Quantum®

StorNext and Scalar Series

New Zealand's Premiere Post Production House Conquers up to 20TB a Day with StorNext

Park Road Post Production is a premier post-production facility located in Wellington, New Zealand. Developed by filmmakers, for filmmakers, it offers a relaxing and inspiring environment to realize their vision.

The facility prides itself on its flexibility and has worked on some of the largest-budget Hollywood films, independent American and foreign films, and lower-budget New Zealand features and short films. Since adopting StorNext®, Park Road stays ahead of today's demanding digital workflows and the growing amount of associated content.

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>
> **Tim Benson**
> Director and Technology Evangelist for Factorial

THE NEED FOR SCALE AND HIGH PERFORMANCE

The challenge that Park Road faced was scaling its systems to accommodate the rapid increase in data that digital filmmaking now generates. As production of digitally acquired 3D films is becoming more commonplace, uncompressed digital film can translate into hundreds of terabytes of data per project, and the traditional tools used to manage the content are often overwhelmed by the new demands of data acquisition, collaboration, distribution, and long-term, protective archiving. Fast turnaround is a key factor in motion picture production, so Park Road's ability to help filmmakers maximize their creative time in post production is a significant competitive advantage

over other facilities. In fact, the kind of technology that Park Road uses has enabled state-of-the-art digital post production to become a seamless part of the filmmaking process. The high cost and quick turnaround of high-end feature film production means material needs to be processed and quality checked as quickly as possible so filmmakers have the option of reshooting, if necessary, before sets are struck.

"We faced a very unique challenge on one particular project, and we realized that we would need to dramatically increase our throughput and capacity to meet the potential demand," says Phil Oatley, Head of Technology for Park Road. "Each shoot day would see us process an average of six to twelve terabytes of new material, and on a really busy day this could reach twenty terabytes. All new material needed to be processed and delivered to the client within 12 hours."

In short, Park Road was faced with the prospect of "drowning in data." Not only would the total amount of data grow fast, but the required daily throughput would also dramatically increase. The facility had a traditional archive system built around Atempo Time Navigator and direct-attached tape libraries, but needed a solution with more speed, efficiency, and scalability to handle the ever-increasing deluge of data.

A project was initiated to determine if there would be a more efficient and effective way forward. Various topologies and technologies were investigated. Park Road had long leveraged

PARK ROAD
POST PRODUCTION

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Phil Oatley
Head of Technology, Park Road

SOLUTION OVERVIEW

- 3 StorNext File System clients, 40 StorNext FX clients, 25 Apple Xsan clients
- 700TB of online disk, divided up into 7 SAN volumes
- StorNext Storage Manager – 2PB license
- Scalar i6000 – 1600 slots, 2.4PB total capacity
- Vaulting license

KEY BENEFITS

- Enables high-performance cross-platform shared storage across Apple, Windows, Linux clients
- Provides extremely scalable capacity and bandwidth to support collaborative post production and faster completion of projects
- Automates creation of copies for near-line archive and long-term data protection
- Simplifies service/support with single vendor for software and tape
- Offers proactive remote diagnostics and relational diagnostics through intelligent iLayer™ software
- Leverages open architecture to allow tight integration with in-house systems
- Utilizes vaulting license to provide unlimited ability to scale tape storage as required

its high-performance SAN infrastructure for real-time processing of picture content, and the facility decided that a further extension of this infrastructure utilizing virtualized tape storage would be the best approach. However, hardware was only part of the solution. Software was just as, if not more, critical.

SELECTING A SOLUTION THAT FITS EXISTING WORKFLOWS

Park Road had already utilized Quantum StorNext FX for four years (due to its interoperability with Apple Xsan) for non-Apple SAN clients. Its legacy archive solution software used a Quantum Scalar® 50 tape library with older-generation tape drives. Although the system had limited scalability, it validated the effectiveness of Quantum technology.

At the recommendation of Park Road's technology partner, Factorial, the facility decided to take a look at a larger Quantum solution comprised of full-scale StorNext software and a Scalar i6000 enterprise tape library with the latest Quantum tape drives.

"StorNext File System delivers high-performance file access, supporting heterogeneous environments including Linux, Mac, and Windows operating systems, all of which are in use at Park Road," says Tim Benson, director and technology evangelist for Factorial. "The intelligence behind the software was a key benefit, ensuring an automated workflow which would enable Park Road to easily scale up without adding more people or needing to re-architect IT solutions. StorNext Storage Manager would allow Park Road to use tape like disk—providing almost unlimited capacity, while at the same time minimizing data center footprint, power consumption, cooling, and ultimately operational costs."

Park Road elected to move forward with the upgrade at the time of its SAN expansion. The full StorNext license allowed the facility to deploy StorNext Storage Manager to automatically move data between high-performance disk and a large-capacity tape library archive.

The Scalar i6000 also provided a substantial increase in the amount of data that could be kept for near-term re-evaluation or processing as well as long-term archive. Moreover, it scaled easily by adding new slots as needed and supported the LTO-5 tape drives for even higher storage efficiencies. Finally, the Scalar system provided optional software that proactively verifies the integrity of tape media and works with StorNext to migrate files automatically to new media if any sign of aging appears.

"The open file-based structure of Storage Manager greatly simplified the automation of storing and retrieving files to and from tape—removing the need for complex backup and restore processes," says Benson. "When creating workflow tools with Park Road, we can rely on StorNext to take care of the heavy lifting of moving terabytes of data, allowing us to focus on improving creative processes."

PERFORMANCE SUBSTANTIALLY IMPROVED

After the integration was complete, performance increased substantially for Park Road. Source data (effectively the original camera negative) is rapidly acquired onto a StorNext SAN, either on-set or from field LTO-5 tapes, for collaborative processing via multiple SGO Mistika workstations. These access source material concurrently over 8Gb/s Fibre Channel for maximum performance. The source data and all metadata generated on-set and derived through processing is archived to LTO-5 tape via StorNext Storage Manager. Tapes are retained within the Scalar i6000 to facilitate quick retrieval back to the SAN for further processing. Tapes are also "vaulted" from the library for long-term archive.

The system at Park Road routinely processes multiple terabytes of data in just a matter of hours and can handle in excess of 20TB per day at peak load.

"One of the most important factors in selecting a new solution was ensuring that the existing creative workflow that filmmakers enjoy at Park Road was not compromised, but rather enhanced by any technology decision," says Oatley. "It was very important that software could be tailored to fit Park Road and not the other way around. StorNext exceeded our expectations by delivering on that requirement and more."

Park Road's storage infrastructure is constantly growing and adapting to meet the changing needs of film post production, and a facility like Park Road is always looking to the future.

"We will ultimately transition to Quantum's StorNext metadata appliances for even tighter integration and development benefits," says Oatley.

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ABOUT PARK ROAD POST PRODUCTION

A premier post production facility located in Wellington, New Zealand. Developed by filmmakers for filmmakers, Park Road offers a relaxing and inspiring environment for filmmakers to realize their vision. Park Road was established as a one-stop shop with a film laboratory on site sitting alongside the picture and sound departments. Park Road is uniquely placed to supply all post services for a feature from digital and film rushes, stereoscopic alignment, digital intermediate, foley and sound mixing through to the final completion of all film and digital deliverables for distribution. For more information, visit: http://www.parkroad.co.nz/

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