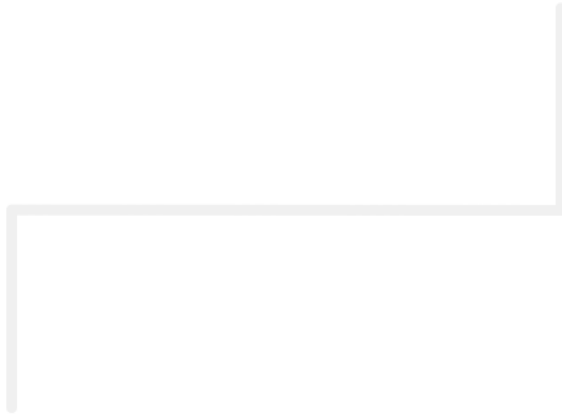




davenportgroup



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Hyperconverged Delivers on Reliability

Davenport Group serves Lone Star Overnight (LSO) to boost efficiency by enhancing their data center.

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The Challenge

“Customers depend on and expect exceptional and reliable service throughout,” said Tim Barrett, IT Manager for LSOFM. “And having a premier technology environment goes without saying.”

After the acquisition, LSOFM hired IT professional, Tim Barrett to assess the inherited technology. When Tim gave his assessment of the existing environment, essentially the decision became to scrap it all.

“It was hard to proscribe a solution to what our challenges were because we almost didn’t know what we didn’t know,” said Tim. “I’ve been in the information technology industry for 25 plus years, and the existing environment was not only aging, it was in dire need of refreshing hardware and software.”

When LSOFM was looking for a partner to come alongside and further assess their current setup, they chose Davenport Group, known for dealing with the changes and challenges of the management of overhauling technology.

“I was relatively new as the IT manager and both my colleague Robert Bennett and I could see we couldn’t limp along to keep afloat. With 31 bare metal servers located in a data center nearly 25 miles away, my records were showing servers going down on the hour. They were about 10 years old; couldn’t take the use, everything kept crashing.”

Tim and Robert knew a quick fix was not in the cards, so they had to look for a full quality investment into their IT solution that would provide significant value and performance improvement for their environment.

About Lone Star Overnight (LSO)

With home headquarters in Austin, the company focuses on package and freight delivery in the southeast, southwest and northern Mexico. Branch office LSO Final Mile, located in Nashville, TN, provides same-day, next-day, scheduled and day-definite guaranteed deliveries, along with live customer support.

As a regional parcel carrier for over 35 years, LSO has an efficient shipping model that their customers depend on as their own personal rapid delivery system. When LSO recently acquired another same-day carrier service, becoming LSO Final Mile (LSOFM), they were able to form a multi-regional parcel carrier providing a portfolio of customized shipping solutions now spanning across 13 states throughout the southeast, southwest, and northern Mexico.

LSOFM averages 40,000 deliveries a day, managing logistics and mail carrier services for nationally known industries and local mom-and-pop shops. Using innovative communications and tracking technologies, LSOFM offers customers courier services, logistics/distribution, and warehousing services, operating with 26 branches.



The Solution

“From start to finish, Davenport Group was able to help us realize these benefits in two months from time of order to production.” Originally, Tim and Robert were given no documentation for the current setup which was an unsorted array, lack of visibility, consuming space, and hindering efficiency. Through a few meetings and in-depth discussions, Davenport Group was able to modernize their IT environment from two full racks of equipment to a single half rack of equipment.

The actions inside LSOFM are the catalyst for prompt deliveries, managing inventories, and keeping costs affordable for customers. Technology tracks the flow of inventory through and around the distribution center, monitors product velocity, and provides advance notice of arrivals. LSOFM provides tailored routing and delivery solutions with constant customer support and local points of contact throughout the regions they serve.

“We knew we did not need any more bumps in the road. We knew what we wanted: virtual nodes and Davenport Group worked with us on what the VxRail hyper-converged system could do for us.”

Davenport Group installed several new Windows Server 2016 instances in their new VxRail environment for various purposes; Microsoft active directory domain controllers, Microsoft file and print servers; various application hosts and Microsoft SQL Server 2017 instances for their dev, test and production database environment and database applications. Additionally, Davenport Group consolidated four network attached storage systems; seven domain controllers; two file servers, two remote desktop servers; six Microsoft SQL servers; three application hosts, general accounting servers and automation, and two reporting services instances into this new environment. “I cannot tell you enough how impressed we were with how involved the engineer and sales teams were,” Tim said. “We discussed our solution and walked through the hardware/software and how it is set up. There was so much to handle, and they managed it incredibly well.”

The Results

LSOFM routinely ranks highly among carriers for on-time arrival and damage prevention; with express customers paying on average 25 percent less than global carriers. Customers that ship time-sensitive overnight packages are tremendously loyal to LSOFM. With that well-known reliability and quality in mind, Tim was counting on a doable solution that neither employees nor customers would feel the slow down.

Later, the primary data architect from LSOFM's outside database admin firm contacted the onsite Davenport Group engineer wanting to know what kind of hardware had been implemented. He explained he was curious because performance benchmarks were so impressive that he ran them multiple times to ensure that he had the benchmark configured correctly.



He was seeing SQL sustained writes at 2400+ MB/s and really thought something was wrong as that was much higher than normal performance in new environments. There is no actual baseline for the same benchmark from their legacy environment, but it is estimated at >50MB/s sustained write.

There were significant general business data task performance improvement. Tim said that some data updates and large queries that once took anywhere from hours to more than a day, now run in the 15-minute to approximately three-hour range.



Results at a Glance

- Delivered on compute, storage, and network resources.
- Consolidated storage array for virtualization.
- Consolidated and simplified server and application environment.
- Improved collaboration
- Managed labor improvements.
- Continued growth.
- Protected data with variable workloads.

LSO Final Mile provides services across 26 branches in eight states and northern Mexico. With the collaborative efforts and teamwork of employees and drivers, they provide delivery with capacity of over 40,000 orders a day. Many organizations are embracing an approach to modernizing IT. And the benefits of replacing legacy infrastructure are clear: including reduced costs and increased business agility.

The LSOFM team kept asking when downtime would be expected, and no downtime ever came. “We did one system until all 31 servers were in the new environment and working, and no one could tell the difference. One employee called me to ask if I knew everything was running much faster. I kind of laughed because normally IT is asked the opposite: did you know everything is running slowly?”

Employees and customers were not aware of any changes, except changes for the better. This for a company that originally began in Memphis with one facility, one employee and five drivers who set out to handle 100 runs a day. For 35 years, LSO has built a reputation for service excellence resulting in dramatic market and geographic expansion, providing same-day scheduled and on-demand distribution and warehousing logistics to support healthcare, financial services, office products, pharmaceuticals, auto parts, manufactured goods and other businesses of all sizes.

