Grid Company

Kaspersky protects Grid Company Group's industrial infrastructure

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BRING ON
THE FUTURE

Kaspersky
Industrial
CyberSecurity

Grid Company Group's mission is to provide a reliable, high-quality and affordable power supply to consumers, help facilitate the efficient operation of enterprises and companies, and ensure comfortable and safe living conditions for all to drive the dynamic social and economic development of the Republic of Tatarstan.

"Grid Company Group implements a number of effective organizational and technical measures to ensure an acceptable level of cybersecurity at its facilities in order to avoid the disruption or termination of critical processes. In this regard, we contacted the experts from Kaspersky to assist in improving the enterprise's protection from cyberthreats."

Sergey Zykov, Head of Cybersecurity, Grid Company Group

Grid Company Group is one of the 10 largest power grid companies in Russia. The company is a leader in terms of the total length of operated overhead and cable lines, as well as the number of substations, transformer substations and distribution points.

Today, branches of Grid Company Group operate 381 35–500 kV substations with an installed capacity of 18871.3 MVA, with 755 power transformers (autotransformers) in operation at 35-500 kV substations. The total length of 35-500 kV overhead lines is 10,444.8 km, as well as 129.4 km of 35-220 kV cable lines. Branches of Grid Company Group operate 23,670.3 km of 6(10) kV overhead lines, 26,973.1 km of 0.38 kV overhead lines, 20,063 6(10) kV transformer substations and distribution points, 5,319.1 km of 6(10) kV cable lines, and 4,999 km of 0.38 kV cable lines.

In addition, Grid Company Group is the only territorial grid company in Russia that owns power grid facilities with voltage levels from 0.4 kV to 500 kV.

As part of its mission, Grid Company Group focuses on the provision of a reliable, high-quality and affordable power supply. The company makes it possible for enterprises and companies to operate efficiently, and ensures comfortable and safe living conditions for all to help drive the dynamic social and economic development of the Republic of Tatarstan.

The technical policy of Grid Company Group is determined by the need to maintain a reliable power supply to consumers with high-quality electricity, reduce operating costs and meet the electrical and connectivity demands of consumers. The company implements modern technologies and equipment to ensure the maximum efficiency and reliability of existing assets.

Challenge

As one of the largest power grid companies in the Russian power industry managing a strategically important sector of the Republic of Tatarstan, Grid Company Group understands the importance of securing its critical information infrastructure (CII) facilities.

In this regard, the company set the task of designing and implementing security subsystems to neutralize threats as part of the project to reconstruct the software and hardware complex of the automated operation control system of the network control center and telemechanic systems to ensure the stable functioning of the system during cyberattacks.

Low impact on protected devices
Kaspersky Industrial CyberSecurity does not affect the continuity of industrial processes, and minimizes the consumption of computing resources.

High compatibility
The solution is compatible with software and hardware components of industrial automation systems, including SCADA, PLC and DCS.

Environment control
Kaspersky Industrial CyberSecurity enforces the application launch policy and access to removable devices, and also passively monitors ICS network traffic.

Solution

The following were determined as the main criteria when choosing industrial cybersecurity tools:

- the quality and completeness of security function implementation

- inclusion in the register of domestic software

- current certificates of local regulation compatibility

- successful tests for compatibility with equipment and software included in the designed systems

- convenience and ease of use, integration capabilities with related components of the cybersecurity subsystem.

Based on a comparative analysis of cybersecurity tools available on the market, as well as a pilot implementation program at one of the company's existing facilities, the following products of the Kaspersky Industrial CyberSecurity (KICS) portfolio were chosen for use in the security subsystems:

- KICS for Nodes – to protect engineering workstations, operator stations and SCADA servers. This solution enables whitelisting, file integrity monitoring, peripheral devices control, malware detection and blocking.

- KICS for Networks – a solution designed for passive inventory of devices and network communications in an industrial network, as well as passive monitoring of attacks and anomalies in industrial network traffic, including inspection of industrial protocols (DPI) to control commands and technological parameters of operations.

"Thanks to Kaspersky products, we've been able to resolve the issues we were facing when implementing the project. The experience we've gained will help us in the future to expand these solutions to other areas of the company."

Timur Kurbangaliev, Deputy Director General of Information Technologies, Grid Company Group

"The project required traffic monitoring of specific protocols from a huge number of technological devices, which was made easy thanks to the product's 'training' mode, allowing for the significantly accelerated creation of a diagram of information flows in the system," shares Dmitry Pavlyukevich, Deputy Head of Cybersecurity, Grid Company Group.

Results

Thanks to the project's implementation, more than 150 servers and workstations of the Grid Company Group's process loop are now protected using KICS for Nodes, and monitoring of key segments of the technological network is ensured by 10 KICS for Network servers.

This comprehensive approach to protect critical infrastructure has significantly reduced the risk of disruptions to critical processes, and has also ensured a high level of cybersecurity at Grid Company Group facilities.

Kaspersky Industrial CyberSecurity

Kaspersky Industrial CyberSecurity is a portfolio of technologies and services designed to secure operational technology layers and elements of your organization - including SCADA servers, HMIs, engineering workstations, PLCs, network connections and even engineers - without impacting on operational continuity and the consistency of industrial process.

Learn more at www.kaspersky.com/ics

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Frost and Sullivan recognizes Kaspersky with the 2020 Global Company of the Year Award

Kaspersky is recognized as the 2020 Winner of VDC Research's Platinum Award for Industrial IoT Vendors in the Industrial Cybersecurity category.