

# HARDWARE PENETRATION TESTING

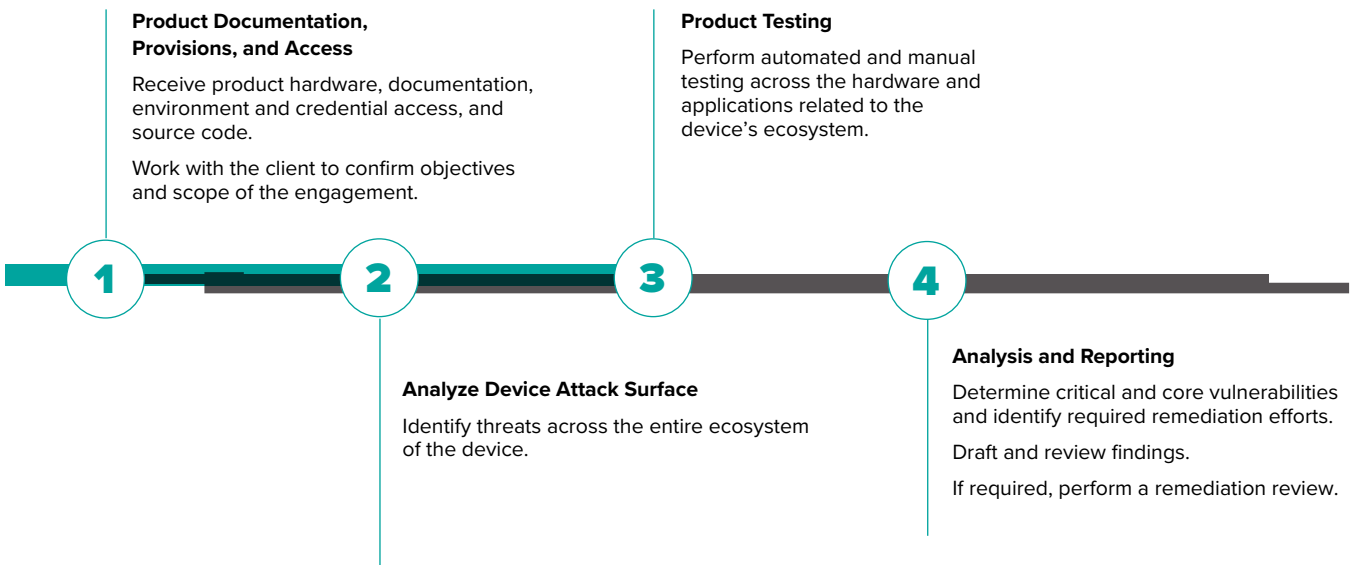
Bishop Fox's Hardware Penetration Testing helps fortify your device security with a comprehensive assessment methodology that extends beyond known vulnerabilities to keep security issues from reaching production and avoid real-world attacks.

## EXPERT TESTING FOR THE CONNECTED WORLD

Bishop Fox's Hardware Penetration Testing validates that your connected products are resilient against real-world threats, protecting your users, partners, and your brand. Accommodating an extensive range of products, our seasoned team of ethical hackers are skilled in compromising smart devices, consumer products, industrial control systems, IoT, and everything in between.

We can deconstruct your device down to the code, electronic components, and interdependencies that attackers could use to their advantage. Applying automation at the right places to discover known vulnerabilities, we reserve our battle-tested experts to break down those hard-to-find security issues that lie deep within product functionality. From fuzzing to in-depth code analysis, our multi-point methodology includes the same tactics, tools, and techniques your devices will likely face in a real-world attack.

Our assessment arms your team with prescriptive actions based on the consequences of exploitation and allows you to implement remediation earlier in the development process so you can avoid costly redesigns and late-stage disruption.



 **Extend Expertise to Accommodate Any Device and Its Unique Attributes**

Alleviate the burden of hiring and retaining hard-to-find experts skilled in deconstructing devices and uncovering potential attacker pathways.

 **Get a Detailed View of Your Device's Attack Surface**

From the circuit level to the cloud, uncover vectors of attack across your product's applications, code, internal components, and connected networks.

 **See Your Device Through the Lens of a Skilled Attacker**

Understand how a motivated adversary would search for vulnerabilities and security issues hidden deep within critical functionality.

 **Discover Known Vulnerabilities and Often-Missed Edge Cases**

Uncover security issues using the same tactics and techniques your devices are likely to face in real-world attack scenarios.

 **Focus Corrective Actions Where It's Needed Most**

Concentrate remediation on issues that have the greatest impact.

 **Address Issues Earlier in the Product Lifecycle**

Avoid costly redesigns and disruptive late-stage changes with prescriptive actions that design teams can integrate earlier in the development process.

## DON'T LET DEVICES BE YOUR DOWNFALL

### HARDEN YOUR DEFENSES WITH OFFENSIVE TESTING.

Bishop Fox takes pride in delivering a highly-skilled team of product and device experts with years of ethical hands-on hacking experience. Their multi-point testing approach is purpose-built to dig deeper, across multiple hardware, cloud and software requirements to exploit findings and uncover likely attack paths. Illuminating several issues and providing prescriptive recommendations strengthens your ability to efficiently improve the security of your products while progressing in the product development lifecycle.

HARDWARE		APPLICATION			
<b>AUTOMATED</b> <ul style="list-style-type: none"> <li>DoS</li> <li>Scanning for Exposed Network Services</li> <li>Fault Injection</li> <li>Glitching</li> <li>Fuzz Testing</li> </ul>	<b>MANUAL</b> <ul style="list-style-type: none"> <li>Identify Debugging Ports</li> <li>Testing Tamper Resistance</li> <li>Testing RF Interfaces</li> <li>Testing Firmware Update Process</li> <li>Testing for Secure Communications (RF, Networks, etc.)</li> <li>Fuzz Testing</li> </ul>	<b>AUTOMATED</b> <ul style="list-style-type: none"> <li>Scanning Web Interface and Code</li> <li>Validation Bypass</li> <li>Buffer Overflow</li> <li>Cryptographic</li> <li>Weaknesses</li> </ul>	<b>MANUAL</b> <ul style="list-style-type: none"> <li>Exploiting Identified Vulnerabilities</li> <li>Key Binary Dissection</li> <li>Multi-point Software</li> <li>Testing Analysis</li> <li>Race Conditions</li> </ul>		
Expertise to test any device attributes	Comprehensive view of your attack surface	Understand your device the way an attacker does	Discover obscure vulnerabilities and missed edge cases	Focus corrective actions where it's needed most	Address issues early in the product lifecycle

### CLIENT SATISFACTION

**94%**

understand targeted outcome and objectives

**100%**

replicate real-world adversaries

**100%**

identify threats and weaknesses

**100%**

prioritize and communicate findings

### TRUSTED BY INDUSTRY LEADING ORGANIZATIONS



### ABOUT BISHOP FOX

Bishop Fox is the leading authority in offensive security, providing solutions ranging from continuous penetration testing, red teaming, and attack surface management to product, cloud, and application security assessments. We've worked with more than 25% of the Fortune 100, eight of the top 10 tech companies, and hundreds of other organizations to improve their security. Our Cosmos platform was named Best Emerging Technology in the 2021 SC Media Awards, and our offerings are consistently ranked as world-class in customer experience surveys. We've been actively contributing to and supporting the security community for almost two decades and have published more than 16 open-source tools and 50 security advisories in the last five years.

LEARN MORE AT [BISHOPFOX.COM](https://www.bishopfox.com)