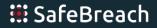
SafeBreach

Heroes and Villains Simulating the Adversary



The dark side, and the light...

Security spend is at an all time high

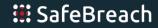
Security controls are at an all time high

"Interest" from BoD is at an all time high Complexity is at an all time high

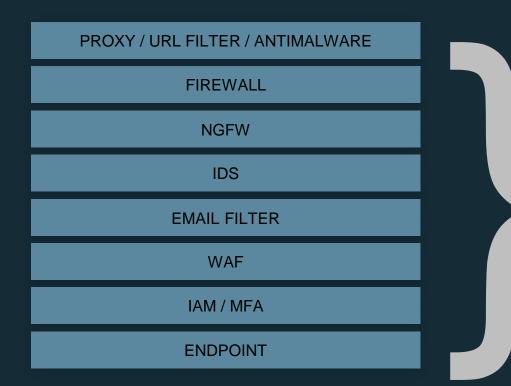


I have tons of controls. I have a smart team. So... How secure am I?





Best Intentions, But What Results?



SECURITY TEAMS

Are these controls working? What's the IMPACT of attack?

BOARD/EXECS/BUSINESS

Can I show security ROI? Can I justify more investment?



Legacy Testing Methods

Continuous

VULNERABILITY SCANNING Easy, too narrowly focused

Automated? Comprehensive? Safe?

PENETRATION TESTING Cumbersome, point-in-time RED TEAM Detailed, creative, innovative

Point-in-time

Narrow Focus



Breach and Attack Simulation

Remediate

- Initiate automation for immediate fixes
- Send to orchestration/ticketing for ops follow-up

Breach and Attack Simulation

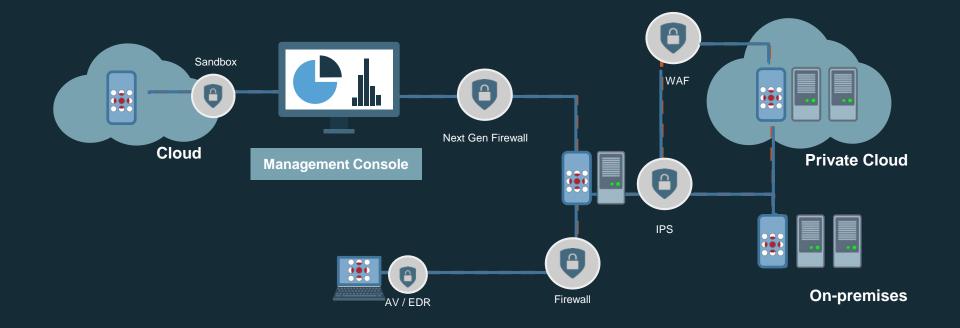
Simulate Attacks

- Cloud, network, endpoint
- Infiltration, lateral movement, exfiltration

Prioritize Results

- Identify and visualize where attacks are successful
- Filter and target critical issues for actionable results

Breach and Attack Simulation Deployment



Simulating the Adversary

Continuously validate security with thousands of attacks — safely

Infiltration

Simulated malware drops Executable files Registry entries

Lateral Moves

Brute force Remote code execution Pass-the-hash

Exfiltration

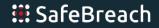
Sample data Direct methods Covert methods Blocked Methods Successful Methods Data Exfiltration Pathways Recommended Actions

Breach and Attack Simulation

Validate your controls—with the same techniques attackers use

- Get more from existing security by optimizing config and ensuring controls work in concert
- Minimize security exposure due to human error, updates, and policy changes
- **Prepare for audits** by validating segmentation and other compliance controls
- Test alerting and action plans for SOC or MSSP teams, and provide breach scenario training
- Get business rationalization for security investment, prove security against headline attacks

Validate your defenses before the attackers do



Simulating the Adversary

Do, or do not. There is no try.



3,400 breach methods executed

simulations

Across verticals and deployment sizes

Simulating the Adversary: Results

- Malware manages to evade perimeter defenses
- Encrypted files not scanned
- Leaving it up to the endpoint

Top Infiltration Methods

	S	Success Rate		
WannaCry 2.0 Ransomware		63.4%		
EXE packed inside a JavaScript	60	.9%		
Carbanak/Anunak HTTP Malware Transfe	r 59	.8%		
EXE inside a VBS using HTTP	56.5%			
EXE inside a CHM File	55.9%			

Simulating the Adversary: Results

- Lateral moves looked like infiltration
- LAN trust is too high
- Is internal traffic safer than
 Internet traffic?

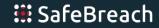
Top Lateral Movement Methods

	Si	uccess Rate	
Malware Transfer - Petya worm via HTTP/S	69.4%		
EternalRocks - Transfer via HTTP/S	68.9%		
EXE inside WSF (as XML) using HTTP	67	.3%	
EXE inside JAR using HTTP	67.0%		
Lazarus Buffer Transfer	66.5%		

Simulating the Adversary: Remediation

- Dramatically increased security in three weeks
- No new investment
- Conflicting rules, misconfiguration, underutilization





Top Considerations: Breach and Attack Simulation



Safe | Continuous | Actionable | Thorough

SIMULATE ATTACKS VALIDATE CONTROLS HARNESS THE HACKER

🔜 SafeBreach