

Ying Zhen

Video Compression: MPEG4 Standard

The MPEG standards have been used thoroughly in the entertainment and computer industries. The latest version to hit the mainstream, MPEG-4, has only begun to gain acceptance. Players used to decode the files using the new standard have only been released for computers within the last year, such as the new Windows Media Player and the new version of Apple's Quicktime. Several of MPEG-4's main markets, including wireless devices such as cell phones, have not seen any use of this standard yet.

The focus of this topic will be on the methods used to encode video for MPEG-4 and how it improves on MPEG-2. There will also be comparisons to MPEG-7 and MPEG-21. It will discuss the ways that video is compressed, which use the following techniques: motion estimation, transform, quantization, and spitting into macro-blocks. It will be shown how effective the MPEG-4 is compared to past standards. It will also discuss the history of MPEG and why the need formed for the development of this standard. Methods to improve the standard will be discussed along with the impact that such changes will have on the standard. It will conclude with a summary of the roadblocks that must be overcome for MPEG-4 to prosper in the marketplace.

References

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