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*Rob Di Figlia  
Head of Production at  
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## Oktobor Animation

**INDUSTRY** Media and Entertainment

**SOLUTIONS** [Network Attached Storage](#)  
**Hardware** — BlueArc® Mercury 100

**oktobor** animation

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## At Oktobor Animation, Network Storage Solutions Support Staggering Growth and Aesthetic Innovation

### Summary

In less than 2 years of operation, Oktobor Animation has grown to 140 artists and produced approximately 500 minutes of top-quality, innovative computer-generated animation. The studio's startling growth, however, put a major strain on its technology infrastructure, particularly its storage. Artists struggled to get their work done, the render farm was inundated and employee morale suffered. To address these challenges, Oktobor Animation turned to a network storage solutions from BlueArc, a company acquired by Hitachi Data Systems. The result has been a dramatic improvement in productivity and a much more stable, robust and high-performing infrastructure. The studio now has the full freedom and confidence to take on exciting new projects knowing that its storage solution will deliver whatever performance, scalability and stability is demanded.

### The Company

Oktobor Animation, based in Auckland, New Zealand, is one of the world's fastest growing computer generated animation studios. In approximately 18 months the company has grown to 140 artists and has become one of the go-to suppliers of animated shows and series for Nickelodeon. Its accomplishments include

Emmy Award-winning shows such as "The Penguins of Madagascar" and "Fanboy and Chum Chum" as well as an upcoming buddy comedy "Robot & Monster." The studio has recently begun work on an animated television series titled "Kung Fu Panda: Legends of Awesomeness," based on the highly successful Kung Fu Panda film franchise from DreamWorks Animation. Innovation and quality are hallmarks of the studio, which can be seen in the studio's work as well as its approach. As articulated on the company website, "we tackle projects big and small with the same technological innovation, aesthetic sophistication and can-do creative approach that has seen many a big dream achieved in New Zealand."

### The Challenge

When Oktobor Animation was founded in 2010, its founders knew it would have a quick ramp-up. The studio was formed to support Nickelodeon and, as such, there was an immediate demand for its work. But even with that consistent demand, it was difficult to predict that the studio would be responsible for the massive amount of work that eventually came its way. "We've produced about 500 minutes of animation in about 18 months," says Rob Di Figlia, head of production at

Oktobor Animation. "If you think about a feature film, that's 90 minutes of animation over a period of 2-4 years. To do 500 minutes in 18 months is an incredible feat." In addition, to the staggering quantity of work, there was an equal demand for quality. Nickelodeon has the highest expectations and expects top quality and innovation from its studios.

While Oktobor Animation had the team and the vision in place to deliver on the quality and quantity expected of the studio, it didn't always have the robust technological infrastructure in place, particularly in the area of high-end storage. The company started with a small network attached storage (NAS) system and then switched to an open-source NAS solution, but neither was sufficient for its needs. "We managed OK at first when we had about 30 artists, but then the storage was just getting hammered," Di Figlia says. Adds Mark Arnott, head of IT for the studio, "we were experiencing very long delays. Artists were having trouble opening scene files, there were periods where things would just freeze up and sometimes it would take up to 2 hours before things would settle down again. It was all due to the storage being very, very slow and unable to cope with the extra load."

The storage problems created snags in getting the work done and, although the quality never diminished, the amount of time required to do the work was well beyond what was desired. And the slow

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*Rob Di Figlia*  
Head of Production at Oktobor Animation

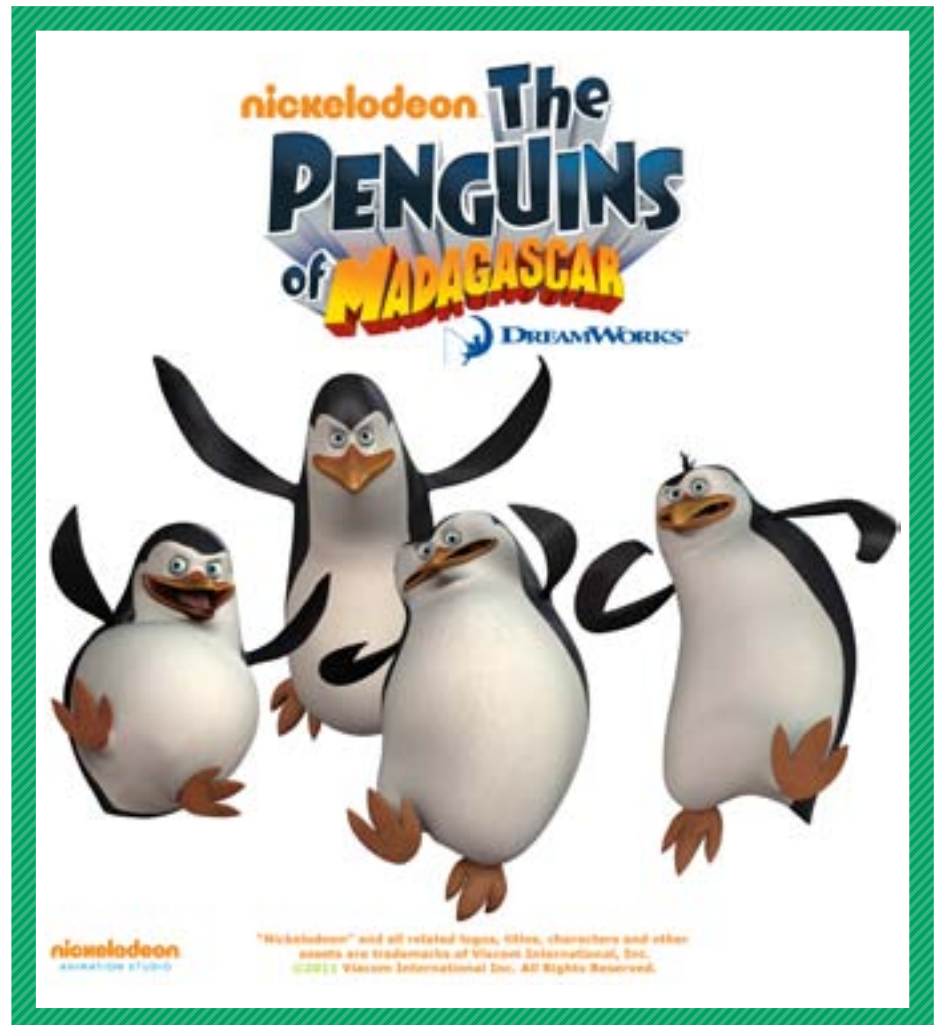
performance had an impact on employee morale. “It was painful,” Di Figlia recalls. “Every day was a struggle just to get the work done for the day. We’d have artists just sitting there waiting. We’d get dropped frames or incomplete frames on the render farm. It had a great impact on employee morale. Every day we’d get these grumblings.”

### The Solution

Once Oktobor Animation figured out that storage was the problem, it had to come up with a viable, world-class solution. “BlueArc storage was our dream solution all along, but we weren’t sure it was going to be financially viable,” says Di Figlia. Oktobor Animation is part of OmniLab Media in Australia, which has several other companies delivering a wide range of entertainment services and digital media solutions. Several of the other OmniLab Media units were BlueArc storage users, and after doing extensive research and consulting with their sister companies, the Oktobor Animation team realized that the BlueArc storage solution was not only affordable, it was also the best solution in terms of delivering the performance, scalability and technological innovation required by the studio.

Arnott had developed a series of in-house tests, such as an IOPS benchmarking test based on real-world scenarios from an animator’s perspective. The tests were extremely rigorous. “Within 5 minutes our existing open source solution just went to sleep and died,” Arnott recalls. “The BlueArc product stayed up and in 12 hours it went through every possible test and got results. We ended up loading it even beyond what it should have been able to handle, but it still managed to output the results.” Other major advantages of the solution were its simple scalability and its approach to file management. “The file system is much more geared to short-forms type of work than other solutions,” says Arnott.

Oktobor Animation now has a BlueArc Mercury 100 network storage solution



with about 42TB of total storage, including 9.8TB of tier-1 high-speed SAS storage and about 32.7TB of tier-2 storage. The solution supports the full production environment, including artists, the render farm and post-production. Software supported in the studio’s environment includes Autodesk Maya for animation; NUKE for compositing; mental ray for rendering and MARI for asset texturing. In addition, BlueArc Mercury supports the Oktobor Animation in-house development department. This department not only creates tools for internal use, but is also for sale to other customers, including MentalCore, a new plug-in for Maya and mental ray.

### The Results

From the moment the BlueArc Mercury went in, the results have been dramatic.

“All of a sudden, the production floor was quiet. There were no complaints,” Di Figlia says. “It’s been like night and day. We’re getting good stability across the network, the artists aren’t complaining, files are opening and the render farms are humming. It has taken what was a huge issue for us every day and has wiped that clean. Some files that were taking 40 minutes to open now open in 1 or 2 minutes. We aren’t taking any more hits come delivery time.” This has made life quite a bit easier – and less stressful – for the IT team. “We used to get constant complaints at the help desk. We get none of that anymore – maybe 5 minutes a week. Everything is running smoothly. We have no issues whatsoever.”

The impact of having the solution in place has been noticeable and measurable in

improved productivity, performance and employee morale. “This product is the solution that allowed the studio to start running smoothly,” Di Figlia says. “Our productivity went right through the roof. Overtime definitely came down and now the artists don’t have to come in on weekends and spend an extra hour or 2 each day to get their work done. We have no bottlenecks on our render farm. We used to get a few days behind schedule. Now the solution chews through everything we throw at it.”

## The Conclusion

With the BlueArc Mercury solution in place, Oktobor Animation believes it has an answer not just for its current needs, but its future needs as well. “The scalability and future-proofing of the product were driving forces in our purchase,” Di Figlia says. “We were buying technology that’s going to stay with us. Right now we have a decent amount of storage and we know that it’s easily scalable and we can go up as our projects increase. It’s now just dependent upon what work comes down the pipe, not on whether our infrastructure can handle it.

This product gives us the freedom and confidence to scale up quickly and economically – we know it’s not going to break the bank and we can roll it out mid-production. Television waits for no one, and we cannot have downtime. With BlueArc Mercury we flipped the switch and it just worked. And the team was great. It was a seamless transition and there was no downtime. It was great and a dream for me from a production standpoint.”

Another major advantage of having the BlueArc storage solution in place is the credibility it provides Oktobor Animation with current and future customers. “We love throwing around the product name because there is a feeling in the industry that it is the top of the line,” Di Figlia adds. This will help the studio, he says, as it looks to expand beyond television and into feature films. “It’s a good selling point for our clients. It gives clients confidence in what we’re doing. We only do the best – not only in our work and animation, but also in the equipment that we use. We are thrilled with this product. It is a great addition to our studio.”



## Hitachi Data Systems

### Corporate Headquarters

750 Central Expressway  
Santa Clara, California 95050-2627 USA  
www.HDS.com

### Regional Contact Information

**Americas:** +1 408 970 1000 or info@HDS.com  
**Europe, Middle East and Africa:** +44 (0) 1753 618000 or info.emea@HDS.com  
**Asia Pacific:** +852 3189 7900 or hds.marketing.apac@HDS.com

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