Abstract

Cryptography in the field of information technology is an art to protect data privacy using standard mathematical techniques. Cloud computing, one of the emerging techniques to lease computing resources on demand, makes use of remote data storage where data owner does not possess direct control over her data. To protect privacy of users' data and to enable user to verify integrity of the data stored on remote location, modern cryptographic techniques are used. Cryptographic techniques impose computational and communication overhead which in turn affect the performance of the overall operation. In this research article, we analyze two broad categories of cryptography viz. symmetric key encryption and encoding. We analyze various algorithms and compare them on the basis of security and performance perspectives. We further make recommendations for Cloud users to protect & verify their sensitive data using
one of these cryptographic techniques.

References

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Index Terms

Computer Science

Security
Keywords

Cloud Computing  Data Security  Privacy  Encryption  Encoding  Performance