Various Image To Text Encryption Techniques: A Valuation

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Abstract: These days the sight and sound information security are ending up essential. The encryption strategy is utilized to secure mixed media information. There are diverse procedures used to shield private picture information from unapproved get to. A Survey of various text to image Encryption techniques that are actually given in this paper. It moreover centers around the usefulness of another method to scramble the content by utilizing different calculations and changed over to Image.

Keywords: Text Encryption, Image Encryption, Text Decryption, Image Decryption

I. INTRODUCTION

The text encryption technique is transfer the text securely for that no one can access those texts. Picture encryption, video encryption, tumult based encryption have applications in numerous fields including the web correspondence, transmission, restorative imaging, armed force Communication etc. The development of encryption is moving on towards the outcomes of absolute reasonable outcomes. The picture information have uncommon properties, for example, mass capacity, high excess and high connection among the pixels. Encryption methods are helpful devices to ensure mystery data. Encryption will be characterized as the transformation of plain message into a structure considered a figure message that can't be perused by any individuals without unscrambling the scrambled content. Unscrambling is the regulate technique of encryption which is the path of changing over the scrambled content into its unique plain content, with the goal that it tends to be perused. Encryption is the path which applying uncommon numerical calculations and keys to change advanced information into figure code before they are transmitted and decoding includes the utilization of scientific calculations and keys to get back the first information from figure code. The fundamental objective of security the executives are to give validation of clients, respectability, exactness and wellbeing of information assets.

II. LITERATURE REVIEW

- Present day encryption worries with:
- ✓ Classification Information can't be comprehended by anybody
- ✓ Trustworthiness Information can't be changed.
- ✓ Verification Sender and collector can confirm each.
- ✓ Access Control: this determines and controls who can get to the procedure.
- Types of encryption

Three types of encryption techniques are:

Symmetric-key Encryption: Both parties share a solitary key. The first party utilizes this key to encode plaintext and send messages to the beneficiary. On the opposite side the second party applies a similar key to decrypt the message and recuperate the plain content.

Public Key encryption: In Public-Key encryption two related keys (open and private key) are utilized. Open key might be unreservedly conveyed, while its matched private key, remains a mystery. This key is used for encryption and for discovering private key is utilized.

Hash Functions: No key is utilized in this calculation. Fixed-length hash esteem is registered according to the plain content that makes it outlandish for the substance of the plain content to be recuperated. Hash capacities are additionally used by many systems to encrypt passwords.



A. Analysing the Efficiency of Text to Image Encryption Algorithm

Ahmad Abusukhon, Mohammad Talib and Maher A. Nabulsi have demonstrated the effectiveness of the content to picture encryption calculation investigations. Abusukhon and Talib proposed a novel information encryption calculation called Text-to-Image Encryption calculation (TTIE) in which a given book is scrambled into a picture. Each letter from the plain content is encoded to one pixel.

B. Permutation based Image Encryption Technique

Sesha Pallavi Indrakanti and P.S.Avadhani presented a calculation based on an arbitrary pixel stage with the inspiration to keep up the nature of the picture. It had three stages during the time spent encryption. The stage one was the picture encryption. Stage two was the key age stage. What's more, stage three was the recognizable proof procedure. This furnishes secrecy to shading pictures with fewer calculations.

C. An Image Encryption Approach Using a Combination Of Permutation Technique Followed By Encryption

Mohammad Ali Bani Younes and Aman Jantan give another system dependent on the blend of picture change and a notable encryption calculation called RijnDael. The first picture was isolated into 4 pixels \times 4 pixels squares, which were revamped into a permuted picture utilizing a staged procedure, and afterward, the produced picture was encoded utilizing the RijnDael calculation.

D. Modified AES Based Algorithm for Image encryption

Zeghid, M.Machhout, L.Khriji, A. Baganne, and R. Tourki examine the Advanced Encryption Standard (AES), and in their picture encryption method, they include a keystream generator (W7,A5/1) to AES for guaranteeing the encryption execution.

III. CONCLUSION

This web world these days, the security of information is vital. In this paper, I have reviewed distinctive content encryption procedures and decoding systems in the range of years. The security for the text and image encryption techniques has produced to be profoundly imperative since the correspondence by transmitting of computerized items over the open system happen all around as possible. Those encryption techniques are scrutinized and confined well to advance the execution of the encryption techniques additionally to guarantee the security procedures. To total up, every one of the methods are valuable for ongoing encryption. Every procedure is a type of its own particular manner, which may be appropriate for various applications. Regular new encryption procedure is establishing subsequently fastened and reliable customer base encryption techniques will dependably work out with a high rate of security. Recently proposed information encryption systems and furthermore improve the security level by presenting more than one encryption calculations.

REFERENCES

1. Suhaila, O.; Sharif, L. I.; Kuncheva, S. P. & Mansoor.(2010). Classifying Encryption Algorithms Using Pattern Recognition Techniques. IEEE Transactions. PP. 1168-1172.

2. Shanthi, and Dr. V Palanswami .(July 2014).Novel Text To Image Encryption Technique by using by AES Rejindael Algorithm with color code conversion. *International Journal of Engineering Trends and Technology (IJETT)*.Volume 13. Number 5.

3. Yuxi, Zhu. ; Cui, Ruchun.(2010). Applied Study Based on OMAP Digital Fingerprint Encryption Method. IEEE Transactions. pp. 1168- 1172.

4. Seyedzade, Mohammad, Seyed. ; Atani, Ebrahimi, Reza. and Mirzakuchaki, Sattar. (2010). A Novel Image Encryption Algorithm Based on Hash Function. 6th Iranian Conference on Machine Vision and Image Processing.

5. Abusukhon, Ahmad.; Talib, Mohammad. and Nabulsi, A. Maher.(2012). Analysing the efficiency of Text to image encryption algorithm. *International Journal of Advanced Computer Science and Applications*. Vol. 3. No. 11.

6. Singh, Sourabh. and Jain, Anurag. (May 2013). An Enhanced Text to Image Encryption Technique using RGB Substitution and AES. *International Journal of Engineering Trends and Technology (IJETT)*. Volume 4. Issue5.

7. Devi, Rama, V. B.; al. et.(2010). A Novel Encryption Method for the Secure Transmission of Images. *International Journal on Computer Science and Engineering*, Vol. 02. No. 09. pp.2801-2804.

8. E, Xu.; Shao, Liangshan.; Cao, Guanghui.; Ren, Yongchang. ;Qu, Tao.(2009). A New Method of Information Encryption. *IEEE Transactions*. pp. 583-586.

9. Wani, N.H.; Taneja, K. & Adlakha, N. (2013). Health System in India: Opportunities and Challenges for Enhancements. *IOSR Journal of Humanities and Social Sciences*.9(2). PP. 74-82. ISSN: 2278-487X.