



Protect Video Objects using HEVC Standard

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Introduction

Video encryption is a process of digitally hiding objects in videos to help avoid sharing videos without permission. The process involves encrypting videos and applying encoding software or techniques to secure the content. No one can view the encrypted videos without first decrypting them.

Due to the rapid development of communication technologies, surveillance systems have become increasingly common in recent decades, as the presence of surveillance cameras is not only limited to airports or stations but is found in homes and offices. So surveillance cameras allow authorized people to track the objects they need by using their portable devices, but sometimes, there are a lot of unauthorized individuals who can access videos in illegal ways, different ROI techniques are represented to solve these hacking ways by encryption videos to hide privacy from the sensitive area.

The region of interest (ROI) is considered a valuable and important area of a video. And encryption to ROIs is a good way to provide protection on video content with low complexity. In video surveillance systems, cameras are used to monitor activities in a site with the goal of detecting suspicious activities. So the moving objects are the most important parts, which can be defined as ROIs.

Objectives

Maintaining the privacy of information inside videos by encrypting the most important objects like faces or brands when an unauthorized person enters these videos with less cost and operations.

