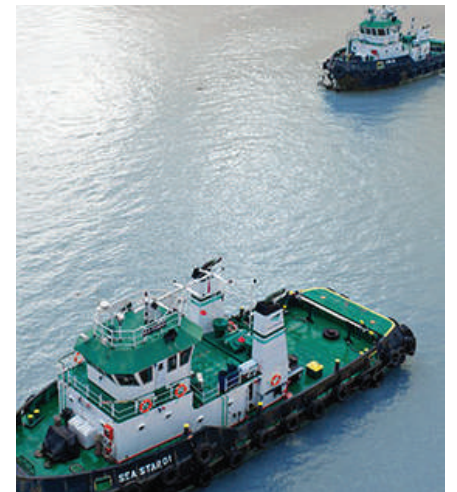bluewireless

Maritime logistics company achieves near 100% network availability and enhanced service uptime

Industry: Maritime

Introduction

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

To meet customer requirements, Rocktree's IT teams must monitor, manage, and track assets deployed across large fleets roaming around the world. Traditional maritime connectivity options, like satellite, are usually expensive and cannot keep up with innovative transport logistics strategies, the Internet of Things (IoT), or the shift to cloud-based applications to enable better services.

01 Challenge
Rocktree sought a partner to support the deployment of a wireless solution across all its vessels, to overcome the challenge of expensive low satellite bandwidth.

02 Blue Wireless Solution
A managed network solution involving on-site installation of ruggedized 4G/LTE routers and weatherproof antennas, as well as remote monitoring and support to enable connectivity for Rocktree's entire fleet.

03 Results
Cost-efficient nearshore wireless connectivity, combined with satellite backup, to achieve near 100% network availability and enhanced uptime.

Overcoming expensive low satellite bandwidth in the maritime industry

Traditionally, maritime vessels could only rely on satellite communications to access the internet and their corporate applications. With the advancement in wireless technology, crew onboard and maritime applications can now leverage 4G/LTE networks for higher bandwidth and at a lower cost compared to satellite.

The Blue Wireless team, with its extensive expertise in connecting maritime businesses around the world, took over the task of designing a network solution for Rocktree's nearshore vessels. By installing omni-directional weatherproof antennas and 4G/LTE routers onboard, vessels can now access the nearest mobile network up to 50 nautical miles away. Cradlepoint devices, specially designed for challenging environments like those at sea, enable automatic routing so that 4G/LTE can be set as primary service whenever in range, reducing data usage costs from satellite which is kept solely for critical maritime applications and backup.

Managing connectivity without onboard IT staff

Besides a more reliable service, Rocktree required a solution that enabled the team to remotely track, manage, configure and troubleshoot their network connectivity deployed on tugboats and barges working around the Asia Pacific region.

Blue Wireless solution, powered by Cradlepoint NetCloud Manager, allows the logistics company to rapidly deploy and centrally manage networks across the entire fleet. The cloud-based platform, included with any Cradlepoint edge device, improves productivity, reduces costs, and enhances the intelligence of the fleet's network and operations. Moreover, it allows the IT team to manage end-point connectivity from a single pane of glass, giving them visibility of vessel location via GPS/GNSS and remote control over the network features.

Maritime-proof Connectivity

Vessels are subject to constant motion, humidity, temperature fluctuation, and unforgiving weather conditions. Securing a spot to host electronic network equipment onboard may be difficult and, still, may be exposed to elements that might damage delicate telecommunications hardware.

The solution provided by Blue Wireless includes the selection and installation of maritime-proof equipment: Cradlepoint IBR900 ruggedized routers are IP54 rated, ingress protected from dust and splashing water. They are also compliant with military-grade stop test standards for shock and vibration. For antennas, high gain, omni-channel, long-range Poynting antennas have proven to withstand the ocean's harsh environment and deliver the best performance nearshore. Both offer Rocktree's IT team peace of mind knowing the devices can withstand the arduous conditions for reliable connectivity on board.

About Blue Wireless

Blue Wireless enables reliable and flexible connectivity for branches, retail sites, remote locations, and the maritime sector in over 80 countries globally, and transforming the way Wireless WAN is used by enterprises.

Learn more at bluewireless.com or email us at enquiries@bluewireless.com