Case Study: Vulnerability Assessment and Penetration Testing Automation

Robots Speed Reviews

Industry: Information Security Services Software

Summary: Creative development, using a combination of off-the-shelf open source software and proprietary programs, automated many common, routine tasks, enabling faster, less resource-intensive delivery of security services to accommodate business growth.

Client

An emerging security services firm providing a variety of customized solutions, focusing on the SMB marketplace. Services included software security assurance, such as application security architecting for in-house, cloud-based, and mobile platforms; network vulnerability assessments; and qualified penetration testing.

Challenges

Our client experienced business growth resulting in greater internal demand for skilled, but repetitive and resource intensive tasks associated with the initial steps to conduct vulnerability assessments and penetration testing. To remain affordable and competitive, the client needed to reduce the time and manpower required to perform information gathering and to configure the tools used to conduct further, targeted probes and tests.

Deliverables

Approaching the problem as if building a robotic analyst assistant, Integris Security first evaluated the steps commonly followed to collect target information about systems and configurations. Designing a "set and forget" style agent, managed through a simple point-and-click user interface, they incorporated these steps into a fully automated platform that runs scans against multiple targets, enumerating operating systems, ports, services, and other elements implemented in those environments. The platform assesses the results, and assists the analyst by focusing further efforts on the actual subset of components and levels in use in the target network. It uses a heuristic layer to decide what additional tests to execute against customer networks and applications. The codified collection of tools takes advantage of open source applications, selected proprietary programs, and customized integration to deliver rich functionality at a comparatively low cost.

Results

Integris Security enhanced the client's analyst "tool box" by adding intelligent automation to their assessment and testing processes. The client achieved significantly enhanced operational efficiencies resulting in reduced time and manpower to identify customers' exposures, more frequent scanning and more comprehensive coverage to better identify risks and vulnerabilities, lower engagement costs, and greater marketplace competitiveness.

About Integris

Integris Security™ LLC is a security services company. We provide tailored, high quality security solutions based on industry best practices and our principals' combined more than eighty years field experience. Our services include information and physical security and risk management reviews, assessments, education and training, planning, development, implementation, and monitoring. Growing from our founders' passion and commitment to protecting our nation's critical infrastructures and businesses, we work tirelessly to earn our clients' trust.