Security Management Solutions for Oil and Gas

Energy, Resources & Utility

Oil and gas companies are rapidly moving toward process automation, IT-OT integration, and digitization of key processes and assets information. While this improves process efficiencies and enabled seamless operations, it makes data – the most valuable asset of an organization – vulnerable to increasingly sophisticated cyber-attacks. This makes it imperative for oil and gas companies to continuously evaluate existing security and risk management systems and methodologies, and adopt new ones in order to secure themselves from organizational security risks.

TCS' Security Management Solutions for Oil and Gas help minimize organizational risks, effectively manage security operations, achieve regulatory compliance, and proactively protect critical information assets against emerging threats.

Overview

Appropriate security coverage for sites and assets is the most critical requirement for oil and gas companies. The importance of this aspect is compounded owing to the highly inflammable environment in which these companies operate. To establish industry-aligned safety benchmarks with regard to sites and assets, oil and gas companies need to increase the efficiency of their security information and event management (SIEM) systems. It is also imperative for them to minimize asset downtime to ensure business continuity, thereby avoiding production losses and service delays. All this is driving oil and gas companies to adopt modern technologies for process automation and system digitization, which in turn has increased their exposure to cyber-security risks.

TCS' Security Management Solutions help oil and gas companies safeguard their business-critical system from data thefts and cyber-attacks, in turn ensuring productivity optimization and risk mitigation. With TCS' enterprise security solutions, energy majors can achieve a high degree of end-point compliance and increase the efficiency of their SIEM systems to reduce process turnaround times. Our solutions help address critical cyber-security issues such as certificate expiry, high severity risks, and accurate log retrieval.
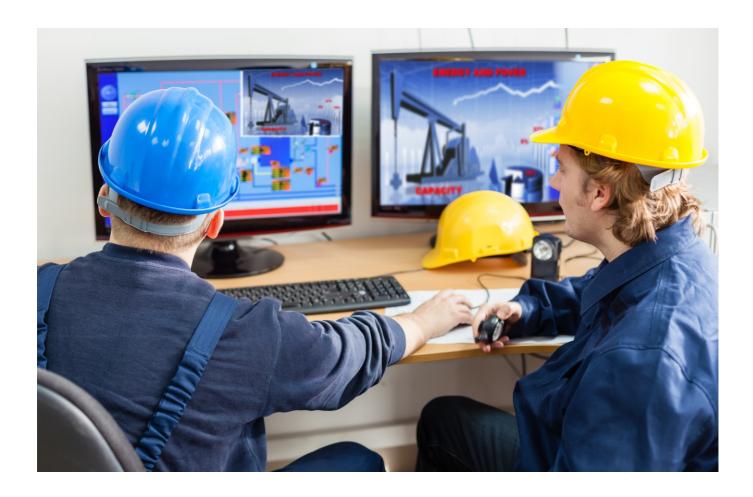
Our Solution

TCS' enterprise security solutions help oil and gas companies resolve a variety of security challenges by enabling:

- Optimization of enterprise antivirus server settings, and modification of update mechanisms to ensure 95% end-point compliance

- Fine-tuning of correlated alerts and disabling of default rules on SIEM tools to reduce CPU, disk, and memory utilization to around 60%

- Proactive monitoring of SSL certificates using schedulers to keep track of expiration to avoid access issues

- Standardization of procedures for cross-analysis of high severity risks in proxy servers

- Risk mitigation by implementation of antivirus and advanced malware protection solutions

- Backup scheduling of SIEM systems to enable accurate log retrieval, and maintenance of dashboards for log sources for efficient tracking

Benefits

TCS' solutions enable oil and gas companies to:

- Improve the security coverage for assets and sites, and ensure high system availability

- Increase the efficiency of SIEM systems to achieve CPU utilization of 40 to 55%

The TCS Advantage

TCS has a proven track record in assisting global oil and gas majors in the area of enterprise security and risk management. Our domain expertise and technology proficiency translate into several advantages, which are:

- Solutions based on our vast industry knowledge and expertise in risk and domain integration

- Comprehensive security infrastructure backed by our extensive intellectual property (IP) in the areas of data protection and digital rights management

- Dedicated Centers of Excellence (CoEs) and long-standing partnerships and alliances with industry-leading product vendors

- Ready access to our vibrant subject matter expert (SME) community that helps resolve issues faster and improve overall business processes

- Reduce the outage time for web servers, thereby ensuring seamless operations

- Deliver better risk responses to adverse events, minimizing the impact on daily operations

- Gain better visibility of historical logs for forensics

- Reduce the manual effort by thousands of person-hours annually

Awards & Recognition

To know more

Visit the **Energy, Resources & Utilities** page on **tcs.com**
Email: **er.marketing@tcs.com**

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

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