

# CELLULAR CONNECTIVITY FOR MARITIME LOGISTICS

## Near Shore Communications Solutions

Within the maritime industry, teams of IT professionals monitor, manage, and track assets deployed across ocean freighters, container ships, tugboats, and other sea-bound vessels sailing the world's vast oceans. Common, and costly, connectivity options like satellite are failing to keep up with the newest logistics strategies, IoT technologies, and cloud service offerings. Logistics companies are constantly looking for technologies capable of providing secure, flexible and scalable network solutions for their mobile enterprises.



### Case Overview | IMPROVING NEAR SHORE CONNECTIVITY

An vessel outfitter reached out to RTO to help address a number of challenges one of their maritime logistics clients was facing. Their client operates their own fleet of near shore and ocean bound vessels, comprised of tugs, container ships, and other craft. The organization they were hoping to serve houses a highly productive team of on-shore admins looking to utilize advances in communications technology and quality systems to improve the efficiency their operations.

### Challenges Faced | SEVERAL CONCERNS TO ADDRESS

#### SATELLITE COSTS

The first thing to address was the high cost of satellite communications. While at one time satellite was the only option available to their clients, advances in wireless technologies make it possible for their maritime organization to leverage 4G/LTE. With cellular networks they can gain access to higher bandwidths at lower costs.

#### CREW DATA USAGE

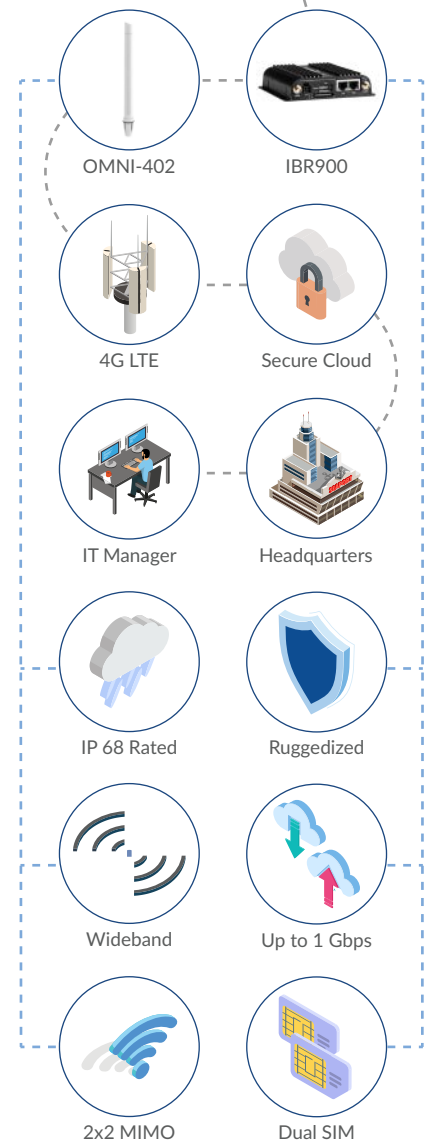
Their next concern was the data usage of the vessels and accompanying crews. With international roaming fees coming to an end, they were trying to work out the best way to give their teams access to recreational WiFi (*with reasonable data caps*), while ensuring that their business-critical assets were given data priority over non-essential functions.

#### REMOTE MANAGEMENT

A third challenge was their lack of IT staff on-board their vessels. It's not cost effective to staff their boats with IT professionals. They needed a solution that would allow for device management and troubleshooting from their main offices.

#### HARSH ENVIRONMENT

Lastly, whatever solution was developed to solve their first three challenges would also need to be able to stand up to the elements. Ocean bound ships are constantly in motion and are subject to extreme fluctuations in humidity, temperature, and wind speed, as well as the occasional and often violent storm out at sea.



RTO can provide your organization the end-to-end communications solutions it needs to support the success of your clients' coastal and marine operations.

### Cradlepoint IBR900 Ruggedized Routers

We helped our customer obtain and deploy Rugged Cradlepoint IBR900 mobile routers for use in their clients' vessels across the North Atlantic - enabling cost efficient near shore connectivity.

Automatic routing enables 4G/LTE as their primary connectivity whenever in range. That way, costly satellite data can be used only as a backup for business-critical maritime applications.

Combined with satellite back-up, we helped them deliver their clients near 100% percent network availability and enhanced service uptime. Coupled with NetCloud, bundled with each IBR900 router, their client can locate and remotely manage endpoints from a single on-shore location.



### Poynting OMNI-402 Marine Antenna

To enhance the connectivity range of each router, and make use of their WiFi capabilities where necessary, we provided them with high-performance wide-band marine antennas capable of 2x2 MIMO operation.

These antennas are built to MIL-STD-810F standards and are IP68 rated; protecting them from dust, UV rays, and salt water sprays and allowing smooth operation between -40° to -176°F.

Their clients' vessels could now more easily access connectivity via near shore mobile networks up to 50 nautical miles away. And with two antennas per router, they configured the other to deliver on-board WiFi for crew use.

### Why Choose RTO?

For over 15 years RTO has provided expert IoT connectivity solutions to organizations that outfit marine vessels. Our team helps its customers engineer and provide solutions to their own clients' utilizing top-tier cellular equipment from only the most trusted manufacturers worldwide.

Our DevProv+ services team configures, provisions, kits and ships your devices hot and ready for immediate use. And our installation teams ensure your devices are functioning securely, reliably, and at peak performance.

Reach out to RTO today to rapidly deploy cellular solutions that meet your clients' exacting vessel management needs.



CONTACT RTO TO ENGINEER YOUR CONNECTIVITY SOLUTION TODAY