Superfast Autodesk® Flame® visual effects creation with Lenovo and AMD

The Department of External Services delivers content creation twice as fast with Lenovo ThinkStation workstations powered by AMD Ryzen™ Threadripper™ PRO processors.

CUSTOMER

DXS
The Department of External Services

INDUSTRY

Film and TV postproduction

CHALLENGES

Faster rendering and iteration when working on a demanding campaign videos

SOLUTION

Deploy Lenovo ThinkStation P620 workstation powered by AMD Ryzen™ Threadripper™ PRO processors

RESULTS

Double the rendering speed and cutting tasks from hours to minutes

AMD TECHNOLOGY AT A GLANCE

AMD Ryzen™ Threadripper™ PRO CPUs with up to 64 cores

TECHNOLOGY PARTNER

Lenovo™

Digital content creation is one of the most demanding activities a workstation can perform, and visual effects software Autodesk® Flame® is high on the list for needing the best possible hardware to deliver its industry-leading capabilities. When award-winning independent visual effects artist Randy McEntee's company The Department of External Services was commissioned by Parliament VFX to work on a major campaign for a top food delivery company, Lenovo's ThinkStation P620 powered by an AMD Ryzen™ Threadripper™ PRO processor delivered exactly what he needed to bring his client's vision to life with Flame.

Top of the Flame leaderboard

"Speed is everything," says Randy McEntee, Founder, The Department of External Services. "They don't call it finishing because it drags on forever." The demands on workstation hardware have grown exponentially over the years, making it increasingly important to use a software platform capable of delivering results. "We have a different challenge seemingly every day: talking babies, celebrities, talking animals, commercials for big sporting events. I need a tool that's going to help me keep up and Flame is that tool. We can solve 95 percent of the problems in one day or less and for our clients that means the difference between hitting or missing a deadline."

One production job The Department of External Services was commissioned to perform posed particularly high demands on his workstation platform.

"For our client's big campaign, we had a lot of work to do," he explains. "We had to produce multiple edits, multiple durations, 60-second, 30-second, 15-second teaser videos, online, broadcast, web, and hundreds of local, regional, and social adaptations."

The client's campaign posed specific challenges when classic characters from an earlier movie were introduced to the videos. "When we were bringing these characters back to a new generation, I did a lot of invisible effects," says McEntee. "We were retouching, doing heavy denoise and regrain work, and complicated set reconstruction, as well as using motion analysis and motion vectors, and the latest machine learning tools. We needed the rendering horsepower to be able to get stuff in and out and iterate with our clients, so it would look exactly the way they wanted in real time."

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Randy McEntee, Founder, The Department of External Services

The demands of the client's work led McEntee to try out Lenovo's ThinkStation P620, powered by an AMD Ryzen Threadripper PRO processor with up to 64 cores running at up to 4.5GHz.[1] His initial testing with Flame proved that this was the best possible platform for his work. "To get the most out of Flame, you have got to bring the horsepower," says McEntee. "I created a community of Flame artists. We benchmarked our hardware and the Lenovo ThinkStation P620 with its AMD Ryzen Threadripper PRO processor was at the top of the leaderboard."

Twice as fast for rendering

"For Flame, there's nothing more important than speed because, at the end of the day, this is what makes a big difference compared to other products," says Stephane Labrie, Senior Product Owner, Autodesk. "Optimizing software is one thing, but of course we need to rely on a good workstation. And that's why we work closely with great technology partners to get the most power we can out of their offering so the artist can realize the vision of their customers."

The Lenovo ThinkStation P620 partners an AMD Ryzen™ Threadripper™ PRO 3995WX processor with up to 64 cores and up to two powerful professional graphics cards, up to 1TB of 3,200MHz ECC memory with an eight-channel configuration, and up to 20TB of storage including PCI Express 4.0 NVMe drives. This makes it the ultimate platform for content creation work with Flame, and ideal for what McEntee needed to deliver the client's demanding videos.

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Randy McEntee, Founder,
The Department of External Services

"I transitioned to the Lenovo ThinkStation P600 series powered by an AMD Ryzen Threadripper PRO CPU and it has changed my workflow completely," says McEntee. "It renders twice as quickly as anything else I've ever owned, which means I can spend more time doing what matters and making stuff happen. After switching to the AMD Ryzen Threadripper PRO in my Lenovo, I'm moving huge amounts of footage in crazy ways for my clients. The footage can be 6K, 7K or 8K, a thousand frames a second, Phantom High Speeds, 16-bit EXR. It's just so incredibly fast. I don't even know how to describe it."

Completing tasks in minutes instead of hours

This pays dividends when iterating versions and adjusting according to client input. "When we're refining a look during a live session with clients, speed is everything," says McEntee. "Before it used to take a few minutes in between renders. Now with the Lenovo workstation, we can stack up multiple damage nodes, multiple image processing nodes, and we can scrub it in real time and audition all kinds of different looks for them. It's also not uncommon to use machine learning tools to recraft stories with complicated read times. On my last computer, machine learning read times were taking 40 seconds a frame. With the AMD Ryzen Threadripper PRO processor, they're two seconds a frame, and that's the difference between hitting and missing a deadline. With the P620, I can work in real-time and audition all kinds of ideas for my clients."

"The P600 series really translates the Flame experience with all the components – the GPU, the CPU, the memory bandwidth, the fast networking capabilities," says Labrie. "It delivers what the Flame artists rely on." McEntee concludes: "For me, Flame is the ultimate tool. It's got conforms, finishing, timeline, compositing, color correction, and image work. The Lenovo ThinkStation P620 powered by an AMD Ryzen Threadripper PRO processor has completely changed the way I work. Before it used to take hours to complete certain tasks, now it takes minutes. Every Flame op should have one."

About The Department of External Services

The Department of External Services is a visual effects company founded by Randy McEntee, a Chicago-based Flame artist and visual effects supervisor specializing in high volume and high-speed compositing, finishing, versioning, adaptations, socials, and deliverables. He has worked with world class directors, brands, ad agencies and digital effects studios to bring their ideas to the screen. He was Head of 2D at The Mill, Chicago for seven years. For more information visit thedepartmentofexternalservices.com.

About Lenovo

Focused on a bold vision to deliver smarter technology for all, Lenovo is developing world-changing technologies that create a more inclusive, trustworthy, and sustainable digital society. By designing, engineering and building the world's most complete portfolio of smart devices and infrastructure, we are also leading an Intelligent Transformation – to create better experiences and opportunities for millions of customers around the world. For more information visit lenovo.com/thinkworkstations.

About AMD

For more than 50 years AMD has driven innovation in high-performance computing, graphics, and visualization technologies. Billions of people, leading Fortune 500 businesses, and cutting-edge scientific research institutions around the world rely on AMD technology daily to improve how they live, work and play. AMD employees are focused on building leadership high-performance and adaptive products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) website, blog, LinkedIn, and Twitter pages.