Network Steganography and its Techniques: A Survey

Abstract

With the ongoing increase of threats and vulnerabilities to our information security, the need for a strong, secure and an effective kind of approach is highly required. An approach that fulfills all these parameters is a byproduct of the trending steganography technique. As there is the availability of various types of cover media, but this paper focuses only on one such media, which is a ‘network’. Using the network as the cover media for hiding the data for transmission of the secret information safely, is one of the smart moves towards the information security. This approach is known as network steganography. Since the intruders try every bit to take the advantage of that secret information, this concept of network steganography provides the concealment of the secret data by using the covert channel which uses the bandwidth of other permissible communication channels for the transmission purpose. This paper is on network steganography depicting all the proposed methods available for the network steganography along with the process of concealing the secret information in the desired communication protocol.
References


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Network Steganography and its Techniques: A Survey

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Index Terms

Computer Science          Security

Keywords

Covert Channel, IDS, Network Steganography, OSI Model, Protocol.