IBM **Edge Delivery Services**
powered by Akamai

Ion

Deliver better online user experiences with effortless performance from IBM® Edge Delivery Services.

Organizations looking to provide safe, reliable, and fast online experiences often lack the tools and capabilities to manage all aspects of the end-to-end delivery over the Internet. The challenges of meeting user expectations are diverse, but fall into three broad areas of focus:

*   **Performance** – Companies looking to maximize audience engagement can help improve business results with faster performance
*   **Cost** – Reduce operational costs, since managing infrastructure for the online challenges across the Internet can be expensive
*   **Time** – Improve organizational agility due to the increasing development costs and short expectations for time to market

The pressure to deliver great online experiences is higher than ever. Across sites and apps, 53% of visits are abandoned if a mobile site takes more than three seconds to load, and 49% of users expect a mobile app to respond within two seconds or less. In order to realize digital success, every business must deliver a consistently great experience on every form factor and device.

The challenges to deliver compelling mobile experiences are formidable:

*   Cellular networks often provide unreliable connections and variable speeds.
*   Device and browser diversity make for an overwhelming number of endpoints, each of which can require unique optimizations.
*   Users view pages with images 94% more frequently than pages without images, driving content developers to build image-heavy pages that account for 2/3 of the payload.
*   APIs have grown 2.8x in year-over-year traffic, and are increasingly the building blocks for every kind of app from mobile to so-called "single page" — yet are subject to network latency and availability.

With all of this complexity, bringing differentiated solutions to market in a timely fashion is becoming increasingly difficult, which threatens revenues and customer loyalty.

Ion is a suite of integrated performance optimizations, tools, and intelligence that together address each stage of delivering compelling online experiences, from development and deployment, through middle-mile and cellular networks, to user devices, browsers, and apps.

Built on the SLA-backed bedrock of our global Cloud Delivery Platform, Ion allows businesses to deliver fast, contextually aware experiences that adapt to each user and help drive increased impressions, conversions, and brand equity.

BENEFITS TO YOUR BUSINESS:

Grow Customer Base

*   Reduce development effort necessary to deliver superior user experiences with automated performance optimizations
*   Deliver optimal-quality images to improve the efficacy of campaigns and promotions
*   Provide seamless cross-device performance across the globe both for in-country and international use cases, and with the benefit of cellular optimizations
*   Get to market quicker by automating Edge Delivery Services into your DevOps workflows, deploying new properties with streamlined and simplified onboarding, configuration, and monitoring
*   Realize the benefits of Ion for sites leveraging WebSockets for interactive sessions

Maximize Conversions

*   Deliver consistently fast experiences with fewer interruptions and instill trust in users to maximize session duration
*   Delight users with rich, high-quality images that are optimized for their device, operating system, and browser
*   Overcome cellular performance challenges so users feel empowered to engage across desktop and mobile use cases

Improve Customer Loyalty

*   Focus on delivering new and differentiated capabilities while relying on automating performance optimizations
*   Add third-party content to personalize and deliver contextually relevant content without compromising performance
*   Maximize efficiency and focus for your web and creative teams by automating image creation and optimization workflows

Ion

Automated acceleration to deliver the best website and mobile app experiences imaginable

Infrastructure

Our Cloud Delivery Platform

Experience

Effortless Browser Performance

Ion Browser Performance

Best Mobile App Experience

Ion Mobile Apps

Maximum Agility for Developers

Akamai for Developers

Faster Performance Across Websites and Mobile Apps

Ion helps every user have a seamless experience across different device types and network conditions, however they choose to connect, adapting in real time to changes in content, user behavior, and connectivity.

- **Adaptive Acceleration** – Deliver faster, more engaging browser experiences leveraging machine-learning technology to automatically determine performance optimizations based on real user behavior, with zero development effort. Ion automatically pushes content into the browser, and both accelerates and mitigates the performance impact from third parties. It also includes the ability to adapt image format, size, and compression, all to deliver experiences that are fast, seamless, and optimized for their browsing context.

- **Mobile Application Performance SDK** – Maximize user loyalty by enabling developers to craft custom, differentiated experiences with software development kits. Mobile app developers can pre-position content to help deliver more consistent experiences across varying network conditions — even when connectivity is lost. SureRoute for Cellular and Adaptive TCP can help reduce latency in last-mile networks, while real user and device insight — including custom metrics — help developers tune mobile experiences over time.

Intelligent Global Platform, Optimized for Cellular

Ion combines the scalability of our global content delivery platform with the fastest dynamic content acceleration. We have also introduced cellular optimizations designed to lower latency and avoid disrupting user engagement.

- **Cellular Optimizations** – Provide consistent performance over cellular connections and realize performance improvements through protocol optimizations, including real-time IPv4/6 adaptation, and secure connectivity for older mobile devices using the ChaCha Poly cipher.

- **HTTP/2** – Help users have a consistent and high-quality experience by utilizing fast and efficient modern web protocols. Ion builds on the benefits inherent in HTTP/2 and delivers intelligence that automatically pushes content to the user's device quickly and efficiently to eliminate the gaps and errors that can lead to dissatisfied users and missed conversion targets.

- **Load Balance Traffic Globally, While Accelerating with SureRoute and FastDNS** – Deliver consistent experiences to your users, and maximize uptime and availability with a fault-tolerant solution that makes intelligent routing decisions based on global Internet conditions.

Tools to Simplify & Speed Time to Market

Ion provides the tools your teams need to rapidly onboard, manage, and tune digital properties. Once on the platform, Ion enables you to craft the differentiated solution your users demand with a powerful set of integrated capabilities, including:

- **Image Optimization*** – Reduce cost and complexity by automating the creation and delivery of high-quality images for multi-screen websites and apps. This easy-to-use, cloud-based solution automatically creates and optimizes each image for the best combination of size, quality, and format for every end user and device.

- **Real User Monitoring (RUM)** – Gain actionable insight to perform ongoing optimization and tuning to maximize end-user experiences in specific geographies, browsers, operating systems, or protocols.

- **DevOps Enabled** – Keep your content fresh and engaging with web-based tools and APIs that simplify operations. Agile and efficient interactions with Cloud Delivery Platform make it part of your existing developer workflows via a programmable, automated, and repeatable interface that allows for early testing, validation, monitoring, real-time visibility, and concurrent developer-friendly logic at the Edge.

The Edge Delivery Services Ecosystem

We make the Internet fast, reliable, and secure. Our solutions help customers gain insight into web and mobile application bottlenecks, turning information into actions that allow customers to improve their online revenue-generation engine. Solutions are built on our globally distributed intelligent platform; ready to consume on the Marketplace; managed through the unified, customizable Luna Control Center; and supported by Professional Services experts who get you up and running easily and inspire innovation as your strategies evolve.

What Now?

Experience the Ion difference by taking advantage of our <u>complimentary consultation</u>.

* available as an add-on to all Ion versions

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