TOONZ ANIMATION
Successful studio’s rapid growth gains momentum with high-performance storage

ANIMATION COMPANY LEADS GROWTH WITH HIGH-PERFORMANCE SOLUTION
Toonz Animation is one of South Asia’s animation success stories. In just 15 years, the company has grown rapidly to become one of the largest and most popular content creation, production, and distribution houses in Asia. The company is focused on combining creativity and technology to produce exciting digital content for its customers. Clients such as Walt Disney, Nickelodeon, Turner, BBC, and Marvel reflect just how far Toonz has come since it was established in 1999.

However, rapid growth, having hundreds of employees working at its production studio and from remote locations, and siloed storage solutions meant the IT team spent a lot of time managing network performance and consolidation issues. The growth demanded a scalable storage solution with a single access point for primary data to increase the speed of production, including rendering and compositing, as well as provide employees with the power to turn around multiple projects quickly. Toonz evaluated several industry accepted solutions, but chose to deploy Dell EMC® Isilon® scale-out storage.

The Isilon solution, recommended by other studios across the region, is helping the business to complete multiple projects quickly. It has also reduced energy requirements by 400 percent, decreasing the company’s overhead for power and cooling. Training and guidance from Dell EMC Global Services means that the IT team can now dedicate a two-person team to manage the environment independently.

K.R. Asokan, IT Head of Toonz Animation, says, “We are very happy with the performance of Isilon. It has achieved the benefits noted by our industry peers, and inspired us to plan how we might use it for our future data needs.”

ENVIRONMENT
Dell EMC Global Services installed and configured seven Dell EMC Isilon S200 nodes to deliver a combined 136 terabytes of primary storage capacity for rendering and compositing animations with the latest Autodesk Maya and Adobe software. An A100 backup accelerator node is installed in the company’s backup system for Network Data Management Protocol (NDMP) backup. The solution delivers the mission-critical I/Os per second performance demanded by Toonz, and provides intuitive tools for monitoring and managing the environment. Dell EMC provided expert configuration advice and installation services, and worked alongside the company to train and support staff to use the storage infrastructure quickly.

ESSENTIALS
Industry
Entertainment
Company Size
250 employees
Business Challenges
• High-performance storage needed to address rapid data growth and concurrent projects
• High operational cost of existing in-house legacy storage
• High energy and cooling expenses
• Capacity, consolidation, and scalability challenges of in-house legacy storage
Results
• High-performance storage environment decreases project turnaround times
• Energy efficiency is increased by 400 percent, reducing operational costs
• Intuitive environment and simple training solutions ensure that the IT team can manage storage independently
Solution
• Dell EMC Isilon scale-out storage
REPUTATION FOR HIGH-PERFORMANCE IN DEMANDING INDUSTRY
Toonz uses Maya and Adobe applications for animation, rendering, and compositing. Of the 250 employees working in house, more than 40 are high-bandwidth users from lighting and compositing departments who generate large data volumes from creating work in the applications. Toonz also uses a 600-processor render farm, which puts pressure on storage simultaneously, and the company generates an average of two terabytes of data per week. Performance, scalability, and ease of management are the key reasons Toonz selected Dell EMC Isilon as a solution. “Its simplicity and simple cluster file system were the reasons we decided to install the Dell EMC technology. Even so, the decision was not simple, and the team evaluated the merits of other competing solutions,” says Asokan.

“The throughput performance of Isilon S200 has a direct impact on the business. We can engage with multiple studios and work on simultaneous projects because we know we can achieve fast turnaround times.”
K.R Asokan, IT Head, Toonz Animation

CREATIVITY AND TECHNOLOGY FUEL RAPID GROWTH
Toonz’s talent for combining creativity and productivity is a key factor in its rapid growth. The company is not only a leader in the Indian animation industry but is also making a real impact with American and European media distributors. With the addition of Isilon storage, Toonz’s reputation is enhanced further. “The throughput performance of Isilon S200 has a direct impact on the business. We can engage with multiple studios and work on simultaneous projects because we know we can achieve fast turnaround times,” says Asokan.

Data-intensive processes, such as those for rendering and compositing, are significantly faster than before. For example, compositing, which involves layering multiple elements to create an animation, used to create network issues leading to slow response times and holdups in the production process. But with the Isilon S200, compositors are able to work on multiple 2K or HD timelines simultaneously, benefiting from more than 1.4 million network file system ops and over 85 gigabytes per second aggregate throughput from a single file system cluster.

“Our artists and other users are getting great response times with Isilon. The improved workflow and real-time playback means we can work on many projects concurrently,” says Asokan

ENERGY EFFICIENCY INCREASED BY 400 PERCENT
Storage consolidation is another area where Toonz is making massive gains. Instead of housing multiple disk arrays, the Isilon S200 scale-out architecture provides the required capacity within a single file system on a few nodes. “For 10 terabytes of storage, we used to need three disk arrays. But now with a single Isilon S200 node, we get that capacity. The reduced energy requirement increases our power efficiency by 400 percent,” says Asokan.
SMALL TEAM MANAGES ENVIRONMENT INDEPENDENTLY

The partnership approach to installation and configuration of Dell EMC Global Services has empowered Toonz’s IT team with the knowledge and insight needed to manage its storage environment effectively. “Dell EMC Global Services added value to our installation by ensuring that everything was prepared properly. The transition—testing, rack mounting, commissioning, and updates—was completed in just four days,” says Asokan. Along with intensive knowledge sharing throughout the four-day installation, a two-day virtual Dell EMC workshop completed by engineers equipped Toonz with the expertise to manage the storage cluster independently. Asokan explains that IT workload has decreased due to the reduction in hours spent dealing with network issues caused by rendering and compositing bottlenecks.

“When the team does need to add more capacity, it can do so in less than 10 minutes with the Isilon S200. This is a vast improvement over the previous storage environment when the team spent hours connecting various SANs. With expected data growth of up to 15 terabytes per month, simplified management is key to containing costs and channelling investment into high value areas,” he says.