

Utah's Second-Largest City Boosts Performance and Reduces Recovery Time



WEST VALLEY CITY CASE STUDY



WEST VALLEY CITY *Utah*

Government
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Challenge

When the city's storage solution came up for renewal, the IT team sought a more economical solution in the short- and long- term, ideally with enhanced data protection.

Results

- Over 100x better RTO, and DR in hours, not weeks
- Data footprint reduced by two-thirds
- RPO cut by 8x
- 70% less storage
- 12x performance improvement

The biggest thing I get out of Datrium is peace of mind. There are fewer user calls about slowness on the network, and by having all those snaps offsite too, we know we can bring servers up easily elsewhere in the event of an emergency.

Ken Cushing
Acting IT Manager

Company Challenge

Protecting Uptime, Reinforcing DR

For Ken Cushing, acting IT Manager at West Valley City, UT, keeping city systems running is goal #1. The city's 1,000 staff members depend on their systems and applications to deliver services to 130,000 residents, as well as the business community. Beyond not providing residents with potentially life-saving emergency services, a one-week outage could cost the city millions of dollars.

"Our biggest focus has been making sure we're as redundant as possible with as few single points of failure as possible," Cushing said. That's why, when the city's storage solution came up for renewal, those goals were top of mind. The easiest route would have been for the city to renew with its incumbent storage solution, EMC VNX. Yet maintaining service on the aging hardware would be cost prohibitive

Results

8x Better RPO, Recovery in Hours not Weeks

With Datrium's Automatrix platform, the city would gain an extra layer of data protection with economics that fit the budget. West Valley City could pair Datrium with its current server hardware, HP blade servers, allowing it to preserve that investment. With other HCI solutions, the city would have needed to swap its blade servers for inferior hardware to fit the budget.

The city deployed Datrium at its primary and DR sites, connected via fiber network, which gave West Valley City redundancy such that any single piece of hardware can fail and the infrastructure stays up.

With the addition of Automatrix, the city bolstered its data protection strategy with built-in backup. Before, the city's DR site was limited to backups. In the event of an outage, the city would have to order new hardware, wait potentially weeks for it to arrive, and then restore servers from backups.

Automatrix provided the city an extra layer of protection with backups every three hours. As a result, RPO dropped from once per day to eight times per day. "To have an extra set of backups offsite and images every three hours..." said Martin Ruiz, Systems Administrator. "It's just comforting to know it's there if the other layers fail."

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With Automatrix, the team found they could run off of data in the DR site for emergency operations drills, without using live data – something it could never do before. It’s also now simpler to create virtual servers.

“At a moment’s notice we can actually spin up our virtual servers at the DR site,” Cushing said. “So if we lose our primary building completely, in a matter hours we can be up and running from a remote site versus weeks with our previous environment.”

Zero Latency in Virtual Servers, 12x Faster Performance

West Valley City runs 130 virtual servers on four nodes, with nearly all applications tied into SQL Server. On Datrium DVX, with flash on the host, there’s no noticeable latency even with SQL in the virtual infrastructure. “Applications run significantly faster,” Cushing said. “There’s almost no latency for our 130 servers because Datrium uses SSD drives that are in the same blades as our virtual environment.”

When the city moved its police records management system (RMS) into the virtual infrastructure, the time to complete one intensive daily report decreased by 12x. End users noticed for certain reports, they were no longer waiting on the applications to respond. In the police department, for example, that means being able to access essential records 12x faster.

70% Less Storage Management

Automatrix consolidated all data into one centralized storage pool. With that, Cushing and the team eliminated the need to move data to free up space, or create separate pools. Automatrix cut at least 70% of all storage management time, giving the team back several hours per week.

Datrium, likewise, eased the burden on the IT team with exceptional support. When the city encountered an issue with Datrium and VMware, Datrium handled troubleshooting directly with VMware – freeing the team to focus on day-to-day responsibilities.

Greater Peace of Mind

Upfront, the city reduced the cost of acquiring new storage by retaining its existing blade servers and SSD drives, and Datrium will remain budget friendly moving forward. The city added always-on compression, erasure coding, and deduplication, which reduced its data footprint by two-thirds.

Just as critical, Cushing has greater peace of mind and confidence in the city’s ability to continue business as usual in the event of a disaster. After all, providing emergency city services like police and fire during an emergency is truly job #1.

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About West Valley City, UT

Settled in 1848, West Valley City, UT, just south of Salt Lake City, is the state’s second largest city with 130,000 residents. Since then, the city has grown progressively to become a desirable and picturesque community to live and work. It’s also home to corporate headquarters, regional offices, and world-wide distribution centers for companies such as Verizon Wireless, Frito Lay, Backcountry.com, United Parcel Service (UPS), and Discover Card.

Learn more about Datrium www.datrium.com

