

Corrigent Gains Speed with Wind River

Wind River Powers Next-Generation, 10x-Faster Products for Leading Telecommunications Company

Corrigent Systems, established in 2000, develops Carrier Ethernet Transport (CET) platforms, the main building blocks for next-generation packet-based metro networks.

Corrigent's products bring the convergence of traditional transport and carrier Ethernet. They merge the well-defined and proven resiliency, quality, operation, and maintenance and cost characteristics of the transport network with state-of-the-art carrier Ethernet packet-processing and traffic-management capabilities. This allows scalable, reliable delivery of differentiated services.

The Corrigent product line provides comprehensive carrier Ethernet and synchronous optical networking (SONET)/synchronous digital hierarchy (SDH) capabilities on a single platform, reducing operational expenses. By cost-effectively supporting any mix of Ethernet and time-division multiplexing (TDM) traffic, these products allow service providers to rollout advanced residential multi-play and business Ethernet services, along with traditional services and the means to gradually migrate them, over the same network infrastructure.

Corrigent products have been mass deployed since 2004, and thousands of units are now in service worldwide. The products are even more widespread due to a recent large deal with Deutsche Telekom.

The Move to Multiprocessing

In 2005, Corrigent began thinking about its next-generation product. It became clear that multiprocessing was the best option for the company's next-generation



"Wind River Linux has made development much easier and faster. We are able to save 20 to 30 percent in development time using Wind River Linux and tools. Along with our internal enhancements, our entire product life cycle has significantly improved."

—Yossi Bar-Sheshet, Director, Software, Corrigent

Company Profile: Corrigent Systems

- Develops Carrier Ethernet Transport (CET) platforms, the main building blocks for next-generation packet-based metro networks
- A wholly owned subsidiary of Orckit Communications (NASDAQ: ORCT)
- Headquarters in Tel Aviv, Israel

Industry

- Networking

Solutions

- Wind River Platform for Network Equipment, Linux Edition
- Wind River Workbench

Results

- Saved 20 to 30 percent in product development time and significant improvements during the entire product life cycle
- Ability to move quickly and remain competitive in the fast-paced telecommunications and network equipment market
- Increased efficiencies and staff satisfaction with a common Eclipse-based developer's toolset

CM 4000-series CET switch, based on a distributed data architecture and more than 10 times faster than its first-generation legacy product. The CM 4000 would provide a non-blocking switching capacity of 320 Gbps and other improvements compared to the legacy product.

The engineering team needed to create an entirely new architecture to deliver this robust product. The software research and development team members conducted market research, talking to customers and peers about the ideal operating system to meet Corrigent's rigorous needs.

"When we started to investigate, we found there was a big wave of enthusiasm about open source," recalls Yossi Bar-Sheshet, Director, Software. "We understood that most of the telecommunications market was going toward Linux because of its stability and efficiency. All the big players were going in this direction, and it made sense for us as well."

Once Corrigent decided a Carrier Grade Linux operating system (OS) was the right fit for the CM-4000 series, the company zeroed in on Wind River Linux and Monta Vista Linux.

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—Yossi Bar-Sheshet, Director, Software, Corrigent

"We initially leaned toward Wind River because the most important issue to me, as a manager, was the development environment," Yossi says. "We have dozens of engineers and we needed a stable, collaborative environment. We were looking for a stable Linux distribution and we needed the right tools and the right support. Monta Vista just provided Eclipse as its IDE without any other tools or amendments."

Wind River offered a Linux platform—Wind River Platform for Network Equipment, Linux Edition—tailored to the telecommunications and network equipment and marketplace. Wind River also offered a full Eclipse-based developer toolset, Wind River Workbench, and readily available support in Europe and the Middle East.

Wind River Offers Speed, Efficiency

While Corrigent was confident in its decision to move to Wind River Linux, it still faced challenges during the move from a real-time operating system (RTOS)-based, multitasking architecture to multiprocessing.

The transition was eased by Wind River tools such as kernel debugging tools and multithreading debug capabilities, which offered a whole new level of convenience to Yossi's team. The team found the hardware bring-up process much easier with Wind River Linux and available networking libraries.

As a manager, Yossi used to hear complaints when a problem arises. But since his team has used Wind River Linux and Wind River Workbench, his job has become easier in this regard.

"There are no complaints from my engineers about Wind River Linux and the Wind River Workbench environment," Yossi says. "Using Wind River Platform for Network Equipment, Linux Edition prevents us from making many mistakes."

As Corrigent navigates the increasingly competitive telecommunications marketplace, Yossi considers Wind River a critical vendor.

"As a carrier-grade company that's still considered a startup, we have a lot of pressure to provide new products quickly," Yossi concludes. "It's a daily challenge to produce products fast enough to make the market window without sacrificing our high-quality standards. We work in a very complicated, risky market space—and Wind River helps us navigate the challenges and succeed."

Learn More



For additional information about the products mentioned in this case study, visit:

www.windriver.com

www.corrigent.com

WIND RIVER

Wind River is the global leader in Device Software Optimization (DSO). We enable companies to develop, run, and manage device software faster, better, at lower cost, and more reliably. www.windriver.com

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