IoT Security Assessment

Is your Internet of Things (IoT) project secure?

Will a successful attack create unfavorable press for your company?

Will your IoT solution compromise your customers' data?

Device manufacturers, IoT product developers and IoT solution operators have domain experts building their IoT solutions. But, these organizations don't have a security expert who can provide guidance on how to do it securely.

Supplementing your team

Fractional CISO will work with your engineering, operations and implementation teams providing expert, third-party analysis of the security of your solution. Fractional CISO was founded by an IoT security expert with years of experience in the IoT cybersecurity space.

IoT Security Assessment offerings

Customers can utilize various IoT security offerings depending on their need.

These offerings include:

- **Requirements reviews** – Evaluation of solution requirements and gaps in security requirements.
- **Design reviews** – Assessment of architectural and deployment diagrams.
- **Identity and Access Management (IAM) reviews** – Analysis of how the system manages user and device identity and access. Areas of focus include how the device establishes identity, manages credentials and permits access to machines and data. Evaluation of credential lifecycle management.
- **Third-party component reviews** – Risk-based evaluation of components.
- **Threat assessment & recommendations** – Analysis of threats and issuance of report. Report provides recommendations for use by non-security experts, highlighting highest risk areas.
- **Threat models** – Development of technical threat models. The models can be maintained by the organization's architecture team as architecture and threats evolve.
- **Software development process review & recommendations** – Evaluation of Secure Software Development Lifecycle (S-SDLC) framework. Analysis includes recommendations for improvements.
- **Environment evaluation** – Assessment of development systems, including source code, build process, continuous integration (CI) and bug tracking. The evaluation includes checking your hosting environment, network, backup and developer machines.
- **HIPAA technical controls evaluation** – Review of access control, audit control, data integrity, authentication, encryption and backup. Promotes compliance with healthcare regulatory requirements.
- **Scanning** – Vulnerability scanning of application and network. Static and dynamic code scanning.
- **Penetration testing** – Adversarial test to break into the system.
- **Hardware security evaluation –** Evaluation of hardware, including firmware, electrical and mechanical security.

IoT Security Assessment Starter Package

Take advantage of Fractional CISO's IoT Security Assessment Starter Package. The result will be increased confidence in your IoT implementation and a more secure IoT deployment.

Starter Package deliverables include:

- Requirements review
- Design review
- Identity and Access Management review
- Third-party component review
- Threat assessment and security recommendations

Typical Starter Package activities include:

- Planning call
- Product/solution overview webcast with the project team
- Project team deep dive on the product/solution via a virtual whiteboard
- Exchange of relevant documents through a secure documentation board
- Conference call to prepare for on-site assessment
- On-site meeting with product leadership, architecture, engineering, hosting and implementation teams
- Off-site follow-up
- Fractional CISO will deliver a threat assessment and recommendations draft review via webcast
- Final document review

IoT Security Guy

Rob Black, CISSP, is the IoT Security Guy. He is the Founder and Managing Principal of Fractional CISO. Besides IoT and cybersecurity, Rob has extensive web services and cloud solutions experience. He has held product and corporate security leadership positions at PTC ThingWorx, Axeda and RSA Security. Rob received his MBA from the Kellogg School of Management at Northwestern University. He holds two Bachelor of Science degrees from Washington University in St. Louis. One is in Computer Science and the other is System Science and Engineering. He is also a Certified Information Systems Security Professional (CISSP). Rob is the inventor of three security patents. He speaks at conferences and blogs about IoT security.

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