

Harris Broadcast Communications Division (BCD)

Case Study



ORGANIZATION:

Harris Broadcast Communications Division (BCD) is a division of Harris Corporation that focuses on the growing requirement for broadcast and rich media management solutions within the public safety, Department of Defense, federal agency, and state and municipal government markets. Harris BCD is a subcontractor to General Dynamics Information Technology working under contract with Lockheed Martin Simulation, Training, and Support. Lockheed is the Lead Systems Integrator (LSI) to develop a common system that would allow U.S. Army Training Centers (CTCs) to communicate with each other and be supported with a common logistical base.

SITUATION:

The mission for each CTC is to provide advanced collective force-on-force and live fire training to Brigade Teams and Echelons Above Division in realistic battlefield conditions. The CTC Objective Instrumentation System (OIS) provides realistic learning experiences for the units undergoing training. It collects player information on tactical performance, and then provides detailed and tailored After Action Review (AAR) to the units. The units participate in the After Action Review (AAR) for self-discovery of doctrinal application, battle-focused skill efficiency and effectiveness, and improved proficiency of tactics, techniques, and procedures.

BUSINESS CHALLENGE:

Accomplishing the technical aspects of the training application is no easy task. Each Objective Instrumentation System provides the ability to track player units in the battle-space, collect player performance data, and provide AARs. The OIS must provide video capture, editing, and time-shifting to be effective — all taking a large amount of high-bandwidth storage.

SOLUTION:

Harris BCD subcontracted the video capture storage system to Digi-Data Corporation after finding the current Windows storage server was just too slow. "We put in Digi-Data storage systems because of their high-bandwidth and flexible capacities," said Steve Muir, Program Manager, Harris BCD. "We first installed an evaluation system to make sure all of the components in this complex system would work together. The Digi-Data storage worked flawlessly."

Industry

Government – military

Application

Combat training simulation

Customer

Harris Broadcast Communications Division

Solution

Digi-Data Video Capture storage system

Results

Video capture system, helping to save lives through effective combat training simulation

The Digi-Data solution consisted of two Digi-Data OpenNAS Servers, three Digi-Data T2000 storage controllers, and ten Digi-Data 16-bay SATA storage arrays. Video is taken in through eight high-resolution and eight low-resolution Harris H-Class Content Capture Servers™. Each server provides two feeds of digital video that is stored on the Digi-Data storage system until it is called up by the editing station. When the editing is complete, the video is returned to the storage system for later recall and playback by the content delivery stations.

The Digi-Data OpenNAS gateway provides a set of three bonded (802.3ad) gigabit Ethernet ports for data transmission, using a fourth gigabit Ethernet port for status and control purposes. The combined throughput of these ports allows a data rate of over 300 MB/second. With the flexibility of the system, as requirements increase, additional ports could be added, bringing the throughput to 800 MB/second.

The high-resolution Digi-Data NAS solution provides 56 TB of storage and 9 TB of low-resolution storage — with room to expand to several petabytes of storage as the systems grow to maturity.

BUSINESS BENEFITS:

The Digi-Data video based storage solution plays a key role in supporting our troops through reviewable video of simulated tactical engagement maneuvers. It enables the CTC OIS to leverage advanced technology and a modular, component-based architecture to meet the needs of the U.S. Army training objectives.

