

CONTENT CREATION AND MANAGEMENT

WEDNESDAY, 22 JULY ■ 10:15AM – CONFERENCE ROOM 2

Title: Compressed Domain Splicing; Myth, Madness or Mastered

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Mediaware
Chief Technology Officer**

Abstract

Is the seamless splicing of compressed digital video a myth or is it madness? Many believe that it is impossible to seamlessly and frame-accurately splice together two streams of long GOP MPEG-2 or MPEG-4 AVC video without taking both streams back to baseband and re-encoding or rendering to all I-frames, since both these formats rely heavily on temporal compression. In this paper we discuss how these formats **can** be seamlessly spliced, how splicing can occur on any frame not just I-frames, and how to ensure that video buffer verifier (VBV) constraints are preserved.

Compressed domain splicing technology offers many potential benefits to broadcasters including improvements to video and audio quality, streamlining technical architecture and workflow, and a significant reduction in cost when properly implemented. We look at a number of splicing solutions on the market and compare the advantages and disadvantages of each.

To finally show that compressed domain splicing is neither myth, madness nor academic trickery, a real-world case study is presented which describes how compressed domain splicers are being used to splice interstitial content into live broadcast channels.

Bio

Dr Kevin Moore is Mediaware's Chief Technology Officer and is responsible for identifying and developing product and technology strategic vision. Joining Mediaware in 1998 shortly after it was founded, Kevin was part of the engineering team responsible for the development of Mediaware's core capabilities in native MPEG and H.264/AVC editing, compressed domain scene change detection, video playback, stream capture, and helped build the first two generations of desktop editing products. Prior to joining Mediaware, Kevin spent 7 years as a Research Scientist at CSIRO, Australia's national science agency, working on a range of image processing and scientific data visualization projects. Kevin has BSc and PhD degrees in Computer Science from the Australian National University, and a broad background in video and image processing, high performance computing and software engineering.

Qualifications:

PhD in Computer Science

BSc. (Hons) in Computer Science