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Title

New Storage Requirements Supporting Video Postproduction

Abstract

The need to migrate from SD to HD in E.N.G.,, and related remote pickup and digital cinema applications, is already driving the need to increase the storage capacity of media used in professional video capture applications. However, HD is not the only technology driven trend that can impact the need to add additional storage. For example, non-linear editing equipment and special effects post-production processing can benefit from special meta-data time sync'ed to the aural and video channel at the time of the recording. Historically such meta-data was of such a low bandwidth that it did not add in a material way to the total storage requirement when compared to the main channel audio and video content.

This presentation will suggest the benefits of capturing multiple versions of video and audio that can offer exciting benefits that support new post-production special effects in creating broadcast content as well as for re-purposing the content for use in interactive applications. In such a situation the storage requirements will grow by integral multiples of the main channel content and for several applications of interest could well exceed 3-4 times the requirement for a single HD channel. Applications examples to be identified include multi-channel content capture:
… With multiple iris settings to extend dynamic range
… In multiple focal plans to extend depth of field
… In multiple adjacent fields of view to allow wide angle capture
… From multiple image sensors to facilitate 3D adjustable perspectives.

Biography

Mr Lipoff is currently a private practice communications systems engineer who provides technology and management consulting services to clients in the telecommunications, information technology, media, and electronics industries. He has worked as a broadcast engineer for WIP Radio in Philadelphia and WLVT-TV in Allentown. He then moved to designing wireless communications products for Motorola and Bell and Howell. Next he joined the consulting firm of Arthur D Little, Inc (ADL) where he stayed for 25 years leaving as VP of Communications and Information Technology Laboratories.

Stuart holds BSEE, BS Engineering Physics, MSEE, and MBA degrees. He is a fellow of the IEEE and past president of The IEEE Consumer Electronics Society. He holds four US patents and several more are pending. Currently he chairs The Technical Activities and Standards Committees of The IEEE's Consumer Electronics Society and is a member of IEEE-USA's Communications Policy Committee developing public policy white papers.

Among his several hundred projects over the last 30 years examples include: managing the development of today's DOCSIS cablemodem specifications under contract to the cable TV industry, under contract from NAB and MSTV he performed analysis and developed recommendations, adopted by The FCC, to mandate phasing in DTV tuners in new TVs, he managed The Next Generation Network Architecture (NGNA) project for Comcast, Cox, and Time-Warner to develop a services vision and supporting technology architecture for the future of cable TV, he assisted NAB to identify and estimate budgets for R&D projects that support exploiting over-the-air transmission assets, he developed air interface technology recommendations for Sprint PCS leading to their choice of CDMA, he assisted Bell Atlantic Mobile (now Verizon) with the selection and deployment of public wireless packet radio services.