



Solution: NetCloud Service Industry: Maritime

Near Shore Connectivity for Maritime Logistics Company, Rocktree

Achieved near 100% Percent Network Availability and Enhanced Service Uptime

Summary

In the maritime industry, IT teams must monitor, manage, and track assets deployed across large fleets roaming around the world. Traditional maritime connectivity options like satellite are expensive and cannot keep up with innovative transport logistics strategies, the Internet of Things (IoT), and the shift to cloud computing. Logistics companies are continuously seeking technologies that can provide secure, flexible and scalable mobile network solutions.

Rocktree deployed Cradlepoint NetCloud Service and the ruggedized IBR900 4G/LTE routers in tugboats and barges for projects across Asia Pacific to enable cost efficient near shore connectivity. Combined with satellite back-up, they achieved near 100% percent network availability and enhanced service uptime.

Customer Profile

Singapore headquartered Rocktree Group works with companies in the water-borne dry-bulk supply chain, providing tailor-made, innovative, practical logistics solutions to improve the efficiency and reliability of its clients' shipments. For more information, please visit www.rocktree.sg.





Challenge #1: Expensive Low Satellite Bandwidth

Traditionally, maritime vessels only have satellite communications to gain access to the internet and corporate applications. With the advancement in wireless technology, vessel crew and maritime applications can now leverage 4G/LTE networks to enable higher bandwidth at lower cost compared to satellite.

By installing omni-directional weatherproof antennas connected to the Cradlepoint 4G/LTE router on board, Rocktree vessels now have connectivity via the nearest mobile network, which can be up to 50 nautical miles. The Cradlepoint Device enables automatic routing between so that 4G/LTE can can be used as primary connectivity whenever in range and costly data usage via satellite is kept at a minimal solely for critical maritime applications and as a backup.



Challenge #2: Managing Connectivity Without On-Board IT Staff

IT teams can now rapidly deploy and dynamically manage networks across the entire fleet with Cradlepoint NetCloud Manager. The cloud-based platform for centralised network management improves productivity, reduces costs, and enhances the intelligence of the fleet's network and operations and is included with any Cradlepoint edge device.

Rocktree wanted a solution that was able to remotely track, manage, configure and troubleshoot their network connectivity deployed on tugboats and barges working around the Asia Pacific region. With Cradlepoint, the logistic company can manage end-point connectivity from a single pane of glass, giving the IT team visibility of vessel location via GPS/GNSS and remote control over the network features.

Challenge #3: Harsh Deployment Environment

Vessels are subject to constant motion, humidity, temperature fluctuation and unforgiving weather conditions. Securing a spot to host electronic network equipment on board may be difficult and even so, may potentially be exposed to elements which may damage delicate telecommunication hardware.

The Cradlepoint IBR900 metal ruggedized router deployed on board Rocktree tugboats and barges are IP54 rated; ingress protected from dust and splashing water, suitable for maritime use. It is also compliant with military grade stop test standard for shock and vibration. This gives the IT team a peace of mind knowing the device can withstand the arduous conditions onboard their vessels.

Learn more at cradlepoint.com