# Programmatic Ad Fraud Report
Q2 2019

This report includes the percentages of fraud found in programmatic digital advertising traffic during the second quarter (Q2) of 2019. On a monthly basis, Fraudlogix's pixel-based technology regularly monitors data from 640 million unique users, 1.2 billion unique devices, and 300+ million URLs and apps. We map the latest devices, locations, bots, behaviors, and hacking tactics that are being used by digital fraudsters.

In this report invalid traffic (IVT) and sophisticated invalid traffic (SIVT) —i.e., ad traffic that was generated by bots, malware, through hijacked devices, and other nefarious means — is referred to as fraudulent traffic.

Q2 2019 Highlights

- 11.9% of all ad traffic was fraudulent.

- 61% of all ad traffic came from mobile devices and 11.6% of that traffic was fraudulent.

- 32% of all ad traffic came from desktop devices and 13.6% of that traffic was fraudulent.

- The Latin American region (LATAM) had the highest percentage of fraudulent traffic globally at 13.5%.

- A majority (65%) of ad traffic came from Chrome browsers, and 14% of it was fraudulent.

- Internet Explorer had the highest percentage of fraudulent traffic (26%) among the six most-used browsers.

- The highest percentage of ad traffic (43%) came from devices running Android operating systems, followed by 28% of devices running Windows, and 20% running iPhone operating systems.

- Traffic from Android operating systems was 14.8% fraudulent, while that from Windows was 14.1% fraudulent, and from iPhones was 4.7% fraudulent.

- The highest percentage of fraudulent traffic (18.8%) came from devices running the Lenox operating system.

## In Q2 2019, 11.9% of all ad traffic was fraudulent.

11.9%
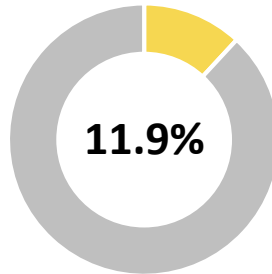
Ad Traffic by Device Type: In Q2 2019, 62% of all traffic was mobile, 32% desktop, and 6% tablet.

Tablet 6%

Desktop 32%
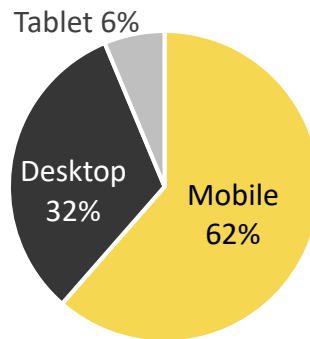
Mobile 62%

Fraudulent Ad Traffic by Device Type: 11.6% of ad traffic from mobile devices was fraudulent, 13.6% of ad traffic from desktop devices was fraudulent, and 5.9% of ad traffic from tablet devices was fraudulent.

% of Fraudulent Ad Traffic by Device Type, Q2 2019

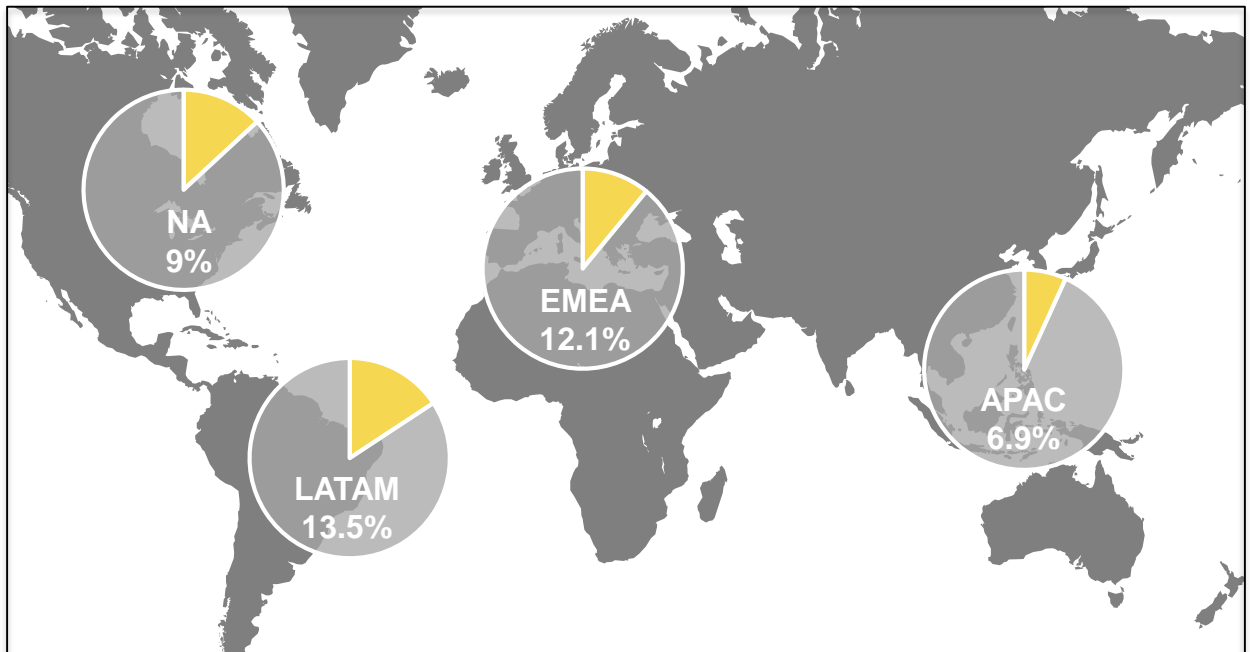| Device	Percentage
Mobile	11.6%
Desktop	13.6%
Tablet	5.9%
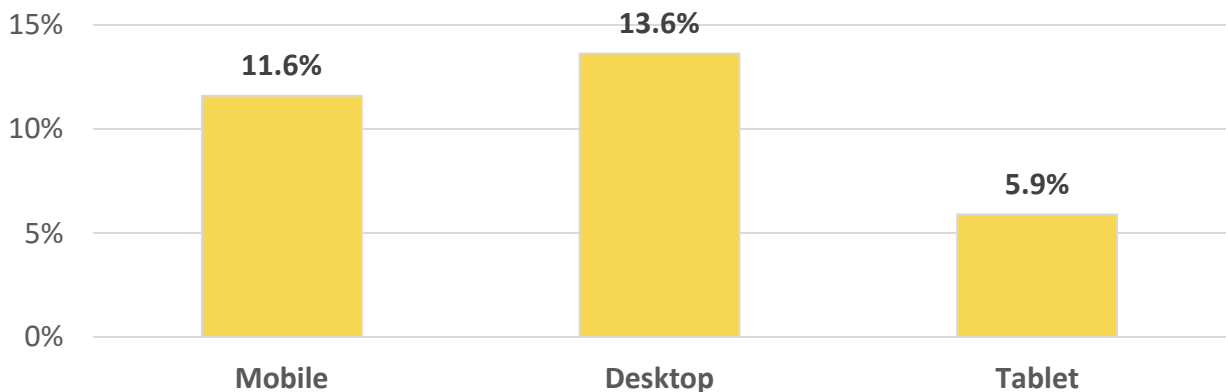
Q2 2019 Fraudulent Ad Traffic By Global Geographic Business Region: Looking at all data during Q1, broken down into four major global business regions [Asia–Pacific, including India (APAC); Europe, the Middle East and Africa, including Russia (EMEA); Latin America, including Mexico (LATAM); and North America (NA)], we found that ad traffic coming from the LATAM region had the highest percentage of fraud at 13.5%, followed by the EMEA region with 12.1%, North America at 9.0% and APAC region with 6.9%.

### % of Fraudulent Ad Traffic by Global Region, Q2 2019

Region	Percentage
APAC	6.9%
EMEA	12.1%
LATAM	13.5%
NA	9.0%
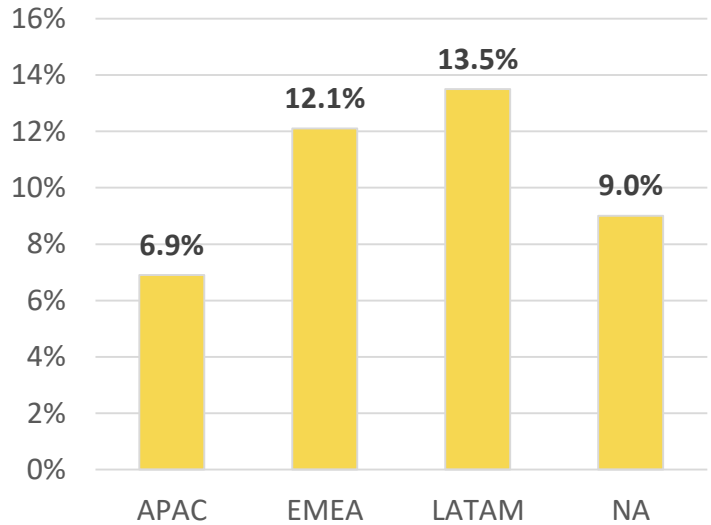
Percent of Ad Traffic that was Fraudulent by Global Region, Q2 2019

NA 9%

EMEA 12.1%

LATAM 13.5%

APAC 6.9%

Q2 2019 Percent of Ad Traffic By Browser

In Q2 2019 we found that 65.4% of ad traffic came from the Chrome browser, followed by 17% from in-app Webview browsers, 8% from Safari, 3.3% from Firefox, 2.8% from Edge, and 2.5% from Internet Explorer.

Internet Explorer, 3%
Edge, 3%
Firefox, 3%
Safari, 8%
Webview, 17%
Chrome, 65%
Other, 1%
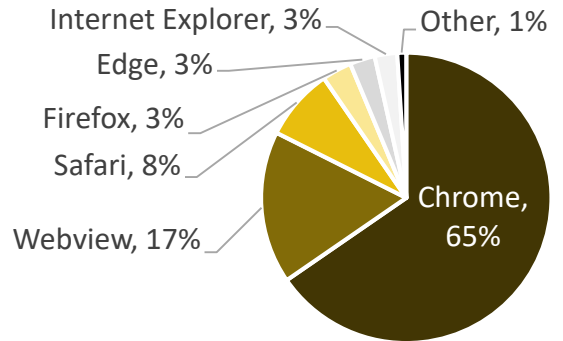
Q2 2019 Percent of Fraudulent Ad Traffic By Browser

We found that ad traffic from the Internet Explorer browser had the highest percentage of fraud at 26%, followed by Chrome at 14.2%, Firefox at 11.2%, Edge at 9.9%, Safari at 5.9%, and Webview at 4%.
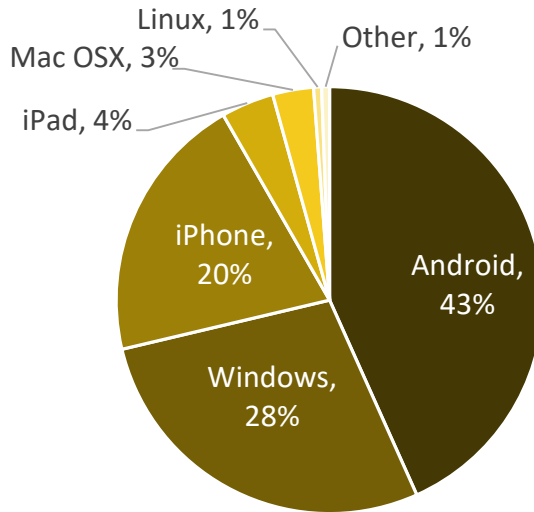
% of Fraudulent Ad Traffic by Browser, Q2 2019

Browser	Percent
Internet Explorer	26.0%
Chrome	14.2%
Firefox	11.2%
Edge	9.9%
Safari	5.9%
Webview	4.0%
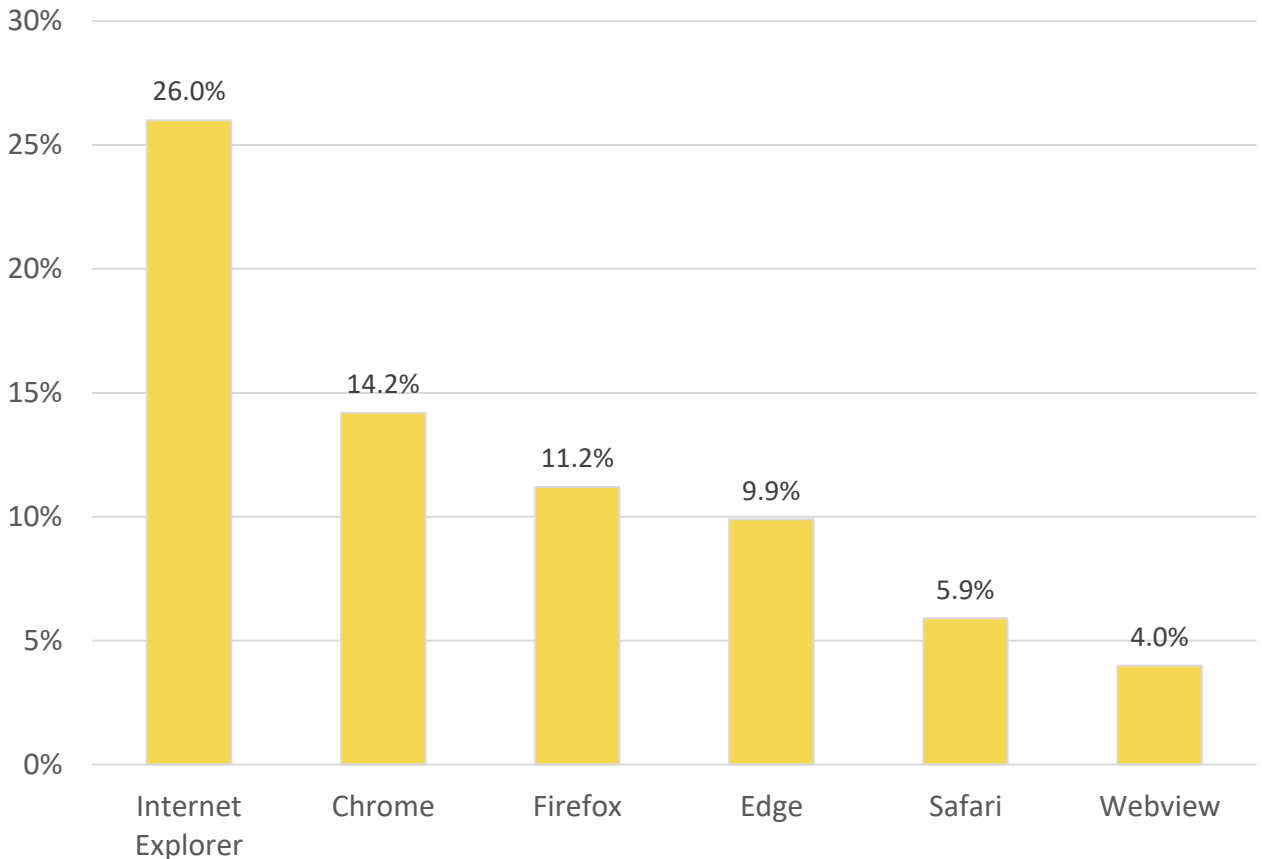
Q2 2019 Percent of Ad Traffic By Operating System (OS) Family

In Q2 2019, we found that the largest percentage of ad traffic (43.3%) came from devices running different versions of Android operating systems, followed by 28% running Windows, 20.4% iPhone, 4% iPad, 3.1% Mac OSX, and 0.6% Linux.

% of Ad Traffic by Operating System Family, Q2 2019

Q2 2019 Percent of Fraudulent Ad Traffic By Operating System Family

Ad traffic coming from devices running Linux had the highest percentage of fraudulent traffic at 18.8%, followed by Android at 14.8%, Windows at 14.1%, Mac OSX at 6.2%, iPhone at 4.7%, and iPad at 3.3%.

% of Fraudulent Traffic by OS Family, Q2 2019