



What are red team-blue team simulations?

HolistiCyber's red team-blue team simulations are intelligence-led security assessments designed to thoroughly test organizations' cyber resilience as well as threat detection and incident response capabilities.

Red teaming is performed by white-hat attackers with <u>nation-state grade</u> level defense expertise, who reflect the methods and conditions of a genuine cyber-attack by utilizing the same tactics, techniques, and procedures (TTPs) used by cyber offenders. This ensures that the attacks are realistic and fully challenge the effectiveness of the company's defenses including technology, personnel, and processes.

Typically, these simulations are performed over a few weeks. First, vulnerabilities are proactively exposed and then leveraged for the attacks. The efforts of the company's defenses are carefully examined, focusing on its blue-team efforts. A detailed and actionable list of remediation options is provided along with clear priorities.

The goal is to mature the organization's security program and elevate its overall security posture.

How does this work for me?

- 1. **Reconnaissance & identifying key threats** an organization can't protect against what it is not aware of. The simulation starts with intelligence gathering and identifying key threats while creating a list of critical cyber risks and attack pathways.
- 2. Planning, staging & weaponization obtaining and configuring resources to conduct an attack. This includes setting up servers to perform Command & Control (C2), social engineering, procurement of malicious code/malware from the darknet.
- 3. **Attack delivery** the red team simulates attacks on different teams and on different IT systems within the organization.
- 4. **Reporting & analysis** At the end of a simulation, the blue team gives the red team indicators of compromise (IoCs) that were detected. These are compared to data collected during the simulation and incorporated into a **report timeline**. To increase value, the red team works closely with the blue team to show its TTPs and how to better detect and respond to offensive methods in incidents. In consideration with the company's business needs, top priorities are provided along with precise remediation workflows and actionable tactics.

WHAT SHOULD YOU EXPECT?

- Analysis of how the organization detects and responds to real-world cyber-attacks.
- Threat identification and real-life testing of the effectiveness of security technologies, people and processes.
- Map exploitable routes and processes which provide access to IT systems and facilities.
- Pin-point the methods that are most likely be used to disrupt business continuity.
- Clear prioritization of security threats that need to be handled immediately vs. items that do not pose an immediate risk.
- · Straight-forward remediation and mitigation tactics and workflows.
- 100% success rate.



Oftentimes, Red team simulations are carried out without notifying a company's blue team so that it will respond and treat the activity like a real attack. For example, when activity is detected on a compromised system being used to access the target's internal network, the blue team will likely remove that access, pushing the red team back in its progression.

Red team simulations typically rely on existing IoCs and capabilities that are already built into operating systems, processes, and other security gaps. We also use tooling to bypass endpoint detection and response solutions and avoid common threat-hunting queries by teams focused on finding nefarious activities through PowerShell/Sysmon/event logs, etc.

Typically, during a simulation, the team focuses on specific targets such as DevOps teams or end-users to gain elevated privileges required to achieve common attacker objectives.



Step 1

Reconnaissance & Identifying key threats

Defining key indicators of compromise, attack patterns and pathways, attack targets and schedule.

Step 2

Planning, staging & weaponization

Includes network and attack sophistication, configuration, architecture and data flows.

Step 3

Attack delivery - Attacks by top white-hat experts, including lateral movement across networks, privilege escalation, physical compromise, command and control actions and data exfiltration

Step 4

Reporting & analysis

Probability and damage assessments; actionable plan on handling risks and fixing top security priorities.





- 1. Nation-state grade expertise our staff of white-hat simulators, former military and government offensive experts examine the attack surface from the vantage point of the attacker and not from the vantage point of the company. This includes a solid grasp of the **sophisticated tooling** available to today's attackers along with access to those same attack tools.
- 2. Holistic approach remediation and mitigation solutions are tied to each company's unique business objectives and workflows. Security should compliment productivity and growth and avoid hindering it. When selecting a red teaming operation, it's important to look for a provider with the necessary skills and experience to accurately simulate an attack, but also to conduct a safe and controlled assessment that provides actionable security outcomes for your business.
- 3. Our engagements have a 100% success rate.

"HolistiCyber's red teaming experts have a deep knowledge of data security and have performed realistic attacks at the highest technical and legal standards. By using the same mindset and tooling of cyber-criminals, and providing in-depth analysis and complete post-test care, these dedicated professionals have significantly improved our cybersecurity program." CISO, large financial corporation, USA