

Cyber Security for Industrial Control Systems (ICS)



Capula has been at the forefront of implementing 'secure by design' solutions for decades. Security is an integral component of our systems and is taken into account in every phase of our operations from design and development to maintenance and support. Our four step approach to cyber security protection offers complete digital resilience as it helps to mitigate the risk and potential threat of a cyber-attack by addressing vulnerabilities before they have a major business impact.

Complementing your existing compliance programmes, our experts are trained to implement a comprehensive four step approach to security comprising, Review, Assess, Identify and Defend. This approach will help you understand if the management of your people, processes and technology, in fact your complete organisational landscape, is operating at optimum effectiveness.

As independent specialists, we have developed strong working partnerships with the UK's leading security organisations and this enables us to deploy the most sophisticated and proven security assessment tools on the market. Combined with our advanced domain knowledge and expertise, we are equipped to provide you with a greater understanding about the level of maturity of your most critical assets.

The output of our cyber security service is a high level action plan with defined metrics to enable you to work towards the desired maturity control level. This forms the basis for discussion with your key business stakeholders as it helps them understand the maturity level of your systems to plan for the future at a pace that helps them keep ahead of potential cyber threats. By investing in Capula technologies and care agreements, you can be sure that the reliability and security of your systems is given the highest priority.

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“Our depth of knowledge, embodied in our highly skilled, experienced and committed team, truly sets us apart. Our engineers have achieved the highest levels of certification; the Global Industrial Cyber Security Professional (GICSP) and Certified Information System Security Professional (CISSP).”

Lee Carter, Principal Cyber Security Engineer at Capula



Four step approach to cyber security

Managing security is not a one off exercise, it is an ongoing process that is part of a wider risk management approach. It is important to monitor the business risk on an ongoing basis as this can change over time due to further identification of vulnerabilities and changes to the threat. We recommend our services are implemented at regular intervals to safeguard your most critical assets.

Stage 1: Review

Firstly, a review will establish which system or systems, defined as 'defensible units', are to be included in the assessment. This can vary from a complete control system to a single device or asset. To help define the level of asset maturity acceptable to the business, the review will also help to clarify the key business stakeholders as well as the business risk appetite.

An initial self-assessment will be carried out to help assessors clearly understand the business' perception of the current level of security for their systems and the threat landscape.

Stage 2: Assess

Utilising proven assessment tools, our audit identifies the maturity level for individual or combined elements - 'defensible units' within the business, based on pre-defined controls across a wide range of security standards.

A full business impact assessment will be generated to help you understand what information is obtained, processed, stored, passed to third parties and ultimately disposed of by the business. It will provide clarity on the effectiveness of existing cyber defences against implied threats and vulnerabilities across the key business areas; people, process and technology.

Stage 3: Identify

The output of the impact assessment identifies the potential security risks and vulnerabilities against the assessed controls. It will identify potential impacts and consequences to the ICS should a threat be realised. Recommendations will be made on how to address gaps in the cyber defences, together with evidence based action plans, ideas and solutions to mitigate business and operational risk.

These recommendations are used to measure improvements or changes in vulnerability and for benchmarking and comparison purposes across departments, systems or the supply chain.

Stage 4: Defend

One of the key challenges in addressing cyber risk is being able to articulate the problem as a business issue rather than a technical



challenge. A managerial-led 'top-down' approach to cyber security is recommended by the National Cyber Security Alliance, and this is an area where our cyber security services add further value. Stage four of the process will equip an organisation's decision-makers, as well as its technical experts, with the right information needed to participate in business planning and to make informed decisions about the appropriate levels of security protection required. It will help the organisation proactively plan security investments and will equip them with fully costed solutions.

Key facts

In summary, there are many benefits to this service, in particular the speed at which it can be implemented. Typically our four stage approach takes around one week to implement, which ensures that disruption is kept to a minimum and that clarity about an organisation's cyber defenses is provided quickly. Capula's four step approach to cyber security incorporates the most advanced cyber security maturity tools on the market. We offer practical business solutions to help organisations reduce vulnerabilities and protect against cyber threats.

Our proactive approach is scalable and repeatable and goes beyond compliance. It identifies weaknesses in the organisations three key business areas; people, process and technology. Evidence based assessments provide key business decision-makers with information they can easily understand and action. Remedial actions can be effectively deployed by engineers you can trust.