Applying Different Stenography Techniques in Cloud Computing Technology to Improve Cloud Data Privacy and Security Issues

Authors : Muhammad Muhammad Suleiman

Abstract : Cloud Computing is a versatile concept that refers to a service that allows users to outsource their data without having to worry about local storage issues. However, the most pressing issues to be addressed are maintaining a secure and reliable data repository rather than relying on untrustworthy service providers. In this study, we look at how stenography approaches and collaboration with Digital Watermarking can greatly improve the system's effectiveness and data security when used for Cloud Computing. The main requirement of such frameworks, where data is transferred or exchanged between servers and users, is safe data management in cloud environments. Steganography is the cloud is among the most effective methods for safe communication. Steganography is a method of writing coded messages in such a way that only the sender and recipient can safely interpret and display the information hidden in the communication channel. This study presents a new text steganography method for hiding a loaded hidden English text file in a cover English text file to ensure data protection in cloud computing. Data protection, data hiding capability, and time were all improved using the proposed technique.

Keywords : cloud computing, steganography, information hiding, cloud storage, security
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