TIME TO GET ANIMATED
ABOUT CLOUD

Cinesite stays agile with cloud-hosted render farm and storage, plus powerful workstations, meaning artists can create award-winning scenes four times faster.

Business needs

Cinesite was looking for a technology partner to help it stay agile in the fast-paced world of visual effects, and give its artists the tools they need to keep producing award-winning scenes.

Solutions at a glance

- **Client Solutions**
- **Cloud Services**
- **Data Center**
- **Enterprise and Client Support**
- **Dell Services (support and deployment)**
- **Dell Networking**

Business results

- Cinesite has a more agile business and can easily open new locations with cloud hosting
- Expensive central London office now better used by the business, with more artists and fewer computers
- Enhanced storage performance and capacity for large file sizes
- Studio can react to fluctuating workload demands

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*Christian Perschky, head of systems technology, Cinesite*
Advances in technology over the past 20 years have led to a boom in visual effects (VFX) and animation in cinema and television. This has resulted in a thriving industry of studios whose artists work hard to deliver the jaw-dropping effects and characters that audiences have come to love.

Based in London and Canada, Cinesite has built a strong reputation in the industry, with credits on more than 200 films. The studio’s work — which includes The Revenant, Harry Potter, and Skyfall — has won Academy Awards, BAFTAs and an Emmy Award. Of course, Cinesite requires the creative talents of hundreds of artists to make its work possible, and these artists in turn rely on cutting-edge technology. Andy Kinnear, a compositor at Cinesite, says, “Technology is the enabler in this industry. If you’ve got the idea in your head, the technology allows you to do it.”

The tech that brings ideas to life

This is where Cinesite’s head of systems technology Christian Perschky comes in. His team looks after IT for the entire studio — from the workstations the artists use, to the storage that underpins everything. Cinesite’s render and storage technology was all housed in a server room at the company’s central London offices, where rents are some of the highest in the world. “Our hardware was showing its age, so we were looking to replace it,” says Perschky. “This made us think about how we could make the best use of the space in our Soho office. Would it be better for the business to have computers there, or artists?”

Storage was also an issue for Cinesite. “We had proprietary appliances that were difficult to scale,” explains Perschky. “The VFX industry can be unpredictable, and we have to be agile, taking on artists and technology when we get large projects, and scaling back during quieter times. Any time we wanted more storage we had to buy expensive black boxes configured as the vendor wanted and not necessarily tuned to our requirements.”

A new co-star

“So we were on the lookout for a new technology partner,” says Perschky. “We knew that two of our competitors were already using Dell EMC, so we arranged a meeting with two of Dell EMC’s VFX specialists — one technical and one commercial — and found we could discuss all our needs.” Cinesite’s group financial director worked with Dell Financial Services to draw up a financing plan that allowed Cinesite to purchase the technology it needed to achieve its business objectives.

Cinesite relied on the Dell services and deployment team to help plan and design the full system refresh. The Dell EMC team guided the implementation and configuration that would allow the company to be more agile, give artists better tools to work with, and enable Cinesite to have more control over its technology. Its render farm has been bolstered by 120 Dell EMC PowerEdge M630 blade servers. Cinesite has upgraded its storage to Dell EMC PowerEdge R720 servers with Dell EMC PowerVault arrays, providing 800 gigabytes of space. As well as new hardware, Cinesite has moved its render farm and primary storage to an off-site colocation centre just outside London, provided by Dell EMC. The primary storage is then mirrored to a similar configuration of hardware for 1 petabyte of backup storage, which takes up a small part of the company’s old server room in its London offices. Network connectivity is provided by Dell EMC Networking S4048-ON and other S Series switches at the core and edge. These provide low latency and deep buffering for render nodes, storage and demanding workloads.

Its VFX artists use Dell Precision workstations. Those who need more compute power have models with dual Intel® Xeon® processors, while all other artists use high-clock-frequency single-processor models. All the workstations contain solid-state drive (SSD) storage for increased speed and productivity, and many use NVIDIA® Quadro® workstation graphics cards.

The elasticity of the cloud

By moving its data centre off-site, Cinesite has helped make the business more agile. Perschky says, “One of the benefits of using a service provided by Dell EMC is that we have the option to ‘burst’ into the cloud and use the additional compute power in the data centre. This is especially useful if we have a tight deadline that requires a sudden spike in resources. For example, a customer might want a scene to be changed overnight, and we can do that without worrying about sourcing physical hardware.”

It also gives Cinesite the flexibility to make changes to its business or open new locations. “The VFX industry is dynamic. For example, we might want to open additional
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Christian Perschky, head of systems technology, Cinesite

sites to take advantage of tax breaks in certain countries. Doing this is easy now that we use a service provided by Dell EMC because we just need to connect to our existing data centre,” says Perschky. The cost to power each machine has also dropped because less electricity is required to run the new data centre.

Faster rendering in a dynamic industry

The power of the new nodes in its render farm is already proving a huge benefit to Cinesite’s artists. “As the models we create for scenes become more complex, they require more processing power to render,” says Perschky. “With the latest generation of Intel Xeon processors, we’ve noticed a 20 percent increase in performance per core. That, combined with our faster networking and storage means that artists have told me that they can work four times quicker. It’s great to hear we’ve made a difference to their days and improved their productivity.”

Finally, Cinesite protects its investment with Dell ProSupport. “One of the best things about Dell ProSupport is the fact we can self-diagnose and order our own parts,” says Perschky. “Rather than go through troubleshooting steps with someone on the phone, we can report faults and get replacements quickly.”

Perschky is optimistic about the company’s future. “Our partnership with Dell EMC has not only removed the restrictions we had, but it’s also given us opportunities. Our directors can now take the business into exciting new realms,” he says.