



AKAMAI EDGE SECURITY SOLUTIONS FOR COMMUNICATIONS SERVICE PROVIDERS

SOLUTION BRIEF





Communications service providers (CSPs) are looking to the web to gain an edge in today's competitive marketplace. Customer portals, on-demand video and entertainment applications, and self-serve shopping and support services can help you move up the value chain and avoid commoditization. Superior web experiences are critical for maintaining subscriber loyalty, improving margins, and growing revenues.

Today's websites and Internet-facing applications are susceptible to a wide variety of threats. Increasingly sophisticated cyberattacks can impair customer satisfaction, tarnish your brand, and result in data leakage, legal actions, and financial loss.

Akamai can help. We understand the Internet and how you use it to drive your business forward. We can discern how bad actors identify and exploit vulnerabilities across your infrastructure to wreak havoc and cause harm. And we have a robust, flexible platform to protect your sites, apps, subscribers, and data against the growing range of threats.

PROTECTING YOUR ONLINE ASSETS WITH AKAMAI EDGE SECURITY

Akamai edge security solutions are designed to safeguard your business-critical online assets and web properties with our comprehensive solution portfolio for protecting websites and applications, APIs, confidential data, DNS services, Internet-facing IT infrastructure, and internal enterprise IT systems.

Akamai edge security solutions are deployed on a global platform that extends from your applications and infrastructure to the subscriber. Easily manage the massively scalable, fully integrated solution portfolio through a single pane of glass.

- Stop attacks in the cloud, at the network edge, closer to attackers and before they can jeopardize applications and infrastructure.
- Reduce attack surfaces, avoid application downtime and performance degradation, defend against data theft, and improve compliance.
- Protect public cloud, private cloud, multi-cloud, and hybrid cloud implementations.
- Defend against inside and external threats.

AKAMAI EDGE SECURITY SOLUTIONS FOR SERVICE PROVIDERS

Protect your customer-facing applications and assets

Akamai edge security solutions protect your web properties and Internet-facing applications.

DDoS Protection

With cloud-based [DDoS protection](#) solutions for websites, infrastructure, and DNS, Akamai can help you keep your customer portals, web apps, and enterprise IT systems available even through the largest attacks. Mitigating thousands of attacks every month, the Akamai Security Operations Center (SOC) recognizes new attack vectors proactively and institutionalizes lessons learned to stop attacks faster.

- Largest DDos mitigation platform with 60+Tbps capacity
- Global SOC for 24/7/365 attack support
- Fast mitigation with industry-leading time-to-mitigate SLAs
- Proven effective stopping thousands of attacks every month
- Highly resilient—architected for 100% uptime and minimal collateral damage
- Stopping DDoS attacks in the cloud since 2003

Web Application Firewall

Service provider websites and Internet-facing applications are increasingly complex and increasingly susceptible. Protect them with [Akamai's industry-leading WAF solution](#) – the market's first cloud WAF. Akamai was named a Leader in Gartner's 2018 Magic Quadrant for Web Application Firewalls for the second consecutive year.¹ We continuously update our WAF rules based on visibility into the attacks against Akamai customers, and other newly disclosed vulnerabilities.

- Highly distributed with 240,000+ servers around the world
- Zero performance impact guaranteed
- Adaptive WAF rules keep up with the latest threats
- Visibility into recent malicious behavior for millions of clients
- High accuracy backed by Akamai threat research
- PCI DSS compliant

Bot Management

Bots can represent 50% or more of your website traffic, with impacts ranging from poor performance to lost subscribers to fraud. Akamai can help you implement a more effective [bot strategy](#) that brings scrapers under control and mitigates credential stuffing. To keep pace with the changing bot landscape, we continuously refine our bot detections based on visibility into how bots interact with thousands of Akamai customers.

- Visibility into more bot traffic than any other vendor
- Protect both websites and native mobile apps from malicious bots
- Advanced bot detections to stop the most sophisticated bots
- Bot-centric reporting to better analyze and understand bot traffic
- Customized response with advanced management actions

DNS Security

Safeguard your authoritative DNS service. With thousands of DNS servers and hundreds of POPs, our global [DNS solution](#) is designed to optimize DNS availability and performance, delivering superior customer experiences even through the largest DDoS attacks. Advanced security features protect against DNS forgery and manipulation.

- Thousands of DNS servers and hundreds of POPs worldwide
- 20+ discrete DNS clouds to minimize collateral damage from DDoS attacks
- Fast DNS resolution to improve customer experience
- Architected for resiliency and availability with a 100% uptime SLA
- DNSSEC support
- Massive capacity to stop the largest DDoS attacks



Akamai security solutions
protect your enterprise
IT infrastructure and
applications

PROTECT YOUR INTERNAL IT SYSTEMS AND EMPLOYEES

Akamai security solutions protect your enterprise IT infrastructure and applications.

Enterprise Threat Protection

Akamai lets service provider security teams proactively identify, block, and mitigate advanced threats to internal IT systems and infrastructure. [Our solution](#) delivers security, control, and visibility to the enterprise, protecting against malware, ransomware, phishing, and data exfiltration, while easily integrating with your existing network defenses. With visibility into more than a trillion DNS requests daily, Akamai keeps track of malware delivery and command-and-control (CnC) infrastructure to help you proactively block malware downloads or CnC traffic originating inside your network.

- Identify and block access to malicious domains—everywhere
- Enforce AUP and prevent access to inappropriate content
- Prevent DNS-based data exfiltration
- Disrupt communications from compromised devices
- Gain visibility into external enterprise DNS traffic
- Resilient, reliable recursive DNS

Secure Enterprise Application Access

Akamai can ensure your cloud-first, mobile-first employees, contractors, and partners have secure access to all your enterprise applications. Our [secure access-as-a-service solution](#) provides a simple and fast alternative to traditional access technologies like VPNs, remote desktop, and proxies, eliminating the need to punch holes in the network perimeter. Our unique cloud architecture closes all inbound firewall ports, while ensuring authorized users and devices have access to the internal applications they need, and not the entire network.

- Provide least-privilege access
- Deliver SSO capabilities for all applications, whether on-prem, in the cloud, or SaaS
- Segment users from your network
- Collapse traditional hardware/software stack into a single web service
- Enable multi-factor authentication
- Provide simple, secure, accelerated application access



PROTECTING AGAINST THE LARGEST AND MOST SOPHISTICATED ATTACKS – TODAY AND INTO THE FUTURE

Akamai offers two decades of security experience, bringing together the best security talent, threat intelligence, and security technology. We work tirelessly to make it easier for you to provide the best and most secure digital experiences for your subscribers, employees, and partners.

Protection and performance

When you're operating online, you cannot have performance without protection.

History of security innovation

We have protected customers from our inception, stopping some of the largest DDoS attacks ever – including the largest DDoS attack ever mitigated by Akamai at 1.3 Tbps. Moreover, we built both the first cloud-based web application firewall and first DDoS protection service.

Continual investment in security

We are committed to helping you better address your growing security needs as well as the changing threat landscape.

Largest, most trusted cloud delivery platform

Relied on by 100% of the top 15 U.S. online retail sites, 70% of the top 10 global banks, and 60% of the world's top 10 airlines – to name just a few.

Next Steps

To learn more about how Akamai edge security solutions can help you improve customer experiences, boost revenues, and gain a competitive edge, visit akamai.com/cloud-security.

Protect subscribers from online threats

Akamai SPS Secure Consumer

protects households from a wide range of online threats, including phishing, ransomware, viruses, and malware. Increase brand loyalty and boost revenues by defending every household member against unwanted and inappropriate content on every Internet-connected device – laptops, smartphones, tablets, DVRs, game consoles, and TVs. The solution provides advanced cyberthreat protection for subscribers on all service provider networks, including fixed-line, mobile, and Wi-Fi hotspots.

Case study

A large U.S.-based communications service provider needed a solution for protecting a number of critical web-based business functions, including its online retail operation, subscriber account services, and online support for its range of consumer services.

The service provider uses Akamai's Kona Site Defender and Akamai's Secure Content Delivery Network for ultimate protection.

Kona Site Defender (KSD)

The communications service provider's website serves three extremely important business-critical functions, including its online retail operation, subscriber account services, and online support for its wireless, digital TV, Internet, email, home phone, and home security businesses. Akamai's KSD provides automated DDoS mitigation, as well as a highly scalable and accurate web application firewall (WAF) to protect against network and application layer DDoS attacks, and SQL injection and XSS attacks, as well as a wide range of other online threats.

Secure Content Delivery Network (CDN)

Like most large companies that service their end users through a significant online presence, this service provider places high value on privacy and confidentiality. To that end, the provider leverages Akamai's Secure CDN to support SSL for web transactions, access to customer account information, real-time customer service interaction, and other activities where strong encryption and fast response times are both essential. Akamai's Secure CDN is segregated physically and logically from the rest of Akamai's global platform, and complies with [PCI standards](#) and other stringent security regulations.

SOURCES

- 1 Gartner, Magic Quadrant for Web Application Firewalls, Jeremy D'Hoinne | Adam Hills | Ayal Tirosh | Claudio Neiva, 29 August 2018, G00340592. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.



Akamai secures and delivers digital experiences for the world's largest companies. Akamai's intelligent edge platform surrounds everything, from the enterprise to the cloud, so customers and their businesses can be fast, smart, and secure. Top brands globally rely on Akamai to help them realize competitive advantage through agile solutions that extend the power of their multi-cloud architectures. Akamai keeps decisions, apps, and experiences closer to users than anyone — and attacks and threats far away. Akamai's portfolio of edge security, web and mobile performance, enterprise access, and video delivery solutions is supported by unmatched customer service, analytics, and 24/7/365 monitoring. To learn why the world's top brands trust Akamai, visit www.akamai.com, blogs.akamai.com, or [@Akamai](https://twitter.com/Akamai) on Twitter. You can find our global contact information at www.akamai.com/locations. Published 11/16.