Abstract

In today’s IT industry, the more sophisticated data storage is cloud storage. Cloud storage mainly helps Small and Medium scale Enterprises (SMEs) to reduce their investments and maintenance of storage servers. Most of SMEs are outsourcing their data to cloud storage. Users’ data that are sent to the cloud have to be stored in the public cloud environment. Data stored in the cloud storage might mingle with other users’ data. This will lead the data protection issue in cloud storage. If the confidentiality of cloud data is broken, then it will cause loss of data to the industry. Security of cloud storage is ensured through confidentiality parameter. To ensure confidentiality, the most commonly used technique is encryption. But encryption alone doesn’t give maximum protection to the data in the cloud storage. To have efficient cloud storage confidentiality, this paper uses encryption and obfuscation as two different techniques to protect the data in the cloud storage. Based on the type of data, encryption and obfuscation can be applied. Encryption can be applied to alphabets, alphanumeric and symbols. Obfuscation can be applied to numeric type of data. Applying encryption and obfuscation techniques on the cloud data will provide more protection against unauthorized usage. Confidentiality could be achieved with a combination of encryption and
Obfuscrypt: A Novel Confidentiality Technique for Cloud Storage

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Index Terms
Keywords
Cloud computing; Cloud Storage; Encryption; Obfuscation; Confidentiality;