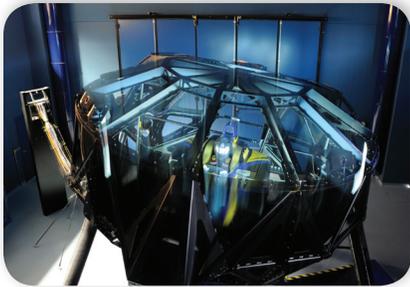


## CASE STUDY: Dallara Automobili

### World-leading Race Car Builder Dallara Automobili Taps Concurrent to Help it Build Cars - and Revenue



For nearly 40 years, Dallara Automobili has devoted itself to the business of designing, building and supporting some of the world's most competitive racing cars and high-performance road cars.

Winner of the 2011 Indianapolis 500 and many other races, Dallara supplies chassis for a wide variety of championship cars and nearly all the Formula Series, including IndyCar, Indy Lights, GP2, GP3, F3, World Series and Daytona Prototype.

It also provides design and manufacturing consulting to Ferrari, Honda, Toyota, Bugatti, Audi, Alfa Romeo and KTM. The culture of Dallara can be summed up with a simple phrase: The pursuit of excellence.

#### KEY BENEFITS

- ⚙ Race car development times improved
- ⚙ More realistic simulation environment improves ability to test new technologies
- ⚙ Improved safety systems get onto the track faster
- ⚙ When safety systems get to the track faster, they get to the everyday automobile faster as well
- ⚙ With improved time to market with new products, Dallara enhances its brand leadership
- ⚙ Dallara now also enjoys an enhanced leadership position as it consults with manufacturers such as Honda and Toyota
- ⚙ Development costs reduced
- ⚙ Increased revenues
- ⚙ Additional business development opportunities

#### **The challenge:** Become faster, safer and more efficient

Dallara faces increasing competition at every turn – literally and figuratively, on the track and off. While it has pledged to produce the fastest, safest racing cars with the highest standards of build quality and aftercare support, it must also operate efficiently to compete in a highly specialized global marketplace.

To maintain its lead, Dallara operates a research and development center in Parma, Italy. With a wind tunnel, state-of-the-art model-making facilities for tunnel testing, an advanced manufacturing floor and an elite engineering staff, its headquarters is a model for teams around the world. But always looking to move forward, the company also committed to develop a \$10 million technology center in the U.S. near the Indianapolis Motor Speedway by 2012.

Both of these facilities require unrivaled simulation and training technology – computing solutions that are as fast, reliable and winning-oriented as the company's cars.

Developing race cars and safety systems in a simulated environment accomplishes three crucial objectives: It reduces costs, dramatically compresses development times and enables Dallara to test speed and safety theories without the expense and time of building a real race car.

"To be able to try new things in a simulated environment is a huge plus for us both in terms of our racing abilities and our business and financial goals," said Andrea Toso, Dallara Head of R&D and U.S. Racing Business Leader. "With simulation we can push forward with theory with much less risk. We can try things that could not have been attempted if we had to go to the time and expense of putting them on a car and doing the testing on the track. Simulation opens up entire new worlds – we can try so much more."

Added Toso, "We must move forward cost-effectively and always with the needs of the customer as a first priority."

## CASE STUDY:

# Dallara Automobili



### SOLUTION CHOSEN BY DALLARA AUTOMOBILI

- ☛ Concurrent RedHawk Linux real-time operating system
- ☛ Simulation Workbench modeling environment

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***"Dallara is going to be a key part in the resurgence of the Motorsport Industry in Indianapolis, and Concurrent is one of our partners in making that happen."***

– Gian Paolo Dallara,  
President and Founder of Dallara

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### **Solution:** Winner of Indy 500 selects Concurrent's RedHawk™ and SIMulation Workbench™ for realistic, cost-effective testing

Dallara selected Concurrent Real-Time to provide simulation and training technology for its renowned research and development center in Parma, Italy. This technology has also been deployed at the company's new facility near the location of one of its great wins – the Indianapolis Motor Speedway.

"After extensive research, we selected Concurrent as our simulation provider because we were impressed with the performance of its RedHawk Linux® real-time operating system and SIMulation Workbench modeling environment," said Toso.

Only Concurrent could deliver the highest levels of computer-generated image quality and fidelity, Toso said.

A continuing leader and pioneer in high-performance, real-time software, Concurrent delivers multi-core solutions for the most demanding of mission-critical applications. Concurrent serves a diverse base of customers who rely on time-critical applications including the, government, aerospace and defense, financial services, medical and industrial market sectors.

### **Results:** With Concurrent, Dallara offers its drivers and engineers a more realistic development environment

Simulation will be the frontline technology used in Dallara's ongoing development of the IndyCar Chassis, the core of the next generation of IZOD IndyCar Series car to be delivered by Dallara in 2012.

Simulators will also be used to provide in-depth training to the drivers and engineers so they can assess and develop car dynamics before delivery and track testing. This technology will additionally facilitate the ongoing development pursued by the Indy Racing League in order to deliver to the media and fans a close racing environment.

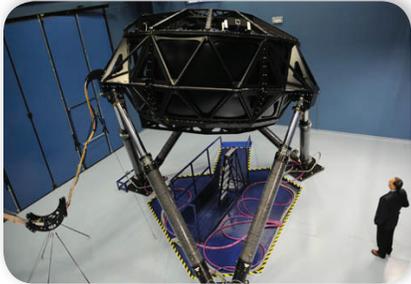
"We're excited about this global opportunity and expanding our reach in the automobile and racing industry with such a prestigious market leader," said Ken Jackson, Concurrent Real-Time Vice President. "Our real-time simulation technology, together with Dallara's race car design expertise, creates a state-of-the-art simulator experience for the IndyCar teams to use for training and technology development."

### **A plan to win on and off the race track**

Gian Paolo Dallara, president and founder of Dallara, said he believes it is critical for the company to focus on goals beyond the race track.

"We are an engineering company focused on delivering industry-leading solutions to the racing industry at large," he said. "Aside from the U.S. factory, it is also important to operate an engineering center open to our partners, universities, race engineers, teams and drivers. Dallara is going to be a key part in the resurgence of the Motorsport Industry in Indianapolis, and Concurrent is one of our partners in making that happen."

## CASE STUDY: Dallara Automobili



**LEARN MORE**  
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Email: [info@real-time.ccur.com](mailto:info@real-time.ccur.com)  
Or call 800.666.4544

As Dallara looks to create engineers of the future, it intends to partner with the University of Indiana and the University of Bologna to establish a master degree course in motorsport, with emphasis in manufacturing competition racing cars. It plans to use the simulator to train engineering students in controlled and repeatable conditions.

"Concurrent real-time products provide an unprecedented level of accuracy and realism in our driving simulators, and we're confident that they can help us cost-effectively deliver next-generation racing dynamics," added Dallara.

"We believe the wealth of our experience and continued investment in people and equipment provides us with the perfect foundation to take on the constantly evolving challenges of international motorsport - and win," he said.

### About Concurrent

Concurrent Computer Corporation (**NASDAQ:CCUR**) is one of the industry's foremost providers of high-performance real-time Linux® computer systems, solutions and software for commercial and government markets worldwide. Concurrent has deployed and supported thousands of multi-core solutions for the most demanding of mission-critical applications for over four decades. These applications include hardware-in-the-loop and man-in-the-loop simulation; data acquisition; and process control in the aerospace, defense, automotive, medical, energy, transportation and financial industries. The Company's products include the RedHawk Linux real-time operating system with guaranteed response; NightStar™ tools for advanced Linux debugging and analysis; and application-specific tools for simulation and testing.



When you need guaranteed response time, you need Concurrent for your mission-critical applications. Schedule an online demo today. ☎

Concurrent Computer Corporation  
2881 Gateway Drive  
Pompano Beach, FL 33069, USA  
1.954.974.1700  
1.800.666.4544

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