PropellerAds

TRAFFIC PURCHASE EXPERIMENT

DECEMBER 2019
PROPELLERADS

Introduction

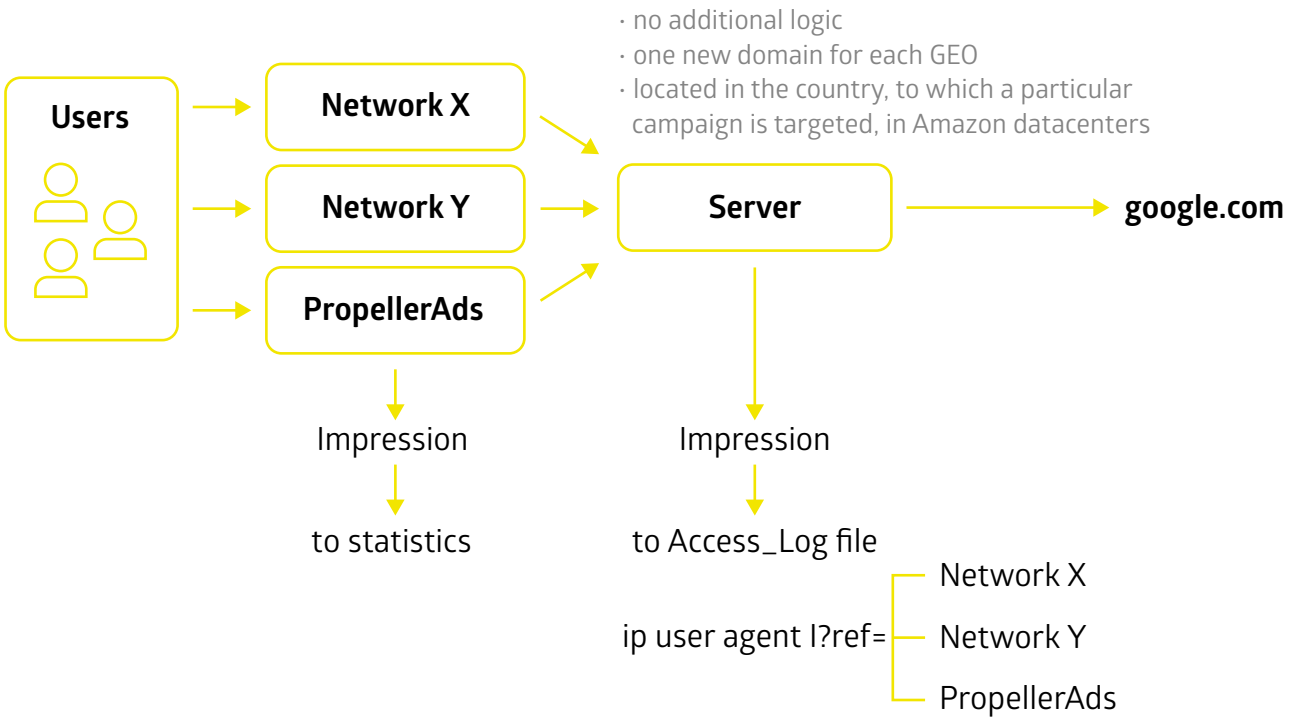
At PropellerAds, we're dedicated to providing the best service to our clients. That involves ensuring the highest quality of our traffic and minimizing data discrepancy.

In order to estimate the discrepancy in our network, we decided to run a test purchase of traffic.

The experiment

As part of the experiment, we bought traffic in three ad networks: PropellerAds and two other networks of the same tier. In sake of objectivity, we prefer not to name them here. During the experiment we referred to them as Network X and Network Y. In this case, we acted as an independent advertiser. Then, we compared the statistics from those networks to our server access log file, which registered all the impressions independently. As a result, we could calculate the discrepancy in each of the networks, compare it to ours, and thus estimate the quality of our traffic.

The technical organization of the process



1. We created a simple http-server with a response time of several milliseconds and no additional logic. Its core function was to redirect all the users addressing it to google.com. Before doing it, the server logged a link that the user came by to an access log file.

2. Then, we created 3 different test domains and gave them the SSL-certificate policies compatible with all the devices and browsers, including the old ones, so that any user could connect to them. This way, we eliminated the risk of discrepancy due to incompatibility reasons.

3. Next, for the discrepancy not to be attributed to traffic from a particular GEO, we tested the traffic from three different locations. To do that, we connected the test domains to one of the three servers, each located in a different Amazon datacenter (West of the USA, The Netherlands, and India).

4. In each of the networks that we tested, we created 3 campaigns for each GEO, so that, for example, Indian users would be directed to the server located in India.

   The links all had the following format:

   https://some-us-site.com/?ref=propellerads
   https://some-us-site.com/?ref=networkX
   https://some-us-site.com/?ref=networkY

   This way, we could see where each user came from.

5. Every time the user came to the site from an ad, two events would occur:
   • First, the ad network, in which the campaign was created, would track the event;
   • Second, the http-server would create a record into the log file.

6. The campaigns ran for approximately 12 hours each.

7. When the campaigns were over, we compared the number of lines in each server log file with the statistics from the ad networks.

Results

You can see the results that we received in the table below.

Here, the ***Network*** column shows the impressions that were registered by the ad platform. And ***Server*** shows the number of lines in the server log file, that is, the actual number of user impressions that reached the test offer.

The discrepancy, which is presented in the ***Discrep %*** column, was calculated by the following formula:

Discrepancy = (Network / Server - 1) x 100%

The United States

	Network	Server	Discrep %
Network A	30008	22012	36,33
PropellerAds	38891	34751	11,91
Network B	33608	25484	31,88

India

	Network	Server	Discrep %
Network A	55652	38463	44,69
PropellerAds	37918	31195	21,55
Network B	37486	28981	29,35

France

	Network	Server	Discrep %
Network A	31252	23083	35,39
PropellerAds	40940	40248	1,72
Network B	38537	32093	20,08

As you can see, in each GEO, the discrepancy in the PropellerAds' statistics was much smaller than in other networks.

For India, the discrepancy reached 21,55% which is slightly above the norm of 20%. This can be attributed to the quality of traffic in the region and other user-related factors.

In the US, the discrepancy stayed just beyond the 12% mark, which is quite accurate.

And in France (a neighbor to the Netherlands, where our servers are located), the discrepancy showed the minimum value of 1,72% which is practically non-existent.

Judging by the experiment, we came to the conclusion that the quality of the PropellerAds traffic is quite high, especially in comparison to other industry players.