

RigNet



Offshore drillers need reliable connectivity and high network performance for critical applications—on the ocean and on land.

The solution: A managed Riverbed® SD-WAN service with integrated security, WAN optimization and SaaS Acceleration delivered by RigNet.

A leading global provider of offshore drilling services needed a reliable WAN for emergency communications, cloud services, suppliers, and crewmembers. The company chose a managed Riverbed SD-WAN service with integrated WAN-op and application acceleration delivered by RigNet, a managed services provider for the oil-and-gas industry that helps customers realize the business benefits of digital transformation.

In Brief

Challenges

- High costs of downtime—up to \$1 million a day in rig rental costs
- Unreliable connectivity at sea due to restricted bandwidth and high winds
- Space constraints on rigs
- Complex regulations defining the countries in which satellite data can land
- Need for visibility across multinational operation

Solution

- Managed SD-WAN service from RigNet, with global satellite and microwave links
- Riverbed® SteelConnect™ EX for SD-WAN, Routing, Next-Gen Security and WAN Optimization
- Riverbed® SteelHead™ CX for WAN Optimization
- Riverbed® SaaS Accelerator for Microsoft 365 and other SaaS Applications

Benefits

- Reliable connectivity: traffic is sent over the best transport option dynamically each moment
- 90% less network infrastructure, lowering space, power, and cooling requirements
- Fast site onboarding, with zero-touch provisioning
- Visibility into application performance from a single portal
- Improved crewmember quality of life, a morale booster and retention advantage

Challenge: Making the Most of WAN Bandwidth on the Seas

For drilling contractors, every aspect of the business requires fast access to up-to-date data. “Communications standards for rigs are extremely high—especially in ultra-deepwater and harsh environments,” says Brendan Sullivan, Global CIO and CTO for RigNet. “If data stops flowing or IP phones stop working, the rig has to shut down.” That’s costly: oil-and-gas operators pay upwards of \$1 million a day to rent a rig.

“Riverbed Professional Services worked side by side with our team so we could learn and document best practices. It’s been one of the most pleasant experiences I’ve ever had with a vendor. We gained expertise and confidence to bring a critical solution to the front line.”

Brendan Sullivan, Global CTO, CIO, and Head of Cybersecurity
RigNet

Unlike businesses operating on land, rigs generally keep the same equipment for 10 years or more. So when it comes time to refresh above-deck and below-deck networks on rigs and offices, they need a solution that can adapt to meet changing business demands.

One RigNet customer, a leading global provider of offshore drilling services required a reliable WAN for emergency communications as well as cloud services like SAP and Microsoft 365. Suppliers aboard the provider’s rigs need to connect to their own applications. And crewmembers working 28 days at a time appreciate access to the network for personal use.

“To meet the needs of our customers, their suppliers, and crews, we aim to double each rig’s bandwidth without doubling costs,” Sullivan says. “The challenge for us is how to “stuff more stuff” on to the network without compromising performance.”

Solution: Riverbed SD-WAN

RigNet meets the need with a managed SD-WAN service based on Riverbed® technology. In customer data centers, RigNet deploys Riverbed® SteelConnect EX, which combines routing, SD-WAN, WAN optimization, next-gen firewall, and unified threat management—all in one device. “Consolidating all the network services in one SteelConnect EX reduces our customers’ on-premises WAN connectivity and security footprint by 90%,” says Daryn Richard, Head of Engineering for RigNet. A converged device also simplifies management and reduces the opportunity to make mistakes.

For the offshore driller mentioned above, RigNet and Riverbed engineers worked together to define policies for the SD-WAN. Policies control which transport to use (satellite, LTE, or microwave) under what conditions. For example, what traffic gets priority or where traffic can and cannot flow to meet specific country regulations.

On the customer’s rigs, RigNet deployed the Riverbed solution enabling SD-WAN, security and WAN optimization, and included a warm spare appliance that can take over any network function as needed. When oil drillers acquire new sites, RigNet can simply ship the plug-and-play appliances to rigs, where staff only need to connect them.

“In terms of challenging network conditions, oil rigs are right up there with the International Space Station. Riverbed SD-WAN helps us make the best use of customers’ bandwidth by combining all the techniques—SD-WAN, WAN optimization, SaaS acceleration, and security—in one device.”

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Results: Increased Agility, Faster Performance and Improved Quality of Life

Rapid deployment—just four months

Despite the complexity of ocean deployment—including two weeks of COVID-19 quarantine before engineers boarded helicopters—the solution was ready to use in just four months. “Riverbed Professional Services worked side by side with our team so we could learn and document best practices,” Sullivan says. “It’s been one of the most pleasant experiences I’ve ever had with a vendor. We gained expertise and confidence to bring a critical solution to the front line.”

Consistent performance, with policy-based decisions

Managing service quality in a worldwide network is complicated, even more so in harsh ocean conditions with ships in motion. When rigs cross network boundaries or performance starts to decline, the Riverbed SD-WAN automatically switches to the best transport based on performance SLAs and real-time circuit conditions

Improved quality of life for crews

Offshore drilling companies look for ways to relieve crewmembers’ stress and improve quality of life. By optimizing WAN bandwidth, the Riverbed solution also helps crew members stay connected with friends and family. They appreciate having the network performance needed to video chat, watch movies, and even play games. It’s a morale-builder and a competitive advantage for recruitment and retention.

Visibility, for simpler IT operations

Crewmember satisfaction is so crucial on rigs, in fact, that some RigNet customers give personnel a direct line to the CEO for complaints. “Riverbed helps us manage service quality because we have visibility into all network activity from a single portal,” Richard says. We can monitor service quality for users, and even see detailed stats like the number of people on Microsoft 365, FaceTime or YouTube.

Business agility

The oil-and-gas industry is marked by frequent mergers and acquisitions. RigNet’s managed service reduces the time to onboard a new location to the network from weeks to hours. Sullivan sums it up: “In terms of challenging network conditions, oil rigs are right up there with the International Space Station. Riverbed SD-WAN helps us make the best use of our customers’ bandwidth by combining all the techniques—SD-WAN, WAN optimization, SaaS acceleration, and advanced security—in one device.”

Learn More

For more information about enterprise SD-WAN solutions, visit riverbed.com/enterprise-sdwan.

For more information about RigNet’s managed service, visit rig.net.

About Riverbed

Riverbed enables organizations to maximize performance and visibility for networks and applications, so they can overcome complexity and fully capitalize on their digital and cloud investments. The Riverbed Network and Application Performance Platform enables organizations to visualize, optimize, remediate and accelerate the performance of any network for any application, and helps to identify and mitigate cybersecurity threats. The platform addresses performance and visibility holistically with best-in-class WAN optimization, unified network performance management (NPM), application acceleration (including Microsoft 365, SaaS, client and cloud acceleration), and enterprise-grade SD-WAN. Riverbed’s 30,000+ customers include 99% of the *Fortune* 100. Learn more at riverbed.com.

The logo for Riverbed, featuring the word "riverbed" in a lowercase, orange, sans-serif font.