

ITU-T Workshop

Video and Image Coding and Applications (VICA)

Abstract

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Title of Presentation: Standardization in JVT: Scalable Video Coding

A new work item on Scalable Video Coding (SVC) was started by MPEG's Call for Proposals in 2004. The goal is to provide scalability at the bitstream level, with good compression efficiency and various flexible combinations of scalable modes (such as spatial, temporal and SNR scalability). The SVC standardization work is now continued within JVT as an extension of AVC / H.264. The current draft of the standard defines a codec architecture which is based on a layered representation. The design builds upon an AVC-compatible base layer, and re-uses existing elements such as motion compensation, transform, quantization and entropy coding. Drift between encoder and decoder can be limited by proper combination of closed- and open-loop concepts. Bitstream truncation capability is provided at the granularity of NAL units. Extended spatial scalability modes such as cropping and non-dyadic scaling are also considered. The SVC extension of AVC is planned to be finalized by mid of 2006.