## HAS 3D'S TIME COME?

TurboSquid ushers in a new golden age for 3D using a Dell mobile workstation—outperforming a desktop by up to 15%



## SOLUTIONS

- MODILITY
- DESKTOP/LAPTOP REFRESH



## **CUSTOMER PROFILE**

**COUNTRY:** New Orleans, LA (USA) **INDUSTRY:** Arts, Entertainment and Media

FOUNDED: 2001

NUMBER OF EMPLOYEES: 50 WEB ADDRESS:

www.turbosquid.com

## CHALLENGE

TurboSquid needs a mobile platform, robust enough for testing, that can inspire audiences on the road with 3D's potential and the capabilities of the company's online marketplace.

## SOLUTION

A Dell Precision™ mobile workstation, used for demos, is also used during challenging tests where multiple versions of the same application are running at the same time.

## BENEFITS

## **RUN IT BETTER**

- Robust performance in intensive 3D testing environment
- Up to 15% faster rendering than a desktop that had twice the RAM
- Proven durability and easier portability during challenging travel
- Certified platform minimizes issues during testing

Tip: 3D is emerging as the next major media type.

This will be just the latest big change caused by digital media. Online video is everywhere. Digital photography has all but killed film photography. MP3's have gutted the music industry. And the Internet is transforming every other medium, including the advertising that pays for it all.

## "I'M ONE OF THOSE GUYS WHO TORTURES MACHINES. I TRY AND PUSH AS HARD AS I CAN. AND ON MY DELL PRECISION MOBILE WORKSTATION, I'VE NEVER HAD A REAL PROBLEM."

Beau Perschall, VP of business development, TurboSquid

The ingredients for a golden age of 3D are in place: processor power and bandwidth are rapidly expanding, 3D software tools have become more powerful and accessible, and driving the tools are two generations of developers who have been manipulating a mouse since they were toddlers.

"I think everyone in our company feels that 3D's time has come," says Beau Perschall, VP of business development at TurboSquid. The 50-person company, based in New Orleans, runs an online digital marketplace for all things 3D.

If the golden age of 3D is dawning, TurboSquid should get some of the credit. Its 1.5 million registered members can visit turbosquid.com to explore more than 250,000 3D items—the largest library of 3D products for sale in the world. Members can buy and sell each other's 3D content, find premium plug-ins for 3D software applications and exchange ideas.

Need a wireframe for a Humvee? A starship? A gleaming chrome trailer truck? Someone out there has spent hours or days developing just the right 3D model. It's easy to find what you need, purchase it, adapt it and plug it into your project.

Hours are saved in development.

Productivity increases. Budgets are maximized. News organizations make deadlines with 3D simulations and legal teams use them to make their cases.

Video game developers put out a better product faster—the market for 3D is broad and expanding.

"The software's getting more sophisticated and more capable every day, to the point where it's hard to distinguish between what's real and what's imaginary," Perschall says.

## **ENGINE OF CHANGE**

To show what's possible in 3D and promote TurboSquid, Perschall travels the country giving demos on a Dell

## **HOW IT WORKS**

## **HARDWARE**

 Dell Precision™ M4400 mobile workstation with Intel® Core™ 2 Duo processors

## **SOFTWARE**

- Microsoft® Windows® XP
- Autodesk 3ds Max®
- Autodesk Maya®
- Autodesk Softimage®
- MAXON CINEMA 4D
- Adobe RoboHelp
- Adobe Photoshop

# "YOU WANT HARDWARE THAT'S BEEN CERTIFIED. WHEN YOU'VE INSTALLED 3DS MAX ON THE DELL PRECISION, YOU HAVE THE DEFAULT ENVIRONMENT THAT YOU KNOW AUTODESK HAS ENVISIONED."

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Precision mobile workstation. He's in front of audiences at shows like the Game Developer's Conference in the spring, SIGGRAPH in the summer and Autodesk University in the fall. He started using a Dell Precision mobile workstation after watching a demo team from Autodesk present with them.

Perschall is the first to admit that he's not an average user. "I'm one of those guys who tortures machines," he says. "When they say multithreaded, I tend to try and push as hard as I can. Can I have my instant messaging up and FTP running, Web site going and be rendering something at the same time? It's that kind of pain threshold."

He has two versions of Autodesk 3ds Max installed, two versions of Autodesk Maya, one of Autodesk Softimage, one of MAXON CINEMA 4D and Adobe RoboHelp, along with two versions of Adobe Photoshop.

"I'm doing a lot of beta testing," he explains. "So I'm using a lot of software that's unproven to the general public. I'm testing plug-ins within the Autodesk Certified Animation Plug-ins (ACAP) program, one against the other, inside 3D Studio to make sure they work. I'm testing our own technology that has Flash components

in it from Adobe, to make sure that it runs stably across different versions of software, whether it's Max or Maya or XSI. I literally have two versions of the same type of app running at the same time. And on my Dell Precision mobile workstation, I've never had a real problem. I don't know of any other hardware that can do that."

Earlier in the year, Perschall's desktop system back in the office died. "It was a home built system," he says. "And I spent about two months with my Dell mobile workstation as my only system. I never missed a beat."

## **15% FASTER THAN A DESKTOP**

Perschall's original desktop had dual core processors with four gigabytes of RAM. His Dell Precision mobile workstation has Intel Core 2 Duo processors with two gigabytes of RAM. Using this technology, Perschall gets the performance he needs for demanding tasks. The processors are built on 45nm hafnium-based technology, allowing for multiple applications to run quickly.

"There were some architectural renderings using mental ray inside of 3ds Max 2008 that ran faster on the Dell by as much as 15 percent compared to my desktop," he says. "It was one

of those things that always confused me as my desktop tends to be my slave renderer. I pass frames off to it from my laptop. The Dell always seemed to be able to chew through some data that my desktop, for one reason or another, couldn't do as well."

## **KING OF THE ROAD**

Perschall has a tip for those who travel. "I've owned four or five laptops over my lifetime," he notes. "The ones with the graphics power you need for 3D were what we demo guys call 'backbreakers.' They're gigantic boxes that must weigh twelve or fourteen pounds each, plus the power supply. You could probably swing one at a burglar to frighten him off, if you had to. The Dell Precision is different. It's light and small and easy to whisk through an airport. It is just a real pleasure to have a machine like that."

Its durability has been tested on the road. "The security folks performing x-rays can be pretty harsh, chucking around hardware every once in a while, and I've had it dropped once or twice," Perschall observes. "It's been durable. The screen's intact. I've seen no performance or data lost."

## **CERTIFICATION PAYS**

Part of Perschall's mission is to find, isolate and fix software bugs as fast as

possible. "In 3D, you need hardware that's been certified," he says. "You want to be able to ensure that you have a system that the software companies have looked at and said, 'Yep, this passes muster. This is how we intended our software to run.' And so when you've installed 3ds Max on the Dell Precision, you have the default environment that you know Autodesk has envisioned."

A certified platform, Perschall points out, lets users focus on the work and not the hardware. "There's the old adage, there's no bug-free software," he says. "But when you minimize as many variables as you can upfront using good hardware, then you're not wasting cycles wondering 'does this video card support it? Did I get bad memory? Where's my issue?"

Dell Precision mobile workstations have passed Perschall's own tests.

"And Dell support has been great," he says. "I buy nothing but Dell systems at home now for my family," he says. "It's one of those companies that I've grown to respect."

A final tip: when posting content for sale on turbosquid.com, note that some of the best selling items are topical models—the kind that news organizations can use to illustrate breaking stories. More tips for increasing your publishing income are on turbosquid.com. Good luck. Maybe you'll be inspired to become part of the history being made in 3D's new golden age.

To read additional case studies, go to: DELL.COM/casestudies





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