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LEGAL SOFTWARE SYSTEMS

Legal Software Systems Refreshes Their IT Infrastructure with VxRail

LEGAL SOFTWARE SYSTEMS, INC.

About Legal Software Systems

Legal Software Systems (LSS) is a leading provider of applications and services for law firms. Founded in 1984, LSS was among the first companies to deliver an integrated, turnkey legal practice management solution. Now in its fourth generation, the software provides accounting, time, cost and expense tracking, document management, and other key features to support busy law firms.

In 2008, LSS began offering its software as a hosted solution, primarily for smaller law firms that didn't have the budgets or the technical capabilities to manage their own servers and networks. Today, the platform provides mobile users and remote offices with secure access to applications and data. LSS also performs daily backups to protect customer data.

The company's data center must deliver high levels of availability and data protection to meet its customers' mission-critical requirements. In 2020, LSS began looking for ways to update its IT environment, and discussed its requirements with a Dell EMC rep.

"*One of our reps came to me with information on a technology called VxRail and Dell EMC's all-in-one backup appliance,*" said Rob Wardan, president, Legal Software Systems. "*Cerium Networks joined us in these discussions, and put together a proposal for a solution that was sized according to our needs with flexibility and scalability for future growth. Once we got the ball rolling, the Cerium team set up everything for us then shared with us the knowledge we needed to take it from there.*"

As a Dell EMC Gold Partner, Cerium was ideally suited to complete the design and implementation. Cerium provided a turnkey solution, handling everything from procurement of the equipment to implementation, configuration and handoff to LSS.

Challenge

The LSS IT environment was highly virtualized, but was not designed for high availability. Systems had to be taken offline to apply patches and updates and these administrative tasks required significant time and effort. Additionally, LSS lacked the automated failover capabilities needed to ensure business continuity in the event of a disaster or extended outage.

Solution

- VxRail hyper-converged infrastructure platform.
- Backup and disaster recovery with Dell EMC Integrated Data Protection Appliance (IDPA)

Results

- Ease of management and reduced administrative workloads
- Non-disruptive patches and upgrades
- Simple scalability and room for growth

Challenges

The LSS IT environment was highly virtualized using the VMware vSphere software suite. However, the company's legacy data center was not designed for high availability. Systems had to be taken offline to apply patches and updates to the VMware software, and these administrative tasks required significant time and effort. The LSS IT team had to carefully plan these activities after hours and on weekends to minimize the business impact of planned downtime.

Additionally, LSS lacked the automated failover capabilities needed to ensure business continuity in the event of a disaster or extended outage.

"*Our legacy backup system was not adequate for our business needs,*" Wardan said. "*In the event of a complete site loss, we would have to spin up spare equipment at an alternate site and go through a lengthy restore process to become operational again. We needed a more advanced disaster recovery solution.*"

Solution

Cerium designed the solution based on the VxRail hyper-converged infrastructure platform. Jointly engineered by Dell EMC and VMware to handle today's workloads, VxRail offers appliance simplicity in a highly configurable solution that supports various use cases.

VxRail includes VMware vSphere and vSAN, creating a fast-track solution for organizations like LSS that use the VMware software suite. VxRail also seamlessly integrates with any software in the vSphere ecosystem, including cloud-based management solutions. Pre-validated software and firmware ensure the highest levels of performance and availability.

VxRail also eliminates disruptive updates. Dell EMC develops, tests and distributes software bundles with VMware security patches and updates along with Dell EMC BIOS and firmware updates.

"*The upgrade package goes to one physical node and moves its virtual machines to other hardware. It completes the upgrade process and restarts the host. It then goes to the next node and performs this process again. There's no need for manual effort or planned downtime,*" Wardan said.

The backup and disaster recovery solution is based on the Dell EMC Integrated Data Protection Appliance (IDPA), which brings together storage, data protection software, search and analytics. It overcomes complexity with a single management interface and support for a wide range of physical and virtual workloads, with native cloud tiering for disaster recovery.

"*The IDPA was one of the key reasons we decided to go with this solution,*" said Wardan. "*It backs up all the virtual machines to local storage, then replicates the backups to the AWS cloud. In the event of a failure, we would have a couple of options. If our data center were still operational, we could restore from local backups. If we lost our entire site, we could recover our virtual machines and spin up our entire system in the AWS cloud. Once we had replacement hardware spun up at another physical location, we could remove those VMs out of the cloud and back down to our local site.*"

The Cerium team handled the entire project, from sizing and configuration to procuring the hardware to developing an implementation schedule. One of Cerium's top engineers worked with Wardan beforehand to make sure everything was ready to move the virtual machines to the VxRail system and make the IDPA work with the AWS cloud.

"*Cerium tracked all of the parts they ordered for us, down to patch cables and every little piece that we needed for the system,*" said Wardan. "*When it all arrived, the engineer came in and set up the switches, the IDPA and cloud DR. Cerium also helped me integrate our legacy data center with the VxRail system so we would be ready to move the VMs.*"

The implementation took about a week, then LSS began migrating the VMs over the weekend. By the following Monday, LSS was fully operational on the VxRail system. There was never any downtime throughout the live migration. Afterward, Cerium handed off all the documentation and provided training so that the LSS team could maintain the system.

Results

The project was initiated during the pandemic lockdowns, and LSS questioned whether it would be possible to have Cerium onsite to do the configuration work. However, Cerium engineers have extensive experience in the VxRail and IDPA solutions and could handle the configuration remotely through the management console.

"*Cerium assured us that they could do the entire project remotely, but we chose to have the engineers come to our site to handle things that are done most efficiently in person,*" Wardan said. "*They were onsite for a couple of days, then headed back to their offices and finished up the project remotely.*"

For LSS, the management capabilities of the VxRail solution have relieved administrative headaches. The entire system can be administered from a centralized console, with wizard-based workflow tools that enable even non-technical personnel to move workloads and apply non-disruptive patches and upgrades.

"*There's no downtime — we've done these upgrades during the day, and our clients have no idea that it's going on. Nobody's noticed any performance impact. Overall, the system is running much faster than before, and backups are completed in less time.*"

Going forward, the solution gives LSS room for growth. Expansion of the VxRail environment is as simple as plugging in another appliance — integrated software automatically discovers and self-configures the new units for cloud-like scalability.

"*We have four physical servers, and each of the nodes was built so that additional disk space and memory can be installed,*" said Wardan. "*We can also add more nodes, up to 64. You just plug in a node and the built-in orchestration makes it an easy process. It only takes a couple of hours at most.*"

"*The IDPA is also fully expandable. If we need more backup space, I can call Cerium and get an access key that unlocks many terabytes of additional storage. There's no need to wait for hardware to be shipped or installed — it takes two or three clicks to have it expanded.*"

Thanks to Cerium, LSS now has a solution that enables it to be its own cloud provider.

"*VxRail is important to us because we no longer just use our data center for our own development needs, but for hosting our product for our clients. Resilience and scalability are very important,*" Wardan said. "*The project went really well and we have a great relationship with Cerium. Their expertise was instrumental in the success of this project.*"