

AKAMAI PRODUCT BRIEF

EdgeWorkers - Serverless Edge Computing

Empowering developers to innovate

As companies embrace agile application development and delivery processes, the ability to create and execute code at the edge opens new opportunities for innovative solutions and managing customers' digital experiences as code. Akamai EdgeWorkers offers capabilities and tools for development teams to create new microservices that leverage our network of hundreds of thousands of distributed servers - for secure and fast-acting computation at the edge.

EdgeWorkers

With EdgeWorkers, Akamai is deploying JavaScript engines across our secure network - creating the largest distributed edge compute network available. Just as caching content at the edge enables rapid delivery, deploying logic at the edge allows for rapid execution - at the point closest to end users, regardless of their location. EdgeWorkers eliminates high latency calls to services deployed at the origin or in the cloud while providing improved security by moving exposed client-side logic to the edge.

Using EdgeWorkers

Access to EdgeWorkers can be enabled through the Akamai Marketplace. Developers can begin coding in JavaScript using their IDE of choice or the one included in the Akamai Control Center. EdgeWorkers was built from the ground up - with the needs of agile development teams in mind - for easy incorporation into existing continuous integration/continuous deployment workflows. EdgeWorkers delivers a wide array of tools for testing and debugging code while also offering complete reporting for visibility into EdgeWorkers's performance. EdgeWorkers can be taken a step further by incorporating EdgeKV, an integrated key-value store enabling low latency access to data.

EdgeWorkers can be used in conjunction with the following Akamai delivery products:

- API Acceleration
- Adaptive Media Delivery
- Download Delivery
- Dynamic Site Accelerator
- Ion
- Object Delivery

BENEFITS FOR YOUR BUSINESS



Innovation

Developers can quickly and iteratively create and deploy new services to problem solve and customize delivery directly on Akamai's globally distributed platform.



Low-latency computation

EdgeWorkers provides the shortest possible round trip from request to response by removing unneeded calls to origin and associated network hops that add latency.



Just code

EdgeWorkers enables developers to create their own solutions for routing traffic, personalizing content delivery, and controlling cacheability with dynamic content assembly using JavaScript. Check out our growing [GitHub repository](#) of creative solutions.



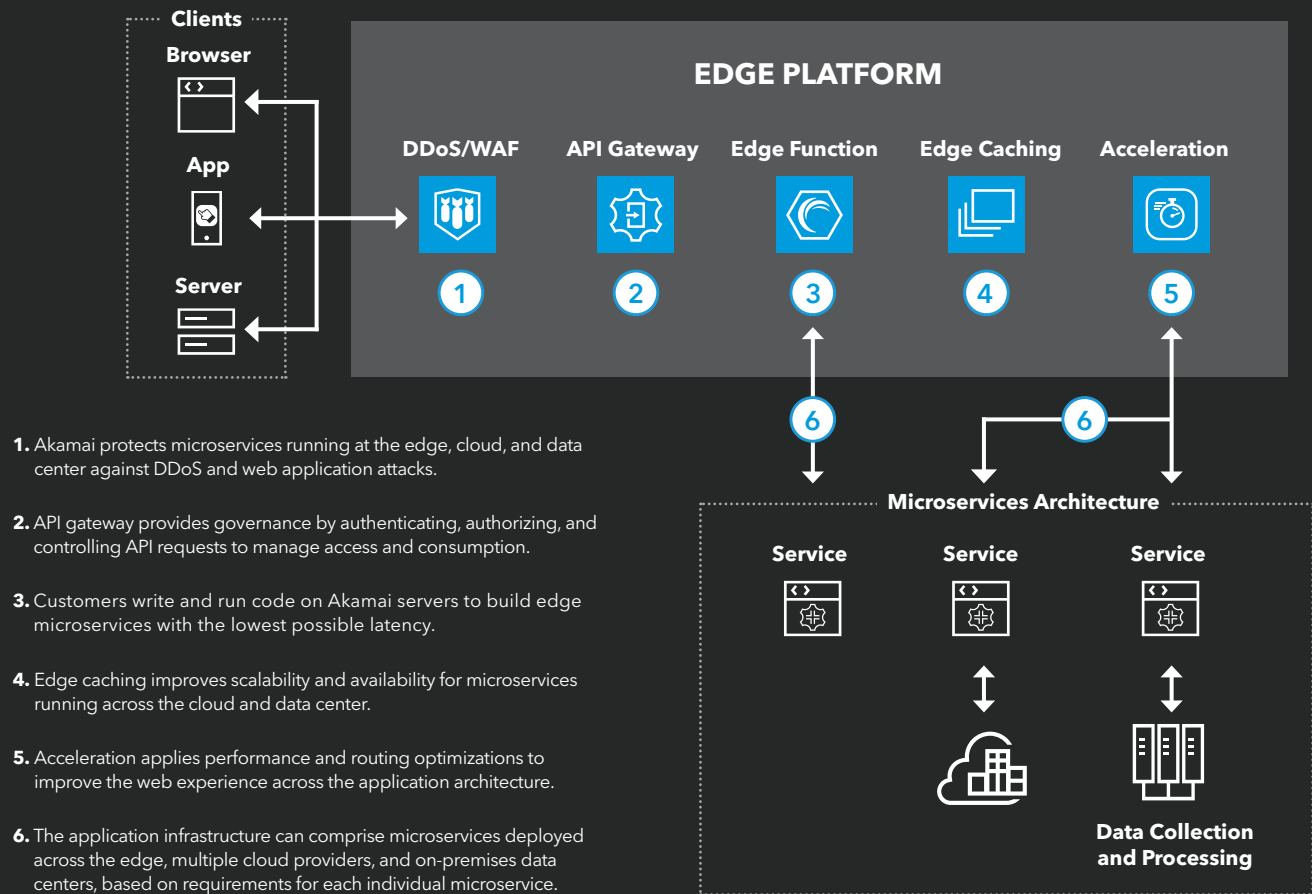
Use Cases

EdgeWorkers allows developers to programmatically solve myriad challenges. The addition of an integrated key-value store further expands the possibilities by bringing data to the edge.

Some current use cases for EdgeWorkers leveraged by customers include:

- **Advanced Caching and Traffic Routing** – Streamline content delivery and increase offload from the origin with edge cache key manipulation and route management
- **Localization and Personalization** – Deliver and maintain personalized customer experiences based on device, geography, and customer-provided user data
- **Dynamic Content Assembly** – Align the right content with the right user by dynamically assembling content from multiple sources
- **Insights and Key Feature Integration** – Integrate additional value-add insights and functionality to your web experience by building capabilities from Akamai and our technology partners into your workflow
- **Header and Cookie Management** – Decorate, reduce, or modify headers and cookies to adhere to user preferences and data compliance laws
- **Add Third-Party Content to Your Site** – Leverage third-party services and run their JavaScript at the edge to add high-value features to your site

Microservices at the Edge Reference Architecture



1. Akamai protects microservices running at the edge, cloud, and data center against DDoS and web application attacks.
2. API gateway provides governance by authenticating, authorizing, and controlling API requests to manage access and consumption.
3. Customers write and run code on Akamai servers to build edge microservices with the lowest possible latency.
4. Edge caching improves scalability and availability for microservices running across the cloud and data center.
5. Acceleration applies performance and routing optimizations to improve the web experience across the application architecture.
6. The application infrastructure can comprise microservices deployed across the edge, multiple cloud providers, and on-premises data centers, based on requirements for each individual microservice.

To learn more, visit www.akamai.com or contact your Akamai sales team.



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 4/21.