

Theory Studios gains greater graphics capability with Dell and AMD

Quick-turn around and rock-solid visual productions with Dell Precision workstation and AMD Radeon™ PRO graphics

AMD
RADEON
PRO



CUSTOMER



INDUSTRY

Media & Entertainment

CHALLENGES

Improve throughput and turnaround time on GPU-intensive rendering and special effects processing

SOLUTION

Deploy a Dell Precision 3630 Tower with Radeon™ PRO graphics

RESULTS

AMD Radeon PRO graphics cut resource-intensive After Effects processing times in half

AMD TECHNOLOGY AT A GLANCE

Radeon PRO W5500 8GB GPU

SOFTWARE APPLICATIONS

Adobe® Creative Cloud®

Blender®

Unreal® Engine

TECHNOLOGY PARTNER

Dell Technologies

Theory Studios is a pioneering high-end animation company based in Orlando, Florida, with a team of graphics professionals scattered around the globe. This active group of animators, designers and graphics effects experts has worked on videos and animations for children's television series and major theme parks across the globe.

Every Theory Studios project involves a far-flung team of collaborators, working on various animations, virtual reality sequences, and post-production special effects. All demand exceptional design and creation of high-quality visuals. Theory Studios always seeks to push the envelope of what is possible, both graphically and artistically, and has earned a reputation as a leading-edge graphics pioneer.

Putting AMD graphics technology to work

To help Theory Studios produce its outstanding graphics concepts and content, Dell Technologies and AMD teamed up to provide the company's founder David Andrade with a complementary Dell Precision 3630 Tower. Equipped with an AMD Radeon™ PRO W5500 8GB GPU, 32 GB DDR4 2666 MHz RAM, and a 512 GB NVMe® Class 40 SSD, this configuration is ready to take on demanding graphics tasks and turn them out quickly and reliably. In fact, when Theory Studios took delivery of this unit it came, in Andrade's words, "at the perfect time." That was because they had an immediate need for a machine to help them handle a large queue of Adobe® After Effects® processing tasks for an animated TV series that was underway.

Big productivity boost from a graphics workstation

To hear Andrade talk about Theory Studio's production process, it becomes clear that there is a distinct production pipeline where assets go from the early concept stage to content creation, animation, compositing and all the way through final rendering and post production effects. At Theory Studios, the company uses Adobe Creative Cloud with an emphasis on After Effects, and they also work with Blender for 3D creation as well. By itself, Blender is a complete graphics pipeline with modeling, rigging, animation, rendering, compositing, and motion tracking, along with video editing and game creation support. This means a constant flow of files moving from stage to stage within the pipeline, where

specific individuals handle specific tasks, and use their PCs, along with server-based assets, either in the cloud or on-premises, to handle the enormous processing loads involved. As each artist in the workflow assumes control of an asset, they turn to the appropriate software tools to tackle that particular phase of the task at hand.

Within this environment, a graphics workstation is not only used for content creation by artists, but is also often put to work as a rendering machine to process raw assets. Given that some of these tasks might typically take hours or even days to complete, reducing this unattended render-time can be a critical way to improve overall efficiency. In fact, it is absolutely essential that this work gets done – and as quickly as possible – for Theory Studios to meet its deadlines and conduct its business. The Dell Precision workstation does this job exceptionally well, along with its many other capabilities.

"All of a sudden a six-hour file export on that other PC was reduced to a three-hour export on the Dell Precision 3630"

David Andrade, Founder, Theory Studios

Ready for action right out of the box

Andrade is quick to confess that as the co-owner of a very busy business, he must wear many hats to drive his teams from success to success. "But," says he, "I'm trying to take my IT hat off now. I don't want to build PCs, I just want to have them ready, done and working. For us, Dell PCs just work." Having struggled himself with component-level compatibility issues when previously building computers, he now enjoys the simplicity of pre-configured Dell workstations equipped with AMD graphics. Additionally, when it comes to recommending computers to his team, Andrade simply says, "If you want a new machine, get this Dell Precision workstation with AMD Radeon PRO graphics." Valuable time is saved and Andrade remains confident knowing they will do what he and his team need them to do right out of the box.

Andrade is likewise sold on Dell Service and Support, especially as it pertains to his team's support needs. "I don't have to deal with it, and they can just talk to Dell directly and that makes perfect sense," he says. "As a small business, you're spending less time fixing stuff and more time making stuff. It's making stuff that makes you money, so I think it's worth the cost."

The AMD Radeon PRO performance edge

Ultimately, what justifies the Dell Precision 3630 workstation with AMD Radeon PRO graphics is that it allows artists to iterate faster.

To that end, the workstation helped Theory Studios radically improve its turnaround time on After Effects projects. While working with a remote colleague on deliverables for a major theme park in East Asia, Andrade looked for a way to speed up production and began to use his Dell to run After Effects file export jobs similar to the ones his colleague was running on a different machine. "All of a sudden," says Andrade, "a six-hour file export on that other PC was reduced to a three-hour export on the Dell Precision 3630." Even though that other PC is only one generation older, that made a night-and-day difference when it came to the throughput and turnaround time involved.

The Dell Precision workstation again proved itself valuable on a recent character animation project for a children's series. Andrade was able to shift the After Effects elements to it instead of making the compositor wait for it to run to completion on his own PC before tackling the next job in his queue.

Asked if the Dell workstation with the power of AMD Radeon PRO W5500 graphics might be a good machine to break into the graphics industry, Andrade responds, "Yes, absolutely, because ... you can let it render and cook on stuff as you need, especially if they're really long renders. It's also a machine that you can do all your day-to-day work on. I confess, I've even done a little gaming on it and it's worked well for that, too. The Dell Precision 3630 Tower is a really capable, mid-level workstation that's good for a little bit of everything."

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David Andrade, Founder, Theory Studios



About Theory Studios

Theory Studios is an EMMY® award winning animation, visual effects, and virtual reality studio that specializes in complex, quick-turn, high-end graphics based on a fascinating mix of tools and technologies. From game engines to hyper-realistic 8K graphics – even occasionally 16K – rendering to virtual reality environments, Theory Studios creates impressive, immersive virtual worlds for gaming, entertainment, and active viewer engagement. To learn more about Theory Studios and its work, visit theorystudios.com.

About Dell

[Dell Technologies](http://DellTechnologies) (NYSE:DELL) helps organizations and individuals build their digital future and transform how they work, live, and play. The company provides customers with the industry's broadest and most innovative technology and services portfolio for the data era.

About AMD

For over 50 years AMD has driven innovation in high-performance computing, graphics, and visualization technologies—the building blocks for gaming, immersive platforms, and the data center. Hundreds of millions of consumers, leading Fortune 500 businesses, and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work, and play. AMD employees around the world are focused on building great products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit amd.com/RadeonPRO.

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