Ensuring that key documents and voter files are properly maintained

The Maricopa County recorder’s office turns to Dell PowerStore and more from Dell Technologies to process and preserve vital records.

Business needs

Meeting the needs of 3,000 to 5,000 individuals daily by providing access to one million or more records annually was testing the speed, scalability and resiliency of the IT environment the Maricopa County recorder’s office depended on. A modern, high-performance and cost-efficient solution with the latest security safeguards was required.

Business results

- Cuts retrieval times in half for users, from title companies to residents.
- Dramatically reduced costs by shrinking storage footprint by 90%.
- Safeguards information with built-in data protection and cyber resilience.
- Supports innovations such as hybrid work solutions and virtual workspaces.
- Scales compute by as much as 200x to accommodate election demands.
- Eliminated up to 85% of physical servers, to decrease data center costs.

Solutions at a glance

- Dell PowerStore
- Dell PowerEdge
- Integrated Dell Remote Access Controller (iDRAC)
- Partner: VMware

“We rely on the performance, integrity and availability of PowerStore to maintain and serve up data.”

Nathan Young
IT Director, Maricopa County Recorder’s Office

Customer profile

State & Local Government | United States
The Maricopa County Recorder’s Office processes and preserves deeds, plat maps and other vital documents. The office serves an average of 3,000 to 5,000 individuals daily, handling an estimated one million records each year. In total, the county has more than 49 million searchable documents, comprised of 185 million images, dating back to 1871.

The recorder’s office also maintains files for more than 2.6 million active registered voters in the populous Arizona county that includes Phoenix. To meet the state’s statutory requirements and ensure that all records — especially voter information required for fair, accurate and transparent elections — are secure, the recorder’s office chose Dell PowerStore and other Dell Technologies solutions.

“These records are key components to the services the county provides to residents,” says Nathan Young, IT director in the Maricopa County recorder’s office. “We rely on the performance, integrity and availability of PowerStore to maintain and serve up data.”

Improving speed and cutting costs

The Maricopa County recorder’s office has built a modern VMware virtualized environment that’s tightly integrated with Dell PowerEdge servers and PowerStore all-flash, NVMe storage. PowerStore holds all of the office’s data including recorded documents, deeds and titles — plus voter registration information.

“PowerStore provides for fast retrieval from multiple streams of data — such as our SQL Server databases and other document repositories — simultaneously,” Young notes. “In fact, PowerStore cut our retrieval times in half, so constituents aren’t left waiting to get what they need.”

PowerStore’s built-in data protection and cyber resilience help the recorder’s office safeguard critical information and protect against growing risks from cyber threats. In addition, PowerStore has decreased costs by significantly reducing the office’s data center footprint.
"We leveraged PowerStore’s compression technology to reduce our old storage area network from as much as 20U, down to just 2U – 90% reduction in footprint," comments Young. “PowerStore eliminated the power and maintenance costs associated with an entire server room that we shut down.”

Supporting changing demands

PowerStore also lets the recorder’s office innovate to meet changing demands from constituents as well as the increased expectations of staff. For example, the solution ensures that individuals can find whatever they need in seconds. In addition, PowerStore readily supports today’s hybrid work environment, making it possible to quickly spin up virtual workspaces and edge computing solutions.

AI and machine learning help the recorder’s office process and search documents, deeds and more, using text and handwriting recognition, as well as optical character recognition technologies — automatically formatting and then categorizing and storing documents in the appropriate databases. Further, PowerStore plays a central role in the office’s multi-cloud strategy, enabling data to be served up through a platform-as-a-service solution on Azure, for instance.

Powering a responsive environment

The unified IT environment created by the recorder’s office relies on the exceptional performance of PowerEdge servers to complement PowerStore’s intelligence, adaptability and ease of use. This simplifies workloads, improves responsiveness and accuracy, and provides a high level of security to ensure that essential systems and data are protected against ransomware and other potential cyberattacks 24x7.

Having reliable, scalable compute is especially important because of the role the recorder’s office plays in elections, according to Young.

“PowerStore eliminated the power and maintenance costs associated with an entire server room that we shut down.”

Nathan Young
IT Director, Maricopa County Recorder’s Office
"We might not devote much computing power to elections for months, and then we'll quickly have to ramp up to 200 times of what we would typically run daily," relates Young. "Having PowerEdge servers with Xeon® Intel core processors allows us to scale compute resources as needed, while saving on energy and rack space."

PowerEdge servers enabled the recorder's office to reduce the number of physical servers from as many as 50 to just six within the virtual environment. Licensing and other costs have been slashed dramatically, while workloads have actually become more efficient. Young and his team also benefit from using the Integrated Dell Remote Access Controller (iDRAC) for secure local and remote management of the PowerEdge servers.

"iDRAC helps the team manage our servers — including performing patches and updates, and monitoring real-time, streaming telemetry," Young states. “These metrics are essential.”

He concludes, “Our partnership lets us to leverage the latest Dell Technologies solutions to serve our constituents faster and more reliably, while keeping our records as secure and accurate as possible.”

“Having PowerEdge servers with Xeon® Intel core processors allows us to scale compute resources as needed, while saving on energy and rack space.”

Nathan Young
IT Director, Maricopa County Recorder’s Office