Success Story

Global Eagle Entertainment Redesigns Video Production Workflow with All-Flash Array

Customer Profile
Global Eagle Entertainment (Global Eagle) provides airlines and the travelers they serve with a complete offering of in-flight entertainment programming, Internet connectivity, and related content services. Its Orange County, California, video postproduction facility also serves Hollywood studios and distributors, advertising agencies, major corporations, government agencies, independent producers, and cruise lines.

The Challenge
Meeting fast turnaround times for customers
To provide customers with the latest, most compelling content, Global Eagle is constantly editing video, creating edited versions of movies for airlines and cruise ships, compiling excerpts from TV shows, and adding foreign language dubbing and subtitles. A team of 17 video editors uses Adobe, Apple®, and Avid nonlinear editing (NLE) systems.

As the number and size of Global Eagle's video files increased due to customer demand and higher resolutions, the company's shared production storage became a performance bottleneck. Poor video playback—stuttering, dropped frames—caused by transcoders running on the same storage affected the video editors and in some cases even customer-facing demos. Delays of hours or even an entire day were affecting the business.

“Our ongoing transcoding requirements are quite intensive,” says Aziz Kapadia, director of global IT at Global Eagle Entertainment. “We’re taking ProRes, DNX, and MXF master program files and converting them to ProRes Proxy mezzanine files. We had 17 people trying to edit video files while our video-on-demand department was hitting the same storage with 20 high-end transcoders. We were no longer getting the I/O performance we needed using traditional arrays.”

As a temporary solution, Global Eagle asked the video-on-demand department to do transcoding at night or early in the morning, before the editors arrived to work. “This was a difficult workflow adjustment for the team and a difficult situation for IT,” says Kapadia.

The Solution
Flash storage for video postproduction
As Kapadia was considering options for solving the performance problem, he
attended a dinner sponsored by CDW, a NetApp partner. “I had a chance to meet with some people from NetApp,” he says. “When I explained our performance issues, they suggested that the NetApp EF-Series flash array might be a good fit for our postproduction environment. It was a casual and friendly conversation, and I came away with some valuable information.”

After speaking with NetApp, Kapadia decided that flash storage could likely provide the low latency and high IOPS that Global Eagle required. He and his team tested real-world postproduction workloads on the NetApp EF-Series, along with flash offerings from four other competitors.

“Performance and price were our most important considerations, and NetApp delivered on both,” he says. “NetApp also offered a cleaner, easier to use management interface with NetApp SANtricity Storage Manager. I’ve been in IT nearly all my life, and it’s the most intuitive user interface I’ve ever seen.”

Beyond ease of use and the video read and write performance of the NetApp EF-Series, the people at NetApp made a difference for Kapadia as well. “The NetApp team clearly understood our industry, and they were there when we needed them,” he says. “They were supportive, collaborative, and answered all our questions. Although there was a lot of work getting done, it felt more like a bunch of IT geeks having fun.”

**Business Benefits**

**No more transcoding in the middle of the night**

With the NetApp EF-Series flash array delivering extreme performance with submillisecond latency, transcoding during business hours no longer affects video editing or playback. All 17 editors can work while 20 transcoders run simultaneously, boosting productivity and employee morale. “The performance of the NetApp EF-Series flash array is absolutely amazing,” says Kapadia. “It’s like having an extra sharp chef’s knife instead of a butter knife.”

**Exporting video sequences up to six times faster**

The process of exporting final edit sequences is now up to six times faster. “With the NetApp EF-Series flash array, we can export video in 15 minutes instead of 60 to 90 minutes, which means we can edit that much longer and still meet our deadlines for final deliverables to customers,” says Kapadia. “With an average of five video exports per day, that adds up to significantly more production time and makes us more competitive.”

**Improving product quality**

The NetApp solution also maximizes uptime, with full redundancy and automated failover. Because video editors can now concentrate on their jobs without interruption, the quality of their work has improved, as has Global Eagle’s ability to demonstrate that quality to customers.

“When a customer is viewing one of our videos, that experience has to be flawless,” says Kapadia. “Since deploying the NetApp EF-Series flash array, we haven’t experienced any outages, dropped frames, or stutter for customer demos. That helps us retain our existing customers and win new ones.”

**Something to feel good about**

Ultimately, however, Kapadia’s decision to use NetApp was about more than the technology. “From sales to engineering, every person I interacted with at NetApp made me feel good about working with them,” he says. “That was the biggest factor in us going with NetApp. If I were to call NetApp three months or three years down the road, I’m confident that they’ll be happy to help us in any way possible.”

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SOLUTION COMPONENTS

- **NetApp Products**
  - NetApp EF540 flash array
- **Environment**
  - Transcoding applications: Digital Rapids Transcode Manager, Telestream Vantage Transcode
  - Video editing applications: Adobe Premiere Pro, Apple Final Cut Pro, Avid Media Composer
- **File systems**: Microsoft NTFS and Tiger MetaSAN (file-level SAN management software)
- **Operating systems**: Microsoft Windows Server®, Apple OSX
- **Video formats**: Red, DNX HD, MXF, ProRes HQ and Proxy, DV25, MPEG 1, 2, and 4
- **Protocols**: Fibre Channel
- **Host bus adapters**: ATTO Technology
- **Partner**: CDW
  - [www.cdw.com](http://www.cdw.com)