



## International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Vol. 3, Issue 3, March 2015

# Survey on Controllable Secure Watermark Technique to Detect Data Leakage

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**ABSTRACT:** Nowadays, the use of the internet triumph over its wider enhancement. The file transferring and sensitive data transferring through internet also increases. At the time of file transferring intruders may hack the file and tries to read the sensitive data .In order to prevent sensitive data and to provide security to the sensitive data watermark technique is used. Watermark technique, which means the hiding data from the external users. In another encrypting and decrypting the data. In this survey paper it explains about the watermark technique, and how it is used in various field to protect the sensitive data from the intruders. This paper explains about the technique that is used to prevent the sensitive data using watermark technique.

**KEYWORDS :** watermark technique, authentication, security, cryptography, digital watermarking.

### I.INTRODUCTION

In recent days, the rapid rising of internet leads development in file transfer or data distribution. To provide security to those sensitive data the watermark technique is used.[1] Digital watermarking is a kind of watermark technique used to hide a small amount of digital data in a digital signal in such a way that it can't be detected by a standard playback device or viewer. Digital watermarking can embed an indelible and invisible 'message' into both the image and the audio track of the motion picture as it passes through the server. In this paper it explains about, how the secured watermark technique is used for jpeg images to prevent sensitive data leakage. This survey paper also explains about the digital video watermarking. Digital video watermarking is one of the rising technology, that is used for the purpose of copyright fortification of the digital media. This survey paper explains about the watermark algorithm, which is used for the purpose of image authentication. This paper mainly concentrates on the copyright protection ,replication and Authentication of sensitive content.

### II.LITERATURE SURVEY

In this section ,the survey papers focuses on the various watermarking technique.[2]this reference paper explains about the video piracy. It focuses on the video watermarking. Watermarking is one of the vital role in prevention of copyright. It needs to design the robust watermarking video for precious purpose. The components that are involved in the methodologies are watermark embedding, attack, and watermark detection. The watermark embedding consists of the signal called the watermark signal that is generated to embed along with the original signal, to generate the watermark signal. After embedding of the signal the water mark content can be subjected to any type of attacks. At the time of watermark detection, detector consists of the test signal ,that can be watermarked. The methodologies used in this are correlation based method, discrete Fourier transform, single value decomposition, principle component analysis, Discrete wavelet transform. This paper solves the video piracy problem[3]. [4]Its deals with the security measures, privacy problem and anonymity challenges in legal peer-to-peer content distribution. The security issues of peer to peer is discussed in this survey paper. Its concentrates on the mechanisms that is used to encounter the challenges in peer-to-peer context distribution system. The mechanisms for security includes that the encryption and digital rights management in it. It also includes digital watermarking and trust management in it.



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This survey paper needs to improve the efficiency. Strategic solutions for the problem of addresses have been given, when it have security issues in peer-to-peer network.[5]This paper describes the digital watermarking. The classification of digital watermark includes the robust fragile. In the robust it consists of the sign copyright information. Fragile is used for the purpose of integrity protection. Along with the fragile ,the semi fragile is used to change the watermarked image. It discuss about the concept of image watermarking, video watermarking, text watermarking, and graphic watermarking. The purpose of this paper is to provide the copyright protection watermarking, and to provide tampering tip watermarking. It also discuss about the requirement of digital watermarking, which includes robustness, security, capacity, imperceptibility, modification and multiple watermarks inevitability[6][7][8][9][10][11][12].[13]This survey paper deals with the method of verification, that is verifying the relational database. It discuss about the image watermark embedding algorithm. In the image watermarking embedding algorithm it consists of the components of embedded scale, key, ownership images, original RDB. After the completion of the image watermarking embedding algorithm, the image watermark extracting algorithm is used. Thus, this paper deals with the verification of relational database[14][15][16][17].[18]This paper discuss about the integrity of the relational data and to provide the copyright protection. It discusses the types of attack. Initially, the value modification attack. In the value modification attack it includes that the bit attack. Bit attack performed randomly called as randomization. Flipping a value includes that the rounding attack, transformation and subset attack. It also discuss about the watermarked based numerical data type attribute. It discusses about the speech as the form of watermark information and genetic algorithm based watermark signal. This reference paper explains about the watermark based on categorical data type attributes. It discusses about the watermarked based on the tuple. In the watermark based on tupule it consists of fake tuple in the form of watermark information and virtual attribute. of watermark .[19][20][21][22][23][24][25].

## III.CONCLUSION

In this paper our proposed system includes watermark technique . The importance of proposed paper is to provide security and to find sensitive data leaker. A data distributor(user) has given the sensitive data to other trusted party, with intentional or unintentional those sensitive data are leaked and accessed by unauthorized person .To avoid unauthorized accessing, watermark technique is used to find the data leaker. Watermark technique is used to send the alert message to distributor through email , when data is accessed by unauthorized user. Proposed data allocation strategies (across the agents) that improve the probability of identifying leakages. In some cases , fake data records are used to improve the chances of detecting leakage and identifying the guilty party(data leaker).

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