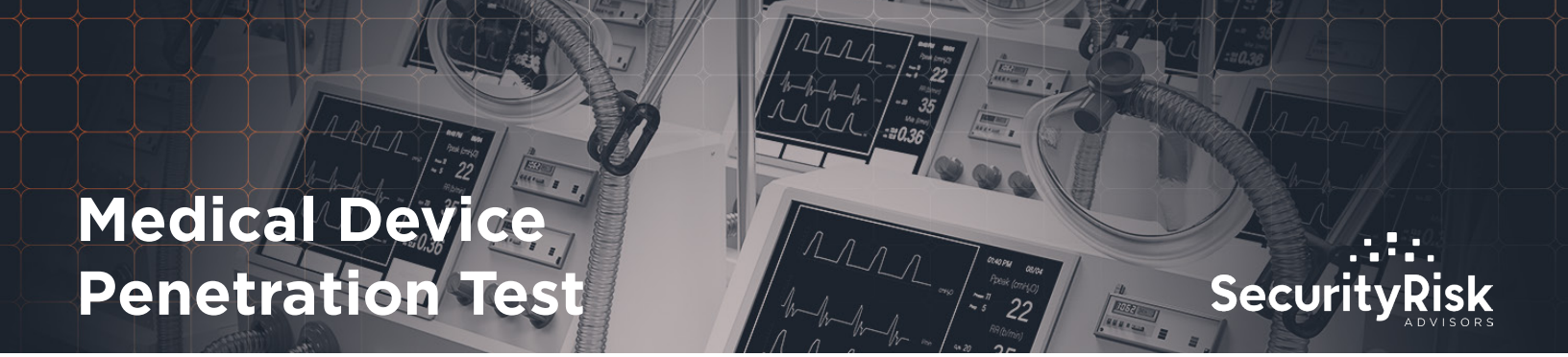

Medical Device Penetration Test

SecurityRisk ADVISORS

Identify Gaps in Hardware and Software Security Design

SRA recognizes that modern medical devices are often implemented as systems and even systems-of-systems, complete with integration interfaces and cloud-based infrastructure. Because of this, our medical device assessment methodology differs from more traditional hardware testing in that we consider the wider ecosystem that recognizes that security impacts often extend beyond the test target.

Overview

SRA performs hardware device security tests using a zero-knowledge or fully-informed approach as appropriate. Test cases are curated based on device type, technology, testing goals, and specific product risks to identify practical and specific recommendations to improve overall product security.

High-Level Activities

System Review

Includes a workshop with the product teams to identify and document components, data flows, and functionalities of the device and system.

Communication Interface Analysis

Identify weaknesses on network, USB, internal, and wireless interfaces, and attempt to extract sensitive data using passive techniques.

Software/Firmware Analysis

Identify potential information disclosure, protocol weaknesses, and review both proprietary and third-party code for vulnerabilities.

Dynamic System Testing

InInteract with system to identify opportunities for abuse, including breakouts, hardcoded secrets, privilege escalation, insufficient input validation, and injection. Test for weaknesses and data disclosure in backup/restore and data export/import functions.

Attack Phase

Pursue high-value targets by exploiting device weaknesses exposed during the review phase. Demonstrate maximum impact by assembling attack chains through the combination of exploitable vulnerabilities.

Why SRA?

Our approach is robust, swift, and actionable, yet conscious of your operational ecosystem. SRA can help your organization plan, design, build, and test secure cyber physical systems security.

- Unique experience working with OT, IoT, IoMT and Robotics in manufacturing, distribution and healthcare environments across Fortune 500
- Relationship and experience with leading CPS security solution vendors
- ISA, CISA and SANS trained resources
- Member of the International Society of Automation, Global Cybersecurity Alliance
- Exclusive cybersecurity services partner of Finite State.

ISA GLOBAL CYBERSECURITY ALLIANCE

Email: info@sra.io https://sra.io/cpss **Phone: (215) 867-9051**