AKAMAI PRODUCT BRIEF

Prolexic — Comprehensive DDoS Attack Protection

Today's distributed denial-of-service (DDoS) attacks come with record-breaking scale and sophistication, making them incredibly challenging for global businesses that depend on the 24/7/365 availability of their digital infrastructure.

DDoS attacks have become not only the primary form of cyberattacks carried out in conjunction with advanced persistent threats (APTs) but also an effective smoke screen for multilayered, triple-extortion, ransomware attacks.

Akamai Prolexic is a comprehensive DDoS protection solution that is:

- **Flexible** — Always on or on demand
- **Comprehensive** — For every environment with on-premises, cloud, and hybrid options, and a firewall at the edge in front of your disparate firewalls and diverse infrastructure
- **Reliable** — A 20+ Tbps dedicated defense capacity, cloud scrubbing centers in 32 global metropolitan cities, and 24/7/365 global Security Operations Command Center (SOCC) service

Prolexic — Comprehensive DDoS protection

Prolexic is purpose-built to stop DDoS attacks and other unwanted or malicious traffic before the threats reach applications, data centers, and cloud and hybrid internet-facing infrastructure (public or private), including all ports and protocols. Prolexic offers DDoS protection on the premises of a customer's origin, in the cloud, or as a hybrid combination of both.

Prolexic includes a cloud-based network firewall designed to provide an additional, centralized access control instance at the edge of a customer's network.

Benefits for your business

Get comprehensive DDoS protection
Proactively stop DDoS attacks with on-premises, cloud, and hybrid offerings and industry-leading zero-second SLA

Use the Prolexic Network Cloud Firewall
Block malicious traffic instantly with access control lists and firewall rules that are applied at the edge of your network

Stop record-breaking attacks
20+ Tbps of dedicated defense capacity and a battle-tested platform stop even the largest, most complex, and record-breaking attacks

Optimize incident response
Custom runbooks, service validation exercises, and operational readiness drills help ensure business continuity

Offer DDoS protection as a service
Don't just protect your own infrastructure — also offer DDoS protection as a service to your multi-tenant clients

Scale security resources
The fully managed solution — backed by 225+ frontline SOCC responders — frees up defenders to focus on high-priority areas of security programs

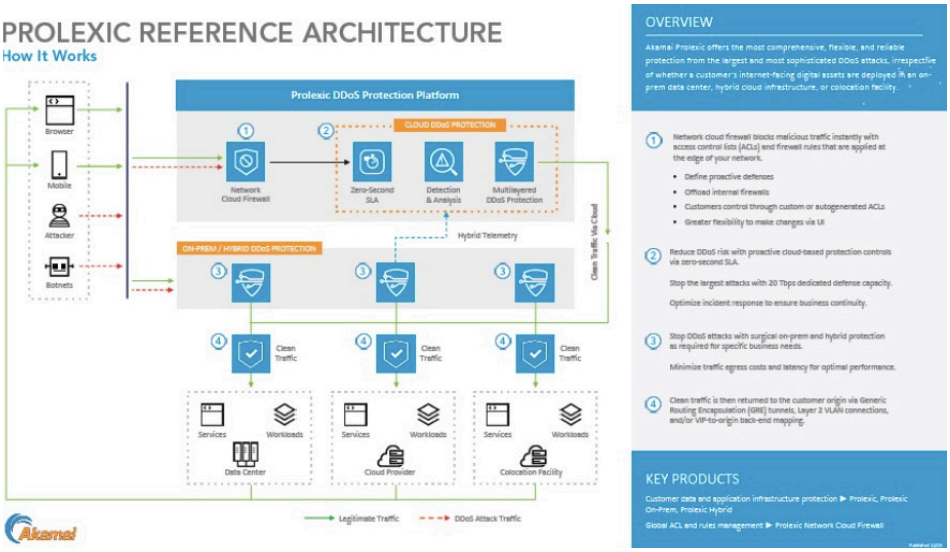
Prolexic — DDoS protection when and where customers need it

Akamai Prolexic Cloud

Prolexic is the industry pioneer in cloud-based DDoS protection. Network traffic is directed in one of two ways via a border gateway protocol route advertisement change or DNS redirection (A record or CNAME record). Available as an always-on or on-demand service, Prolexic offers flexible integration models based on the needs of a customer's desired security posture across hybrid origins.

With global high-capacity scrubbing centers in 32 metro locations, Prolexic can stop attacks closer to the source to maximize performance for users and maintain network resiliency through cloud distribution. Traffic is routed via anycast through the closest scrubbing center, at which the Akamai SOCC deploys proactive and/or custom mitigation controls designed to stop attacks instantly — ensuring fast and accurate DDoS defenses.

Clean traffic is then returned to the customer origin via Generic Routing Encapsulation (GRE) tunnels, Layer 2 VLAN connections, and/or VIP-to-origin back-end mapping.



DDoS risk — mitigated

Akamai Prolexic is purpose-built to stop DDoS attacks and other unwanted or malicious traffic before the threats reach applications, data centers, and cloud and hybrid internet-facing infrastructure. Automated, surgical on-premises mitigation and a 20+ Tbps dedicated cloud scrubbing capacity deliver the most comprehensive DDoS protection to customers.

Prolexic Cloud on-ramp options

All Prolexic Routed services (Prolexic Routed — GRE, Prolexic Connect, and Prolexic over Akamai Direct Connect) are designed to be carrier-agnostic and to support customers with a routable IP space (IPv4 /24 and/or IPv6 /48).

Prolexic Routed — GRE

This is Prolexic's primary DDoS mitigation service. This platform has been live and supporting enterprise-class businesses for more than 20 years, with connectivity from Prolexic configured via logical GRE tunnels for asymmetric clean traffic return to origin. Akamai's proprietary technologies ensure resilience, 100% platform availability, and enable traffic from all Prolexic scrubbing centers to be handed directly to the internet for hand off to origin via the customer's internet providers.

Prolexic Connect

This is configured via direct VLAN connections to origin with asymmetric clean traffic return; global platform partners include Equinix Cloud Exchange, GTT Communications, Megaport, and AT&T TAO.

Prolexic over Akamai Direct Connect

Akamai Direct Connect is a direct, highly secure, and private network interconnection between a customer's origin and Akamai Prolexic infrastructure. This enables a seamless on-ramp to Akamai services and supports 10 G and 100 G port connectivity. It also supports higher capacity traffic throughputs than traditional Prolexic services.

Prolexic over Akamai Direct Connect also delivers significant additional benefits, which include the following:

- **Resiliency.** All Akamai Direct Connect metro deployments have at least two routers and, in many metro areas, customers can connect directly via multiple points of presence. The design allows customers to provision with resilient solutions to ensure uptime and availability.
- **Control.** Inbound traffic is delivered through the Akamai network, providing single-provider visibility and control over how clean traffic is delivered to customers from ingress to delivery locations.
- **Full maximum transmission unit support.** GRE tunnels configured with jumbo frames support 1500 byte packets without the need to reduce maximum segment size.

Prolexic IP Protect

Activated via DNS redirection; a symmetric service designed for customers with less than a routable IPv4 /24 and/or IPv6 /48, fragmented IP space, or cloud-hosting provider.

Prolexic Network Cloud Firewall

Prolexic Network Cloud Firewall is the first line of defense. It sits at the edge of a customer's network, outside all other firewalls, and extends a customer's security beyond just DDoS. Users can define and manage their own access control lists and firewall rules for proactive defense against malicious traffic or zero-day vulnerabilities. With geographic and IP-based access control, users can easily, rapidly, and centrally control exactly what traffic hits their existing network firewalls.

Prolexic Network Cloud Firewall can be easily integrated with other security systems through native APIs. This enables users to have greater visibility into how specific rules are protecting their network, improves the flexibility to secure their digital infrastructure assets according to their specific needs, and enhances compliance by reducing human errors.

Prolexic key capabilities

High-capacity defense: Prolexic provides the industry's highest traffic throughput performance for Prolexic On-Prem and global software-defined scrubbing centers in more than 32 global metropolitan centers with 20+ Tbps of dedicated DDoS defense capacity. This is further backed by the 1+ Pbps (1,000+ Tbps) Akamai Connected Cloud, the world's most distributed cloud.

Industry-leading zero-second SLA: Prolexic mitigates the vast majority of DDoS attacks with an industry-leading zero-second mitigation SLA. This is achieved via cutting-edge automation and by working closely with customers to implement proactive defensive controls tailored to a customer's attack surface and risk profile, which takes place during the service validation process.

Robust on-premises DDoS defense accuracy: Prolexic includes automatic attack packet filtering in real time with deep inspection, using full header and payload.

Intelligent cloud DDoS defense stack: Mitigation controls dynamically scale capacity to stop attacks across IPv4 and IPv6 traffic flows. Compute resources can be dynamically allocated to whatever mitigation controls need to be scaled up.

Broad SLA coverage: In addition to our zero-second mitigation SLA, Prolexic offers 100% platform availability, time to mitigate, time-to-alert notification, time to respond, and individual time-to-mitigate SLAs based on specific attack vectors.

Targeted protection: Prolexic can mitigate each attack down to the specific /32 IP endpoint under attack without collateral damage by creating bypass networks that passively analyze all customer traffic. This /32 data can be integrated into a customer's security information and event management, billing systems analytics (to enrich data), analytics, business intelligence, or threat intelligence platforms via our 100+ APIs.

An integrated DDoS solution set: Prolexic integrates with Akamai Edge DNS and Akamai Shield NS53 for comprehensive DNS DDoS protection and with several other Akamai products, including Akamai App & API Protector, for comprehensive DDoS protection.

Akamai Prolexic On-Prem

Prolexic On-Prem (powered by Corero) provides physical or logical inline and datapath DDoS protection that natively integrates with a customer's edge routers to stop attacks at the edge of their network without requiring traffic backhaul. With automated mitigation in less than one second, Prolexic On-Prem does not require any manual intervention for the vast majority of attacks and provides ultra-low-latency DDoS protection, particularly for businesses offering data-intensive real-time services, like video conferencing, gaming, voice, or multimedia applications.

To learn more, visit the Prolexic page or contact your Akamai sales team.