

Application Note



Distributed Video Archive/Replay Systems for Flight Simulation Training Applications

The AP Labs Digital Video Archive/Replay System (DVARS) has been designed to meet the demanding requirements of networked, real-time distributed flight simulation/training applications. Typically controlled by a mission brief/de-brief system, the AP Labs DVARS represents the leading-edge in performance while remaining cost-effective through the maximum use of commercial server technology.

At the cockpit, the AP Labs real-time digital video hardware compression system is utilized to digitize and compress cockpit RGB video and audio, including multi-function displays and out-the-window (OTW) scenery. Once compressed the data is immediately stored on a standard RAID server and the video/audio data is simultaneously available for distribution across a standard network using point-to-point or multi-cast transmission.

The "user" of the video and audio is typically a standard workstation running the AP Labs multi-stream digital video player software (M-DVP). The M-DVP enables the selection of different combinations of video and audio streams for Mission Brief/Debrief and Instructor Station applications.

DVARS is a flexible system, supporting from a few to a large number of channels. The Application Programming Interface (API) to existing Mission Brief/Debrief control systems can be tailored on a per-project basis.

