



StorNext Solution

## Quantum StorNext Appliances, super star for the 4K film restoration in the Animation Park

The animation industry in China is experiencing exponential growth, facing the new challenge of 4k film production and playing. In order to enhance the production efficiency and smooth playing of animations. Animation Park selected Quantum's StorNext Software and Appliances, aiming to optimize the work flow of animation production. The automated data management model increased work efficiency by 60%-80%.

With animation industry's advancement into the 4K era, animation producers have come to realize that the current storage infrastructure, with its very limited capacity, is unable to satisfy their technical needs for film production and restoration and impacted their work efficiency. In order to guarantee the animation film's production and playing, the working pool usually requires a high storage capacity to support the real-time playing of two lines of 4K film and five lines of 2K film simultaneously. The real-time playing of 1-line 2K film alone requires the bandwidth of 300MB/S while the bandwidth for 1-line 4K film is set as high as 1.2GB/S. Therefore the current storage infrastructure is far below the minimum bandwidth requirement for 7-line film playing. While the animation producers are in urgent need of more powerful storage appliances, Quantum StorNext came into rescue with its StorNext portfolio - StorNext M high-performance series file sharing appliances, StorNext G300 Gateway and StorNext Q-Series Storage - became the key to answer the storage challenge in the Animation Park.

### With Quantum StorNext Appliance – Bid farewell to the prolonged film restoration process

Before Deploying the high-performing Quantum StorNext Q series, the Animation Park employed the desktop DAS RAID when all the graphic work stations have to access the local DAS RAID for film restoration and pool the data via portable hard disk afterwards. The low performing local DAS limited the real-time playing of the restored film in a way that it allows for only a few seconds playing of the loaded images. Under such situation, the animation producers find it difficult to work coherently. Their work efficiency and even skills was harmed by the technical restraints.



"It was the first time for us to cooperate with Hollywood in 4K film remastering, it involved scale-out storage volumes. During the implementation process, Quantum provided us with valuable support, from both a general layout and plan design. Quantum's StorNext has greatly facilitated our workflow process. All our workstations can work simultaneously in a shared environment. Also, our 4K films can have a 48MB data volume per frame. With Quantum's StorNext, we can replay films at native 24 frames per second when working on quality control. This greatly improves our film editing and remastering. Our work efficiency improved by roughly 60%-80% than before we implemented Quantum's StorNext."



— Production Director, the Animation Park



国家动漫园  
NATIONAL ANIMATION INDUSTRY PARK

### CUSTOMER TESTIMONIAL

The Animation Park has cooperated with many vendors during the IT infrastructure construction, among which Quantum impressed us most: thanks to its professionalism and positive attitude demonstrated by every single of its staff. From sales persons to technical consultant, every Quantum people in the project were very committed to provide us with thoughtful need analysis and constructive advices. Moreover, they helped us in coordinating with other software providers for data archival. Owing to their great contribution, the IT Infrastructure Expansion Project in the Animation Park were completed on time. Currently, the Quantum products deployed in the Animation Park are StorNext M high-performance series file sharing appliances, StorNext G300 Gateway and StorNext Q-Series Storage. We wish we could expand the use of Quantum products in the Animation Park so that we can enjoy the excellent Quantum service in a wider range.

### KEY BENEFITS

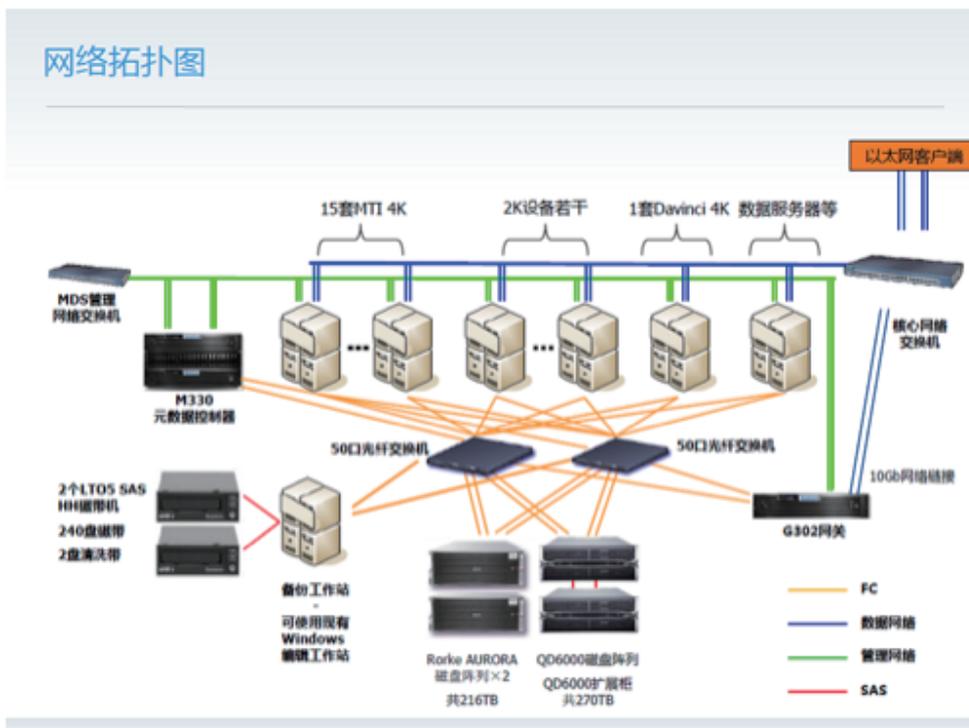
From DNA sequencing to hi-definition video surveillance to seismic exploration, customers across industries are experiencing tremendous growth in unstructured digital assets called scale-out storage. This digital content is very high in volume, is growing at high rates, and has great value to the business or institution. Quantum's StorNext Appliances are purpose-built for scale-out storage with big files, providing high-performance and highly scalable solutions that are cost-effective and easy to manage. The solutions include StorNext Q-Series Storage, a high-performing purpose-built storage portfolio for optimizing scale-out storage. The Quantum solution simplified the complex and long film restoration and management works and ultimately optimized the movie review process. The speed for restoring a single movie film was improved significantly by 60%-80%.

## CASE STUDY

### WHY QUANTUM SOLUTIONS?

As the founder of file sharing and data archiving with over 30 years' experience in disk and tape data protection, Quantum is able to provide the Animation Park the more professional StorNext appliances which is dubbed the highest-performing SAN sharing solution. The Animation Park are focused on the animation, film and TV production fields. We therefore have a big demand for post-production processes in the film and television sectors. We have recently entered the 4K film field. We work with very large data files. Our legacy storage system was not able to handle large files, like 4K. After conducting research into potential solutions, We chose Quantum's StorNext end-to-end content workflow and Quantum's QD6000 Disk Array solution. These two products were especially developed for high-performance file sharing. We also found that the two products are particularly suitable for the media and entertainment industries. Moreover, many of our foreign peers already had successful stories and use experiences with the products. Quantum's StorNext is cost-effective and very easy to scale. This is the main reason why we chose Quantum.

### THE NETWORK TOPOLOGY



### CUSTOMER PROFILE

The National Animation Industry Park in Tianjin is a cooperative project between China and Singapore. This platform is jointly invested and established by the Ministry of Culture, PRC and Tianjin Municipal Government. With over US\$14 million invested in hardware and software. It is a public technical service platform established to mainly help small- and medium-sized animation enterprises in China to address the problems of how to use, how to afford and how to well use high-end equipment. China's animation industry dated back to the 1950s but has advanced in a slow manner afterwards. Since the year 2000, China began to produce animations for some overseas companies. However, the domestic market has been long monopolized by overseas products due to the lack of domestic originality. The comparatively slow development of China's animation industry has drawn the attention of the government, scholars and the industry practitioners as well. On 4th March 2009, The Ministry of Culture PRC and Tianjin Municipality signed the Strategic Cooperative Framework Agreement on advancing culture development and decided to building the National Animation Industry Park in the Sino-Singapore Tianjin Eco-City located in Tianjin Binhai New Area.

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

**Quantum**  
BE CERTAIN