

Image and Text Encrypted Data with Authorized Deduplication in Cloud

Prof. M.B. Yelpale¹, Akhil V², Devyani Sharma³, Shashank Nathe⁴, Aniket Lodhe⁵
Faculty, Department of Computer Engineering, NBN Sinhgad School of Engineering, Pune, India¹
Students, Department of Computer Engineering, NBN Sinhgad School of Engineering, Pune, India^{2,3,4,5}

Abstract: *In this study, role re-encryption is employed in a secure role re-encryption system to minimize data leakage and deduplication. It also looks for evidence of ownership to see whether the user is an authorized one. This is for the sake of effectiveness. The role re-encryption approach involves sharing the access key for the associated authorized user in order to access a specific file without exposing personal information. We use both the avoid use of text and digital visuals in our endeavor. Personal photographs, for example, are stored on our mobile phones, portable devices, computers, and other gadgets. As these photographs must be kept confidential, we are encrypting them. Nowadays, the text file is equally significant for users. It must be kept safe on a cloud server. Digital photographs must be safeguarded during transmission, but personal identity information such as copies of a pan card, passport, ATM card, and so on, should be stored on a single wnpc. To minimize duplication in our proposed system, we are securing the text file and picture data.*

Keywords: Deduplication, Encryption, Decryption, AES, MD5, etc.

REFERENCES

- [1] S. Halevi, D. Hornik, B. Pinkos, and A. Shulman-Peleg. "Proofs of ownership in remote storage systems," in Proceedings of the 18th ACM SIGSAC Conference on Computer and Communications Security. ACM, 2012, pp. 491-500.
- [2] Gonzalez-Manzano and A. Orfila. "An efficient confidentiality preserving proof of ownership for deduplication," Journal of Network and Computer Applications. vol. 50, pp. 49-59, 2015.
- [3] J. Blasco, R. Di Pietro, A. Orfila, and A. Sorniotti. "A tunable proof of ownership scheme for deduplication using bloom filters," in Communications and Network Security (eNS). 2014 IEEE Conference on. IEEE.
- [4] W, K. Ng, Y. Wen, and H. Zhu, "Private data deduplication protocols in cloud storage," in Proceeding~ of the 27th Annual ACM Symposium on Applied Computing; ACM, 2012, pp. 441-446.
- [5] Di Pietro and A. Sorniotti. "Boosting efficiency and security in proof of ownership for deduplication." in Proceedings of the 7th ACM Symposium on Information. Computer and Communications Security. ACM, 2012, pp. 81-82.