

WHITE PAPER

BidPulseSM

Online Identity Provider Accuracy Measurement System

BidPulse measures identity accuracy the way advertisers experience it in real time, via real bid requests.

100 MILE THRESHOLD

It compares a bid request's IP based geolocation against the IP based geolocation history of the cookie IDs bridged into its EID fields, using fixed line internet IP addresses that are not ambiguous (excluding cellular and proxy IPs). Only recent, verified signals (i.e., cookies from the last 30 days, seen on at least 3 separate days) are considered for purposes of this analysis.

30 DAY WINDOW

Each bridged cookie ID is analyzed independently. If a cookie's 30-day location history never resides within 100 miles of the bid request geolocation, that cookie is almost certainly not associated with the device, user, or household to which the bid request relates (meaning that the advertiser is almost certainly targeted the advertisement using the wrong profile information).

3 DISTINCT DAYS

One wrong ID is enough to break a bid request. It pulls in advertising for the wrong audience, at the advertiser's expense.

BidPulse scores every bid request in two ways:

Strict Accuracy Score:

one single bad ID counts the whole bid request as wrong for that provider, no exceptions.

Proportional Accuracy Score:

shows the scale of the problem. 4 out of 10 IDs over 100 miles away = 40% inaccurate (60% proportional accurate), and up to 4x or more inflated bid request value.

BidPulse is a 24/7 measurement tool which tracks the accuracy of ID bridging providers and presents that accuracy over time. We are inviting you to replicate the BidPulse methodology so you can compare your results with the BidPulse accuracy meter at the time of your results and see that you can trust the BidPulse meter results going forward.

02 THE PROBLEM

Modern identity solutions rely on “identity bridging” associating identifiers across devices and environments. Many providers use probabilistic techniques (e.g., shared IP, co-location) that carry a risk of incorrect associations. These inaccuracies are often hidden, leading to budget misallocation and broken attribution. The industry lacks an independent mechanism to distinguish between accurate and inaccurate identity data, resulting in “blind” spending where advertisers pay to reach devices and the audiences behind them they did not intend to target.

03 DATA FOUNDATION AND INDEPENDENCE

BidPulse does not rely on, or build upon, any identity graph, including Intent IQ's own. BidPulse is a measurement layer that sits on top of the open bidstream. It extracts bridged identifiers using the IAB's Extended Identifier (EID) framework and checks them against independently observed, deterministic IP history.

The signals available to Intent IQ from the bidstream and cookie-sync ecosystem are what enable BidPulse to operate at scale and in real time. The accuracy of any identity graph, including Intent IQ's, is an output that BidPulse measures, not an input it depends on. This separation is what allows BidPulse to evaluate every identity provider, Intent IQ included, under the exact same rules.

04 WHY THIS APPROACH IS VALID

The BidPulse methodology is inherently valid because it relies on “observable truth” rather than probabilistic modeling. Its validity is built on three pillars:



Deterministic Reliance

It uses only verified historical interactions (cookie syncs) and IP-based geolocation, obtained through standard HTTP requests, ensuring zero guesswork.



Operational Neutrality

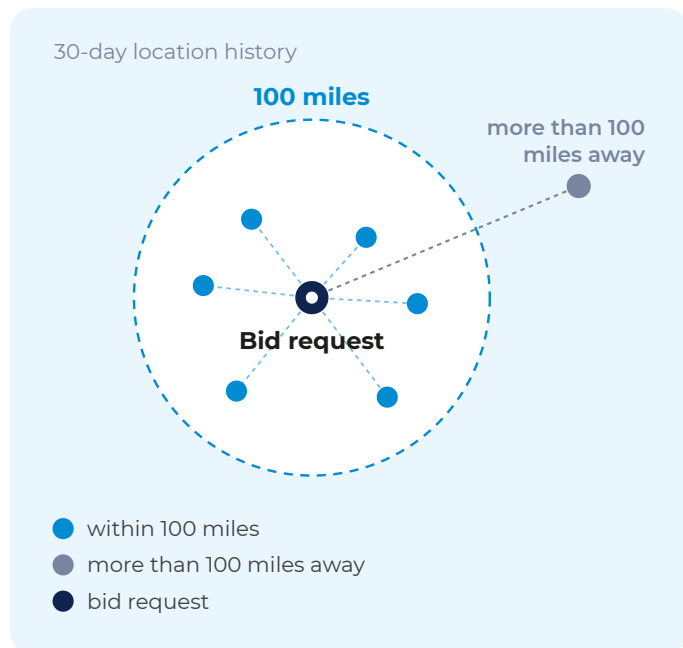
All providers, including Intent IQ, are evaluated using the exact same metrics on open bidstream data, ensuring an unbiased level playing field.



Resilience

The methodology accounts for real-world realities, such as IP-to-geo mapping noise and typical device mobility, by utilizing a 100-mile threshold that separates acceptable regional movement from systematic identity failure, and by requiring a cookie to be observed on at least 3 distinct days within a 30-day window before its location history is sufficiently trusted to be used in the accuracy measurement.

BidPulse calculates accuracy using two complementary methods, focusing on a 100-mile threshold when measuring the distance between a bid request and the devices behind its bridged identifiers.



DISTANCE ASSIGNMENT

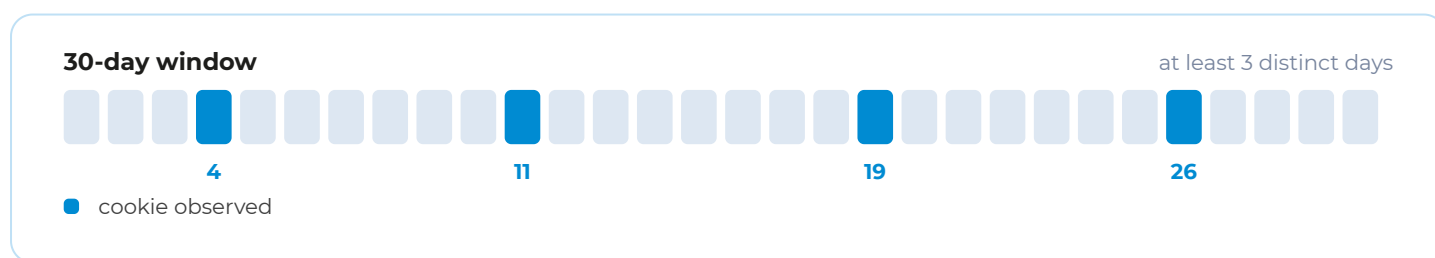
BidPulse assigns the minimum observed distance between a bid request's IP based geolocation and the historical IP based geolocations of each bridged identifier. Selecting the minimum ensures that if any deterministic signal confirms proximity, it is captured, minimizing false negatives caused by occasional data noise. Geolocation itself is derived from standard IP-to-location resolution over HTTP requests; the methodology is not tied to any single geolocation vendor and can be reproduced using any comparable service.

VALID IP SOURCES

BidPulse only considers fixed line internet IP addresses that are not ambiguous when establishing the geolocation of a bid request or a bridged cookie. IPs with ambiguous or unstable geolocation including cellular, proxy and VPN IPs, are excluded from the analysis. This keeps every distance calculation anchored to a location that reliably reflects where a device actually was.

THE 30-DAY WINDOW AND 3-DAY RULE

Only cookie geolocations observed in the last 30 days are considered, and only for cookies seen on at least 3 distinct days within that window. This filters out one-off or transient signals.



THE 100-MILE THRESHOLD

This threshold balances normal device mobility with strict validation. It covers commuting, which typically averages 15-20 miles, while still catching the larger deviations that point to incorrect identity resolution. When a device's cookie history over the last 30 days shows no location within 100 miles of a bid request, that device is treated as unrelated to the bid request's device, in a different zip code, with different demographics and online behavior, likely attracting a different set of advertisements aimed at a different audience.

06 STRICT VS. PROPORTIONAL ACCURACY

Strict Accuracy Score: For each evaluated ID Bridging provider (unrelated to other ID providers' IDs in the bid request), if any of the provider's bridged identifiers (regardless of which SSP or DSP ID is bridged by the provider) in a bid request is invalid, the entire bid request is classified as invalid for that ID provider, regardless of how many of the provider's other identifiers are within 100 miles. This reflects real-world decision-making, where a single incorrect ID over 100 miles away opens up the bid request to a new set of advertisers and advertisements looking to target the incorrect audience represented by the incorrect ID. The strict accuracy score is calculated across all samples from that provider per day as well as the selected time period.

Proportional Accuracy Score: For each evaluated ID Bridging provider, all the provider's IDs in the bid request are evaluated (regardless of which SSP or DSP ID is bridged by the provider), showing the error proportion per bid request by measuring what share of a provider's bridged IDs in a bid request are more than 100 miles away. For example, in a bid request with 10 bridged IDs from a provider, if 4 are more than 100 miles away, the strict accuracy score counts the whole bid as inaccurate for the provider (strict accuracy score of 0), while the proportional accuracy score reports the bid request as 60% accurate, i.e. 40% inaccurate for the provider since each incorrect ID may open up a distinct incorrect audience, inflating the bid's apparent value by as much as 4x or more. The proportional accuracy score is calculated across all samples from that provider per day as well as the selected time period, by averaging the proportional accuracy of each bid within the selected time period.

10 bridged IDs from a provider

4 are more than 100 miles away



STRICT ACCURACY SCORE

0

the whole bid request counts as inaccurate

PROPORTIONAL ACCURACY SCORE

60%

accurate · 40% inaccurate · apparent value inflated
by as much as 4x or more

One bid request, 10 bridged IDs from a provider, 4 more than 100 miles away.

01

Extract Identifiers

Capture all IAB-standard EIDs from live bidstream data.

02

Access Historical Signals

Retrieve deterministic IP history for these identifiers or/and cookies deterministically synced with them from the last 30 days, requiring at least 3 distinct observed days per cookie.

03

Consider only non-ambiguous fixed line internet IP addresses

Exclude cellular, proxy and VPN IP addresses whose geolocation is unclear.

04

Geolocate

Convert IP addresses obtained via standard HTTP requests into geolocation data, using an industry vendor.

05

Measure Distance

Calculate the minimum geographic distance between the bid request geolocation and the identifier's historical geolocations.

06

Determine Validity

Classify a bridged identifier's device as related to the bid request's device if it resides within the 100-mile threshold, and unrelated otherwise.

07

Compute Accuracy

Calculate both Strict Accuracy Score and Proportional Accuracy Score.

1

Why is geographic distance the basis for measurement?

It provides an observable, deterministic way to verify whether an identifier represents the same real-world device, not an assumption about the person or household behind it.

2

Why a 100-mile threshold?

It accommodates normal commute while ensuring large-scale deviations (indicating inaccuracy) are captured.

3

Why only cookies observed on 3 or more days within the last 30 days?

Because a cookie seen only once could be noise.

4

What is the difference between Strict Accuracy Score and Proportional Accuracy Score?

Strict Accuracy Score measures whether a bid request is accurate in its entirety, while Proportional Accuracy Score measures the proportion of bridged IDs from a given provider that are accurate for a bid request.

5

How is fairness ensured?

BidPulse treats all providers, including Intent IQ, equally using the same methodology on open bidstream data. Intent IQ's own identity graph is scored the same way, with no special treatment.

6

Does it use probabilistic modeling?

No. It is fully deterministic, relying on observed behavior and real-world interactions.

7

Is every IP address usable for this comparison?

No. Only non-ambiguous fixed line internet IP addresses are used, since they map reliably to a stable location. Cellular, proxy and VPN IPs are excluded because their geolocation is ambiguous.

8

Can the results be replicated?

Yes. Because the methodology is based on public bidstream data and transparent logic, any organization can replicate the process to confirm our findings.