NGINX
Part of F5

PRODUCT DATASHEET

F5 NGINX APP PROTECT DoS

Defend, Adapt, and Mitigate Against Layer 7 DoS Attacks

WHY USE NGINX APP PROTECT DoS?

Enhance Security
Get superior attack detection by going beyond tracking client traffic patterns with combined service health checks

Automate Defense
Use machine learning to greatly reduce operating costs and adaptive learning for no-touch policy configuration

Accelerate Protection
Mitigate attacks faster with a multi-layered defense strategy leveraging eBPF technology and managed by app teams

Enhance Security, Automate Defense, and Accelerate Protection with NGINX

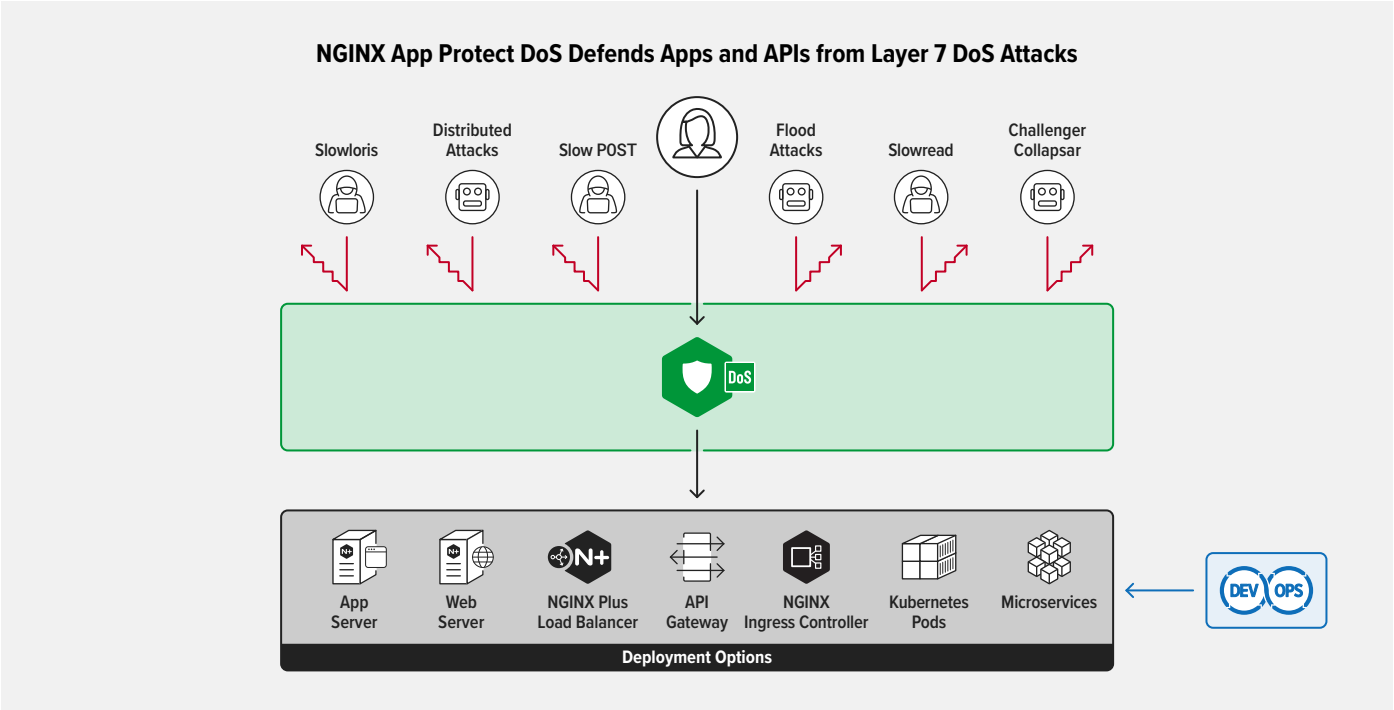
Distributed denial-of-service (DDoS) attacks continue to grow in size and complexity, with application-layer attacks up by 165% in 2022 over the previous two years. Threat actors use multi-vector attacks that include targeting the application layer (Layer 7) to maximize damage, knowing that even a short service interruption can cause revenue loss, reputational damage, and exposure to other types of attacks.

How can you protect your apps and APIs from hard-to-detect Layer 7 DDoS attacks across hybrid and multi-cloud environments?

NGINX makes it easy with NGINX App Protect DoS, which provides a configurable, robust, multi-layered defense for a comprehensive mitigation strategy. Running across distributed architectures and environments, it delivers adaptive and consistent protection.

With NGINX App Protect DoS you can:

- Implement a multi-layered DDoS defense strategy that includes blocking IP addresses of bad actors, blocking bad requests with attack signatures, and global rate limiting as needed
- Significantly reduce operating costs and false positives with machine learning-based algorithms which observe normal traffic patterns to establish a baseline, then detect anomalies and block malicious traffic without affecting legitimate traffic
- Protect HTTP/S and HTTP/2 apps – including gRPC and WebSocket – against various DDoS attacks including Slow POST, Slowloris, flood attacks, Challenger Collapsar, and more
- Continuously measure mitigation effectiveness with adaptive learning for no-touch policy configuration that enables cost-effective DDoS protection at scale
- Seamlessly integrate security posture config changes into DevOps environments to enable security-as-code as a Layer 7 DoS defense across platforms, architectures, and clouds



Implement Multi-Layered Defense

Mitigate against Layer 7 DoS attacks with comprehensive and adaptive protection:

- Track over 300 metrics of user and app behavior used to build a unique algorithm that reduces false positives
- Deploy dynamic signatures to automatically mitigate attacks
- Measure mitigation effectiveness and adapt to changing behavior or health conditions
- Use adaptive learning for no-touch policy configuration and protection from zero-day attacks

Mitigate DoS Attack Types

Protect against multiple types of sophisticated DoS attacks:

- Block GET and POST flood attacks which overwhelm the server with a high volume of requests
- Mitigate low and slow attacks which tie up resources, including Slowloris, Slow Read, and Slow POST
- Block Challenger Collapsar attacks which aim to exhaust targeted server resources
- Protect against targeted SSL/TLS attacks and ensure app uptime using signature mechanisms for mitigation based on the CLIENT HELLO message

Deploy Platform-Agnostic Protection

Enable DoS protection controls wherever NGINX Plus and NGINX Ingress Controller are deployed:

- Deploy DoS protection on the load balancer, API gateway, Ingress Controller, or per-pod/per-service proxies
- Achieve lightweight, high-performance, low-latency attack mitigation
- Easily integrate platform-agnostic protection into any architecture and across multi-cloud environments
- Reduce complexity and tool sprawl using the NGINX portfolio for single-vendor DoS mitigation

Automate Security for DevSecOps

Incorporate DoS attack mitigation into the software development lifecycle (SDLC):

- Apply consistent protection with declarative security policies created by SecOps and deployed by DevOps
- Automate security-as-code seamlessly into CI/CD pipelines for DevSecOps
- Enable cost-effective DDoS protection at scale with no-touch configuration
- Leverage easy policy integration via the Kubernetes API to keep developers agile

To learn more, visit nginx.com/dos

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