

PolyNet DDoS Defense Mitigation System

The safest choice against DDoS attacks



In an ever-changing cybersecurity landscape where the types and intensities of Distributed Denial of Service (DDoS) attacks can vary significantly, data center operators, network providers and enterprises need a defense that is not only effective, cost-efficient, and easy to manage, but also adaptable to different network architectures and security strategies. **PolyNet's DDoS Defense Mitigation System** combines these key features to protect against DDoS attacks and ensure the continuous availability and security of your online services.

Benefits

- Protection against attack varieties, including volumetric, application layer, and protocol-based attacks
- Cost savings by minimizing the need for emergency response and recovery efforts
- Enhanced service availability
- Helps you meet compliance requirements and data protection regulations by maintaining service availability and data integrity
- Improved user experience

Key Features

- Easy integration, ensuring minimal disruption to existing infrastructure
- Flexible deployment without any inline components
- On-site traffic scrubbing ensures that only clean data reaches your network
- Swift response time: More than 99% of all DDoS attacks are detected and mitigated within milliseconds
- Automatic mitigation, enabling immediate action without human intervention

PolyNet DDoS Defense Technical Data

Simultaneous Sessions	Not limited
Detection Modes	SPAN monitor, ERSPAN monitor, Passive Inline
Mitigation Modes	BGP redirect, BGP Flowspec redirect to scrubber, BGP Flowspec rate-limiting, BGP community-based filtering
Transit Link Mitigation	Automatic eBPG signaling (BGP/Flowspec)
Attack Protections	Reflection floods: DNS, mDNS, NTP, SQL, CLDAP, RIP, WSD, CHARGEN, SSDP, SNMP, ICMP, CoAP, NetBIOS, Memcached, TFTP, Sentinel, RPC, RDP, IPsec, L2TP Fragmentation floods: Generic, Nestea, Jolt, Targa, Teardrop TCP floods: SYN flood, RST, FIN, ACK, PSH-ACK, URG, Anomalies Basic app floods: HTTP get, post, SIP, SQL
Scrubbing Actions	Filtering/rate-limiting: Malformed packets, Geo IP, User-defined black/whitelists through RESTapi (Maximum 500,000 user defined IP range) Threat intelligence exchange: Curated, aggregated threat intelligence feed from multiple exchanges. Automatic daily update TCP authentication: Transparent TCP Syn proxy, only requests from RFC compliant TCP stacks are forwarded to the end-point. TCP flag filtering Per-client and per-server transaction rate-limits: DNS, SYN, HTTP, HTTP2 Malformed application request filtering: HTTP
Detection interface	Nx4x10Gbps 14.88Mpps/10GbE or Nx2x40/100Gbps 110Mpps/100GbE Maximum of 400Gbps/server
Mitigation interface	Any combination of 10(10Mpps)/25/40(30Mpps)/50(30Mpps)/100(50Mpps)GbE interface Maximum of 800Gbps/server
Average detection lag	10ms
Scrubbing added e2e lag	1ms
Power Requirements	Two 2200W redundant PSU
Power consumption	600W-1200W based on configuration
Dimensions	Chassis: 2U Weight: 20-25kg Dimensions (D x W x H): 32.71" x 17.25" x 3.43" (831 x 438.4 x 87mm)
Management Interfaces	2x 1/10GbE + 1GbE IPMI
Sample Storage	2TB NVMe SSD storage for network traffic
Environmental	10°C - 35°C (50°F - 95°F) Max 90% Humidity
Regulatory	FCC (SDoC) Class A CE (DoC) Class A CB/LVD Yes RCM Class A VCCI Class A