Automated License Systems

EMC Celerra NS series storage solutions help optimize critical development, testing, and production environments

A leading provider of an expanding array of automated recreational licensing and registration solutions and realtime identity check services, Automated License Systems (ALS), in collaboration with key business partners including Automated Verification Systems, Central Bank, Lockheed Martin, GIS, Integrated Biometric Technology, and LINK2GOV, Inc., has been serving the needs of both government and private industry for over a decade.

Today, a growing roster of state governments rely on ALS’s turnkey solutions to help streamline hunting and fishing license administration as well as recreational vehicle registration for everything from boats to ATVs and snowmobiles. The company’s participation in comprehensive identity check solutions includes such services as digital fingerprint identification and instant point-of-service criminal and credit history background checks for firearm purchase authorizations, employment verification, and other purposes. A variety of associated fulfillment services is also offered. This includes Internet-based and call center sales and payment services, financial management services for automated payment systems, point-of-sale terminal transaction processing, bulk license and tag printing, and order fulfillment.

Business is conducted from a state-of-the-art, 25,000 square-foot operations and call center facility, secondary operations and call center sites, and an equipment depot. Playing a key role in supporting ALS’s operations and protecting business-critical data for the last year and a half is a consolidated, redundant, and easily scaled IP storage infrastructure built with innovative EMC® Celerra® NS series storage and fortified with EMC Celerra Replicator™ and EMC SnapSure™ software data protection solutions.

“EMC's NAS hardware and software solutions have enabled us to consolidate our storage infrastructure, reduce the management resources needed to keep both our data centers in synch, improve backup and recovery for development and production environments, and easily scale the solution as needed,” says Rich Edwards, Director of Technical Operations. “We can also count on EMC system reliability. Since deployment, we haven’t been down.”

An effective, cost-efficient way to address the challenge of growth

In a short period of time, ALS went from supporting eight state contracts to 16. This rapid expansion, combined with rising sales from the company's growing portfolio of new service offerings, was impacting storage resources which were becoming increasingly difficult and costly to manage and scale within the company's traditional direct-attached storage (DAS) environment.

EMC was engaged to help the company design and deploy a consolidated, redundant, and flexible IP storage infrastructure that would deliver the performance, business continuity, and scalability necessary to accommodate growing needs.
Today, two EMC Celerra NS series IP storage systems house and protect business-critical code for 14 web application servers split evenly between the company’s two data centers. These EMC Celerra NS series systems also provide storage support for approximately 65 other application and Oracle database servers.

By combining a NAS head with four terabytes of EMC CLARiiON® storage on the back end, these unique storage platforms deliver the flexibility of multi-protocol support as well as Fibre Channel and ATA drive options for various application needs and budgets. EMC Celerra Manager software is used to help streamline storage management and provisioning via a single web-based interface.

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“Replacing our direct-attached storage environment with a consolidated EMC IP storage infrastructure has significantly reduced the amount of time needed to effectively manage our IT environment,” says Edwards. “A solution like this where we can easily point our 80 servers to one storage source really simplifies the environment and definitely makes sense financially as well. Unlike our previous DAS environment, EMC storage technology also enables us to support high-density servers with little to no DAS.”

Another part of the EMC solution is EMC Celerra Replicator software which provides fast, reliable, and automated asynchronous replication between sites. In the previous DAS environment, every time a code update to production was done, the storage for each server had to be manually validated to ensure that it was current, pushed over to the secondary data center, and then checked again for consistency. Today, Celerra Replicator seamlessly replicates code deployed into production every five minutes with no manual interaction required.

“The replication capability provided by this solution is one of its biggest benefits,” explains Edwards. “We have around 15 developers in Nashville and they’re always building code. Once that code is deployed into production we can count on Celerra Replicator to automatically copy it to our other data center, which gives us the confidence that our data centers are running the same code at all times.”

EMC SnapSure software is used to support local backup and recovery capabilities within the development environment. Set up to take a snap of the code being developed every hour, SnapSure snaps facilitate quick and easy retrieval from local CLARiiON storage if an issue arises or developers need to roll back something.

Economical ATA drives on the CLARiiON platform are used primarily to store SnapSure clones, while CLARiiON-supported high-speed Fibre Channel disks are reserved for production data storage as well as to house information for the Oracle databases.

**Training and deployment support help ensure optimum operations**

To help facilitate smooth operations, a member of the ALS IT team attended an EMC-sponsored training class prior to the EMC Celerra NS series system implementations. The knowledge gained from the class, coupled with the knowledge transfer provided by the EMC Global Services engineers who helped implement the systems at both data centers, was considered highly beneficial in maximizing the benefits of the solution post deployment.
“We sent one of our engineers to an EMC class that helped provide an in-depth understanding of the solution before we actually put it into production,” says Edwards. “Based on his positive experience with the class, we’re planning to send another one of our engineers to take advantage of EMC training. Overall, from the perspective of manageability, reliability, and support, we are very satisfied with our EMC solution.”