Artificial Intelligence (AI) and Machine Learning (ML) Powering NETSCOUT Arbor Edge Defense (AED)

Highlights

Reduced Human Error

The NETSCOUT® Arbor Edge Defense® (AED) AI and ML integration provides deterministic and highly accurate results without the need for human intervention.

Unparalleled DDoS Threat Visibility

NETSCOUT ATLAS monitors over 800+ Tbps of Internet traffic in real-time, spanning more than 500+ ISPs and 3000+ enterprise sites. This represents 2/3 of routable IP space and up to 50% of global internet traffic at any given time. This data fuels AI/ML-powered analysis to create the ATLAS Intelligence Feed (AIF).

Seamless Updates

AI/ML algorithms operate within the ATLAS® cloud infrastructure as part of the standard data collection and analysis pipeline to create the ATLAS Intelligence Feed (AIF). These AIF can be updated instantly without requiring software updates or changes at the customer site.

Automated Mitigation Recommendations

The Adaptive DDoS Protection solution employs AI-driven traffic analysis to detect attacks, determine their nature, and recommend precise countermeasures or AED configurations to block threats effectively.

Challenges in Cybersecurity

In today's evolving cybersecurity environment, precise, actionable intelligence is critical both before and after an attack. Without it, organizations risk deploying broad mitigation tactics that can inadvertently block legitimate traffic, disrupt critical services, and alienate customers. By harnessing deterministic AI/ML algorithms, NETSCOUT delivers accurate detection and targeted mitigation, swiftly identifying and blocking threats while ensuring legitimate traffic remains uninterrupted.

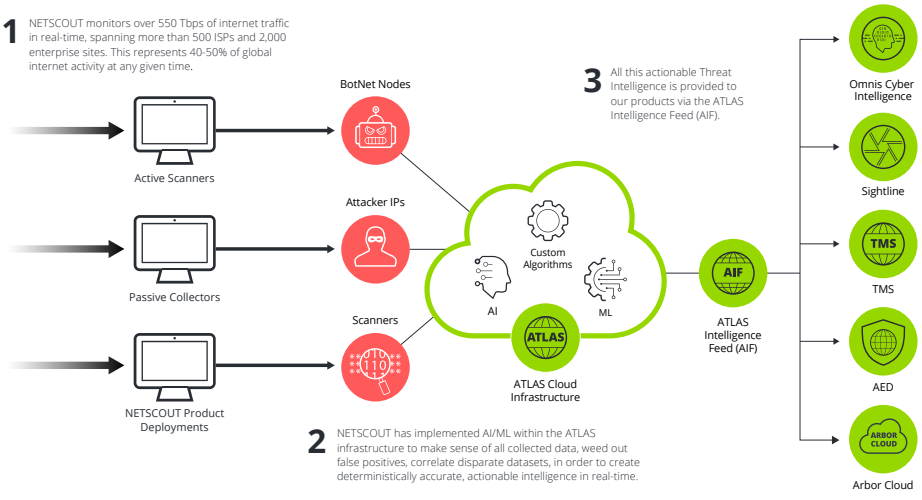
NETSCOUT AI/ML Solution in Threat Intelligence

NETSCOUT's AI/ML capabilities are built on a foundation of unmatched global visibility into Internet traffic and DDoS threats.

This comprehensive visibility fuels our AI/ML-driven threat intelligence, delivered to customers through the ATLAS Intelligence Feed® (AIF). Generating AIF threat intelligence requires:

- **Accurate data processing** to extract actionable intelligence from large, complex datasets.
- **Minimized false positives** to avoid unnecessary disruptions.

AI/ML algorithms in the ATLAS cloud infrastructure perform automated, real-time analysis to ensure data accuracy. These algorithms are continuously updated without requiring changes to products or customer environments. This enables AED to preemptively identify and block attack sources the moment they target a protected network.



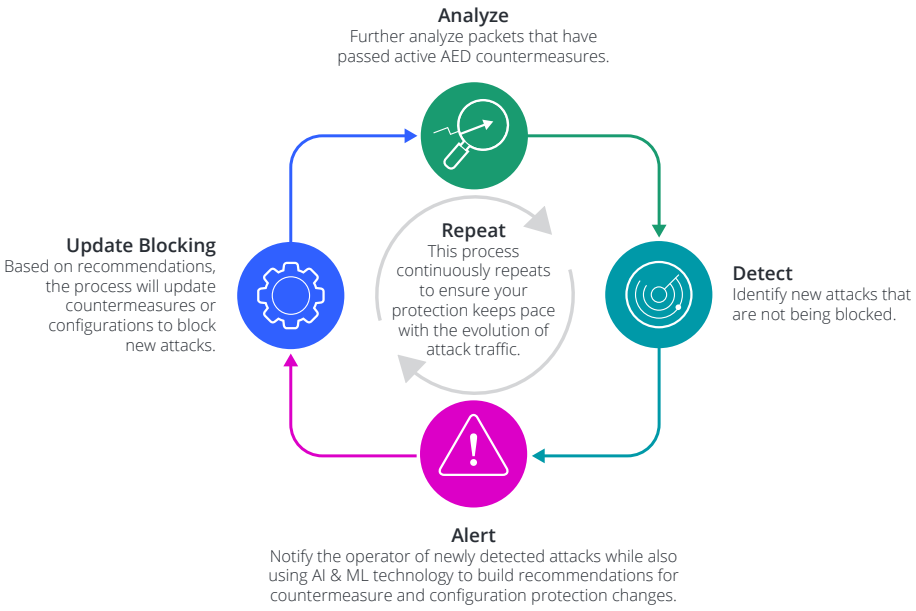


Figure 1: AI & ML Powered Adaptive DDoS Protection Process.

AI/ML in AED's Adaptive DDoS Protection

NETSCOUT's Adaptive DDoS Protection Solution for AED integrates AI/ML-driven traffic analysis to detect attacks, classify their nature, and recommend tailored countermeasures. AI/ML enables our solutions to:

- **Automatically and accurately block malicious traffic** while minimizing the risk of interfering with legitimate user activity.
- **Provide predictable, reliable behavior** that ensures operational continuity for customers.

By incorporating AI/ML technologies, NETSCOUT delivers proactive, dependable cybersecurity solutions that safeguard networks against evolving threats without compromising performance or accessibility.

NETSCOUT

Corporate Headquarters
NETSCOUT Systems, Inc.
Westford, MA 01886-4105
Phone: +1 978-614-4000
www.netscout.com

Sales Information
Toll Free US: 800-309-4804
(International numbers below)

Product Support
Toll Free US: 888-357-7667
(International numbers below)

NETSCOUT offers sales, support, and services in over 32 countries. Global addresses, and international numbers are listed on the NETSCOUT website at: www.netscout.com/company/contact-us

SECQL_019_EN-2502 09/2025