ABSTRACT

Steganografi can use various media to hide a message (secret message). This final

project will explain the implementation of media hiding techniques of digital image (*. bmp). This technique used SSB-4 as the method. SSB-4 is a method that replace the 4th bit. Each

bit of the image pixels value message will be pasted on the 4th bit in each pixels of a cover

image.

In the process of steganography, the secret information as the form of black-white

image would be encrypted first with using baker map which is an image that encrypted with the way the organization scrambles the original pixels. The result of brute force attack

calculating for image file (128x128) pixel to crack, it takes 3.610 x 10²² years, so encrypted

using Baker Map is safety.

From experiment, the stego image that have given noise, each kind of noise have

maximum level to return message image like before encrypted without error. On SSB-4 method, changes of fourth bit equivalent with variance level 10⁻⁷ (Gaussian and Localvar

noises), 10^{-6} (Specklenoise), and 10^{-5} (salt & Pappernoise). So, out of that variance level will

be destroy the performance.

Keywords: Steganography, Baker Map, method of SSB-4

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