Rainmaker Entertainment: 20 Years of CGI Animation Without Missing a Deadline

From Imagination to Animation
Computer-generated imagery (CGI) has come a long way since Rainmaker Entertainment (Rainmaker) launched the first-ever CGI animation series, ReBoot, in 1994. Since then, the Vancouver-based company has become one of the world’s most sought after animation and visual effects studios. From the celebrity-voiced animated feature Escape From Planet Earth, distributed by The Weinstein Company, to the upcoming movie Ratchet & Clank, based on the best-selling PlayStation® video game series from Sony Computer Entertainment America LLC (SCEA) and developed by Insomniac Games, Rainmaker is known for delivering high-quality, engaging entertainment.

The Challenge
Expanding CGI production capacity throughout its more than 20-year history of CGI production, Rainmaker has never missed a customer deadline—an impressive accomplishment and a distinction the company is determined to keep, even in light of increasingly demanding customer requirements. Over the past decade, Rainmaker has moved from standard-definition video to high-definition video and beyond. Each time the company makes a leap to a new resolution standard, its storage requirements quadruple. As individual project sizes grew well beyond 100TBs and 60 million files, Rainmaker had to find a new solution to scale storage for its high-performance render farm.

“Rainmaker’s artists are a passionate and talented group, and they want to go above and beyond on every project,” explains Ron Stinson, director of IT and operations at Rainmaker. “Our mission is to enable them to expand their creativity and improve quality without IT getting in their way. The business challenge is doing this while keeping costs in check so project profitability doesn’t suffer.”

The Solution
Not wanting to risk its perfect 20-year record of meeting deadlines, Rainmaker began looking for a new storage solution that could meet its requirements for performance, manageability, and scalability. Stinson reached out to NetApp.

“NetApp offered all the functionality and features we could ever want in a storage system,” he says. “Equally critical was that NetApp impressed us with their willingness to partner with us and understand our day-to-day operations.”
Rainmaker engaged NetApp partner IT Blueprint to deploy NetApp FAS8060 and FAS8020 storage systems. “Deploying NetApp into our production render farm took less than two weeks, saving us time and money,” says Stinson. “By comparison, it took three months to install our previous storage environment. IT Blueprint has been responsive to all our needs, and they helped nurture the valuable partnership that Rainmaker has with NetApp today.”

To accelerate the rendering process, Rainmaker uses a combination of NetApp Flash Cache™ PCIe-attached intelligent caching and NetApp Flash Pool™ intelligent caching, which automates the use of solid-state disk (SSD) to reduce latency.

“With NetApp, we get a lot of performance out of a small amount of flash storage,” says Dave Algar, principal systems administrator at Rainmaker. “To get the performance we need, we don’t have to put a caching appliance in front of it, as we did with our previous storage systems.”

**Business Benefits**

**More demand, more opportunities—no problem**

With the NetApp systems in place, Rainmaker was able to add 33% more CPU compute power to its render farm, allowing the company to easily meet production deadlines for Ratchet & Clank. There has been no unplanned downtime with the NetApp systems—a critical factor, since downtime for Rainmaker’s render farm could cost the company up to six figures per day.

“NetApp exceeded our expectations,” says Stinson. “Since we deployed NetApp, I haven’t had any complaints from creative teams about performance issues. This is true even as our customers’ requirements continue to increase. With NetApp, we can meet current and future demands on a relatively flat IT budget.”

**Boundless creativity**

Rainmaker can now take on more concurrent projects, thereby increasing revenue potential and customer satisfaction. Quality control has also improved, because artists have the opportunity to do additional iterations.

“We’ve produced Barbie DVDs for Mattel and the Ratchet & Clank movie for Sony using our NetApp systems, and we didn’t miss a beat,” says Stinson. “We’ve been able to protect and uphold the reputation of our studio and continue to improve the quality we offer to our clients.”

As new business initiatives come along, Rainmaker will be able to seamlessly scale its render farm capacity to accommodate them. One example is the company’s recently launched Mainframe Entertainment unit, which focuses on animated and live-action television production and will produce more than 100 episodes over the next two years.

**Partnering for success**

In the near future, Rainmaker plans to offer storage as a service to other media and entertainment companies, giving those companies greater flexibility to grow their businesses as new opportunities are presented. The NetApp clustered Data ONTAP® operating system will provide Rainmaker with the capabilities needed to offer storage on demand supported by proven secure multi-tenancy and storage quality-of-service policies.

“NetApp delivers the reliability and feature set required to grow our business and establish new revenue streams,” says Stinson. “NetApp continues to reinforce our view of them as a valued partner that understands our business and our industry.”