Case Study: Shipboard Wireless
The Navy's Choice for Secure Wireless

Challenge:

The Navy's Integrated Shipboard Network System (ISNS) needed to accommodate an increased demand for access to network services due to the Navy's growing reliance on network-centric technologies. The first step in this adjustment was to seamlessly integrate the Navy's disparate legacy networks without costly changes to the existing network infrastructure.

SUMMARY

Customer: U.S. Navy

Installation: Secure wireless extension of the unclassified ISNS on USS HOWARD, BOXER, NIMITZ, ESSEX, RONALD REAGAN, MASON, COLE and GEORGE H.W. BUSH.

3eTI Solution

- AirGuard WiMesh Access Point

Key Benefits

- **Increased Efficiency:** Ubiquitous access to shipboard unclassified LAN services
- **Certified Security:** Dynamic key for each user and session, authentication using digital certificates
- **Portable:** 3eTI developed crypto client software that provides secure WLAN for laptop
- **FIPS Validation:** FIPS 140-2 validated, Common Criteria certified
- **Robust Devices:** HERO/ HERP/ HERF/ EMI Shock and Vibe
- **Cost Effective:** Power over-Ethernet (POE) eliminates power line cabling

Solution

The Navy recognized that access to secure shipboard communications was imperative. To add to the requirement, the resulting solution needed to satisfy strict cyber security requirements, reflect Department of Defense and Navy Certification and Accreditation (C&A) and meet stringent shipboard environment requirements including EMI and Shock and Vibration standards.

To meet the Navy's need for cost effective ubiquitous connection to ISNS, 3eTI quickly demonstrated an affordable wireless solution which would also accommodate the Navy's stringent security and Information Assurance (IA) requirements. Using 3eTI's AirGuard WiMesh Access Points, the U.S. Navy has implemented a secure wireless mesh networking solution which leverages the world's first FIPS validation access point, providing secure wireless mesh network, gateway, and bridge/repeated capabilities for wireless applications. Because it is a COTS solution, AirGuard meets the Navy's cost constraints and its rugged naval packaging is an ideal defense against environmental challenges.

The Navy's new wireless mesh networking solution is fully interoperable with the existing ISNS aboard several Navy vessels. It successfully maintains the DoD's encryption and security requirements, preventing unwanted eavesdroppers from intercepting transmitted information.

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