



MIS User Deployment Report

Diesel Direct and Virtustream reimagine infrastructure for a growing firm

Analyst: Rachel Chalmers 11 May, 2012

Diesel Direct is a growing company built around a strikingly simple proposition. It fuels trucks when a fleet is parked. In doing so, it saves fleet operators and truck drivers from having to take time out to refuel. The Massachusetts-based company now has hundreds of customers and a new site on the West Coast. Chalking up double- and triple-digit year-on-year growth was no bad thing, of course, but by mid-2011 Diesel Direct was outgrowing its back-office infrastructure. That shouldn't be a big surprise, given that the back-office infrastructure was a single server running a copy of Microsoft's Small Business Server. This was the point at which CIO Timothy Callow stepped in. His assignment: to get Diesel Direct on the right footing so that its IT infrastructure could support its planned future growth.

Early Adopter Snapshot

In his talks with Diesel Direct's owner and founder – Dan Abrams, who started the business with three trucks and a good idea – Callow came to a key insight. The company's business is not only delivering fuel. It is delivering fuel and information: how much fuel was delivered to which truck in which fleet, when, and what it all cost. While Diesel Direct had always had to have this information, it was almost an afterthought, but this information is vital to fleet and logistics managers, to help them reduce costs and increase productivity. Whatever else the new IT infrastructure did, it had to secure this information delivery, and in doing so lay the groundwork for new product lines.

Context

Callow's insight resonated with Abrams, in part because it arrived at a useful tipping point in the story of Diesel Direct: late in the summer of 2011, in the wake of Hurricane Irene. The storm had brought the company's corporate office down, including its email system. Without communications, there was no way to keep the business going. Irene made it clear (as perhaps nothing else could have done) that Diesel Direct needed to move to an enterprise-grade IT strategy and environment.

Challenges and obstacles

For its IT infrastructure and to cope with the plethora of local, state and federal taxes; third-party data management; and various electronic and paper invoice processes, the company could have bought several new servers and new software licenses. The trouble was that for a business the size of Diesel Direct, which makes a very small profit per gallon of diesel, the capital investment associated with that kind of purchase is no small hit.

Besides, on-premises infrastructure leaves little headroom to build new product lines and grow. Nor does it accommodate the seven-day cyclical nature of Diesel Direct's business, in which Mondays are busy with data entry and invoicing, Tuesday night is for running reports, and the rest of the week is not quite as taxing on the infrastructure. No, Diesel Direct needed a more flexible and elastic back end. As Callow puts it: "The more we looked into it, the more it made sense for us to look into a cloud-based service."

Company name:

Diesel Direct, Inc

Activities:

Fueling diesel truck fleets when trucks are not in use

Head office:

Stoughton, MA

Number of employees:

200

LY revenue:

NA

LY net income:

NA

Key suppliers:

Virtustream, Microsoft (SQL Server, Dynamics GP)

Deployment summary

Callow had worked with cloud provider Virtustream before, and knew that it was running the kinds of hands-on, secure service that would appeal to a conservative small business owner like Abrams. Callow's role is that of a transformational CIO; Diesel Direct is not big enough to support a permanent full-time IT infrastructure specialist, so Virtustream's ability to provide very granular technical support to a nontechnical user base was a critical differentiator.

Serious conversations began in the second week of November 2011. Diesel Direct had an SQL Server billing system with an Access front end; this would be rewritten in .NET over the next several months. The company needed to host that application on Microsoft's Remote Desktop Services (RDS). The accounting platform, based on Microsoft's Dynamics GP, is also delivered through RDS. With future releases, a Web front end will eliminate the need for RDS, which Callow admits is an infrastructure hog. With the elimination of RDS, the company will no longer need to rent licenses from Virtustream. Not having to buy those licenses saved Diesel Direct money up front, and not having to rent them any more will save it even more money over time.

Applications were ready for migration at the beginning of December 2011, and Callow took advantage of the New Year to migrate everything to the cloud by January 5, 2012. Today, almost all Diesel Direct's compute is hosted on Virtustream. The only outlier is a small time-recording application currently hosted on Unix, which is also slated to move to Virtustream in the near future. From planning in earnest to execution, Callow estimates the migration took 60 days and cost about \$40,000 – most of it in labor (not counting his) and in installing two leased lines – one each from Comcast and Verizon – for redundancy.

Innovation and roadmap

While it's difficult to calculate a true ROI for the project – running the single Windows server cost virtually nothing, after all – Diesel Direct now has the capacity and flexibility to plan for growth and to build new product lines around information. Owner Abrams had felt thwarted in that he couldn't get the company to where it needed to go. He no longer feels this way. It's easier for the company to capture information and to conduct electronic transactions. Callow is confident that customer satisfaction will increase.

The company has toyed with the prospect of hosting desktops as well as the central server. There's no urgency, since Diesel Direct has only a small number of white-collar workers relative to its total population, but there are certain places where desktops as a service may make economic or management sense. Intriguingly, the sales force has moved straight to iPads. "These guys aren't tech guys, they're truck guys, they're fuelling guys, but they love their tablets," Callow says. "They could be in the garage one minute and the owner's office the next, pulling up a PowerPoint presentation on refueling or an article on costs. The iPads work great for that."

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