



www.smh.org

INDUSTRIES

Health Care, Non-Profit

CHALLENGE

The nonprofit sought better economics and easier storage management as it grows.

RESULTS

Datrium performs nearly twice as fast as the company's incumbent storage solution

The nonprofit reduced its data footprint and increased available capacity by 1.7X translating directly to CAPEX savings.

Deploying new VMs now takes less than one-third the time.

SMH relies on Datrium Support as an extension of the non-profits own

"We use Datrium to scale overall VM infrastructure performance simply by adding hosts. With each blade server running DVX software, I get additional CPU and flash resources to power our VM I/O requirements. To do the same thing with traditional arrays would have meant a pricey array upgrade and ridiculously expensive array SSDs."

- Matthew Sheehan, Senior Systems Engineer

BACKGROUND

Founded in 1966, Sound Mental Health (SMH) is a non-profit, state-licensed mental health provider that serves more than 19,000 men, women and children each year across Washington's Puget Sound. Sound Mental Health's diverse programs include housing services; military and veteran's programs; employment programs; substance use disorder treatment, developmentally disabled services; a wide range of counseling services, and more.

COMPANY CHALLENGE

Lean Operation

SMH operates 20 locations in the Seattle area, with approximately 550 employees. Aside from a small help desk staff, just 1-2 team members handle most of the company's day-to-day IT needs. "We're a one-man shop for 2,000 devices in the field," says Matthew Sheehan, Senior Systems Engineer.

Maintaining adequate performance while managing capital expense has been a critical balancing act for SMH in order to retain more dollars devoted to its mission. Virtualization has been a key strategy in helping the nonprofit support more users while minimizing manpower and costs, but at times storage had been a source of performance and administration headaches.

RESULTS

Adding Hosts Increased Performance

For Sheehan, the promise of higher performance, easier and less expensive flash upgrades, and simpler management compelled him to try Datrium. Unlike the nonprofit's incumbent array-based solution, Datrium DVX performance actually increased as SMH added hosts. And adding capacity for new VMs has simply been a matter of buying additional commodity SSDs (solid state disks) for its servers, rather than premium-priced array-based SSDs.

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Datrium performs nearly twice as fast as the traditional array solution, delivering speed that end users notice when running mission-critical applications. "We have this cutting-edge technology that truly benefits users," says Sheehan. "They no longer sit there waiting for the cursor to spin. When they click, boom, it's done."

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- Matthew Sheehan,
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With the company’s average host CPU utilization rate in the 20-30% range, SMH has chosen to run all its hosts in Datrium Insane Mode, which allocates up to 40% of unused CPU cores to VM I/O, accelerating application performance by up to 2X.

Reduced CAPEX with 1.7X More Effective Capacity

Currently, SMH’s infrastructure includes 8 Cisco UCS blade servers, each with 2 - 2TB SSD drives, as well as 2 rack servers. Every physical host runs approximately 20 VMs, approximately 200 VMs overall. Applications include databases, data warehousing, email and the company file server. SMH found that, versus its existing arrays, Datrium DVX reduced its data footprint and provided 1.7X more effective capacity with its always-on deduplication and compression. Those capacity gains translated directly to CAPEX savings.

Sheehan expects SMH’s data footprint to shrink even further as it moves more of the business onto the DVX. “As we grow our use of Datrium, we expect to get as much as 32TB of effective capacity per host with compression and deduplication on just 4TB of flash,” Sheehan says. “From an ROI perspective, it’s huge for us.”

3X Faster VM Provisioning

With Datrium, SMH effectively eliminated all the array planning challenges with getting new virtual machines up and running. Before, team members spent about an hour per LUN. Now, instead of managing LUNs, Sheehan simply provisions VMs directly in vCenter—storage administration does not exist with Datrium. And deploying new VMs took less than one-third the time of before.

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Datrium Support: A Proactive Extension of SMH

Given IT resource constraints, Sheehan values the proactive partnership with Datrium. The Datrium support team provided top-notch advice as Sheehan deployed Datrium DVX on his own. Plus, the Datrium team proactively identified virtualization stack issues unrelated to the DVX even before SMH encountered them, which they then resolved together with screen sharing.

Moving forward, Sheehan sees Datrium as an important part of the company’s strategy. “As we grow, we need to be a step ahead of the game,” he says. “Datrium is exactly the advantage we have been looking for.”

Learn more about Datrium server-powered storage at www.datrium.com.

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