Washington Healthplanfinder™ Stays Fast, Available, and Secure with Akamai Solutions



"

Akamai's solutions and traffic intelligence position us to effectively serve our mission.

— Chief Information Officer, Washington Health Benefit Exchange

The Situation

In 2010, the U.S. Federal government passed the Affordable Care Act (ACA) – also known as the Patient Protection and Affordable Care Act (PPACA) – as part of health care reform. One of the central provisions called for the creation of health insurance exchanges in each state and at the federal level. Washington State created its own official ACA-compliant health insurance benefit exchange, the Washington Health Benefit Exchange. The Exchange is responsible for the operation of Washington HealthplanfinderTM, an easily accessible online marketplace for individuals, families, and small businesses to find, compare, and enroll in Qualified Health Plans and Washington Apple Health (Medicaid). Since going live in October 2013, the exchange has enrolled 1.8 million people.

The Challenge

Surveys by the Exchange have found that Washington Healthplanfinder is the most-used channel in the state for accessing information and enrolling in health insurance. While the marketplace is a year-round resource, the most critical time is during the open enrollment period, from November 1 through January 31. During this three-month time period, a large number of people visit the site to enroll or renew their health coverage. This traffic spike far exceeds the 100,000-200,000 average site visits per month seen the rest of the year as patients renew or update their information or plans. At the same time, the Medicaid portion of the site is accessed year round.

According to the Washington Health Benefit Exchange (WAHBE) Chief Information Officer, the Exchange's goals are similar to those of other sites enabling a complex process: ensure security, reliability, and high levels of performance at all times. Adds the Security Officer of the Exchange: It is important to detect good traffic from bad at all times — but this becomes more challenging during the open enrollment period with such a traffic volume increase. "Any adverse impact to our site could easily make news headlines," continues the CIO.

The Goals

The Washington Health Benefit Exchange needed to meet three key requirements to support its goal of creating the best state-based health insurance marketplace in the country:

- Maintain a reliable presence. The organization wanted to thwart any potential attacks intended to bring down a high-profile website
- Scale to support peak traffic. Because it plays a key role in ensuring health plan coverage for Washington State residents, the online health marketplace needed to ensure availability during peak times
- **Perform at top speeds.** To encourage use of the online marketplace, the Exchange wanted optimal site responsivenes.



COMPANY

Washington Health Benefit Exchange Olympia, Washington http://www.wahbexchange.org/

INDUSTRY

Public Sector

SOLUTIONS

- Dynamic Site Accelerator Secure
- Kona Site Defender
- Visitor Prioritization Cloudlet
- Fast DNS
- Professional Services

KEY IMPACTS

- Offloaded 100% of DNS requests
- Achieved nearly 100% uptime
- Improved end-user experience and performance
- Enabled to thwart any potential attacks
- Gained robust toolset for fighting all types of attacks



Washington Health Benefit Exchange

Why Akamai

Following a Proven Model

Based on the recommendation of the Exchange's Systems Integrator and the knowledge of how other government agencies were addressing security, performance, and other important website considerations, Akamai was chosen. "Akamai's support of other public sector agencies – including the federally facilitated health exchange – and its reputation across many industries were key factors in selecting Akamai," explains the WAHBE CIO.

Scaling On Demand

While the state has targeted enrollment numbers, there is no way to translate that into expected site traffic at any given time. To be prepared for unpredictable spike levels, it takes advantage of Akamai Dynamic Site Accelerator (DSA) Secure. In just a 60-day period, Akamai DSA Secure offloaded 70% of web content delivery and 100% of DNS requests. For the six-month period between January and June 2016, over 2.2 million people visited the Healthplanfinder website on average each month. During the same period, the online health insurance marketplace application was available 99.99% of the time. As the WAHBE Security Officer explains, "The uptime and reliability enabled by Akamai has helped the Exchange ensure Healthplanfinder's availability to its users."

Delivering Optimal Performance

WAHBE users have experienced the performance improvement that comes with DSA. In a 30-day period, for example, Akamai enabled WAHBE to deliver its site in under 2 seconds to over 75% of its end users. In addition, to help validate end-user experiences, Akamai provides Real-time User Monitoring (RUM) rather than synthetic-based testing. RUM provides visibility into the load time experienced by WAHBE's real end users.

WAHBE also uses the Visitor Prioritization Cloudlet from Akamai to prioritize and manage access to certain services on the website year-round. WAHBE has uniquely set up the Cloudlet to help maintain productivity during maintenance and new-release test periods. During maintenance times, WAHBE account workers can access and process applications while the general public is prevented from accessing the application eligibility service. Instead, the general public is sent to a branded WAHBE maintenance page hosted by Akamai.

Benefiting from World-Class Security

The Exchange and marketplace are protected behind the Akamai Intelligent Platform™ and Kona Site Defender solution. Kona Site Defender was implemented quickly as an emergency integration by Akamai Professional Services after the Exchange received suspicious correspondences. These communications may have been associated with a notorious black-hat hacking group that threatened the Exchange with a Distributed Denial-of-Service (DDoS) attack. Because Kona Site Defender protects the Exchange's web application, the sites and data are safe from threats such as these. Additionally, the platform and solution are designed to absorb DDoS attacks, protecting the Exchange and marketplace from their effects.

At the same time, Akamai delivers unprecedented insight into traffic to the site both from a performance perspective and security standpoint. As a result, the Exchange has more flexibility when it comes to hosting decisions about both its corporate site and the health insurance marketplace. "Akamai's solutions and traffic intelligence position us to effectively serve our mission," concludes the WAHBE CIO.

About Washington Healthplanfinder

Washington Healthplanfinder is an online marketplace for individuals, families, and small businesses in Washington to compare and enroll in health insurance coverage and gain access to tax credits, reduced cost sharing and public programs such as Medicaid.

About the Washington Health Benefit Exchange

The Washington Health Benefit Exchange is a public-private partnership established in accordance with the Patient Protection and Affordable Care Act of 2010 (ACA) to implement a new health insurance marketplace for individuals and small businesses. The Exchange is separate from the state and governed by an independent 11-member board. For more information, visit www.wahbexchange.org.



As the global leader in Content Delivery Network (CDN) services, Akamai makes the Internet fast, reliable, and secure for its customers. The company's advanced web performance, mobile performance, cloud security, and media delivery solutions are revolutionizing how businesses optimize consumer, enterprise, and entertainment experiences for any device, anywhere. To learn how Akamai solutions and its team of Internet experts are helping businesses move faster forward, please visit www.akamai.com or blogs.akamai.com, and follow @Akamai on Twitter.

Akamai is headquartered in Cambridge, Massachusetts in the United States with operations in more than 57 offices around the world. Our services and renowned customer care are designed to enable businesses to provide an unparalleled Internet experience for their customers worldwide. Addresses, phone numbers, and contact information for all locations are listed on www.akamai.com/locations.

©2016 Akamai Technologies, Inc. All Rights Reserved. Reproduction in whole or in part in any form or medium without express written permission is prohibited. Akamai and the Akamai wave logo are registered trademarks. Other trademarks contained herein are the property of their respective owners. Akamai believes that the information in this publication is accurate as of its publication date; such information is subject to change without notice. Published 11/16.