

Product User Application: Remote Installations of Newtec Dialog®



THE CRITICAL COMMUNICATIONS COMPANY

Meeting Tomorrow's Bandwidth Demand in Maritime: How to Deploy New VSAT Technology on Vessels Worldwide Without Setting Foot on Board

THE CHALLENGE

As VSAT technology continues to evolve for a world of higher and higher bandwidth demand, Speedcast made an important decision in early 2020. The company chose to standardize its VSAT-delivered global connectivity services on the Newtec Dialog® platform from ST Engineering iDirect. Dialog is a single-service and multi-service VSAT platform that allows operators and service providers to build and adapt their networks to the mission. It supports multiple satellites, frequency bands and spot beams and is scalable from five to hundreds of thousands of terminals. Dialog brings together many technologies pioneered by ST Engineering iDirect, including highly efficient DVB-S2 ACM and Clean Channel technology in the forward link and a choice among SCPC, MF-TDMA and STE iDirect's Mx-DMA in the return link, to deliver major bandwidth savings. Specialized QOS, network management, link management and file exchange applications support high performance. The end result is extreme flexibility, scalability and efficiency in a single platform.

Driving the decision for Speedcast was continued fast growth in bandwidth demand from the maritime industry, ranging from container ships, tankers and bulk carriers to cruise ships, ferries and fishing vessels. As networks have become essential to running an efficient business, ships are developing the same demand for digital connectivity as offices and homes. Connectivity supports ship management, navigation, weather, health, safety and Internet of Things applications as well as simple email and web browsing. Crew and passengers depend on it for keeping in touch on social media and meeting their entertainment needs.

The infographic features a dark teal background with a world map. It includes the Speedcast logo and the following text: "MAXIMIZING BANDWIDTH EFFICIENCIES AND SUPPORTING HIGHER THROUGHPUTS WITH REMOTE TECHNOLOGY UPGRADES." Two circular callouts provide statistics: "100+ MARITIME SITES CONVERTED REMOTELY IN 2020" and "200+ LINKS SUCCESSFULLY MIGRATED".

Speak to a Speedcast sales representative or email info@speedcast.com for more details.

DEPLOYING TECHNOLOGY IN THE TIME OF COVID-19

The rollout of Dialog began with weeks of behind-the-scenes work. Systems integration teams deployed Dialog hubs at 18 teleports and data centers worldwide, while a project group from Speedcast operations, engineering, global platforms, capacity management and field engineering planned the shipboard installations. Migrating a remote maritime site is a complex task that typically requires a field engineer onboard and scheduling of downtime for the vessel, and the work plan called for converting 100 maritime sites in a few months.

The arrival of the COVID-19 pandemic threw plans into disarray by delaying or preventing the dispatch of field engineers to many sites. Days of frantic consultation, however, soon led to an innovative solution for moving the project forward.

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The team created a method for migrating shipboard systems remotely with the help of IT personnel on board. For each installation, Speedcast hosted three conference calls with the onsite IT leads and guided them through carefully detailed procedures from pre-deployment to deployment and post-deployment. Working together, they converted each ship's secondary antenna to Dialog — a lengthy and complex process from start to final testing — then migrated traffic from the primary to the secondary antenna. Finally, they repeated the conversion process with the primary antenna and returned traffic back to it.

The team completed its first remote migration in April, added more than a dozen sites the following month and then scaled up operations to reach their original goal on time.

RESULTS

The COVID-19 pandemic has had a massive and well-publicized impact on the maritime business, most dramatically in the cruise and energy-related sectors. Yet maritime companies are already planning a return to growth as demand for goods, energy and travel finds its way back to pre-crisis levels and beyond.

The Dialog upgrade to VSAT connectivity enables ship owners to wring more efficiency and productivity from their vessels, thanks to these points:

- **Higher throughput** from a single modem can support up to 400/150 Mbps, which eliminates the need to change modems when the ship has special events, broadcasts or charters that require bandwidth upgrades.

- **Dynamic bandwidth allocation** allows groups of ships on the same networks to share bandwidth, providing the flexibility to use idle bandwidth for surge capacity.
- **Sophisticated mobility management** enables ships to change networks quickly and easily as they move from one region to another, improving availability and quality of service.
- **Rich APIs** provide sophisticated performance management and integration with ship and network management platforms.
- **Flexibility** lets ships manage itinerary changes and upgrade bandwidth on the fly.

By creating a way to deploy the platform with the help of IT staff, Speedcast has brought a new level of convenience to ship owners and managers and has better equipped them to navigate the uncertain waters ahead.

ABOUT SPEEDCAST

Speedcast is the world's most trusted communications and IT services provider, delivering critical communications solutions to the Maritime, Energy, Mining, Media, Telecom, Cruise, NGO, Government and Enterprise sectors. With more satellite capacity than any other provider, Speedcast enables faster, seamless pole-to-pole coverage from a global hybrid satellite, fiber, cellular, microwave, MPLS and IP transport network with direct access to public cloud platforms. The company also integrates differentiated technology offerings that provide smarter ways to communicate and distribute content, manage network and remote operations, protect and secure investments and improve the crew and guest experience. With a passionate customer focus and a strong safety culture, Speedcast serves more than 3,200 customers in over 140 countries.

Contact Speedcast:

4400 S Sam Houston Parkway E, Houston, TX USA 77048

info@speedcast.com

[SPEEDCAST.COM](https://www.speedcast.com)