

A Review of the Problem with Cloud Data Security and the Current Countermeasures in Cloud Computing

Mr. Sharan L Pais, Koushik Achar, Krupashree R, Laya R, Manikanta
Alvas Institute of Engineering and Technology, Mijar, Mangalore, Karnataka, India

***Abstract:** One of the computer systems that is developing the fastest is cloud computing (CC). This is the necessary user administration without the need for specific and direct user administration for network resources, primarily information storage. A single platform is offered by CC, a grouping of public and private data centres that serve customers online. The use of the cloud for purposes other than just data storage and processing at cloud assets is required due to the increasing amount of private and sensitive information obtained by supervisory authorities. Sensitive data should not be sent to public clouds, however, due to security concerns brought up by recent data breaches. This document offers a thorough analysis of the study on issues with data encryption, data obfuscation, and data protection, as well as solutions for cloud data storage. Examined are the most recent methods and technologies for cloud data protection. This study also looks at a number of contemporary approaches to cloud security issues. The effectiveness of each strategy is then contrasted based on its traits, advantages, and drawbacks.*

Keywords: Cloud

REFERENCES

- [1]. Tabrizchi, H. and Kuchaki Rafsanjani, M., 2020. A survey on security challenges in cloud computing: issues, Threats, and solutions. The journal of supercomputing, 76(12), pp.94939532.
- [2]. Rambabu, M., Gupta, S. and Singh, R.S., 2021. Data mining in cloud computing: survey. In Innovations in Computational Intelligence and Computer Vision (pp. 48-56). Springer, Singapore.
- [3]. Abroshan, H., 2021. A hybrid encryption solution to improve cloud computing security using symmetric and asymmetric cryptography algorithms. International Journal of Advanced Computer Science and Applications, 12(6).
- [4]. Challagidad, P.S. and Birje, M.N., 2020. Efficient multi-authority access control using attribute-based encryption in Cloud storage. Procedia Computer Science, 167, pp.840-849.
- [5]. N. Thangarasu, R. Rajalakshmi, G. Manivasagam, & V. Vijayalakshmi. (2022). Performance of re-ranking Techniques used for recommendation method to the user CF- Model. International Journal of Data Informatics and Intelligent Computing, 1(1), 30–38. <https://doi.org/10.5281/zenodo.7108931>
- [6]. Saxena, R. and Gayathri, E., 2021, October. A study on vulnerable risks in security of cloud computing and proposal Of its remedies. In Journal of Physics: Conference Series (Vol. 2040, No. 1, p. 012008). IOP Publishing.
- [7]. Sultan, N.H., Varadharajan, V., Zhou, L. and Barbhuiya, F.A., 2020. A rolebased encryption scheme for securing Outsourced cloud data in a multiorganization context. arXiv preprint arXiv:2004.05419.
- [8]. A. Koulouzis, S., Martin, P., Zhou, H., Hu, Y., Wang, J., Carval, T., Grenier, B., Heikkinen, J., de Laat, C. and Zhao, Z., 2020. Timecritical data management in clouds: Challenges and a Dynamic Real-Time Infrastructure Planner (DRIP) solution. Concurrency and Computation: Practice and Experience, 32(16), p.e5269.
- [9]. Unal, D., Al-Ali, A., Catak, F.O. and Hammoudeh, M., 2021. A secure and efficient Internet of Things cloud Encryption scheme with forensics investigation compatibility based on identitybased encryption. Future Generation Computer Systems, 125, pp.433-445.
- [10]. Yang, P., Xiong, N. and Ren, J., 2020. Data security and privacy protection for cloud storage: A survey. IEEE Access, 8, pp.131723-131740.