

## CASE STUDY

# Maritime Drilling Operator Enables Remote Rig Access and Management with Fortinet Secure SD-Branch for OT

On maritime drilling rigs, advances in operational technology (OT) are enabling valuable new use cases, including autonomous control, remote monitoring, and digitalization. However, as rigs become increasingly connected, their exposure to cyberattacks is growing. And given the nature of maritime drilling, successful cyberattacks represent significant safety and environmental risks, in addition to the general financial and reputational challenges faced by all companies.

One European maritime drilling operator realized it was time to get ahead of the OT security challenge. It resolved to boost its security posture to protect its network of 22 drilling rigs—its most important business asset. With the overall aim of ensuring the safety of its personnel, the company identified two operational objectives: 1) to secure access to its offshore rigs and 2) enable the effective remote monitoring and management of its rigs' OT systems and protect them against cyberattacks. There was also a significant business driver behind the company's plans. Rigs certified with the Cyber Secure Class Notation from Det Norske Veritas (DNV), an independent expert in assurance and risk management, are contracted out at a higher price. Therefore, the company's enhanced OT posture would help increase revenue.

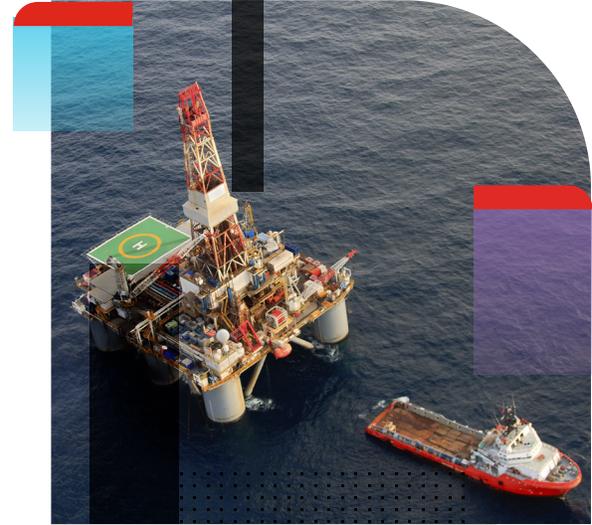
## Testing a New Approach to OT Security

The company launched a request for proposal (RFP) to find a solution to its OT security requirements. Through direct engagement and relationship-building at the executive level, Fortinet was able to demonstrate to the company that it understood its pain points and had a clear plan for addressing them.

Working closely with its partners, NTT and Claroty, Fortinet developed a proof of concept (POC) leveraging OT security components and controls to meet the requirements outlined by the company's network development and security operations center (SOC) team. This process was significantly delayed by the COVID-19 pandemic and associated disruption to the oil market and took two years to complete. However, once complete, Fortinet was awarded the contract based on its ability to exactly meet the customer's requirements.

## Fortinet Secure SD-Branch for Modern OT Security

Leveraging FortiGate Next-Generation Firewalls (NGFWs), FortiSwitch Ethernet switches, FortiManager, and FortiAnalyzer, the rig operator now benefits from a Fortinet Secure SD-Branch protecting the OT systems of its entire rig fleet. Enabling network security, secure access, and secure operations, the solution delivers a modern approach to OT security that enables the customer to digitally transform its rig operations with confidence.



The company benefits from secure remote access to its rigs and complete visibility of all associated OT systems. With logging and indicators of compromise (IOC) fully integrated with the customer's SOC, its internal security team is much better equipped to identify and mitigate threats.

## Details

**Customer:** Maritime Drilling Rig Operator

**Fortinet Partner:** NTT

**Industry:** Oil and Gas

**Location:** Europe

## Business Impact

- Secure remote access, monitoring, and management for offshore rigs
- Enhanced safety for rig personnel

The solution provides a wide range of capabilities to the customer, including centralized network management, log aggregation and analysis, logging and reporting, and management and reporting, in addition to high-performance security and network switching. Delivered through the Fortinet Security Fabric, the solution is seamlessly integrated and leverages a common operating system and user interface across all devices.

In addition, FortiCare Professional Services delivered a custom-made OT security training program, which enables the customer's SOC team to take full responsibility for monitoring the rigs for IOC.

## Highly Secure Remote Management and Monitoring

Today, the company benefits from secure remote access to its rigs and complete visibility of all associated OT systems. With logging and IOC fully integrated with the customer's SOC, its internal security team is much better equipped to identify and mitigate threats.

There are a range of benefits from this modern, highly protective approach to OT security. First, the company can leverage the full benefits of remote management and operations, with employee safety being the most important. Remote operations enable some rig personnel to carry out their work onshore, reducing the requirement for personnel to work in an environment that is potentially hazardous.

Remote access also enables cost efficiencies for the company, as fewer workers need to be transported to offshore facilities. Beyond cost savings, client businesses pay a premium for rigs that are secured from IT and OT perspectives. With its rigs now certified with the Cyber Secure Class Notation from DNV, and compliant with International Electrotechnical Commission (IEC) 62443 standards for securing industrial automation and control systems (IACS), the company stands to benefit from a higher return on its rig investments.

Finally, thanks to the rigorous training from Fortinet's dedicated instructors, the customer's SOC team has acquired new and valuable skills in OT network security management. These skills will help ensure that Fortinet's powerful security and network solutions are fully utilized in protecting remote access to the company's rigs.

## Business Impact (cont.)

- Upskilling of SOC team with OT security training
- Increased value of rigs through security compliance

## Products and Solutions

- FortiGate Next-Generation Firewall
- FortiSwitch
- FortiManager
- FortiAnalyzer

## Service

- FortiCare Professional Services

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