

Free the engineers!

Dell cloud computing and security solution lets valued IT staff focus on improving the business while leaving the grunt work to others.

By Michiel van Blommestein

Combining security and cloud computing can induce concern, if not outright fear, in IT professionals. But AlertBoot, a Las Vegas-based managed encryption services vendor, was confident enough to switch to a full Dell cloud infrastructure for hosting their disk encryption product. The result? Annual savings of more than \$200,000, a continuously available and secure service with no data loss, and a staff fully committed to innovation and customer care (instead of spending time configuring servers).

AlertBoot offers hosted disk encryption services to large organizations. “Our primary solutions are a managed disk encryption and USB encryption product,” says CEO Tim Maliyil. Customers include banks and government institutions, which use the technology for compliance with regulations to properly secure sensitive data.

AlertBoot had hosted its disk encryption services in house, using a Dell infrastructure. However, AlertBoot employees faced mounting pressure when the managed services business really began to take off. New laws in several U.S. states mandating data encryption of all personal information rapidly boosted demand for AlertBoot’s solutions. But its IT staff was often burdened with routine maintenance work when they really needed to be driving innovation and revenue.

To a full cloud infrastructure.

AlertBoot knew it needed to free its engineers to focus on research and development, innovation and marketing support. “We wanted them to do things that are more business-facing than installing servers and running network cables, like sales engineering,” says Maliyil. While maintenance is, of course, critical, “if I have someone with technical ability who is spending time setting up a server or running a cable, he is not involved in a customer-facing event. Customer support and working with the development teams help grow the business, instead of just maintaining it.”

The solution was found in a cloud computing model. It has worked so well that Maliyil recently closed down AlertBoot’s last physical data center. Instead of having to manage Dell hardware themselves,



“We only need to manage the virtual servers on OS level, and that is fairly straightforward,” Maliyil says.

Customer facing.

For AlertBoot’s engineering team, the switch to cloud computing has meant less stress, better working hours and a feeling of being more valuable contributors. “Don’t be fooled, though, they were always willing to work long hours,” Maliyil says, noting AlertBoot engineers on average work 60 to 80 hours a week, something the company does not demand from them. “However, they are now devoting those hours to things that they see as really worthwhile.” In helping the sales effort, the engineers get a sense of accomplishment when the deal is done. Also, the engineers get to spend time with the development and design staffs. They help detect challenges customers are facing, and use that information to structurally improve the products.

“For example, the engineers notice what aspects of the interface are difficult for customers to deal with,” Maliyil explains. “They get to innovate and come up with new ways to further improve the product.” He adds that the switch in roles had a positive effect on morale as well. “The employees get diversification in their work. They feel more valuable [to] the company because they are a source of direct profit instead of a behind-the-scenes expense. It opens their world as they deal with customers and help sell our services.”

The big payoff for the company comes from the fact that those engineers are bringing in much-needed revenue during challenging

economic times. “We did not have to lay off a single employee,” says Maliyil. “They work with the customer directly to improve the overall experience.” Meanwhile, maintenance stays at the same (read: excellent) level. “I would say it got even better, because there are dedicated specialists on the job who don’t have to worry about sales,” Maliyil adds.

Accountability is part of the equation.

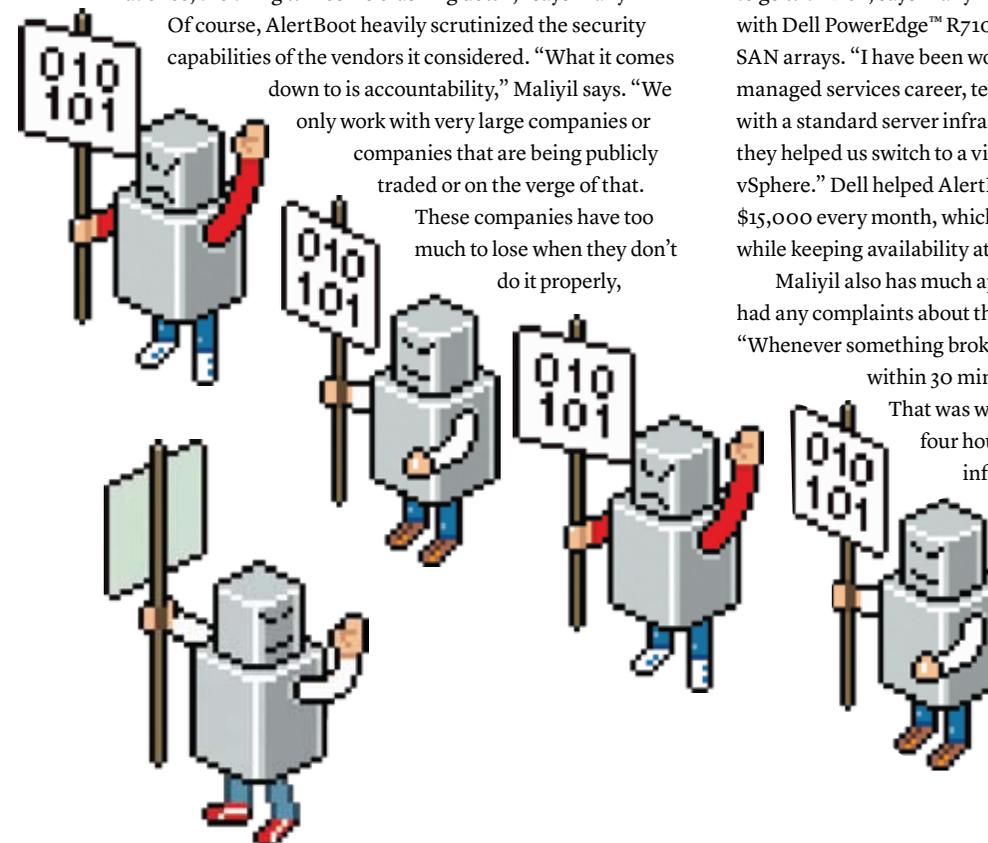
AlertBoot’s customers demand high levels of security and availability; downtime is intolerable. To help its customers meet stringent compliance requirements, AlertBoot must offer security on every single level of the infrastructure. Thus, selecting a partner for this security/cloud computing effort was mission critical, with the final decision coming down to Dell.

“The decision-making part was the hardest challenge,” says Maliyil. “I visited the data centers of prospective vendors personally to see if the infrastructure was impeccably secure and available. I’ve seen the physical layout. I reviewed all the certifications. They should have ISO compliance, SAS compliance, PCI compliance and more.”

Another important factor was the subscription model the provider offered. “The more mature cloud providers have a utility model without an upper ceiling. You can use the capacity that you need and they scale it for you. After that they bill accordingly. I think that gives you the best value for money,” says Maliyil. The business model also has implications for stability. “Some vendors would oversubscribe their cloud, which means that if their customers [used] all their rights at once, the thing will come crashing down,” says Maliyil.

Of course, AlertBoot heavily scrutinized the security capabilities of the vendors it considered. “What it comes down to is accountability,” Maliyil says. “We only work with very large companies or companies that are being publicly traded or on the verge of that.

These companies have too much to lose when they don’t do it properly,



and they will not do anything that compromises our security.”

Maliyil was also particularly impressed by the implementation of Dell’s layered security principle in their vendor’s infrastructure. Layered security protects both enterprise network and the endpoints, while recognizing that different threats and threat levels require different tactics.

“Layered security really simplifies what is typically a complex and expensive type of deployment,” says Maliyil. “We used multiple different firewalls in our previous infrastructure, and we needed to understand the intricacies of each and every one of them. Our vendor uses virtual application firewalls that do the same but are much less demanding from a management perspective. For example, to get redundant firewalls from a top vendor, you would be looking at around \$15,000. You would also need a specialist from that vendor to do maintenance. We now don’t have to worry about that.”

Maliyil also found the scalability of the virtual cloud environment to be extremely fluid. “At one point we had a 1GB firewall. But we were using a fraction of that throughput. Our vendors can throttle that, meaning that the cost is practically zero compared to what it used to cost us.” Other features, such as virtual LANing, allow workstations to be grouped together regardless of their location. Maliyil also noted the excellent manageability of the solution’s load-balancing capabilities.

Hardware is key.

The hardware environment played an important role in the decision to go with Dell, says Maliyil. AlertBoot’s vendor exclusively works with Dell PowerEdge™ R710 servers and Dell™ EqualLogic™ iSCSI SAN arrays. “I have been working with Dell right from the start of my managed services career, ten years ago,” says Maliyil. “It all started with a standard server infrastructure, and four-and-a-half years ago they helped us switch to a virtualized environment using VMware® vSphere.” Dell helped AlertBoot cut power costs by \$10,000 to \$15,000 every month, which is a significant sum for any startup, while keeping availability at 100 percent.

Maliyil also has much appreciation for Dell support. “We never had any complaints about the service Dell provided us,” he says. “Whenever something broke down, we got the replacement part within 30 minutes delivered to us at our doorstep.

That was well within the SLA, which stipulated four hours. We know that our new cloud infrastructure is in good hands.”

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