



COMPANY

Sienna is a nearshore software development firm specializing in Microsoft technologies. Founded in 2004 with a goal of building the highest quality Microsoft-based technology practice and nearshore development services including rich internet applications and custom SharePoint deployments, Sienna has built and maintained business-critical web platforms for small and medium businesses up through large, multi-national corporations. Serving businesses across North America, Sienna is headquartered in Los Angeles and maintains a state-of-the-art nearshore development facility in Monterrey, Mexico. As a Microsoft Gold Certified Partner, Sienna was the 2009 winner of the Microsoft “Innovate on the Web” award for the exceptional design of a Web 2.0 solution based upon the software-as-a service (SaaS) model.

INDUSTRY

Software development and SaaS hosting services

CHALLENGES

Optimizing the use of storage to most cost-effectively create the flexible information technology (IT) infrastructure necessary to meet their customers’ dynamic business requirements

SOLUTION

Microsoft Windows Server 2008 R2 Hyper-V and Virsto

RESULT

Improved on Hyper-V’s native capabilities in two key areas – storage capacity consumption and snapshots – to reduce costs while simultaneously increasing their ability to meet customer requirements

CHALLENGES

Sienna moved to server virtualization technologies to provide more flexibility for two very different environments they were supporting. First, Sienna maintained an internal lab and test bed that was very dynamic and used extensively by their own personnel to support their software development business. And second, Sienna maintained a SaaS infrastructure that was used to provide production portals for Exchange, SharePoint, and other Microsoft enterprise applications they hosted for their external customers. With server and storage solutions from Dell, they had roughly 2TB under management in a very dynamic environment where anywhere from 5 to 10 separate virtual machines (VMs) might be running at any point in time.

Sienna’s server virtualization infrastructure leveraged both VMware and Microsoft hypervisor technologies, but with the native capabilities from the respective vendors they were still running into two related issues that were holding their business back. Snapshot operations were not only slower than desired, but they took up significant storage capacity. Their strategy was to use snapshots to ensure they could provide rapid, granular recovery for not only their external customers but also for their internal development team, but high storage costs were limiting the number of snapshots they could actually do.

“Budget constraints that limited our ability to purchase additional storage were really affecting our ability to use snapshots as effectively as we wanted,” explained Omar Del Rio, Sienna’s vice president of Nearshore Operations. “This was directly impacting our business. We couldn’t take enough snapshots to meet the recovery point objectives (RPOs) desired by our development

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*Omar Del Rio
VP, Nearshore Operations*

engineers, and we didn't have as extensive an ability to build out and test systems ahead of time to help our hosting customers determine their performance requirements. What we were looking for was a better snapshot technology and a way to make much better use of our existing storage capacity."

SOLUTION

Initially Del Rio was at a loss as to how to address these issues without just buying additional storage capacity, until Mauricio Duran, Sieena's president, ran into Virsto Software at a conference during the summer of 2010. Duran passed the contact over to Del Rio, who began looking into what Virsto had to offer. What most piqued his interest in Virsto was their claim that they used physical storage capacity much more efficiently than native hypervisor technology did.

"Our initial testing of Virsto indicated that we would be able to do significantly better with our existing storage across several areas that would have a direct positive impact on our ability to meet business requirements," continued Del Rio. "Through its thin-provisioning technology, we found that we could easily use 70% less storage capacity than we had been using before, while simultaneously improving I/O performance, snapshot flexibility, VM density, and the speed of restores relative to what we had had before."

Virsto's solution deploys at the hypervisor-level with a single software install on each Hyper-V Host, regardless of the number of supported VMs. Virsto establishes a virtual storage layer that can boost VM I/O performance by up to 3x, reduce disk consumption by 90%, cut provisioning times by 10x, and simplify VM management. Virsto's optimized snapshot technology enables instant

creation of an unlimited number of clones without taking up any additional space. Virsto's innovative architecture offers performance, storage capacity utilization, and management advantages for either virtual server or virtual desktop environments, helping customers to get the most out of their Hyper-V deployments.

Virsto's storage capacity savings really opened up opportunities for us to improve operations," added Del Rio. "We can now retain many more images of configured VMs that gives us the flexibility to bring these up quickly and easily when they're needed for sales demo or testing purposes, and we have been able to reduce our response times for restore requests from hours to literally minutes."

RESULT

The bottom line for Sieena was simple: using Virsto, Sieena has achieved the flexibility in their IT infrastructure that they initially moved to server virtualization technology to obtain without having to make additional storage investments. This flexibility lets them better service the needs of their internal developers as well as their external hosting customers. By using Virsto, Sieena was able to create a much more cost-effective Hyper-V server virtualization deployment than they would have been able to achieve without it.

"Virsto's snapshot technology is top-notch, and their ability to optimize the use of storage capacity is simply amazing," concluded Del Rio. "We are now managing our IT infrastructure more effectively, and all that without having to purchase additional storage capacity. We couldn't have reaped the benefits of server virtualization technology that initially prompted our move without Virsto, and I'm looking forward to Virsto being available on VMware."