



INTEGRATED OIL & GAS SOLUTIONS

INCREASING SAFETY &
OPERATIONAL CONTINUITY

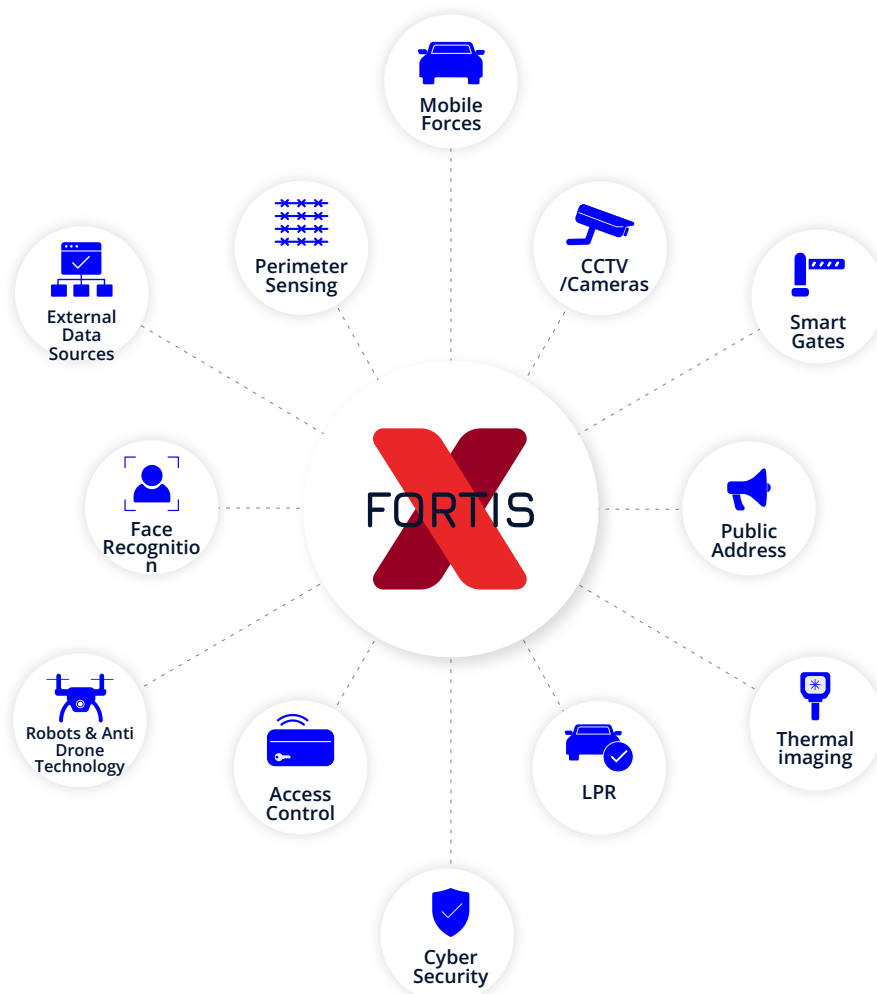


Operational Challenges

The oil and gas (O&G) industry operates in a challenging environment that demands strict security, safety, and operational measures. O&G facilities, including refineries, drilling platforms, storage depots, and pipelines, face inherent risks such as hazardous materials, high pressures, and potential environmental impacts. Ensuring the safety of personnel, protecting the environment, and preventing accidents are paramount concerns in the industry. Addressing these challenges requires comprehensive security, safety, and operational management solutions.

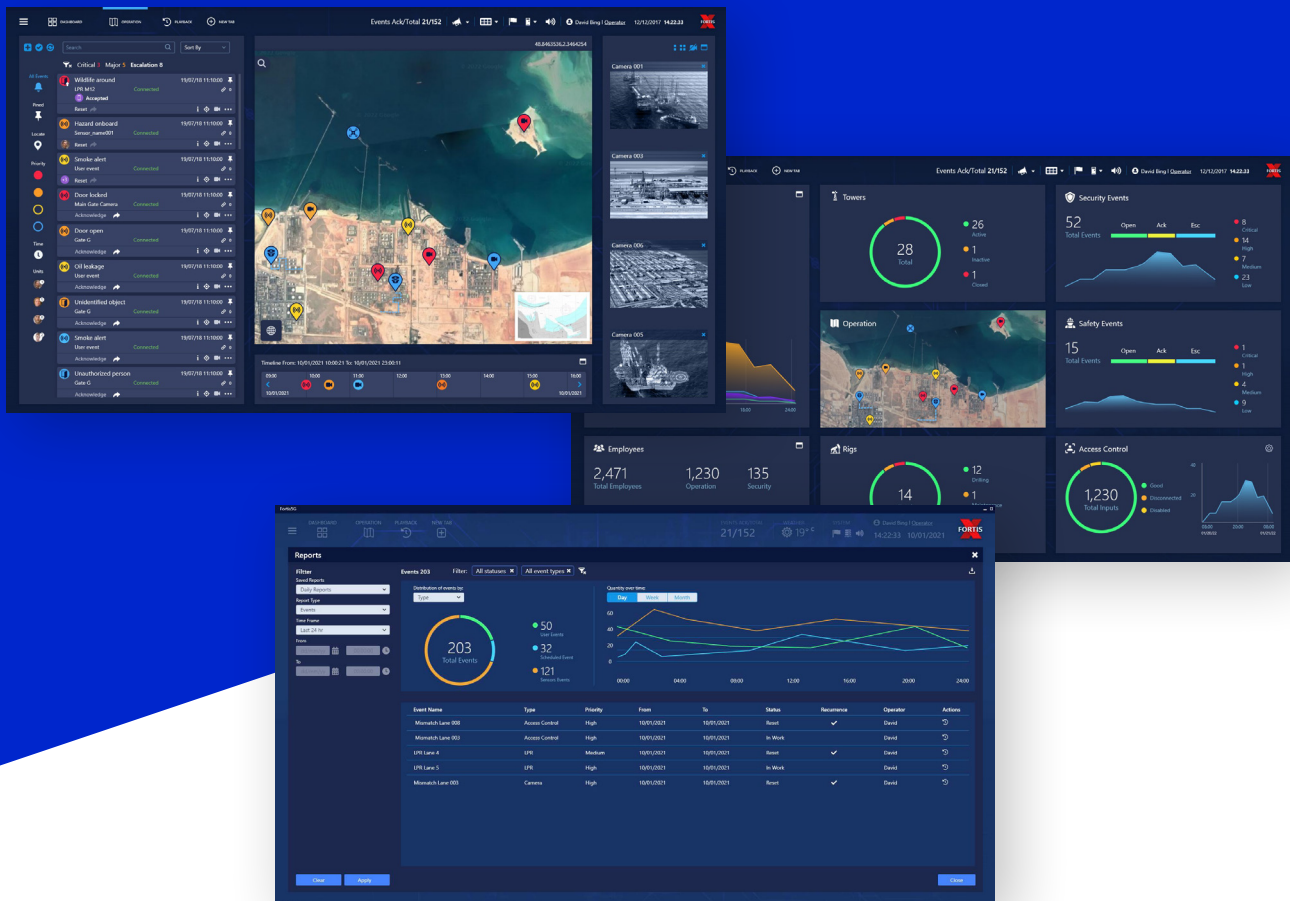
Solution Description

Magal's robust O&G solution integrates all security and safety subsystems, as well as operational systems, into one centralized platform. Consolidating all systems empowers O&G operators with enhanced situational awareness, enabling real-time monitoring and swift response to potential threats or incidents. The integration of operational systems also facilitates optimized workflows, resource allocation, and maintenance planning, further enhancing overall efficiency. By leveraging the Fortis-X C5I platform, Magal's integrated solutions enable resilient and successful operation, allowing O&G operators to proactively mitigate risks, minimize downtime, and ensure operational continuity.



Technical Capabilities:

1. **Safety analytics:** Provides advanced safety analytics capabilities, including Personal Protective Equipment (PPE) monitoring, fire and smoke detection, and leak detection, ensuring the well-being of personnel and early detection of potential hazards.
2. **Fast decision-making:** Enables fast decision-making through the fusion of information from all sub-systems, allowing operators to respond swiftly to security incidents, safety hazards and potential environmental threats, while minimizing response time and enhancing overall efficiency.
3. **Strong GIS engine:** Employs a robust Geographic Information System (GIS) engine, providing operators with a visual representation of the facility layout, enabling effective monitoring, incident response, and resource allocation.
4. **Pipeline monitoring and integrity:** Offers comprehensive pipeline monitoring and integrity solutions, ensuring the safety and integrity of the pipeline infrastructure, including leak detection and preventive maintenance capabilities.
5. **Integration with operational and process SCADA systems:** Seamlessly integrates with operational and process SCADA systems, allowing operators to receive crucial information about operational parameters, optimizing workflows, and facilitating efficient resource allocation.
6. **Intelligent video analytics:** Utilizes intelligent video analytics to enhance gate management reduce the entrance and exit queues, improving overall operational efficiency and minimizing delays.
7. **Special solutions for hazardous areas:** Provides specialized solutions tailored for hazardous areas, such as explosion-proof equipment and advanced safety measures, ensuring compliance with stringent safety requirements.



Solution Benefits



Operational continuity: By leveraging the benefits of the integrated system, O&G operators can enhance the overall resilience of their operations, minimizing downtime and maximizing productivity, to enhance operational efficiency and reduce costs.

- Analyzed performance KPIs & reports
- Fused real-time and historical data to provide actionable insights and predictive metrics
- Optimized workflows and Resource allocation
- Maintenance planning, minimized interruption & downtime
- Reduced operational expenses



Enhanced safe and sustainable operations: Streamlined management and a comprehensive view all operational aspects and protocols provides operators with real-time situational awareness and enables informed decision-making.

- Efficient emergency management, PPE and fall detection, anti-theft and anti-violence
- Simplified safety protocols
- Compliance with regulatory guidelines and protocols
- HSE Integrated Modules
- Automated evacuation procedures and mustering
- Ongoing monitoring of air quality and emission, wastewater and sanitation, fresh water supply and recycle, and energy efficiency.



Improved Site & perimeter security: The integrated system enables early detection of threats and incidents, facilitating prompt response and ensuring the safety and security of personnel and assets.

- Proactive risk mitigation
- Minimal response time to alerts and violations
- Efficient incidents response and investigations

Magal's Fortis-X command and control system offers a comprehensive solution by integrating all subsystems into a centralized platform. This integrated approach empowers operators with enhanced situational awareness, streamlined management capabilities, and optimized workflows. By adopting Magal's solution, O&G operators can mitigate risks, safeguard their assets, and enhance the overall resilience of their operations.