ABSTRACT

In development of video surveillance service makes data safety aspect important. The important data only can be accessed by certain people. Criptograph is a safety data method which is concentrated on written data. The algorithm which is used also influences quality and the data safety. That's why it needs an encription method to hide the data information from the third person.

In this final project will be made a system which using selective encryption with serpent algorithm. The basis of selective encryption is to reduce the volume of computation for encryption / decryption process. A strong key is required by the selective encryption, therefore the serpent algorithm implemented as a security factor of this system.

In this final project will be made also a video surveillance data safety which is a solution to secure video data and give access safely to people who have rights. In this design will be made a system which can secure video data from camera in rieal time by encripting the video data, also give access to people who have rights to the streaming video who can decrypt the data to the original file.

The result of this system shows that selective encryption with serpent algorithm with particular generated key could encrypt and decrypt surveillance video streaming with real-time because the delay lesser than one second

Keywords: *criptography, selective encryption , serpent, video streaming,* video *surveillance, real-time*