Cybersecurity of industrial networks

at the Atyrau oil refinery



Founded in

1943



The only producer of petrochemical products in the Republic of Kazakhstan

5.5 million tons

Refinery capacity

629,000 tons

Petrochemical products produced

The Atyrau oil refinery

One of the largest oil refineries not only in the Republic of Kazakhstan, but also in the world, it can process about 16 million tons of oil per year and has a refining depth of up to 86.4%.

The refinery produces:



Gasoline and diesel fuel



Bitumen, sulfur, fuel oil



Aviation fuel



Other petroleum products



Long-term partnership

The Atyrau oil refinery is owned by the JSC National Company KazMunayGas (99%). The Kazakh national oil company and Kaspersky have collaborated on multiple successful projects over the years.

High-priority information security

Modern production processes at the Atyrau oil refinery rely heavily on the use of information technology and industrial control systems (ICS).

With the rising number of cyberthreats, the increasing complexity of cyberattacks on industrial infrastructure facilities, and public cases of production process disruption due to complex cyber incidents, information security has become a top priority for the Atyrau refinery.



Protection for industrial enterprises

The number of attacks on industrial systems, in particular on ICS and SCADA, continues to grow. 41.74% of ICS computers in Kazakhstan were attacked by malware in 2022 (according to Kaspersky ICS CERT). Meanwhile, traditional solutions are unable to protect industrial environments from the latest cyberthreats. That's why it's now more important than ever to choose a reliable partner who has the relevant expertise and can provide specialized solutions.

To ensure the safety of technological processes, Kaspersky recommended the industrial XDR platform Kaspersky Industrial CyberSecurity (KICS), which consists of two interconnected elements: Kaspersky Industrial CyberSecurity for Nodes, designed to protect industrial operator panels, workstations and servers; and Kaspersky Industrial CyberSecurity for Networks, which monitors the security of industrial networks. With these two solutions it is possible to implement basic XDR scenarios, thanks to native integration. KICS for Nodes forwards endpoint telemetry to KICS for Networks, enriching node inventory and security event data.

41.74%

of ICS computers in Kazakhstan were attacked by malware in 2022 (according to Kaspersky ICS CERT).

Advantages

- Supports more than 50 industrial protocols and their analysis at the application level
- KICS for Networks fully complies with the requirements of the regulatory standard — ST RK ISO/IEC 15408-3-2017 — EAL5
- Available certificates of compatibility with ICS solutions
- KICS for Networks and KICS for Nodes together form an integrated industrial XDR platform

Deploying the solution

After carefully studying a number of information security solutions on the market, the Atyrau oil refinery, owned by the large KazMunayGas holding, chose the Kaspersky Industrial CyberSecurity (KICS) XDR platform. The decision was based on such important criteria as good reputation, technical capabilities of the solution, and alignment with the company's strategic goals for reliable protection of its information assets.

The process of deploying the Kaspersky solution for securing the industrial segment was successfully adapted to the particularities of the Atyrau oil refinery's infrastructure, including configuring rules and security policies, and training the company's specialists to use the new solution. The deployment was carried out in close cooperation with Kaspersky experts, so emerging issues could be swiftly resolved with minimal impact on the company's ongoing business activities.

Results and feedback

As a result of deploying Kaspersky Industrial CyberSecurity, information security at the Atyrau oil refinery has been greatly strengthened. The solutions provided rapid detection of and response to potential threats, and improved monitoring and analytics of the company's cybersecurity and production processes. Now the company receives data and analytics on the cybersecurity state of its technological processes.



We chose Kaspersky solutions, in particular Kaspersky Industrial CyberSecurity, because they offer us reliable industrial network protection. We value a comprehensive approach to cyber defense and are confident in the efficiency of Kaspersky solutions, which will help us to ensure the security of our production processes and protect our systems from cyberthreats — a high priority for our refinery.

Vladislav Ten

IT Department Head Specialist, Atyrau oil refinery



We are very happy to cooperate with the Atyrau oil refinery and provide them with our solutions for protecting industrial infrastructure. The Kaspersky Industrial CyberSecurity XDR platform is designed specifically for the needs of industrial enterprises and offers an integrated approach, providing reliable protection against the latest cyberthreats. We value the Atyrau refinery's trust in our solutions and are pleased to work with them in ensuring the security and reliability of their production process.

Valery Zubanov

Managing Director for Kazakhstan, Central Asia and Mongolia, Kaspersky



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