ملخص البـــــــــــــحث باللغة الإنجليزية:

Large data storage security is a topic of great interest to researchers, particularly in the age of big data where preserving data from theft, unauthorized access, and storage failure has become a crucial concern. To safeguard such data, encryption/decryption approaches have been employed, which are time-consuming and inefficient. The aim of this study is to develop a method, namely Mixed Fragmentation Technique for Securing Structured Data using Multi-Cloud Environment (MFT-SSD), for protecting large-scale data stored in a multi-cloud environment. This prevents insider attacks by adopting a mixed fragmentation approach to split the data into three files. For example, healthcare data is will be distributed among many clouds, each of which stores a partially unrecognised fraction of data without the need for an encryption or decryption layer. Comparing MFT-SSD to various encryption/decryption algorithms, our results show significant improvement; hence, the total performance of big data security is also improved.