

Providing fast, trusted medical information to people in search of answers. **Drugs.com achieves unflinching performance and security with Akamai.**



CHALLENGE

As Drugs.com looked to scale up its business in the United States and other key markets, it needed a way to handle traffic spikes with new levels of performance and security.

Reliable health information at global scale

As a trusted source of pharmaceutical and medical information, Drugs.com's success hinges on the quality, accuracy, and speed of its content. Any downtime or performance lags can drive people away, hurt search engine rankings, and cut into advertising revenue. As the company expands worldwide with Drugs.com and now Medicine.com, it has turned to Akamai web performance and security products to keep its websites running smoothly.

Content drives the business at Drugs.com

Drugs.com provides the largest, most accurate library of pharmaceutical knowledge on the internet, providing potentially life-saving information for consumers and medical professionals. Its sister site – the recently launched Medicine.com – focuses on educating people on medical conditions and treatments. Together, the websites give consumers the facts they need to take medications safely, better manage their health, and have more informed conversations with their healthcare providers.

Powered by leading medical information providers such as Harvard Health and Mayo Clinic, high-quality content is everything for Drugs.com and Medicine.com. Consumers know they can trust the information they read on the websites, and they continue to come back for more. But the content is also crucial for optimizing search engine performance – the main avenue that brings people to the websites in the first place.

“Most of our traffic comes from organic search, which means our success is all about having the right content on the site,” says Nick Le Mouton, CTO at Drugs.com. “We have a team of editors, pharmacists, and content writers working to create quality content that has a chance of being well ranked by the search engines.”

That means, for example, that if someone types “amoxicillin” into Google or another search engine, they’ll see a Drugs.com link at the top of the search results page. The better the content and the faster the delivery, the more visible Drugs.com is to consumers and medical professionals looking for information. And getting people to the websites is priority one, as the company depends on advertising as its source of revenue.



COMPANY

Drugs.com
www.drugs.com
www.medicine.com

INDUSTRY

Technology, Healthcare

SOLUTIONS

- Edge DNS
- Enterprise Application Access
- Front End Optimization
- Image & Video Manager
- Ion
- Kona Site Defender
- NetStorage

KEY IMPACTS

75%

Unexpected spike in traffic absorbed seamlessly

2x

Traffic increase without growing the origin infrastructure

30 MILLION

Monthly users and growing

Drugs.com achieves unflinching performance and security with Akamai

Drugs.com learns the importance of scalability

Drugs.com sees more than 30 million visits every month, and that number has grown as the company has expanded its reach globally and strengthened its presence in its key market, the United States. As CTO, Le Mouton has the critical responsibility of keeping everything up and running around the clock – making sure the content is fast, accessible, and secure.

“If our sites go down, that’s lost revenue we can never regain,” Le Mouton says. He speaks from experience. Having worked with Drugs.com for almost 20 years, he has helped the company overcome some significant growing pains. A little over a decade ago, he was the sole systems operations person for the company, which meant he was often up in the middle of the night dealing with traffic spikes coming from around the world.

“Traffic was bumping up against the limits of the origin server, and we couldn’t scale up fast enough. That all came to a head in 2009, when Michael Jackson died tragically,” says Le Mouton. “During this time, we saw a 20,900% traffic spike as people searched for information on propofol. Traffic related to this medication alone rose from 650 to 135,000 page views in a single day, and all that huge traffic spike took us offline for several hours.”

That event convinced Drugs.com to look for a content delivery network (CDN) to take the pressure off its origin servers. Though it tried a few different products early on, the company struggled to find the performance and 100% uptime it needed – until it found Akamai.

“We reviewed just about every single CDN that we could get our hands on, and Akamai was the leader,” Le Mouton says. “It was one of the fastest solutions we reviewed – and it gave us the scalability, performance, and innovation we needed to continue growing globally.”

Websites stay up 24/7 – not the IT team

Today, Drugs.com has purchased an integrated suite of web performance and security products from Akamai. With Front End Optimization and Ion, the company has maximized site performance for a better, faster end-user experience. And it recently integrated NetStorage with its content management systems, moving static content closer to the edge and offloading traffic from the origin systems. For people researching pharmaceutical and medical topics, that means split-second responses from the web pages – without lag time that might make users bounce to a competitive site.

“When we started caching dynamic content at the edge with Akamai, we saw page performance improve significantly, especially in key markets,” says Le Mouton. “Plus, Akamai helps us keep our websites up and revenue flowing in with 100% availability – something other vendors can’t provide.”

For Le Mouton, that means performance and availability problems no longer keep him up at night, even when traffic rises unexpectedly. Indeed, during the COVID-19 pandemic, there were dramatic increases in searches for potential treatments. On a separate occasion, a change in Google’s search ranking algorithm led to a sudden 75% jump in traffic. But unlike previous surges that might have overloaded the origin servers, neither situation caused any latency issues or downtime.

Drugs.com achieves unflinching performance and security with Akamai

"We can trust the Akamai platform to absorb the extra load, so we can get on with business as usual," he says. "No more getting up in the middle of the night to fix issues or trying to scale up origin servers at the last minute."

That has enabled Drugs.com to double its traffic over the past 10 years, all without an impact on its origin infrastructure. To further boost performance, the company added Image & Video Manager for Medicine.com, which takes an image-rich, consumer-friendly approach to help people manage their own health more effectively. Akamai's solutions are designed to enable a smoother experience for visitors, no matter what device they're using, and help boost the site's rankings with search engines – which increasingly favor visual content.

Akamai makes it easy to protect two websites and millions of visitors

The company also implemented Edge DNS and Kona Site Defender to protect against security threats, including distributed denial-of-service (DDoS) attacks and network intrusions. The Akamai solutions vastly simplified the day-to-day monitoring and management of an increasingly large and complex environment.

"In the past, we spent hours every day chasing down alerts, blocking IP addresses at our origin, and dealing with false positives," says Le Mouton. "With Akamai, we get alerts when activity passes a certain threshold, so even though we have more traffic, we spend a lot less time managing security."

Drugs.com also signed up for Akamai's Enterprise Application Access to give employees remote access to back-end systems. That secure access became even more valuable during the COVID-19 pandemic, as staff members started working from home more frequently.

Drugs.com scales up globally with Akamai

Drugs.com and Medicine.com have grown in popularity, trading on the quality and speed of their content to improve search engine rankings, attract visitors, and drive ad revenue. Having seen what happens when growth overwhelms the origin infrastructure, Le Mouton knows there is no going back to the days before he adopted Akamai – and he sees the integrated platform of performance and security products as a powerful benefit to the company.

"We had a patchwork of tools in the past, and it just didn't work – every tool added a bottleneck and an extra layer of latency," says Le Mouton. "Akamai handles everything seamlessly without breaking a sweat, and it has become an integral part of our business."

The company's reliance on Akamai comes from a place of deep familiarity with both Akamai and its competitors. Le Mouton isn't shy about his approach to evaluating technology – his goal is to find the most effective tools to keep his sites up and running. "We try competitive products regularly to see what else is out there, and we always stay with Akamai," Le Mouton says. "It's a company we know and trust, and we think it's the best."

That approach has been good for the bottom line at Drugs.com, keeping infrastructure costs low as the company scales up its advertising revenue in the United States and beyond. And it's good for consumers and medical professionals, who increasingly rely on Drugs.com and Medicine.com for the information they need to stay safe and healthy.

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About Drugs.com

Drugs.com is the largest, most widely visited, independent medicine information website available on the Internet. Drugs.com presents independent, objective, comprehensive and up-to-date information in a clear and concise format for both consumers and healthcare professionals. The Drugs.com Drug Information Database is powered by several independent leading medical-information sources, including; American Society of Health-System Pharmacists, Cerner Multum and IBM Watson Micromedex. Individual drug content compiled by these sources is peer reviewed and delivered by Drugs.com. The Drugs.com website is intended for a U.S. audience and is hosted at a data center located in Dallas, TX, USA. Drugs.com is not affiliated with any pharmaceutical companies. Drugs.com is not an online pharmacy and does not condone the sale of prescription medicines over the Internet without a prescription. To learn more about Drugs.com, please visit <https://www.drugs.com/support/about.html>



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