WIND™

Huawei Reduces Costs, Accelerates Time-to-Market with Wind River

Leading Global Network Equipment Provider Seals Global Success with Wind River Platform

Huawei

Company Profile

- Leader in telecommunications networks
- Serves 35 of the world's top 50 operators

Industry

Networking

Solutions

- Wind River Platform for Network Equipment, VxWorks Edition
- Wind River Workbench, On-Chip Debugging Edition

Benefits

- Reduced development cost and risk by using a product line–wide standardized developing platform
- Accelerated time-to-market leveraging a powerful, fully integrated commercial off-the shelf (COTS) solution that enables out-of-the-box application development
- Delivered high-quality and competitive products using best-of-breed technologies

HUAWEI

Huawei, a world-leading telecommunications solution provider that has served 35 of the world's top 50 telecom companies, prides itself on creating long-term partnerships with its customers.

The company's efforts are well-recognized. For example, Vodafone, the world's leading mobile operator, awarded Huawei a 2007 Global Supplier Award—citing delivery of highly competitive products and services. Huawei was the only network equipment supplier to receive this award.

As an industry leader, Huawei has no time to sit back and relax. On the contrary, the company continually strives to meet network equipment providers' strict demands for increased performance and decreased cost.

With progressive thinking and effective strategies, Huawei has stabilized its position in the Asian, Middle Eastern, South African, and Commonwealth of Independent States markets. The company is also enjoying regular breakthroughs in the European, Latin American, and North American markets.

"Huawei focuses on the cost challenges and time-to-market pressures experienced by global operators," says Yu Chengdong, President of Wireless Network Products for Huawei. "We continuously innovate to provide competitive solutions an services that maximize our customers' profits. This is a key reason why leading communications operators around the globe are selecting Huawei as their long-term partner, and why we work with Wind River to address these challenges."

The Challenge

Huawei Standardizes Product Lines on Wind River

Huawei began working with Wind River in 1999. Since then, the company has migrated increasingly more product lines to Wind River Platform for Network Equipment, VxWorks Edition.

"Today, many of our network equipment offerings, including core network, Global System for Mobile Communications (GSM), optical, and access products, are based on Wind River VxWorks," explains Barry Xue, Director of the Base Platform Department in the Corporate Software Department at Huawei.

Xue, who has extensive experience with various types of device software, says VxWorks is a solid, field-proven solution for network elements—with many features Huawei values.

"With VxWorks, we get determinism and reliability," Xue says. "We also get the protection of real-time processes. If one process fails, it won't bring down the whole system. Processes can be loaded dynamically, which makes it easy to add new functions to our products."

With VxWorks, Huawei gains access to one of the most advanced integrated networking protocol stacks in the industry. Included with the Wind River VxWorks platform is the Eclipse-based Wind River Workbench, On-Chip Debugging Edition development toolset.

"Wind River Workbench tools help us develop and debug applications," Xue explains. "We can check the resource occupation of each task and improve our products' overall performances."

The Approach

Wind River Offers Three Levels of Value

According to Xue, Huawei appreciates Wind River products on three levels: technology, product line, and industry. On the technology level, VxWorks is a software platform with optimal real-time processes and a small footprint—and it supports many central processing units (CPUs) and board support packages (BSPs). Reliability is another important feature.

On the product-line level, VxWorks provides a common, standard software platform that enables Huawei to reduce the cost and time to develop new products. The ability to use the same platform across product lines presents significant cost and time savings to a company such as Huawei because of the breadth of its production lines.

On the industry level, Wind River's world-class partner ecosystem ensures Huawei receives additional value in an overall solution stack. Wind River integrates its operating technologies with the leading hardware and software partner components.

The Wind River partner program requires partnering companies to tightly integrate their hardware or software solutions with Wind River's core technologies. The partner ecosystem can extend the capabilities of Wind River's development and run-time platforms by offering out-of-the-box integration and support for key technologies in the networking market.

> *"Functionality, reliability, and localized support were the key factors we considered—and Wind River VxWorks was the right answer. With the commercial-grade solution from Wind River, we have dramatically increased our development efficiencies, reduced engineering costs, improved time-to-market, and assured product quality."*
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> *— Matt Clark, Vice President of Software Development and Technical Support, CareView*

The Result

The Bottom Line

"Before we decided to use VxWorks, we investigated many other providers," Xue says. "Functionality, reliability, and localized support were the key factors we considered— and Wind River VxWorks was the right answer.

"With the commercial-grade solution from Wind River, we have dramatically increased our development efficiencies, reduced engineering costs, improved time-to-market, and assured product quality," Xue concludes.

For additional information about the products mentioned in this case study, visit www.windriver.com and www.huawei.com.