

AKAMAI SOLUTIONS BRIEF



# MOBILE PERFORMANCE SOLUTIONS



In a world where every user is connected 24/7, mobile experiences have to meet high user expectations. Every web experience should be fast and engaging no matter when, where, or which device accesses the content. Users demand consistent performance all the time — whether they are using mobile sites or mobile apps.

The web has changed — mobile has eclipsed desktop as the primary means of connecting,<sup>1</sup> and the demand for richer content is higher than ever. Delivering fast, secure, quality mobile experiences requires content owners and developers to consider how they will optimize those experiences to meet the rising expectations of their always connected, globally distributed end users. Failure to deliver fast, scalable, and engaging mobile experiences can result in lower revenue and higher costs.

It's no longer enough to accelerate dynamic web content in a homogenous way. Intelligence and interoperability are necessary to deliver an effective set of real-time optimizations that result in an optimal mobile experience for end users based on their unique situation and context.

Akamai offers integrated mobile and cellular web performance solutions that help organizations reduce cost by eliminating infrastructure necessary to deliver mobile content, increase revenue by optimizing web performance in the mobile channel, and get ahead of competition by leveraging key user insight to tailor customers' mobile experiences.

Additionally, Akamai offers technology for developers to optimize mobile application experiences that help increase app installs, maximize conversions, and improve customer loyalty.

Akamai's industry-leading mobile performance solutions make mobile experiences fast, reliable, and secure across all end-user situations, while maximizing infrastructure offload and operational agility.

**Customer Quote:**

*"Akamai multiplies our app capacity, boosts our app performance and customer experience, and secures and protects our app availability."*

**— IT Manager, Media and Entertainment Company**

## Akamai's Mobile Performance Solutions are Designed to:

### 1) Optimize Performance for Each User

Mobile apps are an essential part of the mobile experience — app usage accounts for more than 85% of total device time.<sup>2</sup> This makes app users your VIP users, who are critical to the success of your business and must be treated accordingly by enjoying the best experience possible. Simultaneously, mobile websites are also important but serve a different purpose — reach. The average monthly mobile web audience is 2.5 times larger than the mobile app audience, and growing twice as fast.<sup>3</sup> In a world where your first impression might be your only impression, it's also mission critical to deliver a great experience to these users. Akamai's Mobile Performance Solutions improve the user experience of both mobile websites (for audience reach) and apps (for audience engagement) by dynamically responding to the unique situation of each individual user and delivering faster web, app, and API responses. Akamai applies optimizations adaptively to mobile websites and apps based on sophisticated analysis of conditions specific to the end user's environment such as browser, device, carrier, real-time network conditions, characteristics of the content being requested, and presence of third-party services. In addition, Akamai offers unique capabilities for mobile app developers to easily deploy edge-based technology directly into their audience's devices.

#### APIs

While mobile apps are similar to dynamic websites in some ways, unlike websites, they function via API calls to origins for data instead of HTML. For mobile apps, Akamai enables easier API operations with API metering, API throttling, and API authorization/authentication. Akamai accelerates API requests with caching as well as route optimization and protocol optimizations. This ensures efficient API responses with API assembly that improves app performance, and lowers round trips to origin by assembling a new API at the edge when responding to user queries that may require multiple API calls.

#### Native Application SDK

But APIs represent only a portion of what Akamai can optimize in service of better app experiences. With its native application SDK, Akamai can give tremendous control to developers and content owners, allowing them to schedule delivery of content to ensure audiences have access to their content even when networks are congested or unavailable. Extending Akamai's cloud delivery platform to the device via SDK means benefits previously reserved for the so-called "middle mile" — including route optimization, TCP adaptation, and network awareness — can extend into the last mile, where cellular and Wi-Fi networks can degrade user experiences.



**+200 BILLION API  
CALLS A DAY\***

[Akamai delivers API and Web Services traffic at extraordinary scale every single day.](#)

\* As of August 2015

## Cellular Networks

Of course, when it comes to the quality of mobile experiences, the network matters. Mobile users are often connecting to websites and apps over cellular networks, which introduce significant latency and are inherently unreliable. Akamai enables better end-user experiences over cellular networks by connecting to 99% of mobile gateways directly with peering relationships on a global scale. Delivering content from closer to the mobile gateways means delivering content that's closer to your end users. Even though most of the congestion and bandwidth problems are within the radio access network, reducing the latency during cellular networks' connection to the Internet results in significant performance optimizations, especially if congestion is leading to packet loss.

Akamai's mobile performance optimizations include the ability to optimize media assets, like images, in order to reduce data payloads, while reducing round-trip time on lossy cellular networks — meaning web pages and apps load faster and more consistently, even when network conditions are poor.

## 2) Simplify Development and Operations for Each Experience

In the mobile-first world, businesses need to make customer experience their highest priority. To maintain a competitive advantage and deliver great mobile experiences that attract customers, organizations are increasingly adopting DevOps as a means to deliver application releases more rapidly than ever before. Consider that organizations will have gone from four application releases per year in 2010 to 120 releases per year by 2020.<sup>4</sup> Akamai's Cloud Delivery Platform can give you the edge, by seamlessly integrating into your organization's existing Continuous Integration and Continuous Deployment (CI/CD) workflow and DevOps tools, enabling automated testing and deployment that results in faster, more frequent, and more robust application deployments. Interested audiences can learn more about Akamai for DevOps [here](#).

## 3) Seamlessly Integrate with Other Akamai Solutions

Akamai has the breadth of solutions to meet your business and technology needs. Akamai's Mobile Performance Solutions can be seamlessly combined with Akamai's Cloud Security and Media Delivery Solutions. Akamai's Cloud Security Solutions protect against increasing web-security threats like SQL injections, cross-site scripts, and DDoS attacks, which can compromise sensitive network data and end users' online experiences. Akamai's Media Delivery Solutions help organizations connect their content to their audiences at the highest quality. In addition, Akamai offers a unified suite of {OPEN} APIs, Luna Management Portal, and Digital Performance Management solutions, which enable you to access, manage, and obtain unprecedented insights into the web experiences of your actual customers.



1 OF 3

1 of every 3 Global 1000 Companies  
choose Akamai Web Performance  
solutions

## BENEFITS TO YOUR BUSINESS

- Improve brand perception and customer loyalty with faster and more available mobile experiences
- Reduce complexity of developing, deploying, and iterating web experiences
- Reduce cost of operations and infrastructure
- Increase app installs with improved app ratings and reviews
- Maximize in-app conversion via usage frequency and session duration

## What Now?

- Our experts can help you find out if your mobile app performance is leading the pack or bringing your user experience down. Get your mobile app performance assessment [here](#).
- Learn how Akamai Ion helps you deliver engaging mobile experiences [here](#).

## SOURCES

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As the world's largest and most trusted cloud delivery platform, Akamai makes it easier for its customers to provide the best and most secure digital experiences on any device, anytime, anywhere. Akamai's massively distributed platform is unparalleled in scale with over 200,000 servers across 130 countries, giving customers superior performance and threat protection. Akamai's portfolio of web and mobile performance, cloud security, enterprise access, and video delivery solutions are supported by exceptional customer service and 24/7 monitoring. To learn why the top financial institutions, e-commerce leaders, media & entertainment providers, and government organizations trust Akamai please visit [www.akamai.com](http://www.akamai.com), [blogs.akamai.com](http://blogs.akamai.com), or [@Akamai](https://twitter.com/Akamai) on Twitter. You can find our global contact information at [www.akamai.com/locations](http://www.akamai.com/locations). Published 10/17.