StorNext Series

Fighting Irish Media Shortens Content Delivery Cycle from Hours to Minutes with StorNext

The University of Notre Dame's Athletics Department identified a wide-ranging need to deliver not just more, but better quality content to numerous media platforms in less time. Using Quantum's StorNext technology, the team created a shared-storage environment with a collaborative workflow that shortened content delivery time from hours to minutes.

The University of Notre Dame's Fighting Irish Media (FIM) mission is to tell the stories of Notre Dame through the lens of athletics. The job is a big one—FIM covers 26 teams ranging from football and basketball to swimming, fencing, tennis, golf, and lacrosse. Besides streaming 125-130 athletic events a year, posting 1,200-1,300 highlights on a variety of platforms, and creating TV shows and features, the award-winning FIM team supports the university's overall mission by supplying broadcast technical support whenever needed.

Creating and distributing this amount of content is a job that demands high levels of collaboration, involving close cooperation between staff and students. The staff is augmented by up to 50 students who do everything from camera work to editing and then distributing the finished products out across various web-based media outlets.

KEEPING UP WITH THE PACE OF FAN EXPECTATIONS

The FIM team knew their audience wanted to see event highlights as close to real time as possible—within minutes of a game's end—but the infrastructure to meet that goal was not in place. The decision was made to invest in the infrastructure required to keep up with the pace demanded by the rise of mobile media outlets. At that time the team was creating around 1,000 video deliverables per year, but content creation was taking too long. Looking for help from an experienced expert, the team added FIM Lead Technologist Scott Rinehart, who had handled media for the PGA TOUR Productions and NASCAR Media Group.

"Previously, the team sent cameras out to events, brought the footage back, copied to removable drives, and then had to edit, transcode, and distribute via their laptops," says Rinehart. "The delay from the end of an event to posting highlights was typically hours. And that was way too slow for our audience."

The FIM team realized it was missing an important opportunity to meet the fans' needs and that the current workflow was not scalable to where it wanted to be in meeting those needs. Therefore, the team decided to upgrade its system to support a more up-to-date workflow that could help FIM create more content, do it faster, and deliver it to viewers within minutes of an event.

CREATING A COLLABORATIVE WORKFLOW

FIM's vision for success was based on Quantum's StorNext® file-sharing software, delivered by OEM partner Active Storage. The new system, ActiveSAN, created a shared-storage environment where multiple editors could work on the same footage at the same time. The ActiveSAN system also leveraged Telestream Vantage to bring content from live feeds into the shared workspace while events were under way. In addition, electronic news-gathering (ENG) content was automatically transcoded to provide a single, consistent format to simplify the edit process. Finally, the collaborative work environment allowed all editors to see and share the same content—and most importantly, editors could work on projects in real time, while images were being ingested into the system.

"The results were dramatic," explains Rinehart. "The StorNext/Vantage workflow reduced the time needed to post content dramatically—projects that could take

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SOLUTION OVERVIEW

- StorNext Scale-out Storage
- Active Storage ActiveSAN and Quantum QXS-1200 storage
- CatDV asset management software
- Telestream Vantage and Adobe Premiere

KEY BENEFITS

- Collaborative workflow speeds up content creation and delivery—cutting delivery time from hours to minutes
- Scalable system accommodates future demands and higher-resolution formats
- SAN performance ensures timely completion of projects
- Smooth transition from ActiveSAN to StorNext on same hardware platform protects the university's existing investment
- Quantum cloud services and extended online storage provide options for future growth

hours to complete were out and to the fans in minutes. That meant that people attending a game could watch highlights on their smartphones while they were walking to their cars. That was just what we wanted."

The new system also increased the FIM team's productivity. The team was able to produce 1,500 videos per year—50% more than the old system. And the SAN-based environment gave the team the ability to scale the system to accommodate expanded demands in the future.

SEAMLESS CONVERSION TO STORNEXT
However, all of the good results seemed to be put in jeopardy when Active Storage—the company that had designed, installed, and supported the FIM system—transitioned to a different business model and no longer offered the ActiveSAN product the team had started using.

"Even though I knew that ActiveSAN, like Apple's Xsan, was 100% compatible with Quantum's StorNext technology and that we should be able to upgrade to the Quantum product, I have to say I was nervous," says Rinehart. "These assets were everything to us—and any time you do a rebuild or major changeover, you hold your breath."

To help make the transition, the team brought on board Chesapeake Systems, an integrator that specializes in media and entertainment projects and is a long-standing Quantum partner.

"The transition from ActiveSAN to StorNext turned out incredibly well," says Rinehart. "We used the same ActiveSAN controllers, updated the software to full StorNext, and rolled the system over using a failover technique. There was no downtime and all of the applications—Telestream Vantage, Telestream Pipeline, and Adobe Premiere—kept functioning seamlessly, as did the asset manager, CatDV."

SUPPORTING THE EDUCATIONAL MISSION OF THE UNIVERSITY
"Our purpose is more than the world of athletics—we are a university resource in that we provide video services for both Notre Dame athletics and the Notre Dame academy," explains Rinehart.

"FIM is now involved with creating content for MOOC (Massive Open Online Course) learning opportunities as well as opportunities such as supporting live shots with academic experts, along with monthly web streaming for the university's alumni department. We are a very busy group these days."

Broader support also extends to other university departments.

"We see ourselves as a bit of a lab….a place where other departments who have heard what we are doing on the video side and want to check out our tools to see if they could take advantage," says Rinehart.

THE FUTURE
Notre Dame is in the midst of the largest construction project in its history, the Campus Crossroads Project (crossroads.nd.edu). Within the 750,000sf of new space, there will be an 18,000sf Media Center which will support all of campus, everything from teaching innovation to communications to athletics.

"The Media Center is going to be a fantastic space," Rinehart says. "All of our decisions moving forward will be with the wider mission of the Media Center in mind. StorNext is certainly in that mix as we consider the future and what all this means to us…from storage environments to cloud features, everything is in play as we work to find the best way to educate our students and deliver our content. The future of technology at Notre Dame is very exciting."

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ABOUT FIGHTING IRISH DIGITAL MEDIA
The University of Notre Dame's Fighting Irish Media (FIM) was created to tell the university's story through the lens of athletics. The FIM team covers Notre Dame athletics from an insider's perspective; producing video features, live game webcasts, highlights, coaches' shows, and documentary-style filmed entertainment. In 2013, FIM was awarded the inaugural Sports Video Group/NACMA Technology Leadership Award. In 2014, it won three bronze Telly Awards and a College Sports Media Award for Outstanding Program Series for its video series, *Strong and True*.