

Nationwide Convenience/Gasoline Retailer Pumps Up Productivity with Converged Network

HP success story



Valero Energy Corporation has integrated its chain of over 1,000 Valero and Diamond Shamrock branded gas station/convenience stores in 11 states with an in-store network infrastructure based on Cisco Intelligent Information Network switching products. Valero found that working with HP and Cisco was like working with one company, from their joint proposal of the best solution to seamless delivery. As systems integrator and prime contractor, HP Services used its expertise with Cisco technologies in planning and managing the acquisition, staging, testing and 12-week, nationwide installation of the Cisco switches. Capable of supporting an ever-evolving spectrum of merchandising devices and data streams, the infrastructure speeds rollouts of retail products and campaigns; collects market intelligence to increase turns and margins; and improves operational efficiencies.



Valero Energy Corporation [<http://www.valero.com>] is a Fortune 500 company with expected annual revenues of US\$50 billion. Its operations include 15 petroleum refineries with a combined throughput capacity of more than 2.4 million barrels per day and more than 4,500 retail outlets in the United States, Canada and the Caribbean. Over 1,000 of its gas station/convenience stores operate under the Diamond Shamrock and Valero brands.

Fuel prices may rise and fall with supply and demand fluctuations, but Valero maintains a steady focus on nimble, consumer-oriented merchandising to build customer loyalty—and profitability. Valero-branded stores offer an inviting, convenient and quick shopping experience to motorists, who can pick up snacks and household staples or withdraw cash as they top off their tanks.

The Valero chain employs a web of in-store technologies to enhance, streamline and standardize point-of-sale (POS) transactions as well as back-office processes. This ever-expanding host of devices includes scanners, touch-screen cash registers and automated teller machines (ATMs); credit card, lottery and phone-card kiosks; back-office computer and printer configurations; gauges monitoring fuel levels in storage tanks; security sensors; and tools to manage pricing and stock replenishment.

Integrating all of these components is a dynamic infrastructure that converges the information, e-commerce and communication technologies at work in more than 1,000 of Valero's convenience stores.



Valero relied on the strong alliance between HP and Cisco to simplify the acquisition and deployment of the new technology, which includes Cisco networking, voice-over Internet protocol (VoIP) and switching products. Valero chose to collaborate with HP Services, which has more than 1,600 Cisco-certified engineers holding in excess of 5,000 certifications, to handle design and implementation. The infrastructure speeds nationwide and regional rollouts of retail products and campaigns; collects market intelligence to increase turns and margins; and improves operational efficiencies.

“Our network infrastructure from HP and Cisco is a productivity enhancer,” says Shannon Ramsey, Director of Retail Systems Automation at Valero Energy Corporation, which employs 20,000 people. “We’ve gained the agility to quickly bring to market the new products and services that our customers want. Without the network, these innovations wouldn’t be possible. And at the same time, our infrastructure lowers maintenance costs by providing a standardized, stable operating environment across all our stores.”

Simplicity, speed and trust: values that lead to HP and Cisco

“We chose to implement a new POS system and tightly integrate it with our wide area network,” says Ramsey. “We wanted to take advantage of new network devices that generate more data—and opportunities. This required a complete upgrade to our network infrastructure within the store. We decided to put in switches that give us 24 ports of connectivity in each store’s front sales counter and 24 more ports in its back office to connect all these devices.”

Forward-looking Valero had already installed a broadband wide area network (WAN) with the capacity to handle next-generation switches as well as vast amounts of data.

“We’d worked closely with HP a few years ago to roll out our WAN, which was probably one of the greatest things we’ve ever done,” says Ramsey. “While bringing our stores closer to corporate headquarters, the network cut our credit/debit card transaction time from up to 30 seconds to less than five seconds, dramatically increasing customer throughput. And since the network employs Cisco voice-over-IP technology, we cut our long-distance phone costs.”

Although HP and Cisco had already earned Valero’s trust, the company evaluated the offerings of multiple companies before deciding on its switching equipment and systems integrator.

“We tested switches from three different vendors,” says Ramsey. “Cisco was the clear choice. Then, we sent an RFP to six companies for installation of the equipment and all logistics. HP won the contract. With Cisco products provided by HP, we chose the best equipment and the best service organization to install it.”

Valero’s values of simplicity and speed guided its selection of a systems integrator.

“We needed to get the job done quickly,” says Ramsey. “Only HP provided a comprehensive work plan that included everything from acquisition of the switches and staging the configurations down to the last in-store installation. We developed our roll-out strategy with HP based on that work



plan, which moved most steps back into the staging phase to minimize what we had to do inside each store.”

The long-term partnership between HP and Cisco also benefited Valero, streamlining and enhancing collaboration throughout the project, from design through delivery. Working together under their strategic alliance, HP and Cisco combined their complementary strengths to jointly develop technologies and provide enterprises such as Valero with seamless, proven, end-to-end IP-based solutions. Their respective resources include Cisco’s industry-leading IP networking products and HP’s expertise in the design, implementation and management of converged enterprise infrastructures.

Alliance simplifies rollout to over 1,000 stores in 11 states within 12 weeks

HP and Cisco worked together to propose a unified solution that offered exactly what Valero wanted: Cisco switches and HP systems integration and consulting through just one interface: the HP Services project manager.

As systems integrator and prime contractor, HP planned and orchestrated all logistics and, following two months of preparatory work, integrated, tested and installed the switches at over 1,000 convenience stores in 11 states within 12 weeks.

“Our network infrastructure platform from HP and Cisco is a productivity enhancer. We’ve gained the agility to quickly bring to market the new products and services that our customers want. And at the same time, our infrastructure lowers maintenance costs by providing a standardized, stable operating environment across all our stores.”

—Shannon Ramsey
Director of Retail Systems
Automation
Valero Energy Corporation

The HP Cisco Strategic Alliance simplified the complexities of providing Valero with a world-class, upgraded infrastructure within a short time frame. Drawing on their close collaboration with Cisco, the HP Services team planned and conducted a tightly synchronized installation process.

From Valero's San Antonio headquarters, a dedicated HP Services project manager scheduled and directed the rollout in collaboration with Valero and Cisco. He supervised the acquisition of more than 2,000 switches from Cisco, which delivered the equipment to the staging site, the HP Customer Technology Center in Dallas. There, HP personnel built each store's customized, rack-mounted configuration, integrated the switches with other equipment, loaded store-specific information off CDs, tested the platform and then shipped it to its destination.

Executing more than 100 installations per week, HP's personnel arrived at each store on the same day as the equipment and proceeded to install the equipment rack, the switches and other gear, reroute the store's cables to the switches, test the connectivity of all devices and adjust software to support the changes.

"HP managed the whole process," says Ramsey. "We dealt with one HP project manager, not three companies. The project would not have gone nearly as smoothly if we had to deal with several different organizations. The fact that HP and Cisco were partners was a bonus."

Expanding pace and scale of innovation—and simplifying support

The infrastructure upgrade from HP and Cisco is a medium for Valero to efficiently and quickly execute merchandising innovations of any scale, from a city-specific promotion to a nationwide campaign.

"Now, as an example, with this new infrastructure, combined with the new POS system," says Ramsey, "we can target all the stores within the vicinity of a big event, such as a

major ballgame, and can set up a merchandising campaign within just a few hours to attract that particular audience into our stores."

Valero has the flexibility to add new technologies without taking on complications and risks. New devices are simply components within the stable, adaptable infrastructure.

"By standardizing our IT infrastructure, we simplify and accelerate support for more than 1,000 stores," says Ramsey. "For example, we can quickly incorporate new merchandising tools. With this network, it could be as simple as making the deal with the vendor of a device or system and then shipping devices to the stores that can be plugged in without needing a certified technician."

Resilience and adaptability are also qualities that Valero values in its business partners.

"Many things can take a store out of play," says Ramsey. "Cash registers and gas pumps quit working. Air conditioners go down. The goal driving my team is that the store is always up. We troubleshoot and solve problems to achieve this goal. We innovate. And we choose agile and trustworthy partners."

As Valero envisions initiatives that build on its network infrastructure, such as advanced wireless and security enhancements, the alliance between Cisco and HP continues to be an asset to streamline the planning and delivery of innovative, IP-based merchandising ideas and programs.

"HP and Cisco fit our bill very nicely," Ramsey concludes. "They've demonstrated success with us on projects going back 12 years. They adapt to change. They innovate with us. And they are well positioned to continue helping us move to the next generation of POS and convenience store operation."

Challenges

- Previous POS technology slowed rollouts of new products and promotions
- Support costs are high to maintain over 1,000 retail stores in 11 states
- Convenience store retailing demands fast, simple consumer experience
- Merchandising tools, ideas and programs are continually evolving
- Impending installation of new POS platform nationwide required fast turnaround

Solution

HP Services

Prime contracting, systems integration and program management to install customized switching platforms at over 1,000 convenience stores in 11 states, including:

- Planning and execution of all logistics by dedicated HP Services project manager
- Phased acquisition of more than 2,000 switches from Cisco
- Staging at HP Customer Technology Center in Dallas, which built, integrated and tested each store's rack-mounted switching configuration
- Management of 12-week rollout that installed switches, racks and other equipment at more than 100 locations per week, rerouting store cables, testing connectivity of devices and adjusting store software

Hardware

- Cisco Catalyst 2950-24 switches

Results/Benefits

- New intelligent infrastructure trims time-to-market for campaigns from weeks to hours
- Standardized platform enhances and streamlines support nationwide, lowering cost of maintenance
- Open platform easily incorporates future merchandising devices and tools
- Infrastructure builds market intelligence to increase turns and margins
- Strategic Alliance simplifies complexities of designing, developing and implementing innovative, IP-based merchandising programs
- New network infrastructure was installed nationwide within 12 weeks

To learn more, visit www.hp.com

© 2004 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

5982-8696EN 10/2004

