Jellyfish Pictures Hires Top Talent Anywhere, Delivering Virtual Desktops from a Public Cloud Using Teradici Cloud Access Software

“With our VFX [visual effects] cloud and Teradici Cloud Access Software, we’re no longer limited by creative resources and hardware when we pitch for work. We can grow or shrink our workforce as needed by spinning virtual machines up or down.”

AT A GLANCE

Challenges
- Quickly provide graphics applications and desktops for employees and freelancers in any location
- Minimize IT and real estate costs in new studios
- Protect intellectual property
- Foster creativity by simplifying collaboration

Solution
- Hybrid cloud for visual effects (VFX)
  - Built private cloud using PCoIP Remote Workstation Cards
- Dell Wyse PCoIP Zero Clients

Results
- Increased capacity and agility: can hire freelancers in any location
- Avoided approximately US$100,000 expense for servers and storage in new studios
- Strengthened security by not storing content on endpoints
- Eliminated hours a week spent collaborating on large video files

Launched in 2001, Jellyfish Pictures creates award-winning visual effects (VFX) and animation for advertising, film, and television. Projects include films like Rogue One: A Star Wars Story and Last Jedi, TV shows like Outlander and Black Mirror, and long-form animation like Floogal and Dennis and Gnasher. Jellyfish has won Emmy, VES, and BAFTA awards.
“Stunning moving pictures. It’s an obsession that’s transformed London-based Jellyfish Pictures from a two-person shop in 2001 into one of the world’s most respected visual-effects (VFX) and animation studios. By 2017, Jellyfish had grown to nearly 200 employees in four studios. The formula for success? “We hire creative people who have a passion for doing great work,” says Jeremy Smith, Jellyfish CTO. “Then we make sure that technology is a tool to heighten creativity rather than a burden.”

Rapid growth spurred Jellyfish to re-think the way it delivers graphics desktops. VFX artists in the company’s Central London and Brixton studios work on physical graphics workstations. When planning two new animation studios in Oval, South London, the company decided to forego physical workstations, on-site servers, and on-site storage. “A one-second Ultra HD film file is 1.2GB—five times bigger than a one-second HD file,” Smith says. “File sizes will continue to grow, and constantly upgrading equipment in multiple studios doesn’t make financial sense.”

So rather than paying London real-estate prices for extra space in the new studios for IT infrastructure, Jellyfish built a private VFX cloud in its Brixton studio. The cloud delivers CPU, GPU, and storage resources to the new studios over a high-speed network.

The Oval studios, opened in June 2017, have no IT infrastructure other than Dell Wyse Zero Clients powered by Teradici PCoIP® technology. Jellyfish selected the Teradici PCoIP protocol after also evaluating other popular remote display protocols. “PCoIP technology keeps creative content secure because files never leave the cloud,” says Smith. “Only encrypted pixels travel over the network.” What’s more, encryption doesn’t slow down rendering by sharing the CPU. Instead, pixel encoding and decoding take place on the PCoIP Remote Workstation Card.

Extending the Brixton infrastructure to the Oval studios cost approximately $100,000 less than purchasing servers, graphics cards, storage, and backup software for each location. Desktop management costs also dropped because the IT team manages applications and desktops in one place—the cloud—rather than on dozens of individual workstations.

The Oval studios’ 70 animation artists log in from any Zero Client to access their personal virtual desktop, which includes digital content creation software and business applications like email. “The experience is the same as it would be on a physical workstation, and sometimes better,” says Smith. And without whirring workstations, the office is blissfully quiet—a welcome backdrop for the creative process.

To add desktops for freelancers and employees working outside the Oval studios, Jellyfish extended the VFX private cloud to Microsoft Azure. Artists access their desktops and graphics-intensive applications using Teradici Cloud Access Software, Graphics Edition. Spinning up one or more virtual desktops in Azure takes just 10 minutes. Freelancers can access their virtual desktops from anywhere from any zero client—or any other device. “No content is ever on the Zero Client, so we don’t have to worry about security,” Smith says. If artists need more CPU or GPU power to do their best creative work, the IT team can adjust the size of the virtual machine in minutes. And when the project is complete, Jellyfish retires the virtual desktop, no longer paying for it.
### Products used
- PCoIP Remote Workstation Cards
- Teradici Cloud Access Software
- Dell Wyse PCoIP Zero Clients

### Virtualization platform
- Microsoft Azure

**Now Jellyfish can take on larger projects with tighter deadlines.** Say a client calls on Monday with a job due on Friday, and that all artists are busy. Without the VFX cloud, work couldn’t start until Jellyfish shipped spare workstations to freelancers—a 2-3 day delay. Now Jellyfish can quickly provision virtual desktops for freelancers so that work starts immediately. The company can say yes to more jobs.

Valued employees who move away from London can also work on virtual desktops hosted on Azure. "Brexit won’t cause us to lose artists who aren’t U.K. citizens," says Smith. "We’ll just move their virtual desktop from the on-premises cloud to Azure so they can work remotely."

**Moving desktops to the cloud also simplified collaboration.** Artists no longer need to change the paths of file dependencies in order to share files with team members in other locations. That saves 20-30 minutes per shot—more than 3 hours a day for an artist who collaborates on 10 shots a day. Artists can reclaim that time for creative work.

Smith concludes, "With our VFX cloud and Teradici Cloud Access Software, we’re no longer limited by creative resources and hardware when we pitch for work. We can grow or shrink our workforce as needed by spinning virtual machines up or down."