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DATA HIDING IN ENCRYPTED IMAGE

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***Abstract*— Recently more end more attention is paid to reversible data hiding (RDH) in encrypted image ,since it maintains the excellent property that the original cover can be losslessly recovered after the embedded data is extracted while protecting the image content's confidentiality. All previous methods embed data by reversibly vacating room from the encrypted images, which may subject to some error on data extraction and image restoration. Here propose a novel method by reserving room before encryption with a traditional RDH algorithm.**

Keywords—Reversible data Hiding,Image encryption,Privacy Protection,LSB replacement

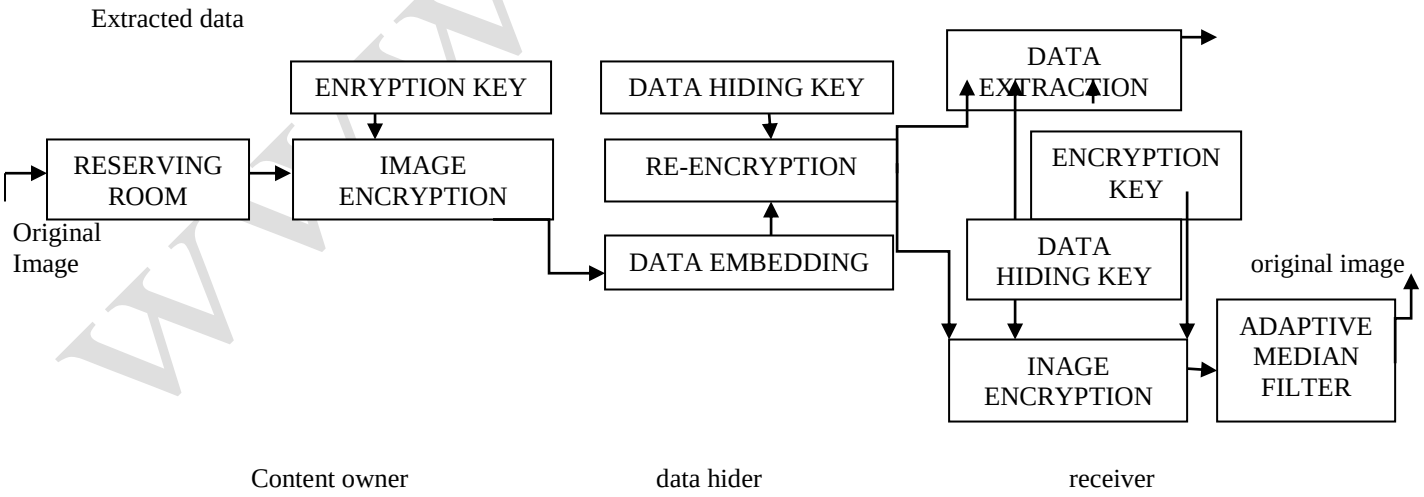
I. INTRODUCTION

The amount of digital image has been increased rapidly; therefore the protection of multimedia data is very important for many applications, such as confidential transmission, video surveillance, military and medical application. The protection of multimedia data can be done with encryption or data hiding algorithm. Now their new problem is trying to combine in a single step, compression, encryption and data hiding.

II. LITERATURE SURVEY

By literature survey in reversible data hiding it was found that digital water marking, often referred to as data hiding ,has recently been proposed the promising technique for information assurance, This type of data hiding algorithm can be referred to as lossy data hiding .Consequently the LSB method is not reversible, so a new methods is proposed.

III. BLOCK DIAGRAM



IV. WORKING

In the proposed method the content owner first reserve enough space on original image and then convert the image into encrypted version with the encryption key. the data embedding process in encrypted image is inherently reversible for data hider only needs to accommodate data into spare space previous empted out. The data extraction and image recovery are identical to the frame work VRAE. Elaborate a practical method ion this frame work which primarily consist of four stages , generation of encrypted image, data hiding in encrypted image, data extraction and image recovery. The rational rhombus method is used to establish RDH approach. For secret data hiding a simple method LSB replacement is used.

V. FUTURE WORK

The system can be enhanced to encode .exe,.doc,.pdf,.mp3.It can be applied in networking and keys are send and received securely by adding an extra key.

VI. CONCLUSSION

RDH is an advanced topic for privacy preserving requirements for cloud data management; hence it takes the advantage of all tradition RDH technique. It provides an excellent performance with adaptive median filter.

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References

[1] "Reversible Data Hiding in Encrypted Image by Reserving Room Before Encryption"Keda Ma,Weiming Zhang,Xianfeng Zhao,member IEEE, Nenghai Yu, and Fenghua Li,

[2] "Reversible Data Hiding :Princilples, technique and Recent Studies"Masoud Nosrati Ronak Karimi Mehdi Hariri

[3] "Reversible Image Watermarking Using Interpolation Technique",Lixin Luo, Zhenyong Chen, Ming Chen, Xiao Zeng and Zhang Xiong.

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