451 Research

S&P Global
Market Intelligence

Fastly's edge platform should help Google retire third-party cookies

Analysts - Craig Matsumoto

Publication date: Monday, April 24 2023

Introduction

Google has tapped Fastly Inc. for a crucial role in FLEDGE, a privacy initiative for Chrome's advertisement auctions. Determined to sunset third-party cookies in 2024, the search giant is applying a specification called Oblivious HTTP (OHTTP) that sends traffic through a neutral third-party relay to shield client information, such as a user's IP address.

The Take

Its partnership with Google is testament to Fastly's technological chops. That is important for a company that prides itself on its technological foundation as an edge cloud platform built for developers. The FLEDGE work is central to Google's primary business — advertising — and requires a network partner that can handle the scale of Chrome's massive user base. First-year CEO Todd Nightingale needs these kinds of wins as his team works to rebuild the company's image, emphasizing technological depth and social responsibility.

Related to the latter camp, Fastly already operates a comparable service for Apple Inc., iCloud Private Relay, which likewise preserves user privacy. Other content-delivery networks can offer similar privacy-shielding services, especially as OHTTP approaches standardization, but Fastly can boast of having two tech giants already on its roster.

Details

Google's long-delayed sunsetting of third-party cookies is due to happen next year. For Chrome, this means that personal information such as an end user's IP address or previous websites visited will be withheld in advertising auctions. The question is how to enforce this, since Google must at some point return information back to the user, which requires knowing the IP address. The answer is a double-blind system with a third-party network in the middle, which is what the Internet Engineering Task Force's (IETF) Oblivious HTTP working group is working to standardize.

The FLEDGE project creates a privacy sandbox based on OHTTP, with Fastly operating the third-party relay. When Chrome conducts an ad auction, the request goes first to Fastly, which forwards the request but withholds personal information. In addition to masking the user's exact location, this process prevents cross-site tracking whereby an advertiser can deploy cookies to glean a user's browsing history and behavior. FLEDGE still allows for targeted advertising by adding the user to a cohort of others, pointing more to mass trends in behavior rather than specific individual behavior.

Fastly, meanwhile, doesn't know the nature of the ad request. It only knows where the request came from, and part of its job is to verify that this is a valid, trusted location (not a source of malware, for instance) — but the traffic's payload is encrypted with a key that the vendor does not possess. When the ad auction is complete, Google sends the information back to the Fastly sandbox, and Fastly relays it to the end user.

Fastly's role requires scale — not of bandwidth, which is negligible, but of number of requests. Thus, Google's partnership with Fastly indicates that it is comfortable with the latter's ability to operate at that scale. Fastly's network is programmable, meaning that any changes to the IETF's OHTTP draft should be easy to implement.

There is certainly a publicity boost here, as well. Fastly already operates a similar double-blind relay for Apple, the iCloud Private Relay, and can hang its hat on being able to serve these large-scale customers. The Google and Apple partnerships speak to platform scale and user privacy and thus feed the image Fastly is cultivating, one of technological depth and good internet citizenship (its acquisition of Glitch in 2022 directly addresses the latter).

FLEDGE is also significant because the IETF is working to make OHTTP into a standard, so the technology should be applicable to many other customers. Fastly's OHTTP Relay is now in beta and should draw some interest due to the increased regulatory attention around internet privacy. Fastly can market the relay as a way to help businesses engender trust in their customers. In the other direction, OHTTP could also protect services; for example, by acting as an intermediary to spot and deflect requests from bad actors.

An end to third-party cookies will disrupt the ad-tech business, as we noted in our 2023 Trends in Customer Experience & Commerce. But it is what consumers want. In our VoCUL: Connected Customer, Disruptive Experiences 2023 survey, 61% of respondents said they opt out of cookies at least sometimes (only 9% said they never opt out), and 84% at least partially agree that businesses make it too difficult to opt out of cookies or other tracking features.