



CASE STUDY

Setting the Stage for Growing Collections of HD Media with Quantum Storage

San Francisco Ballet captures a tremendous amount of HD video and still images every performance season for training and marketing purposes. With help from IT solution provider ASG, the ballet deployed a Quantum storage solution to better access, preserve, and protect these growing volumes of multimedia reliably and cost effectively.

SAN FRANCISCO BALLET
HELGI TOMASSON, ARTISTIC DIRECTOR

ASG
ADVANCED SYSTEMS GROUP

FEATURED PRODUCTS



“StorNext was a game changer. And when we added Xcellis, we were just in a different world. We now have the reliability and the capacity we need at all times.”

Murray Bognovitz

Director of Information Technology, San Francisco Ballet



We recognized that LTO-8 technology could help us prepare for the future by cost-effectively archiving a tremendous amount of content in each 12 TB cartridge. By supporting LTO-8, the Scalar i3 gives us some real distance into the future.

Murray Bognovitz – Director of Information Technology, San Francisco Ballet

SOLUTION OVERVIEW

- Quantum StorNext® storage
- Quantum Xcellis® workflow storage
- Quantum QXS™ hybrid storage
- Quantum Scalar® i3 tape library
- StorNext Connect management software
- ASG implementation and support

KEY BENEFITS

- **Supports fast-growing data volumes**, including HD video and still images
- **Archives years of content** reliably and economically
- **Integrates seamlessly** into existing production environments
- **Streamlines management** with easy-to-use interfaces
- **Backed by exceptional support** that offers peace of mind

As audience members settle into their seats for a performance of San Francisco Ballet, data storage is generally far from their minds. But behind the scenes, the ballet’s IT group knows that data storage not only plays a vital role in helping dancers perform at their peak, but also enables the organization to continuously attract and engage fans. A photographer and a video production team capture numerous performances every season to create content for dancer training and for marketing. To both quickly edit and reliably preserve that vast collection of content, the IT group needs a robust data storage platform.

CAPTURING GROWING VOLUMES OF MULTIMEDIA CONTENT

“Videographers record 30 distinct ballets per season,” says Murray Bognovitz, director of IT for San Francisco Ballet. “They capture a broad array of HD shots, from close-ups of dancers to wide shots of the stage. We also have fixed

HD video cameras on the stage, which record rehearsals and some performances.”

Video is supplemented by still images. “Our photographer shoots everything in a raw, high-resolution format and then delivers the files to us for editing,” says Bognovitz.

All of that content needs to be stored and archived somewhere, and the previous storage infrastructure was not keeping pace with the growing requirement. “Our storage needs have grown quite a bit over the years, especially as we’ve transitioned from 3/4-inch video tapes up through HD video files and raw-format, high-resolution photographs,” says Bognovitz. “Today we are approaching 100 TB of data on disk.”

At the end of each season, the IT group needs to archive that content. “We don’t delete anything,” says Bognovitz. “We need to move data from our production disk environment to an archive that will let us preserve content and reuse it for years to come.”

PLANNING A MOVE FROM XSAN

Several years ago, when the video production team first began working in HD, the IT group was tasked with implementing a new data storage environment. “To support our Mac-based video editors, we chose the Apple Xsan file system, Apple Xserve servers, and another vendor’s storage array,” says Bognovitz. “But just a year later we learned that Apple was discontinuing support for the Xserves. We had to find a new solution.”

Fortunately, just as one door closed, another opened. “A webinar invitation arrived from Quantum,” says Bognovitz. “The invitation specifically targeted organizations like ours that needed to move from Xsan and Xserves. I attended the webinar, and when I heard there could be a painless transition to the StorNext platform, I started paying serious attention.”

FORGING A NEW PARTNERSHIP WITH ASG

The IT group met with a team from Advanced Systems Group (ASG), an IT solution provider and partner of Quantum. “They said they could implement StorNext, deploy new hardware, and move everybody to the new platform without any major issues,” says Bognovitz. “They also reassured us that nothing would change for the video production team—the desktops would appear exactly the same. That was key. We wanted to make sure this change would not adversely affect productivity.”

INTEGRATING STORNEXT INTO THE MEDIA WORKFLOW

With help from ASG, the ballet deployed a new storage environment based on the Quantum StorNext platform plus hardware from other vendors. “The transition to the StorNext platform was seamless,” says Bognovitz.

A few years later, in 2018, ASG helped the ballet deploy Quantum Xcellis workflow storage and upgrade to the latest version of StorNext.

ASG and the ballet’s IT group were able to easily integrate StorNext and Xcellis into existing media production workflows. Video

editors and graphic designers continued using Adobe Premiere, Adobe Photoshop, and other Adobe applications without having to change the way they work.

The video team noticed only one key difference in their workflow. “When we switched to Xcellis, the video team definitely saw increased performance compared with the previous hardware,” says Bognovitz.

SELECTING QUANTUM SCALAR TAPE LIBRARIES FOR ARCHIVING

In addition to a new production environment, the ballet’s IT group needed an archive that could help preserve content from previous seasons, and do so with utmost reliability. “ASG encouraged us to implement a tape solution for backup and archiving,” says Bognovitz. “When I compared the costs of tape with disk, it was clear that tape was a much more cost-effective approach.”

The team initially deployed a Quantum Scalar i40 tape library. “We realized immediately that this was a great way to handle production backups and archives,” says Bognovitz. “We used the Scalar i40 for years and were very happy with it.”

As LTO technology evolved, the IT group decided to move up to a next-generation tape library, choosing the Quantum Scalar i3. “We recognized that LTO-8 technology could help us prepare for the future by cost-effectively archiving a tremendous amount of content in each cartridge,” says Bognovitz. “By supporting LTO-8, the Scalar i3 gives us some real distance into the future.”

To help ensure data protection, the ballet leverages the automated copying functionality of StorNext Storage Manager. This allows the organization to keep duplicate copies of files from previous seasons, thereby having an archive onsite and a clone for long-term storage offsite.

“For us, Quantum and ASG are not just technology vendors—they are true partners.”

Murray Bognovitz
Director of Information Technology, San Francisco Ballet

ABOUT SAN FRANCISCO BALLET

Founded in 1933, San Francisco Ballet has long been pushing boundaries in dance. The ballet staged the first full-length American productions of *Coppélia* (1938) and *Swan Lake* (1940). In 1944, the ballet launched an annual holiday tradition with the first full-length production of *Nutcracker* in the United States. Today the organization operates one of the country’s most prestigious schools of ballet and commissions groundbreaking dance from today’s top choreographers.



IMPROVING RELIABILITY

The Quantum solutions have helped provide consistent, reliable storage and archive environments for San Francisco Ballet. “Before we implemented the Quantum solutions, our production environment was up and down,” says Bognovitz. “StorNext was a game changer. And when we added Xcellis, we were just in a different world. We now have the reliability and the capacity we need at all times. I no longer have to write those urgent emails telling people to move their stuff off of storage before something bad happens.”

STREAMLINING OPERATIONS WITH STORNEXT'S MANAGEMENT GUI

The IT group uses StorNext's modern management facility to administer the storage environment. “We wanted to

work with a graphical user interface, not a command line,” says Bognovitz. “We're totally pleased with the usability that StorNext Connect delivers. We can easily see if there are any health issues and then contact ASG so they can do any deeper investigations.”

RELYING ON EXCELLENT SUPPORT FROM QUANTUM AND ASG

If and when the ballet's IT group does need assistance, Bognovitz and team can count on Quantum and ASG. “Quantum support is fabulous,” says Bognovitz. “We've looked at other storage and archive solutions over the years, but we knew that other vendors could not deliver the same level of support.”

ASG, meanwhile, has provided the pre-sales consulting, implementation assistance, and ongoing management

support to help ensure everything runs smoothly. “The ASG team intimately understands our way of working. They've made great recommendations and have done excellent work,” says Bognovitz. “For us, Quantum and ASG are not just technology vendors—they are true partners.”

STAYING FOCUSED ON MEDIA PRODUCTION, NOT STORAGE

San Francisco Ballet now has a high-performance and easily managed storage platform to support both their production and archiving requirements. And to accommodate their fast-growing volumes of multimedia, they have one that can cost-effectively scale without disruption. “With Quantum storage, we can focus on producing high-quality training and marketing content without having to worry about storage,” says Bognovitz.

ABOUT QUANTUM

Quantum technology and services help customers capture, create, and share digital content—and preserve and protect it for decades at the lowest cost. Quantum's platforms provide the fastest performance for high-resolution video, images, and industrial IoT, with solutions built for every stage of the data lifecycle, from high-performance ingest to real-time collaboration and analysis and low-cost archiving. Every day the world's leading entertainment companies, sports franchises, research scientists, government agencies, enterprises, and cloud providers are making the world happier, safer, and smarter on Quantum. See how at www.quantum.com.

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