

Empowering a Growing VFX Company to Work Effectively from Anywhere

How Gunpowder was equipped to complete remote VFX workflows for staff and clients



GUNPOWDER®

Gunpowder is a systems integrator specializing in moving traditional visual effects (VFX) workloads into the cloud. They offer turnkey VFX solutions to 40+ clients globally including advertising agencies, VFX facilities, editorial teams, and content creators. Launched two years ago as the pandemic began, Gunpowder helped artists and customers accustomed to traditional on-prem working environments navigate lockdowns and complete VFX and video projects while working remotely from home.



INDUSTRY:
M&E



COUNTRY:
Global

“We were [HP] Teradici from day one because I had experience with it. I knew the quality was there. I knew I could rely on it. We strongly suggest it to our clients.”

Tom Taylor,
Founder, Gunpowder



Globally fully remote

VFX company

40+ customers

globally

15 countries

- Gunpowder's footprint

Objectives

- Enable artists around the world to work remotely without distortions and with color-accuracy
- Expand business across more geographical regions to help clients deliver VFX projects within deadlines

Approach

- Implementing HP Anyware (formerly Teradici CAS) on all staff and client cloud workstations, laptops, or thin clients
- Google Cloud infrastructure, Amazon Workspaces, and Active Directory for credential management

Business Outcomes

- Company has grown organically during the pandemic with staff and clients working remotely
- Successfully onboarded 40+ clients around the world and helped them reach VFX and video project deadlines
- The business is poised to scale up and expand across geographical regions while still being remote



“The deadlines in media and entertainment are fixed. If a commercial facility misses a deadline, that means that the agencies have paid for airtime already and they’re dead in the water. It’s critical that a commercial works or that the pipeline and the infrastructure works. There’s no such thing as downtime, there could be no such thing as delays; we just can’t afford that. So, we have to rely on systems that we know will deliver.”

Tom Taylor, Founder, Gunpowder



Software

- HP Anyware, powered by PCoIP technology

Hardware

- Laptops
- PCoIP-enabled Thin Clients

Cloud Service Providers

- Google Cloud
- AWS

Objectives

Replicating the studio experience on the cloud

Designing and rendering VFX is a resource-intensive process. Many artists prefer desktops and high-powered workstations because of their processing power. But the pandemic changed VFX workflows—changes that are continuing to impact media and entertainment companies across the globe. As more businesses embrace hybrid environments, and some move to a completely remote workflow, many IT teams are seriously considering remote access to digital workspaces and cloud providers.

For Gunpowder, the pandemic meant embracing remote workflows for staff, artists, and prospective clients. The challenge was enabling these groups to do their best work from anywhere in the world without interruptions.

According to Tom Taylor, founder of Gunpowder, there are three important aspects that matter to artists when they work remotely on the cloud:

- Quality and accuracy
- Device support
- Performance and latency

“Artists are used to working at a local workstation. They’re not used to compression; they’re not used to artifacts,” said Taylor. “Their job, in fact, is to look for anomalies in pictures, to flag those frames, and to fix some of those anomalies. So, for them, it was very, very important to have a protocol that was lossless, that showed you a full frame at just as good a quality as a workstation under the desk.”

Additionally, artists regularly use peripherals, such as webcams, and especially Wacom tablets and pens to draw and design. When the pen moves over a screen, artists expect the results to appear immediately. Any latency will disrupt the artist’s workflow and negatively affect their performance. Near-perfect device support is crucial when working on the cloud.

Alongside being able to use devices seamlessly, artists expect color-accuracy and text clarity when working remotely. This is crucial to developing a final product that will look the same no matter what system you are viewing it on.

When artists are able to do their jobs from wherever they work, the business can also hope to grow and expand. That was another objective that the still-growing Gunpowder was hoping to achieve—attracting more customers and expanding the business in the global market.

“If something happens to that workstation, it’s really handy because we can just shut that machine down and reboot it up again. And the artist will get a working instance knowing that they can then continue on with the job.”

Tom Taylor,
Founder, Gunpowder

Approach

Reaching deadlines remotely with HP Anyware

Gunpowder opened their virtual doors as the pandemic began and took the changing global circumstances in their stride. The company was designed to be remote, so when lockdowns were announced and most businesses were scrambling to help on-prem staff transition to working from home, Gunpowder was able to start working.

Taylor, who had been Chief Technology Officer at The Mill, was already aware of Teradici CAS, now HP Anyware.

When Taylor started Gunpowder, he already had the experience of using Anyware to set up remote teams. Gunpowder was able to function remotely with all staff, artists, and new clients onboarded using a mix of Anyware and cloud service providers such as Google Cloud and Amazon Workspaces. Google Cloud and AWS have been HP Anyware partners for a long time, so using Anyware to remotely access these cloud service providers was a simple choice.

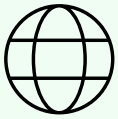
Gunpowder has set up a lot of cloud infrastructure around the world, with nearly 3000 workstations running in the cloud, including 500-1000 active workstations across four different continents and 15 countries, all maintained by just four engineers based in the US. Artists connect to the cloud that is geographically closest to them—the GCP global load balancer determines the region closest to artists, who all use a single URL to connect to the cloud automatically.

Speaking of the experience of setting up artists with Anyware, Taylor said, “everybody that was looking at alternatives out there and basically struggling through the pandemic, **we just came in and installed Anyware Manager, got people connected and it solved most people’s problems.**”

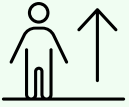
The company does use some Thin Clients but as the HP Anyware software client has been upgraded and improved, Gunpowder is relying more on people’s own laptops and MacBooks to connect to HP Anyware. They have a combination of pools and hard-assign machines, depending on artists’ workloads. Pools of Anyware licenses work well for artists who have similar job functions or remain in a specific job role within the industry. At any time, there are about 50 Anyware Connections across the world.

Hard-assigned machines are for specialty roles and for artists with special equipment. “Autodesk Flame has local storage, so you’re storing files and working on files locally to that machine. You need to be assigned that same machine every single time. That’s where we don’t make use of pools; instead, we hard-assign people specific workstations because that workstation contains their data.”

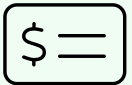




Deployed 3000
workstations globally for
staff and artists



Fast onboarding for
artists and clients



Saved on costs by
managing unused
connections

Referencing the three primary needs of artists working remotely, Taylor explained that the PC-over-IP (PCoIP®) remote display protocol that forms the basis of HP Anyware was the only one that was able to **offer artists lossless image quality, and near-perfect color and text accuracy.**

Device support for Wacom tablets and pen use was also practically seamless with Anyware. Not only does Anyware reduce latency, but it also offers support in terms of pen pressure sensitivity, making Anyware a 'no brainer' for Gunpowder.

And finally, in terms of performance, Anyware makes cloud administration much easier and cost-effective. Anyware Manager allows administrators to automatically boot up machines and to shut them down when they aren't in use.

Taylor elaborated on why this brokering system was a benefit. "To be able to spin up machines on demand without having somebody else go into an interface you developed or a cloud interface to physically boot up that machine, that is hugely beneficial and helps us and our customers save tons of money on their cloud bill, because they don't have workstations running when they didn't need to be."

Business Outcomes

Successfully worked in remote environments

Taylor shared a success story about using Google Cloud and HP Anyware to demonstrate how this infrastructure has worked for clients. A case was logged in Gunpowder's ticketing system about slow Anyware performance. When the team reached out to the customer, they learned that he was on a flight between the USA and the UK. The customer was using the airplane's wi-fi to connect to his cloud workstation through Anyware to complete a project.

“HP Anyware combines the ground-breaking and Emmy Award-winning PCoIP technology of Teradici CAS with the pro-grade collaboration features of ZCentral Remote Boost to deliver a flexible, secure, collaborative and productive digital workspaces solution.”

Learn more at hp.com/anyware

What part of the project was the customer working on? Taylor explained it was the conform phase, the end of a commercial video job which requires a lot of data-wrangling. All the different shots and scenes of a video or film that various departments have been updating are stitched together into a timeline to be viewed as a complete video. “He basically did one of the hardest parts of the job from his airplane seat” using Anyware and Google Cloud, shared Taylor.

“Anyware was able to perform, and we were able to get the job out the door. In an emergency, it’s great knowing that you can get somebody halfway across the Atlantic to login and, sure, it might not be an optimal performance, but they’ll be able to have a look at something at least, and maybe do some slight work to it.”

With HP Anyware and a cloud-compute approach, Gunpowder has grown organically over the last two years and now they’re planning to use this virtual business model to expand further. “We’re really looking at expanding to other regions, to get engineers’ boots on the ground in all the continents and being able to service customers remotely. Continuing down this path of not having to physically be in an office to help a customer is really important for us, because we’re able to serve multiple customers a day.”

Though in-person meetings have their benefits, Taylor has found that physically going to client offices often means he and his engineers can service only two customers a day. Online, they’re able to service up to 10, depending on the types of issues the customer is facing. Additionally, most of their clients are also in the process of downsizing so cloud-compute is a major draw for them.

Gunpowder is also seeing the opportunity to scale their business through Anyware and the cloud in ways not possible for small businesses before. Where once a VFX facility would need to spend millions of dollars in equipment to even think about competing with established businesses, now with a much smaller investment and a few clicks, a company can have 1000 workstations in the cloud which they can easily and securely connect to with HP Anyware.

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