



Akamai® DDoS Defender

Akamai Managed Multi-layered Security Solution to Defend Against DDoS Attacks

As enterprises move more of their core business online, they expose their brand, critical data, and online channels to growing threats from distributed denial-of-service (DDoS) attacks. These attacks are increasingly becoming more sophisticated; saturating different layers of infrastructure and rendering traditional origin based security controls ineffective. Moreover, the unique and changing nature of each DDoS attack makes planning, monitoring, and mitigating this traffic complex and challenging.

DDoS attacks have emerged as the most popular method of attack, with their number, size, and sophistication still on the rise. The impacts of these attacks extend long past the immediate loss of revenue, resources and productivity to cause damage to brand equity and customer trust.

DDoS attacks are dynamic and change profile and method rapidly. Their globally distributed sources and immense scale can only be effectively countered by a globally distributed security platform that can flexibly scale to the capacity requirements and changing attack vectors. Since DDoS attacks bring to bear a variety of attack methods, the best approach is a self learning one that adapts in real time to thwart old and new attack methods.

Akamai® DDoS Defender

Akamai® DDoS Defender is a security solution managed by Akamai that bundles multi-layered security capabilities and world-class DDoS defense professional service teams to provide a unified solution to combat DDoS attacks. The solution offers an evolving set of Akamai's industry-leading cloud security capabilities to provide protection against a variety of DDoS attacks targeting vulnerabilities. It also includes services to support customers in all phases – before, during and after DDoS attacks to ensure rapid execution and efficient response. The service support relieves customers of operational and technical hassles by taking proactive initiatives to prepare for threats; integrate countermeasures and harden defenses, and of course to immediately respond to threats during the attacks; and perform post-attack reviews.

The solution is built on the highly scalable, secure and resilient Akamai EdgePlatform; a globally distributed network of tens of thousands of servers spread across 1000 networks in over 1700 locations and 71 countries. The distributed architecture allows Akamai to effectively mitigate the distributed nature of DDoS attacks close to the source of attack before they have a chance to reach our customer's core infrastructure. It automatically scales the platform to absorb and deflect attack traffic of several thousand times in magnitude than normal traffic loads while maintaining site performance and availability for production users.

Akamai® DDoS Defender easily integrates with customer online properties to seamlessly defend them from attacks. Once deployed, it has all of Akamai's DDoS defense technologies always-on to enable quick reactions to a wide range of attacks to maintain business continuity.

BENEFITS TO YOUR BUSINESS

- *Seamless integration with existing IT infrastructure*
- *Akamai managed 24x7 instant response to DDoS Attacks*
- *Multi-layered security capabilities to mitigate a variety of DDoS attacks*
- *Always-on product capabilities for faster reaction to attacks*
- *Self learning solution, leveraging realtime DDoS intelligence platform wide*
- *Maximize uptime and availability during DDoS attacks*
- *Enable automatic, on-demand scaling to handle massive attacks*
- *Access 24x7 DDoS Attack Support for unlimited number of attacks in a year*
- *Protect your brand equity, customer loyalty, revenues, and online presence from this #1 attack method*

Key Features of Akamai® DDoS Defender

Prepare	DDoS Readiness DDoS Fee Protection	24x7 Support/Standard Runbook + Escalation plan Capped bursting fees
Inspect	Event Log Capture Event Data Store Validation Room*	Real-time logging of DDoS traffic events Historic logging for support investigation CAPTCHA based BOT validation room
Absorb	Content Prioritization Request Management Error Code Based IP Rate Control*	Maximize offload from origin with flexible caching Control content delivery based on user details IP Rate Control on excessive error responses
Deflect	IP Blocking Traffic Prioritization Access Management	Block by IP Block by Geography Control access to data based on user details

*Planned Enhancements

Prepare: The solution provides 24x7 customized support through the DDoS Readiness Service. It facilitates smooth, quick and seamless response to attacks through a Run Book and a well-defined Escalation Plan. The Run Book leverages best practices from across the platform to maintain a DDoS mitigation procedure and action plan that adapts with the ever-changing DDoS attack environment. The Escalation Plan reduces chaos during attack and accelerates the reaction process through a structured communication plan that defines all stakeholders and their roles in the process.

Since attack traffic exceeds normal traffic by several orders in magnitude, it results in unexpected levels of platform usage. Akamai® DDoS Defender includes a Fee Protection plan to cap exposure to bursting fees to avoid billing for malicious traffic.

Inspect: With increasing Internet traffic and changing attack characteristics, realtime monitoring of requests for anomalous traffic is a daunting task. Akamai® DDoS Defender simplifies and improves inspection of sites through the Event Logging feature to provide visibility into the traffic pattern. The events are captured in real time 24x7 providing details of the traffic characteristics to precisely identify malicious traffic. The event logs are provisioned to be stored in the Event Log Store for Akamai support investigation.

Absorb: Akamai® DDoS Defender leverages the flexibility of the Akamai EdgePlatform to absorb massive traffic spikes by maximizing offload from origin and hence reducing the number of malicious requests that reach the origin. This ability increases the edge cachability of content using several identifiers such as URL, Filename, Session ID, Query strings and Cookie Values. In addition to cacheable Web content, Akamai's intelligent EdgePlatform can offload delivery of protected content, resource-intensive SSL content, and many types of dynamic content.

Additionally, it is also possible for Akamai services to control content delivery through the Request Management feature to ensure that requests from unauthorized users are negated. It is based on user and session characteristics such as cookie values along with a requesting user's geographical location.

Deflect: Akamai® DDoS Defender also provides the capability to detect and block malicious traffic at the edge of the Internet. This isolates the origin from attacks based on several criteria. IP Blocking allows requests to be denied based on source IP address, Traffic Prioritization can be employed to help mitigate DDoS attacks emanating from localized regions using geographic information and Access Management provides the ability to protect content and control access based on user an session details.

The Akamai Difference

Simply put, Akamai® makes the Internet work for business. By eliminating the challenges of the public Internet, Akamai guarantees its customers security, performance and scalability to make their enterprise cloud strategies, eCommerce, software downloads and HD video successful. At the center of it all is the Akamai Intelligent Internet Platform™, which sits on top of the public Internet and is made up of nearly one hundred thousand, globally distributed Akamai servers spanning most of the networks that make up the Internet. To learn more, please visit www.akamai.com or follow @Akamai on Twitter.

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