

OTORIO Pen-Testers Help a World-Leading Maritime Company Correct Critical Security Flaws

Case Study

A global maritime company asked OTORIO to conduct a security assessment of one of their cruise ships. They wanted to see their level of protection against cyber attacks.

OTORIO's Role

OTORIO's penetration testing teams come from Israel's elite technological units and are experienced in successfully defending mission-critical, cyberphysical systems. The team employs unique penetration techniques that are non-disruptive and can be carried out with maximum efficiency, with zero impact on daily operations.

OTORIO was tasked with:

- Estimating the security level of the vessel
- Identifying critical risk vulnerabilities
- Mapping attack vectors
- Recommending remediation steps that will address the critical and major findings

In particular, OTORIO was instructed to explore ways to access the ship's engine-room, balance controls, and other mission-critical systems.

Acting Like Hackers

OTORIO pen-testers were not given access to any of the ship's IT or operational networks. Instead, they needed to act like attackers, searching for covert entryways and cracks in the ship's cyber-security.

As testing was restricted to the public facing areas, such as the business centers, bars, casino, restaurants, and an internet café, the team was able to reach only a limited number of machines. Despite this limitation, they were able to gain access to some of the ship's most valuable operational assets in only a few hours. The team was then able to gain access to the master computer, achieve keylogging capabilities on it, and collect hashed credentials of more than ten users - including the administrator of the domain.

Background

The customer runs a number of luxury cruise ships. OTORIO's penetration testing security team spent close to 3 days in a dry dock environment, with a "black-box" approach, to identify security gaps. They had no prior knowledge of the internal network and their goal was to determine if an on-board passenger could potentially gain access to the ship's crown jewels.



