✥Host.net

Host.net's Cloud Services, Cut Costs in Half

For years, the largest IT expense for gourmet coffee purveyor Luna Gourmet (formerly Boca Java, Inc.), was the cost of hosting its e-commerce infrastructure at a colocation facility 300 miles from its office in Deerfield Beach, Florida. When that contract was up for renewal, technology managers hoped to reduce costs as well as modernize their aging equipment by moving to their colo provider's virtual machine (VM) platform. That plan fizzled when the provider's virtualized service proved to be 25% more expensive as well as 30% slower in a series of disappointing performance tests.

After nearly abandoning the idea of migrating to a VM environment, the coffee company decided to take Host.net's Virtual Private Data Center (vPDC) service for a 30-day test drive. Not only was Host.net's monthly fee 50% lower than the original provider's colo charges, but the vPDC performance more than tripled that of the legacy colo setup. Today Luna Gourmet runs its entire e-commerce operation in Host.net's managed private cloud, slashing its e-commerce overhead in half by taking advantage of virtualization.

From Colo to Cloud

Selling exclusively online since its inception in 2002, Luna Gourmet specializes in artisan roasted coffee that is hand-roasted in small batches at its Florida headquarters. The company also sells teas, cocoas, chai latte mixes, sweets, brewing accessories and special packages like Coffee of the Month club memberships.

Luna Gourmet's e-commerce operation runs on open source Java applications that include the front-end website and shopping cart as well as the back-end inventory and management systems. In the colo facility, these applications were distributed across six servers running mirrored versions of the website, database and back-end software. Each cluster provided backup as well as the ability to continue transaction processing during system updates and maintenance.

"When the time came to renegotiate our colo contract for the next five years, we knew that moving to an outsourced VM platform would eliminate initial capital outlays for an equipment upgrade, long-term capex for future equipment replacement, and excess CPU expenses by charging only for the processing power we needed," said Darren Spurgeon, Director of Technology for Luna Gourmet. "We were using just 3% of our CPU capacity in the colo on most days, so we expected that to be a big savings in itself."

Bump in the Road

Unfortunately, the colo provider's monthly VM charges turned out to be 25% higher than what Luna Gourmet was paying for colo service. In addition, a VM trial with that provider was discouraging. The migration from five-year-old Windows 32-bit physical servers to new Linux 64-bit virtual machines should have yielded significantly improved performance, particularly for the coffee seller's Java applications. Instead the system suffered a 30% loss in data delivery speeds.

Spurgeon and his team spent nearly three months trying to determine whether the problem was related to Boca Java's MySQL database – as the provider and others had suggested – but were unable to resolve the issue.

"We were already having trouble with slow page loading times, high abandon rates and customer complaints with our colo service after large email drops and other promotions. Slower performance in a VM environment was not acceptable," Spurgeon noted. "Based on the results of this trial, we thought that virtualization was not going to work for us, and we almost gave up."

> **Until we found Host.net, we were disappointed with the performance of our e-commerce platform in the virtual machine environment. Host.net's vPDC outperformed our colo setup by at least 3 to 1 with equivalent load, ensuring that we can handle traffic spikes without long page load times and high customer abandon rates.**

Darren Spurgeon
Director of Technology
Luna Gourmet, Inc.

Brewing Better Performance

As the deadline for renewing the colo contract approached, however, Spurgeon decided to try again. He ran tests with three other managed cloud providers. Host.net not only outperformed the two other contenders, but more than tripled the speed of Luna Gourmet's colo service under an equivalent load. Those initial results were repeated consistently in 30 days of testing.

Credit for the superior performance goes in part to the storage architecture of Host.net's custom-built, multi-million-dollar vPDC platform. Designed to compensate for the fact that retrieving information from a database is usually the slowest process in the computing chain, the Host.net vPDC delivers a 300-500% performance increase over standard hosted Storage Area Networks (SANs) by leveraging the mega-caching capabilities of DataCore SAN virtualization software along with technologies including intelligent pre-fetch and coalescing caching intelligence.

With the addition of other vPDC components including VMware vSphere virtual servers, the Host.net platform offers an overall processing core with more horsepower than most competitive services. For Luna Gourmet, that would meet the objective of providing a smooth customer shopping experience even during the busy holiday months.

Half the Cost

Luna Gourmet cut over both the storage and transactional computing functions of its e-commerce operations to Host.net's vPDC service, replacing six physical servers with six virtual machines. The combination of virtualization and a pricing model based on VM, CPU, RAM, storage and Internet bandwidth needs delivered the savings that Spurgeon was looking for.

"Our e-commerce operation used to be the #1 line item on the technology budget. Today, at half the cost, it's #3 and occasional heavy loads don't change the pricing structure because we have an allowance for bursting," Spurgeon said. "We can scale at any time, but right now we have enough infrastructure to support even the quadrupling in traffic we see from October through December, and we expect our costs to remain stable for some time to come."

Additional benefits of Host.net's vPDC service for Luna Gourmet include the security of Host.net's SOC2, PCI/DSS, Visa, and HIPAA certified facility in Boca Raton ("We considered an internal data center but it would be too expensive to outfit with a SOC2, PCI/DSS, Visa, and HIPAA level of security"), synchronous mirroring of every byte of data, rapid VM recovery in the event of a hardware failure, 24x7 Host.net system and security monitoring, and robust e-commerce performance for Luna Gourmet customers.

The move from colo to cloud, then, has paid off on every level. And it's all because Luna Gourmet woke up and smelled the coffee – virtually speaking.

✣ Host.net

3500 NW Boca Raton Blvd., Bldg. 900
Boca Raton, Florida 33431
Toll Free: 877 388 HOST (4678)
Office: 561 869 6100
Fax: 561 869 3321
info@host.net | www.host.net