

# Seattle Nonprofit Doubles VM Performance and Provisions 3x Faster



## SOUND CASE STUDY



Healthcare, Nonprofit  
[www.sound.health](http://www.sound.health)

### Challenge

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

### Results

- Automatrix 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 takes less than one-third of the time
- Sound relies on Datrium Support as an extension of its team

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**Matthew Sheehan**  
Senior Systems Engineer

### Company Challenge Lean Operation

Sound 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-person shop for 2,000 devices in the field,” said Matthew Sheehan, Senior Systems Engineer.

Maintaining adequate performance while managing capital expense has been a critical balancing act for Sound because the nonprofit wants to maximize funds for activities devoted to its mission. Virtualization has been a key strategy in helping the nonprofit support more users while minimizing labor 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's Automatrix platform. Unlike the nonprofit's incumbent array-based solution, Automatrix performance actually increased as Sound 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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Automatrix 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,” said Sheehan. “They no longer sit there waiting for the cursor to spin. When they click, boom, it's done.”

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With the company’s average host CPU utilization rate in the 20-30% range, Sound has chosen to run all its hosts in Automatrix 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**

Sound’s infrastructure includes 8 Cisco UCS blade servers, each with two 2TB SSD drives, as well as two rack servers. Every physical host runs approximately 20 VMs, approximately 200 VMs overall. Applications include databases, data warehousing, email, and the company file server. Sound found that, compared to its existing arrays, Automatrix 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 Sound’s data footprint to shrink even further as it moves more of the business onto Automatrix. “As we grow our use of Automatrix, we expect to get as much as 32TB of effective capacity per host with compression and deduplication on just 4TB of flash,” Sheehan said. “From an ROI perspective, it’s huge for us.”

#### **3x Faster VM Provisioning**

With Automatrix, Sound 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 doesn’t exist with Automatrix. And deploying new VMs took less than one-third of the time.

“We run a very lean operation,” Sheehan said. “With Automatrix, we don’t have to worry about storage management. We simply manage VMs within vCenter – storage is totally invisible.”

#### **Datrium Support: A Proactive Extension of Sound’s Team**

Given IT resource constraints, Sheehan values the proactive partnership with Datrium Support. The team provided top-notch advice as Sheehan deployed Automatrix on his own. Plus, the Datrium team proactively identified virtualization stack issues unrelated to Automatrix even before Sound 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.”

#### **About Sound Mental Health**

Founded in 1966, Sound is one of King County’s most comprehensive providers of quality mental health and addiction treatment services, supporting our area’s most vulnerable populations. A central tenet of our work is Reaching Recovery, an evidence-based clinical care model that promotes high levels of client engagement, improves health care outcomes and enables providers to better measure a client’s recovery. Our award-winning and innovative programs help our clients reach lives of recovery, reconnect with their families and re-engage with their communities. As a healthcare organization, we work with primary care and other partners to support the holistic well-being of our clients.

Learn more about Datrium at [www.datrium.com](http://www.datrium.com).

