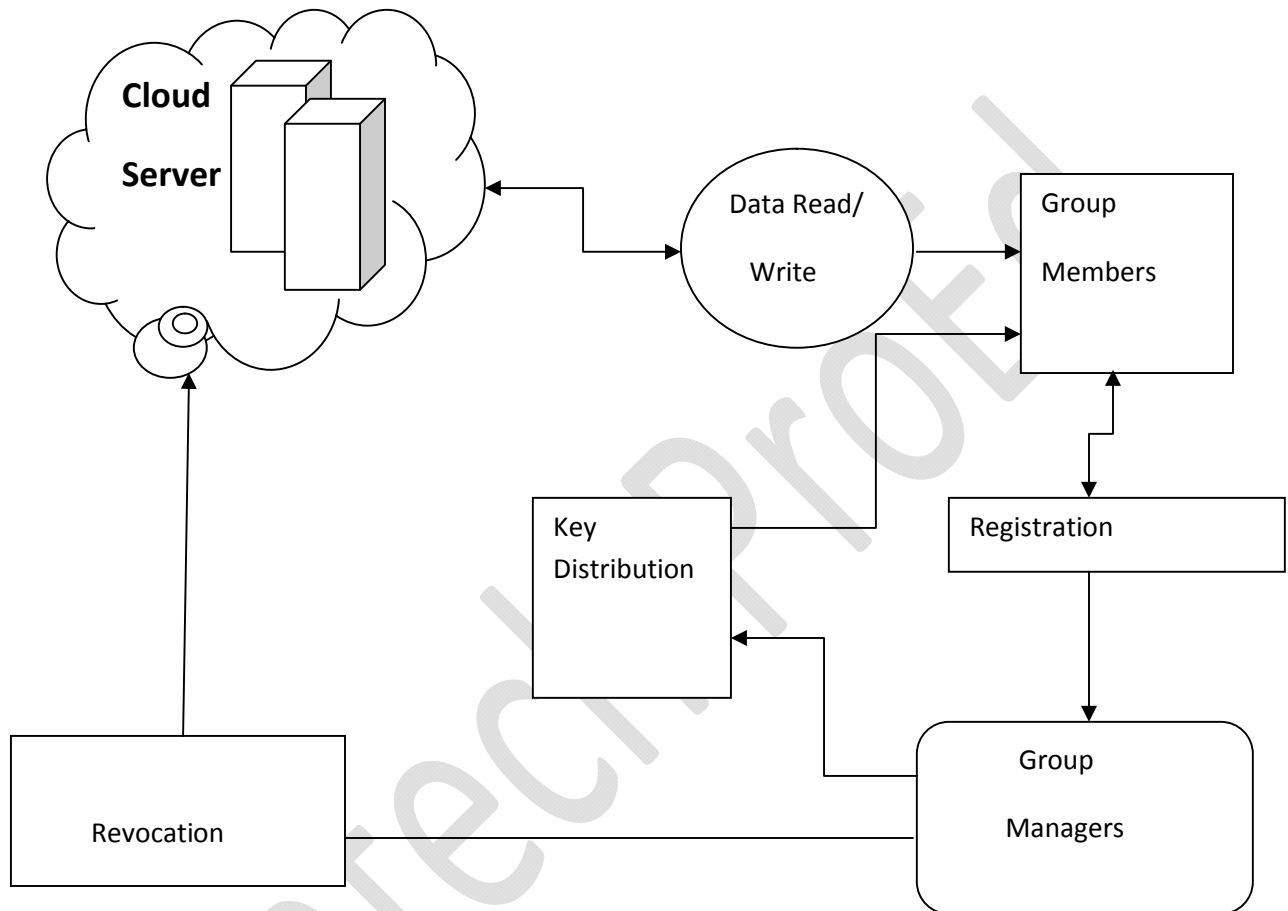
HARDWARE SPECIFICATION

- Main Processor   : 2GHz

- Ram   : 512 MB (min)

- Hard Disk   : 80 GB

SOFTWARE SPECIFICATION

- Language : Java
- Web Server : Tomcat 6
- Operating System : Windows 7 32 Bit
- CloudSim

.