



## DigitalFilm Tree Gets Faster Post-Production in Diverse Workflows with StorNext®

From editing to compositing, DigitalFilm Tree (DFT), a production, post and consulting company, uses Quantum® StorNext® FX with Apple® Xsan® to seamlessly integrate every aspect of post-production. DFT is a leading innovator in digital workflow solutions and has worked on projects including "Cold Mountain," "Napoleon Dynamite," and NBC-Touchstone's "Scrubs." These and other high profile projects have made DFT a sought after company, particularly when deadlines are very tight and speed is of the essence. Using a "content pooling" philosophy and StorNext data management software, DFT is able to share data faster, organize content more effectively, and produce final cuts at heart pounding speeds.

### POST-PRODUCTION IN THE OPEN SYSTEMS ERA

In today's post-production workflows, common tasks such as rough-cut editing and visual effects generation are performed using applications running on industry standard operating systems such as Mac OS X, Linux, and Windows. The end result is a workflow built around applications running on a mixture of server platforms. These diverse workflow implementations cost a fraction of what proprietary systems cost and enable shops to create high quality masters for much less. But as Digital Film Tree has recognized, and the rest of the industry is finding out, diverse workflows require glue to bind them together, or issues can arise.

Foremost is the problem of content organization and management. Sharing content between DFT's talent pool requires careful tracking of versions to prevent working on older cuts and potentially losing hours of work if a critical scene or effect is dropped. Tracking the physical and digital intermediaries among disperse systems adds significantly to the overhead of producing a master. Additionally, there is a problem of actually transferring content. Dropping files onto a FireWire drive and "sneaker-netting" the drive to the next system is slow and inefficient, but LAN transfers are not necessarily better. Copying large files over the LAN is slow and can potentially destabilize applications resulting in lost productivity and a strain on deadlines.

### CRANKING UP THE PACE

For its latest project "Crank," (Lakeshore Entertainment and Lion's Gate Studios) DFT wanted to work smarter, saving time and avoiding the management headaches of tracking content versions between systems. They also knew that churning through the constant barrage of scans, visual effects, and files to meet deadlines required high speed data sharing between different server platforms. Sneaker-net transfers of FireWire drives or slow LAN transfers would not be sufficient. To achieve these goals, DFT built a solution that pooled content on a centralized repository accessible by all servers. At the core of this architecture was a Fibre Channel SAN for high speed data transfers and Quantum StorNext FX coupled with Apple Xsan. Xsan, a shared file system for Mac OS X, runs on every Mac and allows DFT to access a common disk volume. StorNext FX, Quantum's shared file system software for practically every other OS, builds on Xsan by allowing non-Mac systems to access to the same volume and the content stored there.

## DigitalFilm Tree

"StorNext FX and Xsan enhanced our processes without drastically altering the workflow we were familiar with," said Ramy Katrib, CEO of DigitalFilm Tree."

Ramy Katrib, CEO  
DigitalFilm Tree

### SOLUTION OVERVIEW

- 🔧 Application: Apple® Final Cut Pro and AutoDesk® applications including Maya, Combustion, Discreet® Flint, and Discreet Flame
- 🔧 Operating System Environments: Apple Mac OS X, Microsoft Windows XP, and SGI Irix
- 🔧 Key Enabling Software: Quantum StorNext Data Management Software, Apple Xsan
- 🔧 Storage Infrastructure: Apple Xserve® RAID, and Qlogic Fibre Switch



“StorNext FX and Xsan enhanced our processes without drastically altering the workflow we were familiar with,” said Ramy Katrib, CEO of DFT. Footage acquired on Sony’s HD SR format cameras, along with other content was ingested through the “Video Village,” a collection of tape input devices. Low-res proxies and the higher resolution essence were then stored on a central repository where they could be tracked.

StorNext FX and Xsan allowed all servers to use the same content pool so DFT’s staff had access to the entire catalogue of content at any time. When edits were made, the updated content was stored in hierarchical structure on the central content pool for simplified management. “Any time a change was made, everyone could see it and know what the newest version was,” says Zed Saeed, Senior Post Consultant at DFT. “We never had to worry if someone was working off an older file from a FireWire drive.”

For visual effects, DFT used a combination of Poser, Maya, and Combustion (running on Mac and Windows clients) to generate and composite 2D and 3D animatics into stunning effects that included a beating heart that could be snapped to as action took place with the main character. As effects were finished, they were stored on the central content pool and immediately accessible to the rest of the DFT crew. SGI systems running Flint and Flame leveraged the same capability to warp and unwarped focal length changes from the snap zooming used by the directors to capture perspective changes from high above a city to a car chase on a busy street. The end result—everyone had rapid access to content and decisions on pacing, scene placement, and more could be made faster. Once editing was completed, a render farm of Windows XP nodes running StorNext FX was used to take the high-res footage along with the effects and generate a final product.

#### ZOOM AHEAD

With Crank completed (Sept 2006 release) and even more projects in progress, DFT is considering where else they can simplify their workflow operations while leveraging the freedom that working on multiple operating platforms brings them. “It’s apparent to us that StorNext FX and Xsan give us advantages we cannot get anywhere else,” says Sazeer Kader, DFT’s Post Systems Engineer. “The next step is to determine if features like StorNext’s iMover™ can help us. StorNext’s iMover technology would enable us to off load selected files to cheaper secondary storage, but still allow us to have transparent access to the content if repurposing is required. In postproduction, this is not a common need, but we are seeing change happen so fast in this business we have to always looking for the next thing.”

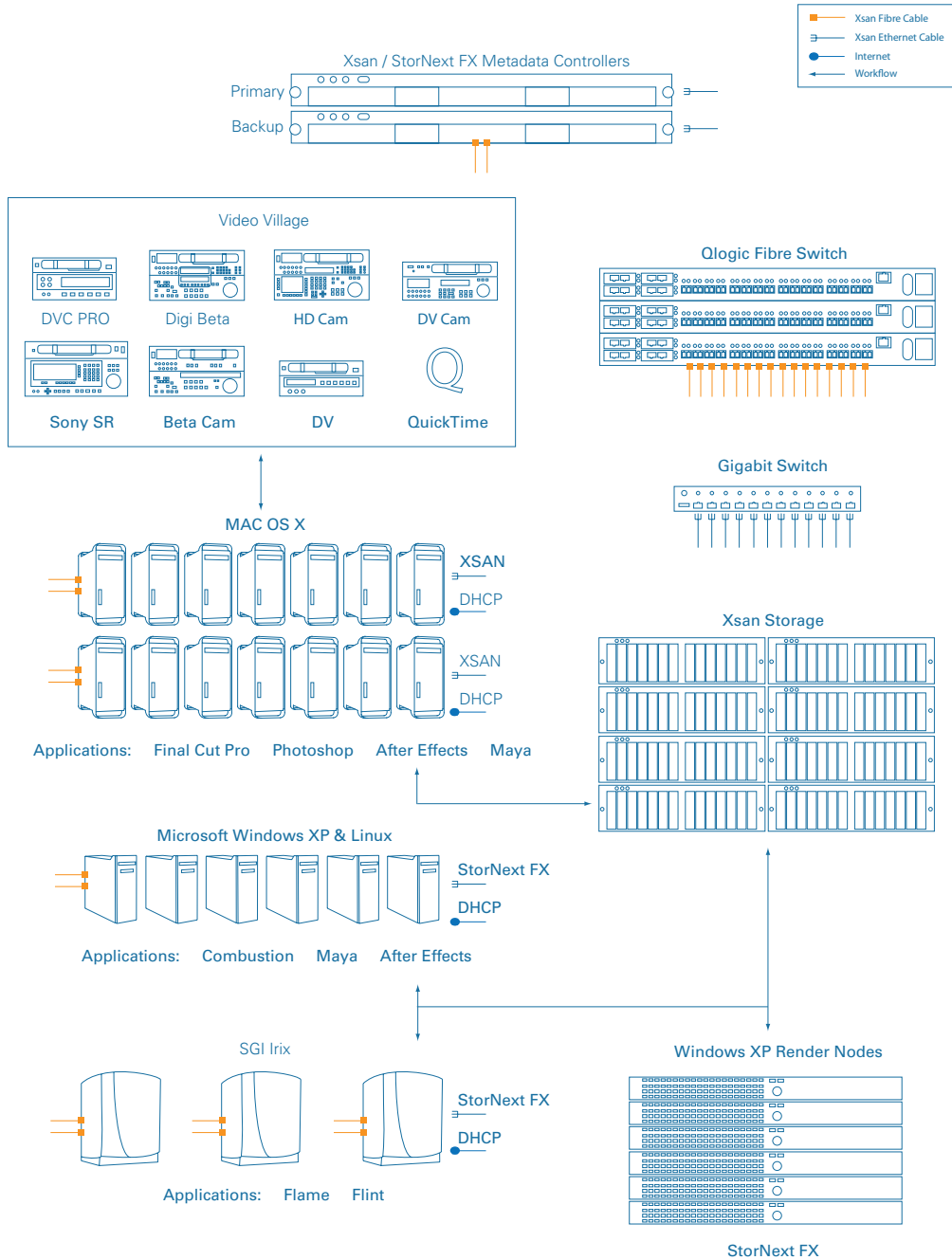
“It’s apparent to us that StorNext FX and Xsan give us advantages we cannot get anywhere else. The next step is to determine if features like StorNext’s iMover™ can help us. StorNext’s iMover technology would enable us to off load selected files to cheaper secondary storage, but still allow us to have transparent access to the content if repurposing is required. In postproduction, this is not a common need, but we are seeing change happen so fast in this business we have to always looking for the next thing.”

**Sazeer Kader,**  
DigitalFilm Tree  
Systems Engineer

“Any time a change was made, everyone could see it and know what the newest version was. We never had to worry if someone was working off an older file from a FireWire drive.”

**Zed Saeed,**  
DigitalFilm Tree  
Senior Post Consultant

**DigitalFilm Tree Post-Production Environment**



**ABOUT DIGITALFILM TREE**

Since 1988 DigitalFilm Tree has played a definitive role in bringing revolutionary change to the post-production industry. By pioneering innovative technologies and workflows, DFT has served an unprecedented diversity of creatives worldwide. These include television, motion picture, independent and first time filmmakers alike.

DigitalFilm Tree is a highly unique creative hub, where technology and art converge. Offerings include production, design, effects, color correction, online finishing, QuickTime dailies, and consulting services. All managed by one peerless team, in one seamless environment, for a user experience that is beyond compare.

To contact your local sales office, please visit [www.quantum.com](http://www.quantum.com)

**Quantum**  
Backup. Recovery. Archive. It's What We Do.

**About Quantum**

Quantum Corp. (NYSE:DSS) is the leading global storage company specializing in backup, recovery and archive. Combining focused expertise, customer-driven innovation, and platform independence, Quantum provides a comprehensive range of disk, tape, media and software solutions supported by a world-class sales and service organization. As a long-standing and trusted partner, the company works closely with a broad network of resellers, OEMs and other suppliers to meet customers' evolving data protection needs.