Business Brief

Schneider Electric's Critical Infrastructure and Security Practice (CISP) is a global leader in cyber security services, providing comprehensive security solutions.

Benefits

Our clients have requirements larger in scope than secure products alone can provide. We have a comprehensive solution portfolio that includes:

- Products designed with security
- Compliance with industry standards
- Cyber security experts and delivery/ support personnel
- Enhanced solutions to meet client cyber security program needs

Our cyber security solutions will meet the challenging industrial landscape. We are the largest and most experienced ICS cyber security practice in the industry.

Advantages

- Platform Independent: CISP's security solution portfolio will work on ANY control system platform.
- Network Agnostic: CISP's security solution portfolio can be deployed on any network topology or technology, independent of network lifecycle, due to the lifecycle methodology of the solution portfolio.
- Industry Relevant: CISP's portfolio is applicable to any industrial manufacturing industry, whether the focus is on cyber security compliance or network systems optimization.
- Solution Ecosystem: CISP is greater than the sum of its parts: cyber security consulting, network compliance, regulatory experts, auditors, network systems design, and implementation.

Smart Grids

The smart grid holds much promise, with the basic concept being the addition of monitoring, analysis, control, and communication capabilities to the national electricity delivery system in order to maximize the output of the system while reducing energy consumption. The smart grid will also allow homeowners and businesses to use electricity as efficiently and economically as possible. Smart grid technologies can help to further improve the reliability, security, and efficiency of the electrical grid. Intelligent devices can automatically adjust to changing conditions to prevent blackouts and increase capacity.[1]

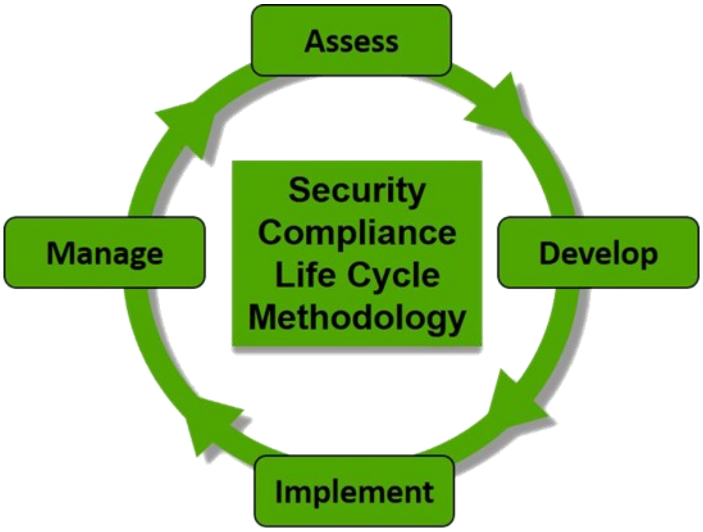
The smart grid integrates the traditional power grid with information and communication technologies. Therefore, the smart grid itself is evolving into a huge and complex network comprised of millions of devices and endpoints. With such an expansive network comes a number of security concerns:[2]

1. **Customer security**. Smart meters autonomously collect massive amounts of data (including private consumer data) and transport it to the utility company, consumer, and service providers.
2. **Greater number of intelligent devices**. These devices are involved in managing electricity supply and network demand and may act as attack entry points into the network.
3. **Physical security**. Unlike the traditional power system, the smart grid includes many components, most of which are out of the utility's premises. This fact increases the number of insecure physical locations and makes them vulnerable to physical access.

Fortunately, there are already many existing and evolving cyber security regulations in place that address the present power generation side of the smart grid, yet can be adopted to other aspects of the smart grid. However, many of these regulations are not prescriptive, leaving the individual operators with the daunting task of developing and implementing a cyber security program on their own. In most cases, this results in a reliance on singular hardware and software point solutions such as firewalls and anti-virus software—leaving them with a false sense of security. After all, who is going to install, configure, maintain and patch these items? As with any project undertaking such as cyber security, the first step is to identify the risks to help define the needs that will ultimately identify the compliance requirements, providing the operators the key actionable items in the plan to move to the next step to identify their unique technical requirements and specifications. Simple point solutions are ultimately a "one size fits all" approach, when in fact every facility and plant owned by a single company is unique, requiring a plantwide comprehensive cyber security solution that is flexible enough to address any individual facility's needs.

Many companies may already be at some point in the development of a cyber security program or just embarking on the process. To facilitate these needs, the Schneider Electric cyber security consulting team has developed their portfolio of cyber security solutions using their Security Compliance Lifecycle Methodology. This approach permits the cyber security consulting team to engage with a client at any point in their own program's lifecycle. If the project is brand new, cyber security consulting team would start with the Assessment stage. If it is mature and already in place, cyber security consulting team can engage at the Management stage or any point between.

The security compliance life cycle approach consists of these four tenets:



Assessment
The cyber security consulting team reviews the current network, identifies any problems or issues, and suggests areas for improvement.

Development
Using an assessment or plan as a guideline, the cyber security consulting team identifies what needs to be implemented and develops the detailed designs required to make it happen.

Implementation and Modernization
The cyber security consulting team takes the network design and turns it into reality through the procurement, staging, and commissioning of the client's new system or system upgrades.

Management and Optimization
The cyber security consulting team manages the network closely, providing a mechanism to improve and optimize the continuously changing landscape of network usage.

The Schneider Electric cyber security consulting team is a global consulting organization that provides comprehensive cyber security compliance and solutions regardless of industry. The cyber security team's solutions are system- and plant-agnostic and are adaptable to any industry and region.

[1] https://www.nema.org/Policy/Energy/Smartgrid/pages/default.aspx
[2] http://smartgridawareness.org/privacy-and-data-security/smart-grid-vulnerabilities-a-more-detailed-review/smart-grid-security-threats-vulnerabilities-and-solutions/

To learn more about Invensys' Critical Infrastructure and Security Practice (CISP) solutions, contact your sales representative or visit: http://iom.invensys.com/CyberSecurity

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