

## Customer Success Story

# Ferrellgas

## Descartes Routes Propane Industry Leader to Success

For more than 65 years, Americans have relied on Ferrellgas for their residential, industrial/commercial, and agricultural propane needs. Ferrellgas has grown from humble beginnings as a family-owned propane supplier to a publicly traded, Fortune 1,000 company and market leader with 150 field service centers serving more than 1 million customers in all 50 states, the District of Columbia and Puerto Rico. Through its Blue Rhino operation, Ferrellgas also is the nation's largest provider of propane by portable tank exchange.

To meet its customer's needs, Ferrellgas relies on a fleet of approximately 2,600 delivery vehicles, including 1,950 Bobtail trucks, and 650 Cylinder trucks, each making on average 20 to 25 stops per day.

### Thorough Evaluation of Operations Drives Project Renaissance

After more than six decades in business, Ferrellgas began evaluating its decentralized operating structure. At the time, Ferrellgas had 600 retail offices, with each one using its own standalone propane system for tracking customer deliveries, billing, creating statements and producing demand reports. Since the systems did not provide routing and scheduling functionality, the manual process began with reports from a crude forecasting system that would predict which customers needed deliveries and when. The delivery schedule was open to interpretation by drivers who would review weekly reports, hand pick orders and then come up with delivery dates.

According to Steve Ferro, IT Director, Application Development at Ferrellgas, "We needed to redefine our business processes and apply technology where it made sense to help us deliver in a more efficient way and serve our customers more effectively."

Ferrellgas embarked on Project Renaissance, an overhaul of equipment, employee training and technology integration. The company's goal was to identify areas where technology could be used to improve operational efficiencies. Through this project, Ferrellgas identified areas where it could reduce operating expenses and improve customer satisfaction leading to the development of new technology to improve the routing and scheduling of propane deliveries, customer administration, and operational workflow.

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Steve Ferro,  
IT Director, Application Development at Ferrellgas

## Selecting a Best of Breed Logistics Solution

After evaluating approximately 15 routing applications, the project team determined that the Descartes Routing and Scheduling solution best addressed the unique and flexible needs of the propane market. "Descartes provided a routing solution that supported the flexibility we required and would allow for ad-hoc, unplanned stops to handle urgent calls for same-day deliveries," explains Ferro.

Ferrellgas and the Descartes team integrated the routing package with the CRM solution that lay at the heart of this initiative. "The key was to ensure the smooth flow of information back and forth between the two systems, and out to drivers on the road," explains Ferro.

Before long, the North Dakota region went live as the first pilot site. The project team put Fleetwise and the CRM system through multiple tests and evaluations. After making some design and integration changes, the solution was ready to deploy to new test sites. Project Renaissance was then rolled out to every location.

## Revamped Business Model Yields Tremendous Payback

While Ferrellgas began with 600 retail locations at the start of Project Renaissance, they were able to consolidate these locations into just 150 Service Centers. According to Ferro, "The technology we applied enabled us to manage larger geographic areas with fewer people."

Today, all customer information is stored in a centralized database in the company's Liberty, Missouri data center, and a centralized call center takes all overflow and after hours calls handling.

Using Descartes Route Planner, delivery managers can view delivery schedules for the week ahead, and do pre-planning of routes as required. The Descartes Dispatch solution enables activity to be managed on a daily basis. "When an order is received in our CRM system, the delivery manager sees it in the Descartes system and can take action," says Ferro. "They can see

where trucks are in real time, and can either make a manual decision as to which driver should handle an order, or they can ask the system to suggest a cost effective alternative on an existing route. Decisions are then pushed out to the appropriate driver's handheld computer."

While Ferrellgas drivers use cellular technology to receive dispatch notifications, a lot of deliveries are made to rural locations across America with limited cellular coverage. To address this issue, the company installed satellite modems/domes on the top of the cabs of selected vehicles. This ensures that the system automatically switches to satellite when a cellular signal is lost.

Ferrellgas' new business model showcases an unprecedented level of integration for the propane industry. The company has experienced improved bottom line results through reduced delivery and administration expenses, more accurate prediction of customer demand and the ability to provide 24/7/365 customer service through centralized service center operations.

Industry observers are also touting Project Renaissance as the competitive model of the future. Among other achievements, Ferrellgas is the first major propane retailer to fully apply technology used by leading delivery logistics companies to link bobtail routing, customer data management, inventory management, forecasting, billing and accounts receivable to reduce operating costs and boost shareholder value.

As a result of the consolidation, customer service staffing needs were reduced by 30%. All delivery vehicles have been set up with new onboard wireless computers that utilize Descartes' Routing and Scheduling solution to determine efficient route sequences for delivery trucks; enable real-time adjustments, monitoring and management of daily routes; and balance priorities with delivery costs. Better forecasting, tighter control and more efficient routing have allowed the company to reduce driver hours and the number of trucks required. To date, this initiative has resulted in an 11% reduction in fleet requirements. In addition, over the past two years the company has also skipped its annual purchase of new bobtails, which normally accounts for 10 percent of the fleet.

## Summary

### Challenge:

To centralize its operations and establish an efficient business model, Ferrellgas embarked on Project Renaissance, an overhaul of equipment, employee training and technology integration – including route planning and scheduling.

### Solution:

Ferrellgas selected the Descartes Routing and Scheduling Solution. Using the Descartes Route Planner, delivery managers can view delivery schedules for the week ahead, and pre-plan routes as required. The Descartes Dispatch solution enables delivery activity to be managed on a daily basis.

### Benefits:

Customer service staffing needs were reduced by 30%; better forecasting, tighter control and more efficient routing delivers results; reduced driver hours and the number of trucks required; 11% reduction in fleet requirements.