



# Wind River Helps Global Networking Equipment Vendor Make the Move to NFV

Using Titanium Cloud, Raisecom Cuts Time-to-Market by 30%, Testing and Qualification Costs by 20%, While Ensuring 99.9999% Network Availability

## RAISECOM

### Industry

Networking

### Solutions

- Wind River Titanium Cloud
- Titanium Cloud Ecosystem

### Benefits

- Gained first-mover advantage in a new market
- Cut product testing and qualification costs by 20%
- Decreased time-to-market by 30%

In telecommunications, change is the only constant. Customer needs evolve rapidly. New competitors enter the market every year. Meanwhile, the cutting edge of technology never stops advancing.

Global telecom equipment manufacturer Raisecom is no exception to this immutable fact of digital technology. And like the rest of the industry, Beijing-based Raisecom is looking to Network Functions Virtualization (NFV) to open up new product revenues and bring far greater flexibility and efficiencies to telecommunications networks.

To ensure success for its move into this new era for networking, Raisecom turned to the Wind River® Titanium Cloud™ product portfolio, the industry's first fully integrated and full-featured NFV software platform.

## The Challenge

### Benefiting from Software Without Sacrificing Performance

The move to NFV is a necessity for networking equipment manufacturers like Raisecom. Telecommunications carriers are demanding increasing network flexibility, adaptability, and scalability—the kinds of capabilities that NFV can provide.

For network equipment vendors, switching to NFV from special-purpose, dedicated hardware (switches, routers, firewalls, load balancers, etc.) promises to lower product development, testing, and qualification costs while accelerating time-to-market.

“The entire telecommunications industry is on the verge of switching to virtualized network functions,” says Sandy Guo, key carrier account director at Raisecom. “The faster you can move, the better chance you have to win, because the changes happening in the industry mean that the competition is fiercer than ever.”

In other words, it was strategically crucial for Raisecom to make the move to NFV or else run the risk of being left behind by this momentous industry shift.

While software-based, virtualized services hold tremendous promise, this new approach to networking comes with a major caveat. Critically, these new software-based services must perform with the same unwavering reliability and performance as traditional hardware-based telco equipment.

*“Telecommunications carriers require five-nines reliability—in other words, 99.999% availability,” says Guo. “Our hardware products meet that standard. Our virtualized products have to meet it, too.”*

## The Approach

### Delivering Carrier Grade NFV with Titanium Cloud

Raisecom called on Wind River when it determined that developing a high-performance, highly reliable NFV platform on its own would have been too expensive and taken too long.

To enter the NFV space, Raisecom chose to virtualize small cell gateway functions.

Carriers employ small cells—low-powered radio-access nodes with a range of 10 meters to 100 meters—to offload mobile network data and use radio frequency more efficiently. This allows them to extend service coverage and increase network capacity—an urgent need as demand for mobile services grows.

By virtualizing small cell gateway functions using Titanium Cloud—by recreating those functions using software delivered via the cloud—Raisecom hoped to lower product development costs and cut time-to-market while better serving customers. At the same time, it would begin developing the NFV expertise it needed to thrive in the new era of software-defined networking.

Guo says Wind River’s history of providing operating system software for the world’s most critical systems gave it full confidence in Titanium Cloud.

From cutting-edge medical devices to industrial robotics, Wind River software is at the heart of many of the world’s most demanding devices and machines. Customers like Boeing, BMW, and NASA turn to Wind River for running critical systems where failure would be catastrophic.

*“Our customers know Wind River,” says Guo. “They really like that we have built our NFV platforms with Wind River software.”*

## The Result

### Faster Time-to-Market, Better Products, Lower Costs

By using Titanium Cloud, Raisecom cut product testing and qualification costs by 20% compared to testing and qualification costs for traditional small cell gateway hardware, while decreasing time-to-market by 30%.

“Thanks to Wind River and Titanium Cloud, we got to market faster, with a better product, and at a lower cost to our customers,” Guo says.

Titanium Cloud, which can guarantee 99.9999% availability, provided Raisecom with a core competitive advantage with its new virtualized cell gateway platform.

“For telecommunications carriers, the standard is five-nines availability—99.999% uptime. Titanium Cloud beats that,” says Guo. “So we can offer NFV products that outperform our customers’ availability requirements by an order of magnitude.”

And because Titanium Cloud runs on off-the-shelf servers and is open and scalable, with Yocto Project-based Linux and OpenStack at the core and APIs for provisioning and management integration, Wind River ensured Raisecom will have complete development flexibility throughout the lifecycle of its equipment.

Guo says Raisecom also will benefit from the Wind River Titanium Cloud Ecosystem of products validated by Wind River as being interoperable and optimized for Titanium Cloud.

The Titanium Cloud Ecosystem gives Raisecom the ability to reach new markets with its offerings, with the confidence that those offerings will work seamlessly with other products on the Titanium Cloud platform. In addition, the ecosystem promises to make it simple for the company to assemble offerings from a variety of industry-leading providers to better meet any customer requirements.

“The extensive ecosystem of vendors supporting Titanium Cloud can only help when it comes to providing customers with the best possible service,” Guo says.

The Titanium Cloud Ecosystem, combined with Titanium Cloud’s performance and reliability, are helping Raisecom make the transition to a new era in networking.

“Thanks to Wind River and Titanium Cloud, we were able to get a fast start into a new market,” Guo says. “It’s all about staying a step ahead of the competition.”

