



Founded in 2002, Vehicle Tracking Solutions® has more than a decade of experience providing customized fleet management solutions to its clients in the transportation and delivery, government, medical, educational and security industries. The lifeblood of the company's success is the GPS tracking system that it has installed in more than 50,000 vehicles and integrated into a custom Web application that provides performance analytics and tracking data to customers in real time so they can optimize the profit and safety of their fleets.



VTS CTO, Ryan Wilkinson

Fleet Management Telematics Provider Vehicle Tracking Solutions Boosts Data Access and Reliability with a Dell Upgrade from mindSHIFT

Challenge

Vehicle Tracking Solutions' Web application, which allows clients to manage their vehicle tracking, required a data storage and system performance upgrade to handle the increased workload of its rapidly expanding Software as a Service (SaaS) offering while limiting outages and connectivity issues.

The company was using a direct-attached storage solution integrated within a Microsoft® SQL environment, while local cellular networks transmitted the data via ISP connectivity. The system worked well when the business was small, but performance and reliability didn't fully scale as the company grew. In addition, some coverage areas had interruptions in cellular service, putting customer connectivity at risk. Vehicle Tracking Solutions needed to store more data, access it faster and gain deeper insights into it—all while giving customers the capability to access their fleet data on demand.

"We are a SaaS provider. We give our clients mobile and Web access to their vehicle data," explains Ryan Wilkinson, CTO of Vehicle Tracking Solutions. "If our customers don't have access to the GPS data their vehicles are transmitting, it puts their operations at risk."

Solution

Vehicle Tracking Solutions was already a mindSHIFT customer for managed hosting services for its Web application, so Wilkinson reached out to the company for a solution to advance its data storage and connectivity requirements.

"mindSHIFT offers a robust and extremely reliable and secure data center that can completely cover our needs in one solution," says Wilkinson about his decision to choose mindSHIFT.

After analyzing Vehicle Tracking Solutions' existing environment, growth plan and forecasted data storage requirements, mindSHIFT recommended a frameless, IP-based peer storage architecture based on Dell® EqualLogic® equipment that would be integrated into its Microsoft SQL environment. This would enable live firmware upgrades and maintenance on the system, as well as linear scaling of capacity and performance with each array added to the group, making it perfect for the company's growing data and performance needs.

As part of the solution, mindSHIFT deployed a configuration based on Dell EqualLogic PS 6110 XS with solid-state hard drives in conjunction with standard 10K SaaS discs, which improved availability of both readily accessed and archived data. The system was hosted in mindSHIFT's data center in New York and replicated in its Virginia facilities for continuity and full redundancy of services.

“What sets us apart from our competition is the performance of the system and how easy it is to use and access the data. The speed and reliability of the EqualLogic arrays provided by mindSHIFT have definitely helped us raise the bar of our application,” says Wilkinson.

The solution costs less and delivers more continuity because the Dell EqualLogic server runs IP over SCSI, which is a simpler, more affordable configuration that's replicated to a remote SAN for disaster recovery assurance and peace of mind.



Implementation

Connectivity: Because Vehicle Tracking Solutions' devices depend on local cellular networks, connectivity is a major concern. With Dell EqualLogic and mindSHIFT, the company now has routers in its racks that are inside cell provider networks for direct connectivity to devices in the field. Devices communicate to the cell tower, and traffic is routed to the mindSHIFT data center before being securely transmitted to the Vehicle Tracking Solutions SQL database on the EqualLogic array. This allows the company to troubleshoot connectivity issues faster and with less effort.

Scalability: Dell EqualLogic's scale-out capacity and performance, with automated tiering and workload balancing, allows Vehicle Tracking Solutions to set a growth plan for scaling its data center without requiring a large budget or complex deployments.

Security: The security and redundancy of mindSHIFT's data center, service agreements and 24-hour replacement service provide continuity for Vehicle Tracking Solutions and its clients, which deal with strict guidelines when it comes to data center security. Because of the strict compliance requirements of SSAE-16, mindSHIFT is able to help ensure security for Vehicle Tracking Solutions and its clients.

Results

Within the first two weeks after implementing the Dell EqualLogic solution, Vehicle Tracking Solutions' clients commented that the data access speeds were greatly improved.

For more information on how mindSHIFT implemented this server solution—and how you can leverage this expertise for your own implementation—contact us today at info@mindshift.com or 877-227-5054.

“mindSHIFT has always met and far exceeded any requirements that any of our clients have ever had with the hosting of their data, as far as the physical security and redundancy of its data center is concerned,” says Wilkinson.

Find out what we can do for you.

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