

Industrial Control System Security Services

Cyber Security



As enterprises look to harness the digital advantage, they are increasingly adopting industrial internet of things (IIoT) devices within their operational technology (OT) environments, thereby requiring greater connectivity and data sharing. Studies show there is an increased business requirement to connect the corporate and OT or the industrial control systems (ICS) networks to improve process efficiencies and gain better insights into operations.

However, this leads to an increase in the attack surface, and introduces newer attack vectors, unless such connectivity is securely configured and monitored. Hence, the need of the hour is to design and deploy a strong defense-in-depth security architecture that can prevent, detect and respond to attacks on the ICS environment.

TCS Industrial Control System Security Services includes several features that have been specifically designed to reduce operations downtime by reducing the risk of disruption due to cyberattacks and prevent revenue loss.

Overview

Cyber threats are forcing organizations to take a long and hard look at how they protect the ICS. The increase in the number of cyber incidents on ICS networks is a reality that enterprises can no longer ignore. Yet, ICS networks pose unique challenges for cyber security professionals, primarily because they are not like the traditional IT networks. To protect them, it is important to understand how they operate, the different technologies they employ, and their discrete functions.

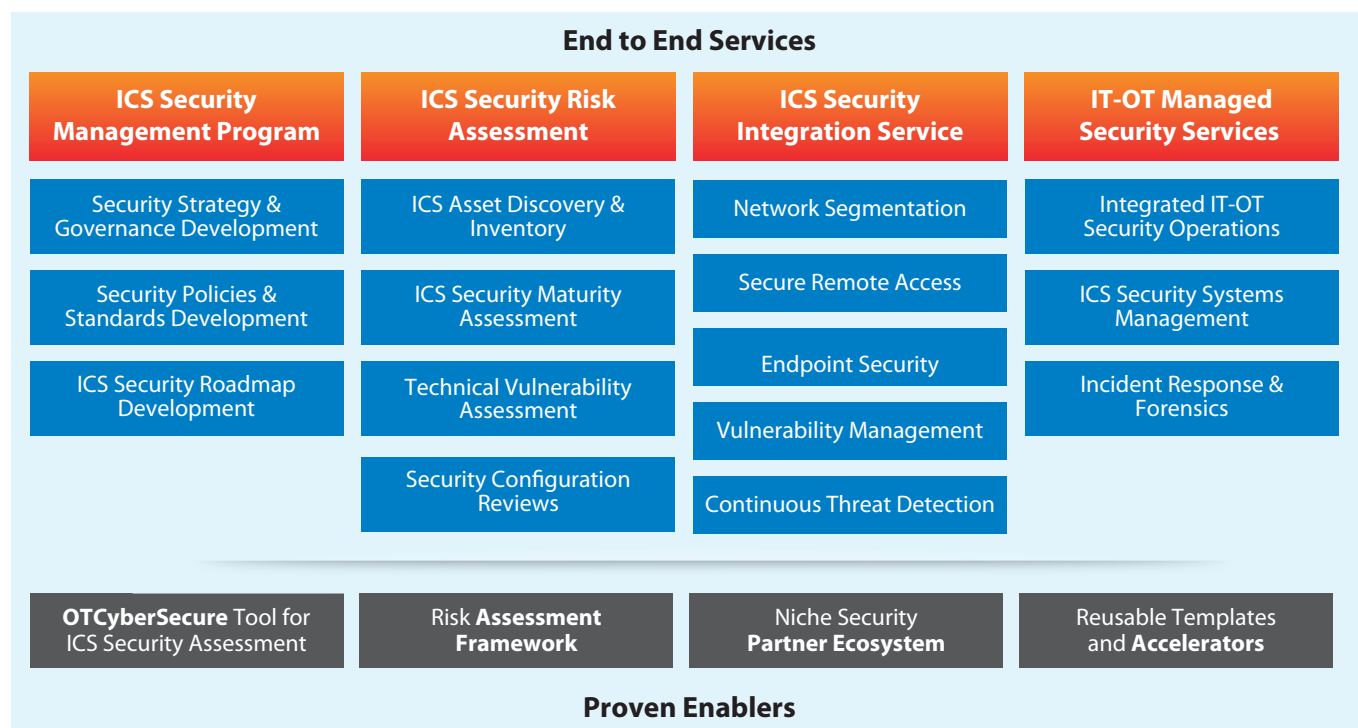
The limited system and network resource availability leads to a situation where some of the traditional IT security controls cannot be easily deployed, while the lack of test / non-prod environments makes it difficult to test security controls or changes to configurations before deployment, which can potentially cause a negative business impact in case of an adverse effect.

TCS Industrial Control System Security Service combines several services such as ICS Security Risk Assessment, IT-OT Managed Security Services, ICS Security Management Program, and ICS Security Integration Services that provides continuous visibility into vulnerabilities and threats to the ICS environment, lowers the total cost of ownership (TCO) for ongoing ICS security management, and reduces the risk of disruption due to cyber-attacks.

Solution

A one-stop solution that covers all aspects of security governance, security risk assessment, security control design, and ongoing security operations and management for ICS environments, TCS Industrial Control System Security Services includes:

- **ICS Security Management Program:** Designed to develop, implement and maintain security policies, processes, and standards for ICS security, the program addresses applicable requirements of industry standards and guidelines
- **ICS Security Risk Assessment:** Allows comprehensive assessment and analysis of security threats, vulnerabilities, and their impacts on ICS
- **ICS Security Integration Services:** Leverages industry-leading ICS security solutions from global partners to design and implement a defense-in-depth approach to protect ICS – across network security, anomaly and breach detection, vulnerability management
- **IT-OT Managed Security Services:** Includes turnkey, centralized security operations for security monitoring, administration, and incident management to provide a holistic approach to managing the security of ICS



An overview of TCS' Industrial Control System Security Service

Benefits

A combination of advisory, system integration, and managed services in the ICS security domain, TCS Industrial Control System Security Services can help various industries reap the following benefits:

Reduced Risks of Disruptions

- Reduces operations downtime due to cyber attacks
- Improves the resilience of industrial systems and networks against cyber attacks

Protection Against Revenue Loss

- Ensures that there are no cyber-attacks on operations, thus reducing the chance of revenue loss
- Lowers the TCO for ongoing ICS security management and operations

Standardized ICS Security Solutions

- Provides comprehensive insights into the management of security risks across an enterprise
- Allows continuous monitoring of vulnerabilities and threats to the ICS environment

The TCS Advantage

Combining client-first philosophy with years of technological experience, TCS constantly strives to design and deliver industry-leading solutions to help enterprises stay ahead of the curve. By partnering with us, enterprises across all industries can leverage:

- **Recognized Industry Footprint:** TCS has decades of experience in cyber security, with a global reputation and recognition. We have received praise for our out-of-the-box solutions and served as the turnkey partner providing services right from strategic consulting to execution to sustenance.
- **Contextual Knowledge and Expertise Across core Domains:** TCS has two decades of experience in cyber security, operational technology, and the IT infrastructure services domain. TCS is also familiar with the engineering (ICS/OT) processes across industries. Armed with in-depth knowledge of client business, our domain knowledge, and proficiency in handling specific business scenarios are a bonus for enterprises seeking to gain a competitive edge in the Industry 4.0 age.
- **Strategic Partnerships and Alliances:** TCS has forged strong partnerships with leading industry players to deliver best-in-class solutions to its customers. Our collaboration with leading cyber ICS security solution providers such as CyberX (acquired by Microsoft), Tenable, Nozomi Networks, Palo Alto, Cisco, Symantec and Trend Micro, helps us deliver nothing short of the best to our clients.

Awards & Recognition



To know more

Visit the [cyber-security](#) page on [tcs.com](#)

Email: cyber.security@tcs.com

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that has been partnering with many of the world's largest businesses in their transformation journeys for over 50 years. TCS offers a consulting-led, cognitive powered, integrated portfolio of business, technology and engineering services and solutions. This is delivered through its unique Location Independent Agile™ delivery model, recognized as a benchmark of excellence in software development.

A part of the Tata group, India's largest multinational business group, TCS has over 453,000 of the world's best-trained consultants in 46 countries. The company generated consolidated revenues of US \$22 billion in the fiscal year ended March 31, 2020, and is listed on the BSE (formerly Bombay Stock Exchange) and the NSE (National Stock Exchange) in India. TCS' proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the Dow Jones Sustainability Index (DJSI), MSCI Global Sustainability Index and the FTSE4Good Emerging Index.

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