ABSTRACT

Steganography is one of the alternative encryption techniques currently.Steganografi hide messages in other messages that can include text, images, and so on. Because humans are less sensitive to messages that do not form visible text, steganografi is rarely to detected.

Digital Steganography using a variety of digital media to hide the message. These media can be an image, audio, or video.Hiding messages techniques used is varyous. In this time many approaches to detect steganography on digital images. However, still few published methods for detecting steganography on sound data, where voice data transmission technology has been equipped with a field to steganography,one of them is VoIP.

In this final task had been implemented a VoIP application steganography. VoIP (Voice over Internet Protocol) is one of the media to send the voice messaging where used protocol RTP (Real-time Protocol). VoIP sends a sound data using IP packets. If the sound in the form of IP packets are 'stolen' in the middle of the road, the thief will soon know it. To overcome this, VoIP is equipped with a field to steganography. Field will be used as a covert channel, which secret message can be streamed covertly. In addition the method can be applied least significant bits (LSB) on the voice data which will be sent viaVoIP.

In addition, at the end of this task has been done on performance analysis of VoIP performance Steganography, the sound quality of the data inserted and before inserted, which Steganography sound quality of VoIP is still in ITU-T standard with good quality MOS.

In addition, at the end of this task has been done on performance analysis of VoIP performance Steganografi, the sound quality of the data inserted and before inserted, which Steganografi delay of VoIP 0.173282344 ms and VoIP 0.016009571 ms is still in ITU-T standard with good quality MOS . Extraction test messages received by the server and client can be realized with both, and can communicate fullduplex. For security testing conducted Man in the middle attack, in the implementation will be difficult to decryption on VoIP steganografi attackers due to the form of binary message data and inserted in the RTP payload.

Key word : Steganography, Covert Channel,VoIP,Crypthography, RTP