Conceal Communication via MP3

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Hiding messages for various security purposes have become highly interesting topic on now a day. Encryption provides the ability of data hiding. With development of the technology, people tend to figure out a technique which is not only capable in hiding a message, but also capable in hiding the existence of the message. The current study is conducted in order to hide a text message in an MP3 file. The major aim of this research is the ability to hide text message in MP3 and retrieve the hidden text message. The research is introduced a new system called StegMP3 v1.0. Steganography of mp3 is more challenging due to wider dynamic range of the Human Auditory System (HAS) rather than Human Visual System. Research objectives are secrecy, verification, truthfulness, assure unapparent perceptual transparency of mp3 file (cover object) and the object covering secret messages and send/receive mp3 files. Least Significant Bit (LSB) is the core tactic which changes the last bit from a byte. This system doesn't change the mp3 file and doesn't increase the size of the carrier file. Thus, the existence of the message cannot be detected. MP3 consists of packets and each packet includes header and data. The system uses unique approach to guarantee the original quality of mp3 and secrecy of the message. However, the impartiality of dispatch before and after is assured. The system facilitates to enjoy the music while processing. The system is evaluated by conducting a survey among IT professionals. The program quality has been accepted 84.37% and 89.59% accepted that the program like to be available in the internet. This program is suitable for safe and careful preservation of sensitive records. The StegMP3 v1.0 is a free, simple and quality assured software tool new to the area. In future, the system should be upgraded with cryptographic involvement and increase the message capacity support with text files rather than text.

Key words: Steganography, HAS (Human Auditory System)

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