In the era of digitalization, more and more information technology is being used in industrial automation. Likewise, a high degree of connectivity is required for Industry 4.0. The key phrase here is the "Internet of Things". This greater degree of networking leads to much higher numbers of cyber attacks, which are also becoming more targeted and complex, on offices and industrial plants. Cyber crime is widespread and costs the global economy 400 billion US dollars each year. Cyber attacks affect companies of all sizes and in all markets. However, high cost pressure and production availability are barriers to the implementation of appropriate protection mechanisms. Prioritized and balanced security investment is required for this. Another difficulty is that, due to the huge increase in cyber threats, there is a lack of adequately qualified personnel to identify the security vulnerabilities, implement protective measures and react to attacks.

The challenge

In the era of digitalization, more and more information technology is being used in industrial automation. Likewise, a high degree of connectivity is required for Industry 4.0. The key phrase here is the "Internet of Things". This greater degree of networking leads to much higher numbers of cyber attacks, which are also becoming more targeted and complex, on offices and industrial plants. Cyber crime is widespread and costs the global economy 400 billion US dollars each year. Cyber attacks affect companies of all sizes and in all markets. However, high cost pressure and production availability are barriers to the implementation of appropriate protection mechanisms. Prioritized and balanced security investment is required for this. Another difficulty is that, due to the huge increase in cyber threats, there is a lack of adequately qualified personnel to identify the security vulnerabilities, implement protective measures and react to attacks.

The solution

With the holistic security concept "Defense in Depth" from Siemens, you protect your plant from security risks. You are supported in this by the Siemens Industrial Security Services. With "Defense in Depth", Siemens provides a multi-level concept that gives your plant both all-round and in-depth protection. The concept is based on plant security, network security and system integrity as recommended by ISA 99 / IEC 62443.

Plant security is achieved through physical access protection, implementation of processes and guidelines on Industrial Security, and comprehensive security monitoring. For network security, the individual plant sections are divided into cells and connected through firewalls and VPNs. System integrity is guaranteed by system hardening, patch management and methods for detecting attacks. The Siemens Industrial Security Services experts support you in this context with a holistic approach – from analysis of the threats and vulnerabilities according to IEC 62443 and ISO 27001 (Consulting), through execution of the protective measures derived in this way (Implementation), all the way to managed services for comprehensive and continuous protection against cyber threats (Optimization).

Benefits of Industrial Security from Siemens

- Assured plant availability
- Highly sophisticated malware detection
- Secure remote access
- Real-time communication according to cell protection concept
- Security support over the entire life cycle
- Transparency in relation to assets used
Protection of confidential data and information, as well as intellectual property.

Reduced risk of production downtimes and plant damage through proactive defense based on global threat analyses.

Continuous protection over the entire operating life cycle of your plants.

Calculable and transparent planning Benefit from Siemens’ competence and know-how and ensure optimum use of your cyber security budget.

Transparency with respect to data traffic in industrial networks and early detection of anomalies and cyber threats.

In accordance with the requirements of standards, regulations and laws on the protection of critical infrastructures.

**Available service portfolio**

<table>
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<tr>
<th>Portfolio</th>
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<tr>
<td>Security Consulting</td>
<td>Security assessments, scanning services, Industrial Security consulting</td>
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<tr>
<td>Security Implementation</td>
<td>Security awareness training, automation firewall, endpoint protection</td>
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<tr>
<td>Security Optimization</td>
<td>Industrial anomaly detection, Industrial Security monitoring, remote incident handling, industrial vulnerability manager, patch management, SIMATIC security service packages</td>
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