

A person in a brown jacket is holding a smartphone. The background is a cityscape with a prominent skyscraper and a bridge over a river.

Web Performance Delivered

**With IBM® Edge Delivery Services,
powered by Akamai®**



To stay competitive, the web experience that your online platform delivers must meet or exceed customer expectations. It must be fast, engaging and responsive. As a result, the mobile and web architectures that support it are now business-critical.

Market intelligence continuously reports that the key to business success is a high quality end user experience. In the digital age, this experience must include quick and secure functionality of every application, from the simplest webpages to the highest-traffic mobile configurations.

When all data is traveling from a compute center straight to the end device, the potential for delivery challenges is high. Slow page load times, potential for breaches and poor mobile capability mean the delivery model is faltering, and the end user experience suffers as a result.

How can your organization combat:

- Constantly growing web pages,
- Increased complexity in applications,
- Greater security concerns than ever before,
- Or mounting mobile usage that requires infrastructure modernization?

It's time to rethink your strategy in web application delivery.

IBM Edge Delivery Services helps your organization stay on top of the future of internet delivery support.

What is IBM Edge Delivery Services?

Fast, Reliable and Secure

IBM Edge Delivery Services, powered by the Akamai Intelligent Platform™ is the leading cloud platform for delivering secure, high-performing user web experiences to any device, anywhere. It reaches globally and delivers locally.

The platform manages the underlying complexities of online business – from device and format proliferation, to application and network security, to performance and reliability issues – so you don't have to.

The platform is made up of a distributed network of over 200,000 servers and intelligent software, delivering over 2.5 trillion interactions daily. No one delivers more web traffic, and 95% of internet users are a single network hop away. The platform is constantly monitoring web conditions to:

- Optimize the end user experience
- Provide instant device-level detection and optimization
- Identify, absorb, and block security threats
- Make decisions based on comprehensive knowledge of network conditions
- Present unprecedented business and technical insights



200,000+ servers globally



2.5 Trillion+ interactions delivered daily

The process is simple.

This globally distributed platform optimizes web communications between any type of end device and the origin premises, improving performance, reliability and availability. IBM Edge Delivery Services identifies the fastest and most reliable route to an organization's infrastructure to retrieve the data, while providing static caching at edge servers and the acceleration of dynamic content. As a result, subsequent requests for the content will be delivered lightning fast.

The impact is huge.

IBM Edge Delivery Services can:

- Reduce web server usage by 50-70%
- Cut internet bandwidth usage by 70-95%
- Eliminate peak load needs by 10-30%
- Absorb hundreds of Gbps of attacks routinely without pause

Put simply, IBM Edge Delivery Services provides fast, reliable and secure web service to end users. This proven method of web application delivery leads to new markets, new customers, improved interactions, and increased revenue at decreased costs.



7 Tenets of the IBM Edge Delivery Services Methodology



1. Maximize results for your business by providing a high-quality end user experience.

With IBM Edge Delivery Services, organizations will consistently reduce loading times and deliver predictable, high-quality performance to users, especially for those users on mobile devices over cellular network connections. When end user satisfaction increases, revenue increases, improving business practices and outcomes overall.



2. Secure your data and applications from attack.

The platform carries up to 30% of global web traffic on any given day, providing an unrivalled window into the security exploits taking place in real time. This intelligence is continually reviewed to enhance security offerings and to ensure as security threats change, IBM Edge Delivery Services' ability to stop them doesn't. A comprehensive range of stand-alone or integrated solutions are available to meet your business requirements including Domain Name Service Protection, Website Protection, Behavioral Analytics, Bot Management and Data Center Protection.



3. Reduce IT complexity and cost.

With no hardware, software or device limitations, IBM Edge Delivery Services is easily enabled, and greatly reduces your need to purchase additional infrastructure. Leveraging a global, standard solution for delivering applications, it eliminates the need to deploy numerous point solutions. Employing this drastic simplification, will deliver a more consistent level of service across your entire application portfolio.



4. Provide service on any device, in any location.

Improve the performance of websites and applications by automatically recognizing the device being used and delivering faster web and API responses. The platform applies web and API optimizations adaptively to websites and apps based on a sophisticated analysis of real-time conditions specific to the end-user's environment including browser, device, network speed, and presence of third-party services.



5. Deliver content in a way that's tailored to the device and connection capability.

With cloud image management capabilities, the IBM Edge Delivery Platform can automatically optimize images to deliver the highest quality image with the least amount of bytes. The platform can also convert images to the size that is best suited for each device, software and screen dimensions.



6. Balance your workload intelligently and reliably.

The global platform is integrated in thousands of ISP locations, allowing data to be load balanced across multiple data centers, and making the most efficient use of your infrastructure. With hundreds of thousands of servers worldwide, the platform can detect load conditions, and route traffic reliably to the appropriate data source.



7. Scale operations efficiently and seamlessly.

Reduce cost and complexity by offloading expensive web infrastructure, including bandwidth, compute and storage while providing website and app availability and scalability. IBM Edge Delivery Services simplifies website operations by pushing application logic to be executed at the edge of the platform, providing developer-friendly open APIs for quick and easy performance optimizations, and offering access to a team of award-winning internet experts who can get you up and running easily, answer questions 24x7, and inspire innovation as your strategies evolve.

What is the Impact of IBM Edge Delivery Services?

IBM Edge Delivery Services empowers leaders to advance their web business like never before.

Optimize the User Experience to Maximize Business Success

Poor performance or spotty availability on a website or portal can negatively impact the end user experience, which in turn affects customers and businesses. If users cannot obtain the information, product or service they need, businesses will suffer from lower conversion rates, fewer customers and reduced sales.

Optimizing the performance of web applications across all devices helps organizations achieve the ideal user experience for customers, employees, dealers, distributors and business partners. IBM Edge Delivery Services works in ...



116 countries



1,440 networks



3,100 locations



200,000+ servers

... which makes it easy for organizations to utilize the platform.

Providing the superior experience that end users have come to expect, whether it be on the desktop or a mobile device, preserves brand integrity for all stakeholders. E-commerce companies using IBM Edge Delivery Services grow online revenue, reduce e-commerce site and cart abandonment and handle seasonal spikes in website usage with ease.

The cost of not investing in improved web capabilities can be huge.

A one second delay in page loading time can result in: 11% fewer page views, 16% decrease in customer satisfaction, and a 7% loss in conversions.

Balance Workload and Substantially Reduce Infrastructure Investment

As demand for products and services fluctuates, organizations need to safeguard their web applications' functionality. Business-critical functions must accommodate spikes in user activity without sacrificing performance at a moment's notice. When revenue growth depends on consistent usability across mobile and desktop platforms, reliable web applications are key.

IBM Edge Delivery Services enables organizations to deliver the performance their applications, portals, mobile platforms and media services demand, every single time they are used. The benefits of IBM Edge Delivery Services:

- Significantly increase performance by ensuring the best possible route to your application, and executing caching and processing functions nearest to the end user making the content request
- Reduce the need for future infrastructure investments, resulting in greater ease of manageability, reduced complexity and the ability for IT resources to resolve potential issues faster
- Simplify support of mobile delivery, seasonal activities or proof of concepts by being able to quickly and easily deploy applications on and off the platform

IBM Edge Delivery Services allows organizations to support the innovation that customers expect, and it enables businesses and their employees to excel in web application development and delivery.

IBM Edge Delivery Services helps to dramatically increase productivity by reducing latency over 50%.



Secure Websites and Applications

The security of a website and applications is paramount to the success of any organization operating in a hyper connected world. Before performance and modernization, absolute security is essential, so a business can operate without fear. How can organizations safely navigate the increasingly dangerous online environment?

IBM Edge Delivery Services enhances the protection of websites and applications. It works with the existing infrastructure, making it easy to integrate and enable the organization to identify malicious behavior and thwart attacks quickly. The platform delivers an array of cloud-based security services which protect businesses from attacks including DDoS, SQL injection, cross-site scripting and other common threats, which can bring applications down or compromise sensitive data. The platform delivers “always-on” protection authenticating valid traffic at the network edge. This capability can absorb even the most intensive attack in the hundreds of Gbps with relative ease.

The security benefits of IBM Edge Delivery Services includes:

- Reduction in risk of downtime, defacement, and data theft
- Protection of revenue, customer loyalty, and brand equity
- Reduced costs associated with handling spikes in attack traffic
- Elimination of unnecessary capital expenditure on security hardware and software

In an age of increasing threats, IBM Edge Delivery Services helps organizations avoid security issues: “We saw more web application and DDoS attacks than ever before, a trend that shows no sign of reversing.”

- Akamai's Q2 2016 State of the Internet Security Report



Improve Performance for Mobile and Cellular Users

With mobile device usage skyrocketing, mobile sites and applications are emerging as the key engagement channel for businesses to connect with their most valuable customers. Mobile app usage represents more than 85% of total mobile device time, and users now spend more time with apps than they do with television. In the web world, performance translates into happier users, longer engagement times, more views, and lower abandonment rates – delivering business benefits ranging from increased revenue to greater brand loyalty.

To optimize a highly performing mobile web infrastructure to this degree, an organization must recognize and avoid key barriers including variable last internet mile conditions, complex rich-media requirements and lack of network-aware intelligence in apps.

IBM Edge Delivery Services can circumvent these hurdles by:

- Leveraging deep deployments in cellular networks to help optimize performance
- Providing intelligent platform services tailored to accelerating the API and image calls that mobile apps heavily rely on
- Embedding on-device, network-aware capabilities that enable apps to deliver better user experiences across changing network conditions
- Making real-user app performance monitoring available that ties performance metrics to business objectives

The performance bar is high, with a guideline of one-second response times for mobile web pages and mobile apps, regardless of network conditions.

– Forrester Report “Building High-Performance Mobile Experiences”



Who Benefits from IBM Edge Delivery Services?

Any organization, anywhere conducting business on the web.

The platform's easy integration and device flexibility means it can be applied across a variety of industries, including finance, engineering, manufacturing, energy & utilities, business services and more. That flexibility also means IBM Edge Delivery Services scales easily, allowing the platform to work across organizations of any size, from small and mid-sized companies to the largest of enterprises.

Having access to hundreds of thousands of servers worldwide, IBM Edge Delivery Services can bring fast, secure communication to any continent or country, enabling organizations to be truly global.

With its flexible framework, IBM Edge Delivery Services can transform any end user experience.

IBM Edge Delivery Services is powered by Akamai, which has over 5,000 customers internationally.



Success Stories

IBM Edge Delivery Services works with clients across the globe to improve the way they conduct business over the web. Across a variety of industries and world-class business, IBM Edge Delivery Services is transforming the way data, applications and transactions operate online.





Banking and Finance

Due to its safety and speed, IBM Edge Delivery Services is a top platform choice for financial institutions looking to simplify and secure online transactions and application delivery. As of 2015, most top organizations are protected by the Akamai Intelligent Platform, including:



The top 10 US banks



The top 10 asset managers



9 of the top 10 FinTech companies



5 of the top 10 stock exchanges



Over 100 banks worldwide



Energy & Utilities

The Energy & Utilities industry can leverage IBM Edge Delivery Services to drive business by increasing performance and availability to end users while optimizing their applications for speed and safety. The Akamai Intelligent Platform is being used by:



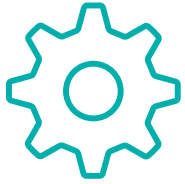
**7 of the top 10 Electric
Utility Companies in
North America**



**3 of the top 6 Energy and
Utility companies**



**2 out of the top 3 Oil and
Gas companies**



Engineering

A European engineering company required IT-based integration of product planning and production to ensure a successful global rollout of a central web content management system. The new integration also needed to manage growing web traffic volumes at reduced costs. The corporation needed quick delivery of SharePoint files to users in China and to protect intellectual capital, they did not want to store data locally in China.

The specific demands of the project led the company to select IBM Edge Delivery Services as their solution, as it had the capability to accelerate the web-based application and improve the delivery of the SharePoint application. Overall, the solution was able to provide:



**Traffic growth without
expanding the web
infrastructure**



**Reduction in latency
delivering content to
China**



**Increased performance
of globally deployed web
applications**



Healthcare & Life Sciences

One of the 10 largest medical device manufacturers in the world chose to equip its salesforce with Tableau, enabling them to make timely, informed and data-driven sales decisions. Maximizing the value of the new software required making Tableau accessible from any location and on any device. When adoption plateaued at 80% because the sales reps were frustrated with waiting for the VPN connection to work, the company knew they needed to make a change.

They turned to the Akamai Intelligent Platform to enable access to Tableau in a way that didn't require a VPN connection and still kept sensitive and proprietary information secure. By using the Platform, they optimized their use of Tableau and:



**Achieved 100%
adoption**



**Eliminated the
need for VPN**



**Improved application
performance
by 60%**



**Enhanced protection
against web
application attacks**



Public Sector Services

After a weekend of cyberattacks, the CIO of the Canadian based Police Service contacted IBM's cyber security team for advice on moving its web infrastructure to the cloud. They wanted to create a bulletproof buffer against cyberattacks and threats of any scale and sophistication.

Within 30 hours of the engagement kick off, their site had been migrated to the cloud and the Akamai Intelligent Platform implemented. The site is now monitored 24/7 by IBM's cyber security team, so any attack attempts are addressed in real time, which also alleviates the internal security team from having to handle long, intensive and unplanned shifts. With IBM and Akamai, additional benefits to the police service include:



**Offload of
Internet traffic**



**Uninterrupted
website
availability**



**Reduction in
load on internal
servers**

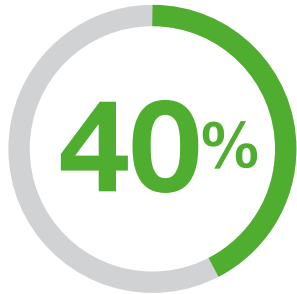


**Increased public
confidence**



Retail, Wholesale Distribution and Sales

A popular bridal website was launching a new online feature that would require four times more hardware to support the highly dynamic site. IBM Edge Delivery Services provided a solution to offload intensive processing from the application servers while boosting performance and security. By providing faster operation for the configuration tool with no additional investments for growth, IBM Edge Delivery Services contributed to:



Reduction in application servers



Reduction in web servers



Decrease in bandwidth requirements



Lower CPU utilization



More traffic supported



Savings in overall costs

The IBM Edge Delivery Services Difference

IBM Edge Delivery Services provides organizations and end users with a web experience that is faster, more reliable and more secure than ever before. By communicating rapidly and securely across hundreds of thousands of servers worldwide, IBM Edge Delivery Services is a truly global platform for transforming the online experience. No matter the industry, IBM Edge Delivery Services can add speed and security to any online business.

Extensive Experience

- For over 50 years, IBM services have helped design, build and run the foundational systems the world relies on.
- For more than 13 years, IBM and Akamai have partnered to deliver secure, high-performing user web experiences to any device, anywhere.
- IBM has been named a leader in the 2015 Gartner Magic Quadrant Report for Managed Mobility Services.



World Class Technical Support

With IBM Edge Delivery Services, IBM brings its expertise in systems integration and other services that support world-class functionality for web applications and services to Akamai's Intelligent Platform. IBM also provides 7x24 support from service delivery centers around the world – so you have access to experts when you need them.

Recognized World Leader by Analysts

IBM is positioned as a leader by many analysts, including industry analyst TBR noted the following key findings in its Cloud Business Quarterly report.

Cloud Professional Services vendor adoption

IBM leads in customer adoption rates and ranks third in cloud professional services revenue.

Segment vendor adoption

IBM leads adoption across cloud professional services segments: consulting, SI, ADM and managed service.

IBM customer feedback

IBM's cloud professional services customers place an emphasis on IBM's knowledge of their specific industries as an important factor when choosing to work with the company.



Take Your Organization's Web Performance To The Next Level

If your organization is struggling with complexity of content, large IT investments to ensure performance, or concerns about increased vulnerability to DDoS/DNS and application attacks, Edge Delivery Services can transform your web infrastructure.



Complimentary Web Assessment

Evaluate your organization's web infrastructure for speed, performance and security to ascertain how Edge Delivery Services can best serve your needs. <http://ibm.biz/IBMEdgeDeliveryServices>



Specialist Consultation

Talk to an Edge Delivery Services specialist to learn how you can take your organization's online performance to the next level. [Talk to an Edge Delivery Services Professional](#).



Learn More

To learn how Edge Delivery Services can help you manage the underlying complexities of online business, visit <http://ibm.biz/EDSoffering>

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