

Fiat Auto drives distribution innovations
with Linux®-based Oracle® solution
on HP Integrity servers



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Claudio Javier San Pedro, Vice President,
Worldwide Sales and Marketing,
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Fiat



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Fiat’s Business Unit, Lancia & Light Commercial Vehicles



Fiat Auto is transforming distribution to suit customers’ needs with Fiat Link, an innovative sales support/customer relationship management (CRM) solution. Customers can now configure and buy their Fiat of choice with Fiat Link, which sales people access from wireless HP Tablet PCs. Fiat Link will integrate and enhance sales and service across 5,800 retailers in Europe by 2005. HP Services consultants developed Fiat Link’s three-tier, Linux-based infrastructure, powered by an Oracle9i Real Application Clusters database on HP Integrity servers equipped with 64-bit Intel® Itanium® 2 processors.

Fiat is the largest industrial group in Italy. Today operating in more than 120 countries, Turin-based Fiat has produced more than 85 million cars and light vehicles since its start in 1899.

An inventive automaker, Fiat Auto is renowned for distinctive small cars that combine style and value. Fiat Auto has won Europe’s premier automotive trophy, the Car of the Year award, more often than any other car manufacturer. But as look-alike models and discounters crowd the market, Fiat intends to distinguish its brand by the caliber of its service as well as the quality of its cars.

At the 2003 Bologna Motor Show, Fiat Auto showcased its new sales and support system, Fiat Link. Sharing the spotlight with the Fiat Panda, 2004 Car of the Year, Fiat Link earned its own share of rave reviews.

Fiat Link provides all the information that a customer needs to select, configure, and purchase a Fiat car. Running on a wireless HP Tablet PC, Web-based Fiat Link streamlines and enhances the buying process—for both customer and dealer.

However, this Web-based tool is just the front end of Fiat Link, a powerful CRM and retailer support solution. As a medium to integrate sales and support processes across Europe, Fiat Link will help the automaker streamline distribution and transform marketing, sales, and service into agile, customer-centric operations.

Fiat Auto developed the Fiat Link infrastructure with its longtime information technology (IT) provider, HP. Its engine is an Oracle9i Real Application Clusters database powered by HP Integrity servers running the Red Hat Enterprise Linux AS operating system.

“The automotive arena is facing a very turbulent time,” says Claudio Javier San Pedro, vice president of Worldwide Sales and Marketing in Fiat’s Business Unit. “Award-winning products are not enough. Our partnership with HP enables us to innovate not only in cars, but also in service.”

Connecting 5,800 retailers in 17 countries by 2005

Already implemented throughout Spain, Fiat Link will soon connect 70% of the company’s Italian retailers. By 2005, the solution will support Fiat Auto’s entire European retail network, encompassing 1,800 dealerships and 4,000 authorized auto maintenance centers in 17 countries.

“An efficient and effective sales network is crucial to our ongoing competitiveness,” says Nunzio Calì, director of Information Technology, Fiat’s Business Unit, Lancia & Light Commercial Vehicles. “We expect real return on this investment in terms of impact on profits.



"From the beginning, we worked with HP," Mr. Cali continues. "Fiat Auto and HP have a long tradition of joint development. HP offered us the best possible Itanium-based infrastructure solution. And HP's relationships with Intel and Oracle are extremely important to us, ensuring the success of our application."

Transforming distribution with a trusted partner

Fiat Auto developed and piloted Fiat Link in Spain, a process that began 18 months ago. "In the beginning, we were not sure how to develop this new tool," says Mr. San Pedro. "HP has been a fantastic partner, pushing us forward with their experience and their possibilities."

As systems integrator, HP worked closely with Fiat Auto to plan, design, and implement the architecture of the Fiat Link infrastructure. A team of HP Services consultants used proven HP methodologies and best practices to guide all phases of the project.

The forward-looking automaker envisioned an adaptable infrastructure that could easily incorporate new technologies with ever-higher price/performance paybacks. It also preferred a platform based on industry-standard components to reduce total cost of ownership.

Bringing open-source savings and agility to an enterprise-class solution, the HP Services team devised an end-to-end infrastructure with the resilience, flexibility, and long-term economy Fiat Auto required. The team defined a three-tiered architecture composed of Linux-based database, application, and front-end servers.

Adaptable enterprise infrastructure with end-to-end resilience and economy

"For such an important and demanding application," says Mr. Cali, "an infrastructure based on 64-bit Intel Itanium 2 processors is the right solution for us. We chose Linux as the operating system and Oracle as the data management system because they can support the scalability and growth that we expect from this application in the future."

A clustered configuration of HP Integrity rx5670 and rx2600 servers powers the Oracle9i Real Application Clusters database. The cluster includes a one-terabyte Fibre Channel storage area network (SAN) based on an HP StorageWorks Virtual Array 7410 system.

Currently sized to provide up to 20,000 simultaneous users with instant access to real-time CRM, dealer, and vehicle information, the infrastructure can easily expand to support growing volumes of users and data.

HP ProLiant DL380 servers run the application server tier, which is based on Oracle9i Application Server software. The front end consists of Apache Web Server software on ProLiant ML370 servers. Retailers access the front end servers through WiFi-enabled HP Tablet PC TC1100 systems equipped with browser software.

Under the hood: next-generation innovation engine

By distributing information as well as cars, Fiat Auto is enabling its dealers to build stronger customer relationships and loyalty.

The engine fueling Fiat's enterprise distribution innovations is the high-performance HP Integrity server family, powered by Intel Itanium 2 processors. Intel's next-generation, 64-bit platform provides a scalable and cost-effective foundation

Fiat Link puts the inventories of thousands of dealerships within the customer's reach.

for business-critical applications that require extremely high processing throughput and speed. Compatible with most operating systems and software, Intel Itanium 2 processors also build in flexibility, enabling companies to adopt leading-edge technology that lowers their IT costs from procurement and installation through ongoing support.

Fiat Link puts customer in driver's seat

When most customers enter an auto showroom, they go straight to models of interest. With wireless HP Tablet PC in hand, the Fiat salesperson approaches and, while creating the initial rapport, gathers information to serve the customer.

"As soon as they start to provide information, the sales process begins," says Mr. Cali. "Our dealers find that the HP Tablet PC is an ideal tool. With it, they can move seamlessly from the introduction into the transaction."

Just about all the information that a customer and dealer need is instantly available through the HP Tablet PC, including a car's features and options in colors, upholstery, and accessories, which Fiat Link displays in photos. The system presents special offers and extended warranties, press reviews, and comparative data on other models from Fiat and its competitors. Fiat Link can also calculate the trade-in value of the customer's current car and generate the offer.

If the desired model and configuration is not in stock, the dealer can use Fiat Link to search other dealers' inventories to locate a similar car. Fiat Link puts the inventories of thousands of dealerships within the customer's reach.

After the showroom visit, Fiat Link continues to connect buyer and dealer. The customer can amend order preferences by logging in from any Web browser via a private code. The dealer's record of each customer can guide follow-ups, such as a call to schedule a test drive. And as the relationship evolves through purchase and

after-sale service, the customer's ever-larger record becomes a reference point for Fiat and its retailers to enhance each contact with the customer.

When Fiat Link is fully implemented, a customer will be able to receive continuity of service from any Fiat retailer in Europe. The dealer or service provider will have instant access to the customer's preferences, Fiat transaction history, and vehicle maintenance records. "With Fiat Link," says Mr. Cali, "we will show that we are capable of satisfying the specific needs of every single customer."

Strengthening brand, fueling growth

By enhancing the customer's buying experience, Fiat Auto expects to strengthen its brand and fuel growth in sales and market share. At the same time, the automaker and its retailers have the potential to lower costs.

"Using Fiat Link, dealers will require less back-office logistics and administrative support," says Mr. San Pedro. "Fiat Link will also benefit the head office. We finance showroom inventories for at least 45 days, an investment that represents a huge amount of money. As dealers across Europe sell from each others' inventories, we expect to reduce holding stock by about 15 percent."

CRM data will also help Fiat Auto to increase the return on its marketing investments and tailor offers to customer preferences. "Today, our only feedback is from sales figures," continues Mr. San Pedro. "But with Fiat Link, we will see how many contacts are generated by particular offers. And if a sale doesn't go ahead, we will have more data at hand to understand why."

Open road

Fiat Auto and HP continue to collaborate as Fiat Link evolves and reaches retailers in 17 countries. The automaker anticipates a host of applications that will capitalize on the growing repository of customer and sales information.

"Working together," concludes Mr. San Pedro, "we are continuing to develop the full potential of Fiat Link to expand our commercial activities with customers. Our HP consultants have provided us with the best solution in hardware and software. They also bring us HP's industry experience and vision. HP has steered us onto the right road—one that is wide open to the future."

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Challenges

- Commodity-style competitors
- Costly distribution infrastructure
- Channel inefficiencies
- Drive to stand out in service as well as cars

Solutions

- HP Services consultants worked with Fiat Auto to develop Fiat Link infrastructure to streamline distribution and enhance CRM, providing services that included:
 - Systems integration
 - Planning and design of the three-tiered architecture
 - Enterprise application integration (EAI) consulting
 - Implementation, testing, and installation
- Three-tiered Fiat Link environment from HP is composed of
 - Oracle9i Real Application Clusters and Red Hat Enterprise Linux AS operating system on clustered configuration of HP Integrity rx5670 (2) and rx2600 (2) servers, each equipped with dual Intel Itanium 2 processors, and an HP StorageWorks Virtual Array 7410 system configured into Fibre Channel SAN (RAID 5) with one-terabyte capacity
- Oracle9i Application Server software on
 - HP ProLiant DL380 servers, each equipped with Intel Xeon™ processors
 - Red Hat Enterprise Linux AS 2.1
- Apache Web Server software on
 - HP ProLiant ML370 servers, each equipped with Intel Xeon processors
 - Red Hat Enterprise Linux AS 2.1
- This front end provides Fiat retailers with Wi-Fi access to Fiat Link through
 - HP Tablet PC TC1100 systems running Web browser software

Results

- Dealers and Fiat Auto gain tool to build customer relationships and loyalty
- Solution enhances and streamlines buying process while lowering cost of sales
- Customer-centric distribution to fuel growth in sales and market share
- Integrating processes across 5,800 retailers in 17 countries to trim inventory cost

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