Silverfort

Solving key identity security challenges in oil & gas with Silverfort

The oil and gas sector faces growing cybersecurity threats, with ransomware attacks increasingly targeting operational technology (OT) networks.

Once considered secure due to their air-gapped designs, OT environments are now exposed as IT and OT systems become more interconnected. This convergence, driven by the need for real-time data and centralized control, has expanded the attack surface. Compromised IT systems now serve as entry points into OT networks. The growing use of Active Directory and Single Sign-On (SSO) enables attackers to move laterally using stolen credentials.

To counter these threats, oil and gas organizations must strengthen identity security across IT and OT systems. This is done by ensuring that all access is continuously verified and tightly controlled.

What makes the oil & gas sector a key target for identity threats?

IT/OT Convergence and Third-Party Access

As IT and OT environments converge, OT networks increasingly require access from third-party contractors, creating links to external systems. Routine file transfers between OT and IT further weaken their isolation.

Air-Gapped Networks Exposed to Ransomware

As air-gapped networks become more connected, attackers can exploit these openings to deploy ransomware on critical OT assets such as HMIs, engineering workstations, causing downtime, data loss, and financial damage.

Shifting to Active Directory Single Sign-On

The shift from local authentication to Active Directory SSO has streamlined OT access but also introduced risk. Attackers can use centralized credentials to move laterally and escalate breaches.

How Silverfort solves identity security challenges in the oil & gas sector

Secure Third-Party Access

Silverfort requires no agents on protected devices, enabling MFA on all access attempts including those by external vendors. This ensures only authorized users gain access and significantly reduces the attack surface.

FIDO2 Token Support Prevent Lateral Movement Attacks

By supporting FIDO2 tokens, Silverfort strengthens OT network defenses against lateral movement. Requiring strong authentication for each access attempt limits an attacker's ability to spread ransomware

Seamless AD Integration and SSO Capabilities

Silverfort's integration with Active Directory allows users to benefit from SSO while staying protected against identity threats and streamlining authentication and strengthening security.

Learn more about how Silverfort helps oil & gas organizations solve their key identity security challenges.

Download the full eBook