



IT provider launches battlefield simulation system

IT firm enters the training and simulation market in the defence sector with high-performance, custom solution that supports eight concurrent military simulation sessions, while reducing processor load by 50 per cent



Customer profile



Company Amulet Hotkey
Industry Aerospace, Defence and Investment Banking
Country United Kingdom
Employees 82
Website amulethotkey.com

Business need

Amulet Hotkey's defence client needed customised servers that would run multiple 3D battlefield simulations, streaming them to zero client devices in real time. In addition, it wanted to reduce energy consumption and desktop support requirements.

Solution

The company chose to work with Dell OEM Solutions on Dell PowerEdge blade or rack servers customised through Dell Configuration Services, and shipped with Amulet Hotkey branding.

Benefits

- Server supports eight simulation sessions running at the same time
- User efficiency is boosted while cutting processor load by 50 per cent
- Zero clients lower noise, heat and energy consumption, reducing running costs by 30 per cent
- Close partnership with Dell OEM Solutions means Amulet Hotkey can get new technologies to customers faster
- Firm enters the training and simulation market, creating growth

Solutions featured

- OEM Solutions
- Server

"We estimate that our eight-user Dell solution saves clients £59,800 [US\$100,600] in hardware costs over eight years, and saves £918 a year in energy costs, compared to a traditional training room using tower PCs."

Antony Summerfield, Director of the Defence Practice, Amulet Hotkey

Walk into any company and you'll see computers on most surfaces. They're responsible for tremendous productivity – as well as noise and heat. They also consume a lot of energy, and, especially in the finance and defence sectors, represent a significant security risk.

Founded in 1990, Amulet Hotkey is a designer, manufacturer and integrator of technology solutions to financial services, defence and commercial sectors. It pioneered the advent of remote computing in 1990 with its rack-based KVM (keyboard, video, mouse) extender products for trading floors. These have now been replaced with PCoIP® and virtual desktop infrastructure (VDI) solutions to fit today's workplace, where all businesses are looking for products to improve the user environment and reduce energy and support costs.

PCoIP is a secure Advanced Encryption Standard that streams a workstation or virtual machine's display over the local area network (LAN) or wide area network (WAN) to the Amulet Hotkey zero clients. These interface with users' monitors and other peripherals. With 20,000 of its zero-client systems already in place in the finance sector, and a growing presence in the defence industries, Amulet Hotkey saw an opening in that market for a training and battlefield simulation solution for a number of its defence customers. Amulet Hotkey CoreStation™, with its ability to run eight simultaneous sessions, provides an affordable out-of-the-box solution for environments where security of content and fast, accurate delivery of information is critical.

Antony Summerfield, Director of the Defence Practice at Amulet Hotkey, explains: "We wanted a server-based, space-efficient and manageable system for the data centre that we could customise with PCoIP technology, high-end graphics and

bespoke software." The server had to be capable of running multiple 3D battlefield simulations at the same time, and streaming them to zero client devices in real time.

Building on a strong partnership

Amulet Hotkey already had a well-established relationship with Dell, using Dell products to convert server-based technology into high-powered workstations. "Dell was the obvious choice. Tens of thousands of these systems have been sold over the last seven years," says Summerfield. "It was therefore a natural step to leverage this platform to create graphic-intensive servers for bespoke requirements such as simulation. Dell has a very strong data-centre presence and its blade technology is at the forefront of green IT, data-centre consolidation and high performance."

"Together, Amulet Hotkey and Dell OEM Solutions build the defence training solution, test it, take it through the product lifecycle and deliver a secure, trusted solution."

Antony Summerfield, Director of the Defence Practice, Amulet Hotkey

Technology at work

Services

Dell OEM Solutions

Dell Support Services

– Dell ProSupport with Mission Critical

Hardware

Dell PowerEdge R720 rack server with Intel® Xeon® E5 processors

Software

VMware®

Windows® 7

Amulet Hotkey gains complete customisation to order

With Dell OEM Solutions and Dell Configuration Services, Amulet Hotkey is able to take a standard Dell platform and turn it into a solution that's branded, uniquely tailored to its needs and ready to go. The products ship from Dell with the Amulet Hotkey bezel and custom lid fitted, and includes the Windows® 7 operating system, VMware® software and the installed applications. Dell installs the graphics cards and the Apex card used for compression and encryption, and makes the complete solution available for ordering through Dell using a single part number.

The ability to create a solution that ships with Amulet Hotkey's branding was vital. "We have built up significant brand recognition on trading floors for our mission-critical and secure performance," says Summerfield. "We want to make sure we're taking that name across to the defence sector. It's critical that people associate the performance with the Amulet Hotkey name. Behind the brand are thousands of hours of engineering."

But looking beyond the company's reputation, it is performance that really wins the trust of customers. Summerfield sums up: "Together, Amulet Hotkey and Dell OEM Solutions build the defence training solution, test it, take it through the product lifecycle and deliver a secure, trusted solution."

Technology breathes life into 3D and reduces processor load by 50 per cent

Battlefield simulation is a demanding application requiring high-quality graphics and a smooth response. Amulet Hotkey opted for the Dell PowerEdge R720 rack server with Intel® Xeon® processors.

Dell OEM Solutions and Amulet Hotkey cooperate closely on engineering. Dell's OEM team provides the firm with early access to new hardware and, through weekly calls with the

engineering team, keeps Amulet Hotkey's engineers informed of changes that might impact their solution.

The Amulet Hotkey CoreStation solution has been designed to work with Virtual Battlespace (VBS) software, which provides an immersive 3D environment for conducting training exercises and rehearsing missions. It's widely used by military forces across NATO partners.

Amulet Hotkey CoreStation supports eight users on a single server, each running their own software instance. Amulet Hotkey's zero clients remove the need for cumbersome PCs from the simulation rooms, reducing the main processor load by up to 50 per cent and improving user efficiency while ensuring outstanding performance. This means staff experience consistent, powerful performance that delivers accurate, error-free, real-time graphics at the desktop, even when server use is at its highest level.

"We've been working with software providers to make sure we can deliver reliable performance," says Summerfield. "Testing has been carried out in live user environments using VBS software, which gives us confidence that the platform will be acceptable for training and simulation over the next six years."

Military is better armed to defend IT from threats

In a military environment where privacy and safety are paramount, Amulet Hotkey's CoreStation guarantees security from data centre to desktop. Crucially, Amulet Hotkey zero clients don't store any information, so if one is stolen or lost no data can be accessed from the client, eliminating any security risk. And, because there's no operating system on the client device, it's easy to maintain and there aren't any issues with malware.

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Antony Summerfield, Director of the Defence Practice, Amulet Hotkey

Significant reduction in CAPEX and OPEX

The zero clients use less energy and generate less heat and noise than conventional computing devices. Summerfield explains: "We estimate that our eight-user Dell solution saves clients £59,800 [US\$100,600] in hardware costs over eight years, and saves £918 a year in energy costs, compared to a traditional training room using tower PCs."

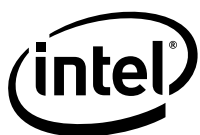
Company offers customers trusted performance and support for the long term

It's also imperative for Amulet Hotkey to offer its customers a long product lifecycle guarantee. Making changes to a training system is tricky because trainers then need to be retrained. For that reason, many of Amulet Hotkey's customers are attracted by the fact that Dell OEM Solutions is able to maintain a full component build even after the core server has reached the end of its lifecycle. The Amulet Hotkey solution can be supported and locked down for seven years. Under a collaborative support agreement, clients can choose to work with Dell or with Amulet Hotkey as the first line of support. Around 95 per cent of Amulet Hotkey customers subscribe to Dell ProSupport with Mission Critical, benefitting from next-day service on their critical systems and taking away the hassle of managing IT demands and complexities.

Dell global support and OEM relationship: The key to keeping ahead of the competition

Amulet Hotkey's design and manufacturing facilities are based in the U.K., with sales, support and technology centres in London and New York. Through a network of partners, it is able to provide worldwide sales and support and is expanding into new markets and solutions. For this reason, it's important that the Dell partnership provides global support. The company receives the latest product updates, which helps it stay ahead of its competitors. "Dell's globalised sales force gives us an opportunity to drive sales. It also helps Dell sell more blades," comments Summerfield.

Amulet Hotkey benefits from weekly engineering calls with the Dell OEM Solutions staff. And it's kept up to date by the Dell team with the latest products for testing before they hit the market. Amulet Hotkey has a great relationship with Dell's Solution Centre team and has worked with them on several occasions, testing solutions themselves and even conducting proofs of concept for their end users. Says Summerfield: "We're confident our partnership with Dell keeps us ahead of the curve."



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