

INCUBATING THE GAMES OF TOMORROW

The Guildhall at SMU goes mobile in just 3 weeks
with laptop solution from Dell



SOLUTIONS
• MOBILITY



CUSTOMER PROFILE

COUNTRY: Plano, Texas (USA)
INDUSTRY: Education
FOUNDED: 2003
NUMBER OF STUDENTS: 120
NUMBER OF FACULTY AND STAFF: 20
WEB ADDRESS: guildhall.smu.edu

CHALLENGE

The Guildhall at Southern Methodist University (SMU) needed a mobile technology platform with outstanding graphics capabilities that would follow students through a 17-month program of intensive use.

SOLUTION

SMU chose Dell™ XPS™ laptops along with Dell PowerEdge™ servers and Dell PowerVault™ storage in the data center to support students' educational needs and keep applications running 24/7.

BENEFITS

GET IT FASTER

- Custom 50-laptop order built and delivered in 3 weeks
- Dell storage array deploys in less than 30 minutes

RUN IT BETTER

- Dell XPS laptops provide the latest graphics technology available
- Sturdy laptop construction helps students excel
- Dell PowerEdge servers offer maximum availability

GROW IT SMARTER

- Dell MD3000 storage array allows for quick expansion

If the concept of deadly, color changing robots swarming to destroy Dangeropolis makes you eager to grab a controller, you're probably one of the many people who are helping to push sales in the worldwide game market to \$63 billion this year.

“IT'S CLEAR TO US THAT DELL LAPTOPS ARE AHEAD IN THE PRICE-PERFORMANCE EQUATION.”

The Guildhall at SMU

The phenomenon just keeps on growing. In recent years, video games appear to be outselling Hollywood box office revenues, and Dr. Peter Raad, executive director, The Guildhall at Southern Methodist University (SMU), decided that there was a need to incubate talent for this booming industry.

At the time, the Linda and Mitch Hart eCenter at SMU existed to provide a program of studies designed specifically to incubate ideas, research and products for the Internet society. Dr. Raad was approached by leaders of the game industry who shared their thinking about a partnership between academia and the industry. The goal was to prepare the artists, designers and programmers to exceed the prevailing standard of excellence and become game industry leaders of the future.

BREEDING FUTURE GAME MAKERS

So The Guildhall at SMU was born, and became the premier graduate video game education program in the United States. The 17-month program has more than 250 graduates working at more than 80 of the leading video game studios around the world. The program offers a graduate Professional Certificate as well as a Master's Degree in Interactive Technology, which requires a thesis.

In seven months, Dr. Raad and a team of education specialists and industry leaders put a school together, hired a faculty, wrote a curriculum, admitted 32 graduate students from all walks of life and opened up the doors.

“We decided that as part of the tuition, every student that comes to The Guildhall at SMU would get the best laptop that we could afford for making games, with all the software and hardware included,” says Dr. Raad. “We knew the students would be mobile, moving from class to class and working in teams, but not always the same teams. The students also needed phenomenal graphics capabilities to help advance their education.”

HIGH-PERFORMANCE GRAPHICS

Dr. Raad's staff did a lot of research in the market for laptops, and continues to research the market thoroughly every six months for each group of entering students, or “cohort.” After a couple of early tries with third-party laptops, he went with Dell and has stayed with Dell ever since.

“When we were choosing a machine for our third cohort, the Dell XPS was being introduced,” says Dr. Raad. “We felt that it had the best graphics card at that time, so we chose it. Each time we go through the selection process, it's

HOW IT WORKS

HARDWARE

- Dell™ XPS M1730 laptops with Intel® Centrino® Core™ 2 Duo T8300 processors
- Dell™ PowerEdge™ 2950 and 2970 servers with Intel® Xeon® processors
- Dell/EMC Symmetrix® DMX-4 storage arrays
- EMC® Centera® data archiving platform

SOFTWARE

- Microsoft® Windows Server® 2003
- Microsoft SharePoint®
- Microsoft Outlook®
- Microsoft Exchange Server 2003
- EMC Invista® storage virtualization software
- Microsoft Windows Vista™ Ultimate
- Microsoft Studio.NET
- Autodesk 3ds Max, Adobe Photoshop, Autodesk Mudbox, Half-Life 2, Gears of War, Unreal Tournament 3

SERVICES

- Dell Global Infrastructure Consulting Services

“PERSONAL EXPERIENCE SHOWS THAT DELL PROVIDES MAXIMUM RELIABILITY.”

The Guildhall at SMU

clear to us that Dell laptops are ahead in the price-performance equation, and they have outstanding graphics capabilities. I expect that to continue.”

The Guildhall at SMU also benefits from Dell’s quick service. “We placed a custom order for 50 laptops, and they were built and delivered in just three weeks,” says Dr. Raad.

Today the machine that creates all the action at The Guildhall at SMU is the Dell XPS M1730 laptop with Intel Centrino Core 2 Duo T8300 processors. SMU purchases approximately 150 per year for incoming students. These machines must be able to run the latest graphic intensive video games and applications. Students at The Guildhall at SMU use a host of professional game development software programs, including Microsoft Studio.NET, Autodesk 3ds Max, Autodesk Mudbox, Adobe Photoshop, Half-Life 2, Gears of War and Unreal Tournament 3.

“We use Microsoft Windows XP Professional for our students,” says Dr. Raad. “We appreciate the fact that we can continue to buy that from Dell.” Microsoft’s Windows XP Professional is a proven platform that has excellent support for all applications currently used at The Guildhall at SMU. SMU is also rolling out Windows Vista to take advantage of newer technologies that include DirectX 10.

STANDING UP TO ABUSE

The stability and robustness of the machine are critical. The Guildhall at SMU is 22 miles away from SMU’s main campus in Dallas and the IT

support available there. Only one IT support person is available at the game development program site.

“We know from our IT manager that the machines require very little attention,” says Dr. Raad. “And they have to stand up to incredible abuse. Big fingers pound on them all day long from 9 am until 1 am the next day. This is a very intense program, and if the XPS wasn’t a sturdy machine, we’d know it.”

When problems do occur, Dell’s CompleteCare™ accidental damage service plan takes care of any issues from broken keyboards to spilled coffee. If any non-customer replaceable parts are required, a Dell-certified technician is dispatched to The Guildhall at SMU to repair the system, freeing up The Guildhall’s IT resources to focus on daily operations and long-term planning.

BUILT FOR HIGH AVAILABILITY

Dell also provides the servers and storage that help keep The Guildhall at SMU’s high level of activity going day and night. In its data center, SMU provides its video game education program with Dell PowerEdge 2950, 2850, 2600 and 1750 servers with Intel Xeon processors. SMU uses the Dell PowerEdge 2950 specifically to run the Subversion version control applications that the students use, which require a server that can provide maximum availability.

“As a small IT department with limited resources, reliability and uptime was a major factor in choosing Dell

PowerEdge servers,” says Dr. Raad. “Personal experience and industry studies show that Dell provides maximum reliability with low levels of maintenance at competitive prices. Since installing the Dell servers, The Guildhall at SMU has never had to call customer support for any issues related to the systems. They have worked flawlessly for the last five years.”

SIMPLIFIED, MODULAR STORAGE

For central data storage, The Guildhall at SMU’s manager of information services, Du Ngu, chose a Dell PowerVault MD3000 highly available modular disk storage array, along with a Dell PowerVault 132T LTO-2 tape library for backups.

“I chose the MD3000 based on cost, flexibility and scalability,” says Ngu. “The redundant paths provide automatic failover, helping to prevent data loss and corruption. Storage and performance needs at the time of purchase and projected over the next four years did not require anything more than a direct-attached storage system.”

Over the next several years, Ngu anticipates adding an additional two to three terabytes of online storage. A faster storage system could have been purchased, but the current network infrastructure limits data throughput to that of a MD3000. “The Dell PowerVault MD3000 is essentially a plug-and-play device requiring minimum setup and maintenance,” says Ngu. “It deploys in less than 30 minutes.”

TECHNOLOGY YOU CAN RELY ON

With a reliable technology infrastructure from Dell, SMU students are able to push the creative envelope with new video game concepts without worrying about the enabling technology.

“If our students didn’t have a laptop they could rely on, they wouldn’t be able to develop the skill set and portfolios that earn them such a great success rate in industry placement,” concludes Dr. Raad. “The Dell laptops and the servers and storage that support them are an essential part of the education and training we provide.”

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