Abstract

With high development of computer technology and internet technology, multimedia service has become a new area in internet services today. It has problems like huge amount of data, high speed play, bandwidth limitations etc. Enhancing its security and speed has become an assurance of the video service. Using H.264 to compress and encrypt, videos can solve the
speed and security problems in mobile application. Protecting the video information by encrypting selective data is the crucial element. Considering the limited resource and bandwidth of mobile devices, a selective video encryption algorithm, is proposed based on the special features of H.264. In this algorithm, the luminance transform coefficients of residual data are selectively encrypted. Experimental results demonstrate that the proposed algorithm encrypts much less important data and achieves good security and high efficiency.

Reference


Index Terms

Computer Science
Multimedia
Key words

H.264  Video Coding  Partial

Encryption

Luminance Transform Coefficients

Stream Cipher