

Home Forward Cuts Management Time and Rack Footprint by 90% While Converging Primary and Secondary Storage



HOME FORWARD CASE STUDY



homeforward

Government
www.hapdx.org/

Challenge

When aging Dell storage required an upgrade, Home Forward sought the capabilities of new storage models but feared the cost would be too high.

Results

- Cut storage management time by 90% – provisioning in minutes instead of hours
- Reduced rack footprint by 90% and storage footprint by 50%
- Faster database transactions and reporting
- 2-3x faster server snapshots
- Converged primary and secondary storage

“We’ve substantially reduced the time to crunch numbers for reporting. We didn’t think we would be able to afford a solution with the performance of an all-flash array or even a hybrid, but fortunately, we were wrong.”

Michael DePaepe

Director of Information Services and Technology

Company Challenge

Bloating Capacity and Management Complexity

For years, Home Forward has stored its mission-critical applications on Dell Compellent, including its ERP database, virtual infrastructure, phone system, all database servers, and other office applications. Over time, the organization’s storage footprint had expanded significantly due to duplicate data. When it was time to swap its aging Dell storage, the IT team put deduplication and compression at the top of their wish list.

When Home Forward evaluated solutions, the company looked again at the latest Dell Compellent solution, as well as HP 3PAR. With Dell, the company would need to upgrade to the latest hardware and software, as well as add storage. And both vendors’ solutions would require another level of management. “With Dell and HP, it was another operating system that we would have to learn and run,” said Michael DePaepe, Director of Information Services and Technology.

Results

90% Less Management Time

As Home Forward expanded its search to include new storage solutions, it found that Datrium’s Automatrix platform met all of its goals. With Automatrix, Home Forward gained simplified, centralized management right in VMware vSphere, always-on deduplication and compression, and more capacity for the money.

The IT team now manages performance and capacity right in vSphere, transforming a once tedious process and reducing hours of weekly storage management time by 90%. The team oversees a single capacity pool, eliminating the need to deal with any LUNs or storage artifacts. When it’s time to spin up a new virtual machine, they also don’t have to think about where to put it. Automatrix handles all of their provisioning needs, and it takes just minutes to bring a new VM online.

“Managing storage was tedious before with constantly having to decide which disk drives to put data on, or a LUN would fill up, and we’d need to make it bigger,” DePaepe says. “Now it’s one big pool, and we don’t have to worry about LUNs or storage tiers at all. It’s much, much simpler.”

Beyond the Automatrix platform, the Datrium team helped Home Forward get the most out of the solution, and again, save precious time. “The Datrium support group is fantastic – even identifying issues that have nothing to do with Automatrix,” says Charles Zuercher, Network Infrastructure Manager.

“Datrium has allowed us to expand our DR in ways I’m not sure the Compellent or HP solutions would have. Leveraging Datrium’s cost-optimized solution, we’re now taking 2-hour snapshots to support our disk-to-disk-to-tape installation. Having Automatrix allowed us to expand that capability very easily and cost-effectively.”

Michael DePaepe
Director of Information Services and Technology

90% Smaller Rack Footprint

With deduplication and compression, Home Forward cut its overall capacity footprint in half. The agency also leverages server resources for I/O processing, eliminating the space needed for dedicated array controllers. These two benefits combined to reduce rack space demands from half a rack down to a single 2U Data Node.

“With Dell or HP, we would have had to buy another storage box to gain I/O processing power, whereas with Datrium we just leveraged existing hosts and the Data Node to accomplish the same thing for a much lower cost,” Zuercher says.

Faster Reporting, Happier DBAs

With Automatrix, Home Forward can also use any type of host or host flash. Compared to array flash, host flash typically comes in at about one-quarter to one-eighth the cost. Datrium accelerates performance by keeping all reads local on the host (Compute Node), and speeds writes to NVRAM in DVX Data Nodes.

The database administrator now reports faster transactions because all database data is maintained in local flash on hosts. “By adding hosts, we increased performance and boosted our IOPs,” DePaepe says. “We’ve substantially reduced the time to crunch numbers for reporting. We didn’t think we would be able to afford a solution with the performance of an all-flash array or even a hybrid, but fortunately, we were wrong.”

Converging Primary and Secondary Storage

The copy data management capabilities and overall economics of the Automatrix platform meant Home Forward could effectively converge both the company’s primary storage and data protection requirements. With the combination of Automatrix and a new 10G backbone, DePaepe and Zuercher noticed improved speed across multiple processes, including backups, server boot-up, file copying, and more. Server snapshots are now 2-3x faster than before.

“Datrium has allowed us to expand our DR in ways I’m not sure the Compellent or HP solutions would have,” DePaepe says. “Leveraging Datrium’s cost-optimized data node, we’re now taking 2-hour snapshots to support our disk-to-disk-to-tape installation. Having Automatrix allowed us to expand that capability very easily and cost-effectively.”

About Home Forward

Home Forward is dedicated to providing safe, decent, and affordable housing for individuals and families who are challenged by income, disability, or special needs. As the largest provider of affordable housing in Oregon, Home Forward offers a variety of housing options to low-income individuals and families: more than 6,000 apartments to rent, including approximately 1,980 units of public housing, and about 9,390 Section 8 rent assistance vouchers. Home Forward is a public corporation serving all of Multnomah County. Home Forward partners with more than 100 community agencies in the public, nonprofit, and private sectors. The services provided by community partners include financial services, education, substance abuse prevention, youth programs, job training, and life skills.

Learn more about Datrium at www.datrium.com.

