

# Kaspersky IoT Secure Gateway



Cyber Immune gateways for connecting  
**PETROCHEMICAL EQUIPMENT**  
to clouds and business systems

## Scenario N°1

Gateway as a **software data diode** with  
functionality of industrial protocols  
converting (one-way data transmission)



- **Safe and secure transport** of previously unavailable data for business
- **Trusted data received from the gateway** help to build digital analytics and equipment operation forecasting services
- **Operation monitoring** of drilling rigs, pump plant to optimize weight and foresee equipment breakdowns
- **Equipment monitoring** of the accumulation well clusters and oil storage infrastructure
- **Connection and monitoring** of equipment on remote technological sites, of energy-supply for oil exploration, production and transferring
- **Collection and transmission** of parameters to digitalize an oil terminal

## Scenario №2

# Gateway as a firewall with data routing functionality (two-way data transmission)



- Sending security events via the Syslog protocol
- Safe and secure two-way data transport of previously unavailable data for business
- Signature-based intrusion and anomaly detection to provide protection from external threats
- Cyberprotection of industrial equipment, DCS, APCS and SCADA systems from cyberattacks when connected to IT-systems and during data collection
- Data collection and transmission (CME) received from pumps and well cluster/oil field equipment, to optimize energy consumption and foresee equipment breakdowns, data transmission to demilitarized zone

### Additional notes:

- Creation of ecosystem using Kaspersky Lab products such as KISG+KUMA+KSRW+KICS+KSC to provide an end-to-end protection of a production line
- Centralized management of Kaspersky Lab products via Kaspersky Security Center
- Protection and comprehensive data collection from processing equipment to create a digital twin of a technological process and an optimal control of a system
- Local storage of collected data (buffering), emergency data buffer
- Secure data collection and transmission from industrial equipment to DCS