PROTELION
GOVERNMENT SOLUTIONS

Highly Secure Communication for the Port Industry

USE CASE

Digitalization has become common among port authorities and maritime logistics companies. Cyber-attacks occur every day in this sector. Malicious users attempt to steal valuable assets stored in networks, which are crucial for evolving port operations because they provide more efficient communication and management. Ports mandatorily need secure remote access not only to internal databases but also to facilitate communication between ships, main offices, and on-ground transportation systems.

Duties and As-Is Situation for the Port Industry

Ports strive to manage the arrival, docking, unloading, and departure of ships efficiently. To achieve this, port authorities must be permanently informed about the respective whereabouts and status of ships and cargo. Critical goods and valuable cargo are monitored closely, with constant exchange of sensitive ship data and current location information with headquarters. Ships and trucks are constantly in operation all over the world to satisfy market demands and not to interrupt supply chains. To ensure this, an undisturbed global administration process of port authorities, customs, and logistics companies is required.

In a highly competitive global market, sensitive data and information in written or verbal form are constantly being passed from one desk to the next, both internally and externally, often in an insufficiently protected manner.

Project specification

Ports and maritime logistics companies require secure data transmission with minimal delay to protect the ships, cargo, and personnel.

Software updates and security patches on ships, IT infrastructure, and endpoint devices must be possible to be installed at any time remotely and securely.

In case of connection interruptions, changing mobile cells, or changing telecom provider, the secured connection should not have to be re-established each time.

Continuously secure ship monitoring (including GPS location tracking), and telemetry data access via mobile networks need to be established.

Implementation

1. With the always-on functionality of Protelion VPN Technology, it is possible to connect to the ships securely via a mobile data network and satellite at all times.

2. The secure exchange of telemetry data via the protected VPN network by Protelion Security Solutions prevents the intentional modification and manipulation of this sensitive data. As a result, attempted attacks that lead to disruption, incorrect orders, or even destination changes can be prevented.

3. With the implementation of Protelion Security Solutions, it is now possible to ensure protected location tracking even if GPS localization is no longer available, such as when navigating through dense fog or during signal interruptions at sea. The complete tracking and monitoring of the ships increase the transport security of the goods, which is of central importance for maritime logistics companies.

4. Remote working options are supported with Protelion VPN, allowing personnel to manage operations securely from home. This ensures full control and oversight of ships and logistics operations regardless of location.

Protelion Features

Easy Use and Integration

Easy to use and seamless integration of Protelion Security Solutions within existing networks which might use outdated devices in their systems.

Always-On

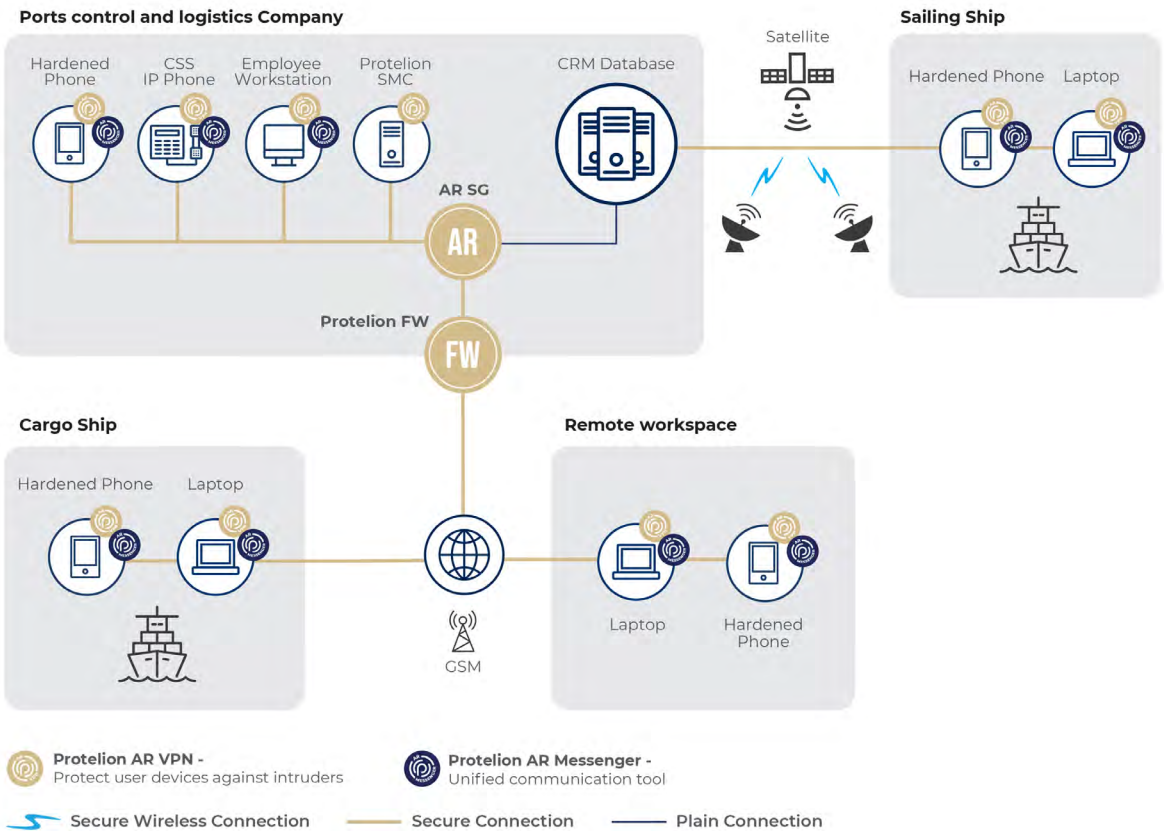
The Protelion VPN Technology design of non-session connectivity provides a secure “always-on” connection that can be maintained even when poor and unstable communication channels are used.

Endpoint Protection

All-in-one solution to secure endpoint devices from cyber threats like unknown malware and internal or external threats, providing stability and availability to port networks.

Operational Security

Protelion VPN Technology enables a trusted and uncompromised response in case of ship malfunction or failure in real-time, paired with permanent ship tracking even when no GPS signal is available.



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