Non Path-based Mutual Anonymity Approach with Secure Cipher Text to Image Encryption Message-Peer to Peer Systems

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Abstract

In Anonymous peer to peer system regularly incurred extra expenses if wants to do perfect transfer. Last node always tries to copy itself when they receive the information and privacy consideration for the entire user kept in consideration. The transmission of secure data in peer to peer system is major issue in current scenario. To ensure the security in the peer to peer system there are many techniques and algorithm were evolved his cryptograph techniques are most powerful. In the existing models the path based, unstructured with dummy traffic to confuse the attacker. The plain texts convert to cipher text in the existing models. The attackers are easy track the cipher text and this is not secure form. Propose Rumor Riding, a novel approach for nodes in P2P systems with a more secure data, cipher text to Image format which is more secure and protect data from unauthorized users. In this scheme block cipher using substitution method that encrypts the given text into blocks. In this paper, the user given plain text is dividing into blocks that are referred to the AES Rijndael Encryption process, converted to unreadable format. Each and every character of the block shifted into ASCII value and from this ASCII value formulated into equivalent color code. Finally this cipher text which encrypted is
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become the Image format this give the more enrichment to the data. After become image, now applying Random walk mechanism for lower overhead systems, by using the symmetric cryptographic algorithm. Dummy traffic generation will be used to hide the actual image encrypted data to confuse the attackers and accelerating query speed. Dummy traffic generates traffic in a similar message with Image encrypted format and key to confuse the attacker. Evaluation is done by using anonymity approaches AES Rijndael. show the effective by simulations driven this protocol is very effective and efficient than previous protocols and this is illustrated with the experimental and analytical results.

References

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Index Terms

Computer Science Image Processing

Keywords

Dummy traffic; Query Speed; non path based; random walk; peer-to-peer; Block cipher, Color Substitution, AES Rijndael Algorithm.